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BALTIC LINGUISTICS

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THEMATIC ISSUE

STUDIES IN THE *TAME* DOMAIN IN BALTIC AND ITS NEIGHBOURS



Warsaw

Contents

AXEL HOLVOET (Vilnius),	
The TAME domain in Baltic and its neighbours. An introduction	7
Danguolė Kotryna Kapkan (Vilnius) Perfect in Lithuanian: A case study based on data from Facebook comments	21
Anna Daugavet (Vilnius) & Peter M. Arkadiev (Vilnius & Moscow), The perfects in Latvian and Lithuanian: A comparative study based on questionnaire and corpus data	73
BIRUTĖ SPRAUNIENĖ (Vilnius) & PAWEŁ BRUDZYŃSKI (Vilnius), The Lithuanian passive perfect and its history	167
NICOLE NAU (Vilnius & Poznań) & BIRUTĖ SPRAUNIENĖ (Vilnius), Future tense and narrativity	209
Axel Holvoet (Vilnius), Anna Daugavet (Vilnius) & Vaiva Žеімаntіenė (Vilnius), The perfective present in Lithuanian	249
VADIMIR PANOV (Vilnius), Untangling the functions of aspectual distinctions in the Lithuanian imperative against the background of Slavonic	29 5
Kirill Kozhanov (Vilnius) Pluractionality in Lithuanian: A tale of two suffixes	323
Axel Holvoet (Vilnius), Liina Lindström (Vilnius & Tartu), Anna Daugavet (Vilnius) & Asta Laugalienė (Vilnius), Irrealis in Baltic and Baltic Fennic	349
Axel Holvoet (Vilnius) & Gina Kavaliūnaitė (Vilnius), The Lithuanian mirative present and its history	413

The TAME domain in Baltic and its neighbours. An introduction

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This article outlines the aims, methodological approaches and research topics of the thematic volume *Studies in the TAME Domain in Baltic and Its Neighbours*. It also briefly characterises the individual contributions to the volume, highlighting their main ideas and pointing out their relevance to ongoing discussions as well as the impulses they can give to further (also cross-linguistic) research. The grammatical domains explored in the volume are tense, aspect, mood and evidentiality/mirativity.

Keywords: perfect, present tense, future tense, narrativity, mood, complementation, mirativity, Lithuanian, Latvian, Baltic, Slavonic, Fennic

1. The goals of the volume¹

The present volume deals with the grams of the TAME (Tense-Aspect-Mood-Evidentiality) domain in Baltic, with extensions into the contiguous areas of Slavonic and Fennic, continuing the basically constructional approach reflected in the earlier volumes *Minor Grams in Baltic, Slavonic and Fennic (Baltic Linguistics* Vol. 10) and *Studies in the Voice Domain in Baltic and Its Neighbours (Baltic Linguistics* Vol. 11). The assumption underlying these as well as the present volume was that interesting insights could be gained by looking at smaller fragments of grammatical structure where the categorial values often intersect—present tense with aspect and with evidentiality /mirativity, perfect with voice, aspect with modality etc. Like

¹ I wish to thank the participants in the 'Baltic Verb' project for their comments on this introduction. The research presented in this article has received funding from the European Social Fund (project No. 09.33-LMT-K-712-01-0071) under grant agreement with the Research Council of Lithuania (LMTLT).

its predecessors, this volume aspires to offer new insights on grammatical semantics in Baltic and to raise new questions for future research. The domains most strongly represented are those of tense and aspect, but those of mood and evidentiality / mirativity are also represented in one article each.

2. The articles in the volume

2.1. The perfect

The tense domain is mainly represented, in this volume, by the perfect, a gram that remains in several respects elusive in spite of the large body of work that has been devoted to it. We could probably say that a hallmark of the perfect is a certain instability; Bybee and Dahl's (1986) article already captured the inherent fluidity of the perfect, but still established this gram as one of the grammatical 'foci' in the domain of tense and aspect. More recently, additional insights have been provided by research viewing the perfect in conjunction with the closely related domain of 'iamitives' (Dahl & Wälchli 2016). In this light, the traditional definitional meanings of the canonical perfect, resultative and experiential, can be slightly reformulated. Following Laca (2010), Dahl and Wälchli distinguish two dominant profiles for the perfect, viz. the 'transition' and the 'extended time span' profiles. Their findings appear to be relevant for Baltic as well.

Danguolė Kotryna Kapkan's article "Perfect in Lithuanian: A case study based on data from Facebook comments" offers a fresh look at the Lithuanian perfect, based on a language variety that is somewhat intermediary between written and spontaneous spoken language. This choice of empirical base is particularly valuable because generalisations about the functions of the perfect have generally been based on standard varieties, while the situation in the dialects and colloquial language may differ radically from what we know from the standard language. Kapkan's research shows that the Lithuanian perfect has not moved too far away from its source, the subjective resultative (Nedjalkov & Jaxontov 1988, 9), which was in origin a copular construction. The fact that the Baltic perfect

² The term 'iamitive', created by Dahl, refers to a gram related to the perfect but "differ[ing] in that they can combine with stative predicates to express a state that holds at reference time" (Dahl & Wälchli 2016).

(like that of Fennic) is a 'be'-perfect rather than a 'have'-perfect might be of some significance here. The 'transition' meaning (change and transition to a new state) is relatively rare, and emphasis is mostly on a state or property of the subject, which readily lends itself to extension in the direction of an experiential perfect but only rarely in the direction of an object-oriented resultative perfect based on prototypically transitive verbs. Transitive verbs, to the extent that they occur, are mostly ingestives or reflexive-marked autobenefactives with affected agents. The predominant subject orientation is evident in examples like (1), where it is, of course, strengthened by the autobenefactive reflexive marker:

(1) Lithuanian (from Kapkan)

Visus nuopelnus yra pa-si-savinęs.

all.Acc.pl.m merit.acc.pl be.prs.3 appropriate-rfl-pst.pa.sg.m

'All his merits are usurped.'

Thanks to its innovative approach, Kapkan's article opens a completely new vista on the use of tenses in Baltic, and it is to be hoped that similar work will soon be undertaken for Latvian, and also for other domains of the verbal system.

Anna Daugavet and Peter Arkadiev's article "The perfects in Latvian and Lithuanian: A comparative study based on questionnaire and corpus data" is broader in scope than Kapkan's in that it deals with both Baltic languages and covers the whole system of perfect tenses, including the pluperfect and the future perfect. This broader perspective is particularly welcome with reference to the pluperfect, whose sphere of use is not wholly disjoint with that of the present perfect. With regard to the empirical basis this article is to some extent complementary to Kapkan's, as the data were partly elicited (on the basis of the Perfect Questionnaire in Dahl, ed., 2000) and partly taken from a Lithuanian-Latvian parallel corpus reflecting, in principle, carefully edited texts. Although Daugavet and Arkadiev's data differ markedly from Kapkan's, the results show striking similarities as far as Lithuanian is concerned. The Lithuanian perfect has remained close to its source construction and is predominantly resultative in the sense that it characterises subjects in terms of changes undergone or experiences accumulated. In Latvian, the present perfect has further evolved in the direction of a canonical perfect with more strongly developed experiential uses as well as uses based on 'current relevance', i. e. characterising effects that are 'not directly derivable from the meaning of the verb' (Dahl & Hedin 2000, 392). An example of 'current relevance' would be (2):

(2) Latvian (from Daugavet & Arkadiev)

Es neesmu gulējis trīs

1SG.NOM NEG.be.PRS.1SG sleep.PST.PA.NOM.SG.M three.ACC

naktis.

night.ACC.PL

'I have not slept for three nights.'

By combining two complementary sets of data, Daugavet and Arkadiev succeed in bringing to light a considerable number of hitherto unnoticed contexts for the use of the Baltic perfect. But they also point out the inherent limitations of these research data, and they conclude their article with a sizeable list of research questions for the future.

The relatively weak degree of grammaticalisation of the Lithuanian perfect is also evident from Birutė Spraunienė and Paweł Brudzyński's article "The Lithuanian passive perfect and its history", whose topic could be more accurately formulated as "is there a passive perfect in Lithuanian?" The Lithuanian passive perfect originates as an 'objective resultative' (Nedjalkov & Jaxontov 1988, 9), and it has not yet become clearly emancipated from its source construction. A considerable part of the process of formation of a passive tense paradigm on the basis of the original resultative construction can be followed in Old Lithuanian texts from the 16th to 19th century, as the authors show, but it has not run its full course even now. In addition to forms ambiguous or vague between resultative passive and perfect passive, Lithuanian has also developed a dedicated passive perfect based on a passive participle in combination with a perfect form of the auxiliary. In the function of what we could call a resultative perfect we thus find a form hard to distinguish from the present resultative passive (3), while the form with the perfect of the auxiliary has only experiential function (4):

(3) Lithuanian (from Spraunienė & Brudzyński)

Kol kas Lietuvoje neatlikta so far Lithuania.Loc NEG.perform.pst.pp.nom.sg.f visuotinė tokiu objektu inventorizacija, ... general.nom.sg.f such.GEN.PL object.GEN.PL inventory.Nom.sg 'So far, no general inventory of such objects has been drawn up in Lithuania, ...'

(4) ... yra buvęs įvestas 274 m
be.prs.3 be.pst.pa.nom.sg.m dock.pst.pp.nom.sg.m 274 m
ilgio tanklaivis.
length.gen.sg tanker.nom.sg
'... a tanker of 274 m in length overall has been docked before.'

These dedicated passive perfects illustrated in (4) are, however, marginal. It appears, therefore, that the passive perfect has not developed a dedicated type of marking even though the formal means to differentiate it from its source construction are available. It is hard not to see this hesitant development of the passive perfect in connection with the situation of the active perfect, which, in a similar way, has not yet cut its links with the corresponding subjective resultative.

2.2. The future and narrativity

In their article "Future tense and narrativity" Nicole Nau and Birutė **Spraunienė** pose the question of whether a narrative future can be singled out in Baltic. The Baltic future is an outlier in the context of neighbouring Germanic, Fennic and Slavonic, where dedicated future grams, if available, are limited in scope and future marking is not completely emancipated from the present. Baltic has dedicated futures covering most of the domain of future time reference and little beyond that. A narrative future in Baltic would therefore be qualitatively different from analogous forms in Slavonic, where narrative functions of the perfective future historically derive from perfective presents. The authors carry out a careful analysis of the various futures occurring in Lithuanian and Latvian and set apart proleptic (imaginative) and inceptive uses of futures (referring to actions either intended or initiated and expected to develop further) from uses that are purely narrative in the sense that they serve as text-structuring and grounding devices. The latter could be illustrated with an example characteristic of Latvian, with the future of atnākt 'come' announcing a new episode with a new actor:

(5) Latvian (from a folk tale, cited in Nau & Spraunienė) Otrā rītā atnāks velns other.Loc.sg devil.nom.sg morning.Loc.sg PFX.come.FUT.3 рiе rijkura un teiks: kiln_heater.gen.sg and say.FUT.3 'The next morning, the devil **came** to the kiln heater and **said**: [...]'

Such futures could have developed from the proleptic or inceptive use and then have been assigned a purely textual function, perhaps as a means of marking stronger foregrounding than could be achieved with the relatively neutral narrative present.

2.3. Verbal aspect

Three studies in the volume deal with problems of verbal aspect. The first is **Axel Holvoet, Anna Daugavet** and **Vaiva Żeimantienė**'s article "Perfective Presents in Lithuanian". As the formal means of aspectual differentiation in Baltic are derivational, the domain of verbal aspect is comprehensive, extending as it does over the whole tense system and including participles, infinitives and modally marked forms like irrealis and imperative. Analysing the functioning of verbal aspect in the various domains of the verbal system is a task for the future. The present tense is singled out in this article because of its strategic position at the intersection of tense and aspect. When the boundedness introduced by verbal prefixes leads to the inability of prefixed verbs to occur in progressive use (i. e. in situations where reference time is included in event time), they are ousted from one of the central functions of the present tense; in a subsequent process of generalisation, perfective verbs can then be ousted from all present-tense functions, which has basically occurred in part of the Slavonic languages. In Baltic, on the other hand, perfective presents still cover a wide functional domain. The 'paradox' of the perfective present has recently drawn attention in a cross-linguistic context as well, cf. de Wit (2017).

The article in this volume offers a partial portrait of the Lithuanian perfective present, taking into account both grammatical and narrative functions as well as semantically and pragmatically specialised, constructionalised uses. Apart from that, however, the article also puts the case for verbal aspect in Baltic. The question of aspect in Baltic has always been viewed in the context of Slavonic aspect, with which it is structurally related as both are based on prefixation. This has also led to Russian being used as a benchmark in evaluating the grammatical character of Baltic verbal aspect, which is misleading. In this article it is argued that Baltic and Slavonic aspect both represent what Dahl calls 'grammaticalised lexical classes', though the degree of grammaticalisation is decidedly lower

in Baltic. In Lithuanian, we can still, in many respects, see the process of grammaticalisation going on. Motion verbs with bounding prefixes are by default perfective, but can still be coerced into progressive use in the present tense, as shown in (6); but many other verbs with bounding prefixes are already barred from progressive use, as shown in (7), where the perfectivised verb would be impossible:

- (6) Lithuanian (from Holvoet, Daugavet & Žeimantienė) Fis iau at-eina, parodžiau already point.PST.1SG 3.NOM.SG.M PFX-come.PRS.3 kita ranka i aikštės pusę. hand.ins.sg other.acc.sg square.GEN.SG at end.Acc.sg "There he's coming already", I pointed with my hand at the other end of the square.'
- (7) Šiuo metu organizuojame *su-organizuojame
 right_now organise.PRS.1PL PFX-organise.PRS.1PL
 akciją,
 action.ACC.SG
 [kurios metu renkame drabužėlius nepasiturinčioms šeimoms.]
 'Right now we are organising an action [consisting in collecting clothes for underprivileged families.]'

A corollary of the conclusion that Baltic does have verbal aspect, be it less grammaticalised than in Slavonic, is that further research work is needed to gain more insight into how such weakly grammaticalised aspect systems function. This entails further work on the use of aspectually marked tense forms in Baltic with the aim of establishing how aspect and tense interact in various domains. This research should, of course, extend to the converbs, whose central uses are concerned with relative location in time. And finally, a separate subdomain of this research programme comprises the atemporal verbal forms, i. e. the forms that at least in part of their uses refer to states-of-affairs without location in time: infinitives, imperatives and conditionals. A first and important step in this direction is Vladimir Panov's article "Untangling the functions of aspectual distinctions in the Lithuanian imperative against the background of Slavonic." The subject matter of this article belongs to a relatively underinvestigated domain of aspectology for reasons connected with the morphology of aspect. While in Slavonic and Baltic the derivational exponence of aspect creates an aspectual opposition extending to infinitives, imperatives etc.,

aspect, when inflectional, may be restricted to part of the verbal system, cf. the restriction of aspect to the past tense forms in Latin and Romance. Panov's exploration into aspectual usage in the Lithuanian imperative leads him to the preliminary conclusion that its usage types are basically similar to those observed in Slavonic, particularly in East Slavonic. Aspectual usage types in the imperative can be divided into those that directly follow from the semantic differences between the aspects, and secondary, discourse-oriented functions whose connection with the basic aspect functions is probably indirect and difficult to account for. The first case could be illustrated with the opposition between the prohibitive imperfective imperative and the perfective negated imperative in warnings:

(8) Lithuanian (from Panov)

Ne-gerk

NEG-drink.IMP.2SG this.GEN.PL

this.gen.pl juice[pl].gen

sulčių!

'Don't drink this juice!'

(9) Ramiau. Ne-iš-gerk visko.
more_quietly NEG-PFV-drink.IMP.2SG everything.GEN
'Steady now! Don't drink up everything!'

But while such functions derive from aspectual semantics, Lithuanian aspectual usage in the imperative shows a series of non-trivial correspondences with Slavonic, especially Russian, that are not motivated by purely aspectual features but are closely related to discourse structure, e.g., the use of imperfective imperatives in situations where the type of action to be undertaken is already known to speaker and addressee:

- (10) Lithuanian (from Panov)

 Dabar skambink jai

 now call.IMP.2SG 3.DAT.SG.F

 'Go ahead, call her (on the phone).'
- (11) Pa-skambink jai dabar!
 PFV-call.IMP.2SG 3.DAT.SG.F now
 'Give her a ring (on the phone).'

As the author points out, more work is necessary on Lithuanian's sister language Latvian and on neighbouring Estonian; but the data of Baltic and the Circum-Baltic area should also be compared to those of other languages displaying aspectual distinctions in the imperative and other atemporal forms, such as Modern Greek and Georgian.

A further subdomain of aspectuality is dealt with in **Kirill Kozhanov**'s article "Pluractionality in Lithuanian: a tale of two suffixes." It presents a comparative analysis, based on data from the Lithuanian web corpus, of Lithuanian iterative verbs with the suffix $-(d)in\dot{e}$ - and the habitual past tense with the suffix -dav-. The first belong to the domain of verbal derivation while the latter belong to verbal inflection. As the author's analysis shows, the differences between the two forms are such as one would expect to occur between inflection and derivation with regard to generality, predictability of meaning etc. The basic semantic difference is that pluractionality is situation-internal in the case of $-(d)in\dot{e}$ - and situation-external in the case of -dav-. It turns out, however, that the functional domains of the two formations are not quite mutually exclusive and there is a grey zone between them. This can be seen in (12), where a habitual past is coordinated with two iteratives in $-in\dot{e}$ - in apparently largestly similar functions:

(12) Lithuanian (from Kozhanov)

dirho Ŧi nepavargdama papirkinėjo 3.NOM.SG.F work.pst.3 tirelessly bribe.iter.pst.3 isiteikdavo sargybinius, jiems, guard.ACC.PL ingratiate_oneself.HAB.PST.3 3.DAT.PL.M apgaudinėjo. juos deceive.ITER.PST.3 3.ACC.PL.M

'She worked tirelessly—she bribed the guards, ingratiated herself with them, tricked them.'

2.4. Mood

The domain of mood is represented by one article: **Axel Holvoet, Liina Lindström, Anna Daugavet** and **Asta Laugalienė**'s study "Irrealis in Baltic and Baltic Fennic". The study focuses on complementation and poses the question to what extent, and in what functions, the two Baltic languages Lithuanian and Latvian and the two Baltic-Fennic languages Estonian and Finnish use irrealis as a complementising strategy (or, as the authors put it, 'complementising mood'), i.e. as a means of marking the type of complementation involved. Lithuanian consistently uses irrealis in complements of desiderative verbs ('want') and verbs denoting directive acts ('order, tell'), a strategy well known from Slavonic. Latvian does this rather inconsistently: with *lai*, the desiderative complementiser, both moods occur:

(13) Latvian (from Holvoet, Lindström, Daugavet & Laugalienė)

Es gribu, lai tu to

I want.prs.1sG that you this

zini / zinātu.

know.prs.2sG/know.irr

'I want you to know this.'

It is possible that the difference has to do with expectations as to the realisation of the event described in the complement clause, but this is difficult to substantiate as such expectations are difficult to measure. At any rate, the way Latvian departs here from a pattern of irrealis use common to Lithuanian and Northern Slavonic (East Slavonic, Polish) is striking, so that the areal context must be taken into account. The article investigates irrealis use in four domains of clausal complementation: propositional, desiderative, apprehensional and evaluative. The picture that emerges is complex and it would be premature to formulate clear-cut conclusions, but the results for desiderative complements are striking. Finnish, with very little irrealis use, and Lithuanian, with 100% irrealis use, are at the extremes, while in Latvian and Estonian the values for realis are closer to each other. In Estonian irrealis clearly predominates, but there is evidence that this state of affairs might be recent; whereas the situation in Old Latvian still awaits research. Areal convergence involving Estonian and Latvian might have been a factor behind changes in both languages, but only a diachronic investigation could bring more clarity.

2.5. Evidentiality and related phenomena

The domain of evidentiality and mirativity is represented by **Axel Hol-voet** and **Gina Kavaliūnaitė**'s article "The Lithuanian mirative present and its history". The article deals with a construction in which the main sentential predicate is expressed by a present active participle with the prefix *be*- (whose basic function is continuative but which has many other functions besides), used without an auxiliary. It is described in the grammars as expressing surprise:

(14) Lithuanian (from Holvoet & Kavaliūnaitė)

[Žiūriu ir negaliu patikėt —]

ant neštuvų be-gulįs anas

on stretcher[PL].GEN CNT-lie.PRS.NOM.SG.M that.NOM.SG.M

```
mano bendrakeleivis [...]

my travel.companion.nom.sg

'[I look and cannot believe my eyes]—it's that travel companion of
mine who is lying on the stretcher [...].' (Gasparas Aleksa, 2001, ccll)
```

Lithuanian grammars now assign forms like (14) to the domain of evidentiality. They conform to the formal features of the Baltic evidential, which is marked by the use of participles instead of finite verb forms. But the form in (14) has been described as specifically mirative, and it also stands apart by the obligatory presence of the prefix *be-*. Old Lithuanian yields no conclusive evidence as to the origin of this construction, but the authors draw attention to two factors that might have contributed to it. One was presentative constructions with štai 'behold' in which be- + present active participle was originally a postnominal modifier but could have been subsequently reanalysed as main sentential predicate; the other was the use of be- + present active participle in progressive forms, which are known to refer to non-canonical situations when used beyond their basic progressive function. The authors' suggestion is that the Lithuanian 'be-+present active participle' construction is an instance of a specifically mirative gram standing apart from the evidential system, with a grammaticalisation path of its own (in line with DeLancey's 1997 view of mirativity as a distinct category). But the relationship between the two categories remains an object of controversy (cf. the discussion in Aikhenvald 2004, 195-215), and with regard to Lithuanian as well the matter deserves further research.

3. Outlook

The research results presented in this volume would not have been achieved without the growing number of corpora and other digital resources available for the Baltic languages: the internet corpora accessible through Sketch Engine, the TriMCo dialect corpus for South-Eastern Lithuanian, the Lithuanian-Latvian parallel corpus, the online resources for Old Lithuanian and Old Latvian, and many more. New research tools will also afford increasing access to non-standard language varieties, as illustrated in Kapkan's pioneering article on the perfect in colloquial Lithuanian. In due time, research endeavours exploiting the new technological possibilities will presumably lead to the creation of comprehensive

corpus-based grammars of the Baltic languages reflecting their variation across registers. In order to enable adequate use of the linguistic data thus obtained, more theoretically and typologically informed research work on many aspects of Baltic grammar remains to be done. Hopefully the present volume, and its predecessors, will have contributed to it. If so, it will have done so as much by raising new research questions as by providing answers to older ones.

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ABBREVIATIONS

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ACC — accusative, CNT — continuative, DAT — dative, F — feminine, FUT — future, GEN — genitive, HAB — habitual, IMP — imperative, INS — instrumental, IRR — irrealis, ITER — iterative, LOC — locative, M — masculine, NEG — negative, NOM — nominative, PA — active participle, PFV — perfective, PFX — prefix, PL — plural, PP — passive participle, PRS — present, PST — past, RFL — reflexive, SG — singular
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Perfect in Lithuanian: A case study based on data from Facebook comments

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The aim of this paper is to analyse the semantic values of the Lithuanian perfect construction, putting them into a perspective of grammaticalization. The paper is based entirely on the data from a 2-million-word Facebook comments corpus created ad hoc for this study. The quantitative and qualitative analysis of the semantic values of the perfect tokens extracted from the corpus reveals several previously unidentified features of this Lithuanian construction. A large proportion of structures formally corresponding to the perfect should be described as copular constructions with adjectivized participles. This formal coincidence and the ambiguity generated by it in certain cases should not be seen as accidental but rather considered a likely source of the grammaticalization of the Lithuanian perfect, as the influence of its semantic features can be seen in all the perfect's other values. Considering it as a source, it seems that the development of the Lithuanian perfect is going in two separate, but also related directions, each of which is based on a gradual abandonment of one of the two core features of the prototypical Lithuanian perfects—the subject-oriented resultatives. In the case of the transitive resultative perfects, the orientation towards the subject is lost, while in the case of the experientials, it is the resultative meaning that is lost. Of these two values, the experientials are twice as frequent, which shows that the resultative meaning is abandoned more readily than the need to express a state or a quality of the subject. However, the experiential perfects seem to present some formal differences from all the other perfect values, namely, a significantly more frequent auxiliary usage which has so far been considered accidental.

Keywords: perfect, Lithuanian, Facebook, comments, resultative, experiential, subject-oriented, participles, adjectival, grammaticalization

1. Introduction: definitions and the state of the art

The perfect in the languages of the world, and especially the European perfects, have long been a widely studied category in linguistic typology and grammaticalization studies—mainly because of the category's semantic complexity, including the intricate notion of current relevance, and because of its relative instability, which is due to its tendency to develop into a past tense. The latter process has been well documented for some languages (e.g., the development from the Latin periphrastic perfect to a perfective past tense in some of the Romance languages) and extensively described for many of them, starting with Dahl (1985), Bybee & Dahl (1989), and then on to Bybee *et al.* (1994), Heine & Kuteva (2006), contributions by Squartini & Bertinetto, Lindstedt, Dahl & Hedin, Thieroff in Dahl (2000), and Drinka (2017), among others.

Nevertheless, the definitions of the perfect as a gram and the generalizations of perfect semantics vary. The perfect semantics is most frequently associated with the notion of current relevance, stemming from Reichenbach (1947), which is problematic because of its possible vagueness, despite numerous attempts to formalise and define its various instances (Comrie 1976, McCawley 1981, Klein 1992, Kiparsky 2002, Dahl & Hedin 2000). Alternatively, extended-'now' and indefinite-past theories have been proposed (McCoard 1978) and adopted by some, but none of these three is uniformly accepted yet.

A slightly different approach to defining the perfect was adopted in the Eurotyp project (Dahl 2000 on tense and aspect). As Lindstedt writes in the chapter of the volume devoted to the perfect, referring to *The Perfect Questionnaire* employed in the project for data collection, "definitions have not been operationalized—a language possesses a perfect if it has a gram, associated with a verb, that is used in most of the first seven examples—which illustrate different kinds of CR [current relevance] of

¹ I wish to thank Axel Holvoet, Justina Bružaitė-Liseckienė, and Ignas Rudaitis for all our conversations, discussions, and their practical advice that have been of great help in designing my approach, implementing it, formulating ideas, and writing this article. I am also indebted to Peter Arkadiev, Anna Daugavet, Nicole Nau, Birutė Spraunienė, Wayles Browne, and two external reviewers for their constructive comments. For all remaining shortcomings of the article I am, of course, solely responsible. This research has received funding from the European Social Fund (project No. 09.3.3-LMT-K-712-01-0071) under grant agreement with the Research Council of Lithuania (LMTLT).

past situations—but is *not* used in the following four examples, consisting of short narratives" (Lindstedt 2000, 366). So instead of a metalinguistic definition of what should qualify as an instance of a perfect, a series of constructed sentences are given. Nevertheless, the constructed sentences are still based on the same metalinguistic notion of current relevance.

Probably the most concise and adequate way of identifying perfects cross-linguistically was adopted in the perfect section of the World Atlas of Language Structures (Dryer & Haspelmath 2013) by Velupillai & Dahl (2013). For a gram from a certain language to qualify as a perfect, it needs to have at least these two exact semantic values: the resultative and the experiential. The resultative perfect conveys an event that happened in the past but which has a result that still holds at the reference point, while the experiential perfect conveys an event that has occurred at least once during an interval ending at the reference point. Perfects can also assume other semantic values, but in order not to confuse them with general past tenses, a further negative criterion is added—if a gram has the values mentioned above but can also be used in narrative contexts, it should not be considered a perfect.

The most recent, computationally-oriented and parallel corpus-based studies on the perfect, such as Dahl & Wälchli (2016) or van der Klijs *et al.* (2020), "sidestep the theoretical debate, and abstract away from preconceptualized meanings" (van der Klijs *et al.* 2020, 6) by adopting a form-based approach as a starting point. This way a perfect is defined as a construction combining a *have/be* auxiliary and a past participle, and thus includes, for instance, the French *Passé Composé* or the Italian *Passato prossimo*, which would not be considered perfects according to Velupillai & Dahl (2013), as well as according to most other previous current-relevance-based definitions, as these two grams can be freely used in narratives.

According to the definition by Velupillai & Dahl (2013), the Lithuanian be and past active participle qualifies as a perfect, as it does satisfy the [+resultative] and [+experiential] but [-narrative] criteria. However, the corpus-based approach taken in this study dictates the necessity to put aside any semantic generalizations and to start from the formal features of the construction.

As in most other European languages, in Lithuanian, too, the perfect is formed from an auxiliary and a participle. Though Lithuanian does have a construction formed with a possessive verb and a participle (Wiemer

2012), this does not qualify as a perfect semantically, as it can only assume resultative meaning and not experiential. Regarding the constructions formed with the copula and the passive participles, see Spraunienė & Brudzyński (2021). The active Lithuanian perfect is formed from the present tense of the verb $b\bar{u}ti$ 'to be' (the copula), functioning as an auxiliary, and the past active participle of the lexical verb (1). As can be seen from the example, the participle agrees with the subject in number and gender.

(1) Donatas labai Ingute yra

Donatas.Nom.sg.m very Ingute.Acc.sg.f be.prs.3

izeid-es,
offend-pst.pa.sg.m

[kad tik jis ir niekas negali laimeti.]²
'Donatas has strongly offended Ingutė, [[by saying] that only he can win, and nobody else.'

The Lithuanian perfect has been discussed in several studies (Sližienė 1964, Servaitė 1985, Servaitė 1988, Geniušienė & Nedjalkov 1988, Sakurai 2016), in some also in comparison to Latvian (Arkadiev & Daugavet 2016, 2021), as well as in the context of Baltic and Slavic languages (Wiemer & Giger 2005, Arkadiev & Wiemer 2020). Lithuanian was not included in the sample of European perfects in the European periphrastic perfects by Drinka (2017) from the point of view of language contact. However, the only corpus-based studies on the Lithuanian perfect so far have been Arkadiev & Daugavet (2016) and (2021). The sources of data in their studies were questionnaires and the parallel Lithuanian and Latvian corpus (LiLa) which comprises literary fiction and non-fiction translated from one Baltic language to the other, as well as Eu documents. This shows that the Lithuanian perfect in less formal language varieties has not been studied at all, and one of the aims of this paper is to fill this gap.

² Here and henceforth, all of the examples are taken from the Facebook comments corpus described in Section II, unless indicated otherwise. Spelling and punctuation have not been edited. Whenever possible, quoting rude language has been avoided, so the comments selected for citing are somewhat biased towards the more politely written ones. Perhaps not incidentally, these are the ones using more standard spelling and punctuation.

2. Data and methodology

Although the present study deals with one language only, my goal is to present typologically-oriented results that could be applied to cross-linguistic comparison. Cross-linguistic comparison of grammatical structures has started off with secondary data sources—mainly descriptions present in grammars of different languages. In Dahl (1985), Bybee & Dahl (1989) and in the Eurotyp project (Dahl 2000) questionnaires were used, as a way to obtain primary data directly from the speaker. However, the language variety of a questionnaire is likely to be somewhat artificial and formal because of the unnatural situation linguistic data extraction takes place in.

Lately, however, and also thanks to the new technologies that allow researchers to process larger amounts of text, there has been a significant shift towards primary data analysis also in typology, not only in descriptive linguistics (see, for example, Kortmann 2003 and Szmrecsanyi & Wälchli 2014). The most convenient source for such studies is morphologically and syntactically annotated parallel corpora. Parallel corpora allow for a direct comparison between linguistic structures, without having to rely on metalinguistic definitions (for example, Dahl 2014, Dahl & Wälchli 2016 on perfects).

In their 2012 article on motion verbs, Wälchli & Cysouw introduce the notion of a doculect, meaning "any documented language variety, be it as raw data (e.g., a sound file), primary data (e.g., a transcribed text or wordlist), or secondary data (e.g., a glossed text or a grammatical description) of whatever size" (Wälchli & Cysouw 2012, 673). The term serves as a "replacement for the notion of language" and is used in order to emphasize that what is studied (or, in typological studies, compared) is merely an empirical sample of language, "rather than assume that any particular sample fully represents a language" (Wälchli & Cysouw 2012, 706). Assuming such a stance, it becomes particularly clear that in a fair amount of literature on perfects in general, and on the Lithuanian perfect in particular, standard, written, and formal doculects are overrepresented, at the expense of spoken, regional and informal doculects. Especially in typology, more often than not researchers are concerned with written standard varieties of European languages, while non-standard and spoken language data is often overlooked, as has been discussed by Kortmann (2003, 2).

A case in point can be the category of perfects, as Miller (2003) points out in his article on perfects and resultatives in non-standard and spoken

English and Russian language data. The author stresses that "[w]here languages have standard written varieties and non-standard spoken varieties typological work usually focuses on the former and ignores the latter" and as a consequence "[c]urrent typologies of tense and aspect are weakened by their neglect of non-standard varieties and spontaneous spoken language." This is because "non-standard varieties of a given language may differ in many (sometimes surprising) respects from the standard variety" and "even the spontaneous spoken language of speakers of standard varieties offers many constructions unrecorded in reference grammars." Miller shows that, based on his data, the English perfect, so often taken as an impeccable example of a standard perfect category, may not be so standard in the spoken language, as some of its uses draw it closer to a past tense, while the spoken varieties of Russian, a language that is often cited as lacking a perfect, do have certain constructions that may qualify as perfects. Thus, studies based exclusively on informal, spoken, or non-standard doculects should be seen as only counterbalancing a disproportionate amount of studies based on standard, formal, and written data.

Another reason to look into less formal and more spontaneous style doculects has to do with the features of the perfect category itself—namely, its grammaticalization tendencies and relative instability. Given the perfect's tendency to change, such styles seem even more interesting to use as data—as shown in detail by Labov (2007, 158) "[o]nly in spontaneous speech will we find the most advanced tokens of linguistic change in progress, and we will need these to establish the direction and path of the change." Moreover, in Labov's terms (2006, 436), grammaticalization can be considered a 'change from below'—it is a very slow process that can stay for a long time below the level of awareness of the speakers, until the very last stage, when a change has already happened. As this type of language change occurs without speakers realizing it, changes from below have a high probability of going to completion (Claes 2015, 2–3), which is also the case with grammaticalization.

However, including less formal and more spontaneous language data into the samples is easier said than done—most high-quality corpora, especially for relatively 'smaller' and relatively less-studied languages, are restricted to standard and written language varieties. Thus, if most typological studies are not focusing on non-standard or spoken language data, this might mainly be due to practical reasons—none or very few spoken, informal, or non-standard language corpora are available, especially if we are looking

for morphologically annotated or syntactically parsed ones. The case of Lithuanian is a perfect example—the only two morphologically annotated corpora, to the best of my knowledge, are DLKT, which is 99.7% composed of literary, journalistic and administrative texts written in standard language, and ltTenTen. The latter is an interesting resource built according to the same method in many different languages, including Lithuanian. The corpus formation is done automatically, excluding duplicated content and spam and including any linguistically valuable material from the web, as long as it's longer than one sentence and shorter than a document of many thousands of words, so as to raise a suspicion that it might not be a standard webpage (Jakubíček *et al.* 2013). However, the content of the genre 'webpages' is so diverse that it is hard to define or describe in some way. If we're looking for informal and spontaneous language, it's impossible to say how much of it, if any, could be found in ltTenTen. The EUROPARL corpus provides some spoken language data of parliamentary speeches but the genre it belongs to can hardly be considered informal or spontaneous.

The narrow choice of resources available shows the necessity for a practical and realistic method of data collection and processing. This has led to the decision to choose a particular type of internet language and to create a specialized corpus for the present analysis—namely, the comments from public news media outlet pages on Facebook (a visual illustration in English is given in Figure 1 below).

Figure 1. Screenshots from the Facebook page of The Guardian with the location of the comments (circled)



The genre of comments on social media is a valuable resource in this context for several reasons. First, and most importantly, it represents a written-language variety that is highly interactive and spontaneous—features that draw it closer to spoken language, as discussed by Crystal (2011, 16–35). Secondly, having in mind the difficulties described in the preceding paragraphs in finding large amounts of data of informal language, comments on social media stand out because they are extremely widespread and readily available in Lithuanian as well as in all other European languages, so as to additionally give the possibility of creating genre-parallel corpora for a possible comparative study as well. Third, the comments from public pages on the most widespread social network, Facebook, are easy to extract and process due to their already being fairly structured and available in a digital format.

Obviously, the private pages and their contents on Facebook can't be used without explicit consent from the owner of the page or the profile, so out of the public pages an interesting possibility, chosen for this study, is to select the main media outlets in the country, which always have their own Facebook pages that are publicly available even to users not registered on the social network. The content of such pages is almost exclusively composed of posts with links to news articles on the official webpage of the news outlet. Under such posts social media users subscribing to the page often leave comments, expressing their views on the subject matter of the article as well as on related (and sometimes also unrelated) issues. These comments can be short and laconic phrases and sentences, little opinion pieces and, more often than not, interactive dialogues and discussions.

The posts in such news outlet pages are often accompanied by a sentence or two summarizing the article. The important distinction here is that such accompanying introductory texts in the post should not be included if the goal is to create a corpus of comments by users, as the post itself contains a text written by a journalist or a social media manager and is very different from the unedited and informal variety used by the commenters.

To summarize, the corpus created from such comments would be a doculect that could be described as having a fair degree of spontaneity and positioned halfway between what has been traditionally considered a dichotomy between speech and writing, although, as pointed out by Crystal (2011, 34), the internet medium should not be identified with either

of the two, and should rather be considered in its own terms. The comments genre is often close to chat or text message language and reflects a contemporary and highly informal language variety.

3. Data extraction process

Having chosen the genre of the data for the corpus, the process of data extraction was the following. First, four of the most popular news outlets in Lithuania were selected (LRT.LT, DELFI.LT, 15MIN, LRYTAS), based on the number of followers of their pages on Facebook, in order to get the most active pages and gather a sufficient amount of data. The extraction was done using Facepager software (Jünger & Keyling 2019). Given a link to a page on Facebook, the Facepager allows a specified extraction of the particular kind of text (post, comment, or both) or other type of content, accompanied by certain features, such as the number of reactions or responses, date, name of the author and so on. The data is extracted in a structured way, so that each comment can be linked back to the post it was referring to, which can be useful in case some brief comments entering into a dialogue directly with the title of the news article or the comment might otherwise be incomprehensible. As mentioned above, only the comments have been extracted, leaving out the posts, as they represent a rather different language variety. The size of the corpus formed this way was 2 million words. In order to gather the required amount of data, the software started from the newest and 'scrolled' down to get the comments under the posts published in the last 3 years. Given that the extraction was done at the beginning of 2020, the timespan of the data is approximately from 2017 to 2020.

 s, u, u, and z.³ The morphological tagger cannot recognize a text written this way, so the process of identification of the perfects had to be done in a more primitive way—by creating a textual search string, and then by filtering the results manually.

As shown in example (1) from the preceding section, the Lithuanian perfect consists of the auxiliary $b\bar{u}ti$ (the copula) and a past active participle of the lexical verb. Using the method of data extraction described below, the fact that the auxiliary in Lithuanian perfect constructions (as in most other contexts of copular constructions) is optional is of crucial importance. In his study on the copular constructions in Lithuanian Mikulskas notes that "[e]xcept for clear cases of presentational identification or general statements, the presence or absence of the verbal copula in Lithuanian present tense constructions is not important; most often it is conditioned by reasons related to style or prosody" (Mikulskas 2017, 208). However, although this is generally the case, it is reasonable to expect that in informal language, such as in a Facebook comment, the copula may often be omitted, at least for reasons of brevity. This implies the necessity to identify not only perfects with an auxiliary, but also the ones without it. A decision to create a more limiting search string, low in recall but high in precision, containing two elements—the auxiliary and the participle—would have made the process easier but would have produced a smaller sample, leaving out a significant amount of possibly interesting data.

The latter consideration left only one possibility—namely, to simply identify all past active participles present in the corpus, thus yielding

³ In most laptop keyboards, the specialised Lithuanian characters can be found in the upper row of the keyboard, where, when typing in English, the numbers are placed. Because of such (some would say, unfortunate) placement, the user is forced to choose between being able to type the numbers and being able to type the special Lithuanian characters listed above. Generally, a solution is to have two keyboards installed (for example, the Lithuanian one and the English one) and to switch between them when needed. However, this is time-consuming, so many users choose to avoid the Lithuanian upper-row characters altogether, especially in informal contexts. Similar considerations hold for typing with a smartphone—it may, of course, depend on the model of the smarphone and the software; however, more often than not, at least from my own experience, typing with these characters is considerably more time-consuming. Perhaps surprisingly, texts written without these characters are almost always perfectly comprehensible.

a search strategy very high in recall, but low in precision, and then to manually select the ones in perfect constructions, excluding other contexts of participle usage. The solution was to create a search string identifying all words containing the suffixes characteristic of the past active participles, including masculine, feminine, singular and plural, as well as their orthographic 'internet language' versions and two very common orthographic 'mistakes' (Table 1). The search was limited to words at least 4 characters long, in order to avoid the pronouns and other highly frequent words with the same endings, while a few of the participles shorter than 4 characters, such as $\dot{e}m\dot{e}$ (take.PST.PA.PL.M) or $\dot{e}j\dot{e}$ (go.PST.PA.PL.M) were searched for separately. The search yielded 40 000 results, which had to be filtered manually in order to eliminate noise generators.

Table 1. Past active participle suffixes

	masculine	feminine	masculine	feminine
	singular	singular	plural	plural
standard	-ęs	-usi (-us)	-ę	-usios
	sakęs	sakiusi (sakius)	sakę	sakiusios
internet	-es sakes		-е sake	
orthographic 'mistakes'	-ias sakias		-ia sakia	

After filtering out the non-participles, 12 000 tokens were identified. However, past active participles in Lithuanian, apart from the perfect, have a rather wide range of other uses. They can be used as attributes in noun phrases, as well as in what Ambrazas (1979) defines as semipredicative usage, where the participle is not part of the main predicate of the sentence; in the past tense of the subjunctive mood; with copula in the past tense to form the pluperfect (which has a range of specific meanings and is outside the scope of this study, but included in the comparative study with Latvian by Arkadiev and Daugavet 2021); as well as in the future resultative with future tense copula and with the past habitual tense copula for a specific resultative. Some other constructions can be

added to this list, such as the evidential.4 All of these had to be manually eliminated as well to get the final sample, consisting of 2018 perfect constructions from a 2-million-word corpus. This yields a frequency of 1 construction per 991 words in the sample.

4. Semantic values of the perfect constructions in Lithuanian

4.1. Overview

The semantic values of the Lithuanian perfect identified in the data can be categorized into several different groups. Some of them have already been identified by Geniušienė & Nedjalkov (1988), Arkadiev & Daugavet (2016) as subject-oriented resultative perfects, possessive resultative perfects and experiential perfects. Perfects with prototypically transitive verbs, identified by the authors above as 'current relevance' perfects, are here termed 'transitive resultative perfects', in order to avoid the vague concept of current

```
A. Veryga sako
                    ne-žinoj-ęs, [kad būtų galėjusios dingti apsaugos priemonės.]
A. Veryga say.prs.3 NEG-know-pst.pa.sg.m
```

```
Jonas Pinskus teigia
                                             [nieko bendra su cigarečių kontrabanda.]
                              ne-turėj-ęs
Jonas Pinskus claim.prs.3
                              NEG-have-PST.PA.SG.M
```

```
Tokio
                                      ne-buv-e
        snygio
                    gegužę
                               esa
                                                             jau
Such
        snowfall
                   May.Acc
                                      NEG-be-PST.PA.SG.M
                                                             already
                              EVD
keliolika
           metų.
```

In the data chosen for this study, none of the cases of PAPS functioning as a main predicate in the sentence without an auxiliary seem to have the evidential meaning.

11-10

⁴ Arkadiev & Daugavet (2016, 2) mention that bare past active participles are ambiguous between the perfect and the evidential. Although according to Lithuanian grammars a bare past active participle can in fact acquire an evidential reading, it seems to be rare, at least in the kind of data chosen for this study. Evidentials are widely used, for instance, in news texts, but, possibly also because of their ambiguity with the perfect, the evidential construction with a bare participle tends to be replaced by a structure consisting of a main verb, such as sako(si) 'says' or teigia 'claims', with a participial complement clause (see Arkadiev 2012 for a detailed description of participial complementation in Lithuanian). Another stucture with a similar function can be formed from the reportative marker esq and the participle (see Wiemer 2010 for an analysis of this heterosemic marker and its functions). For example:

^{&#}x27;A. Veryga says he didn't know [that the protective equipment could have disappeared.]' (kaunodiena.lt)

^{&#}x27;Jonas Pinskus claims he didn't have [anything to do with the cigarette smuggling.]' (lrt.lt)

year.PL 'Apparently, there hasn't been such a snowfall in May in around 15 years.' (xxiamzius.lt)

relevance. All of the above are discussed in more detail in the following sections. One more semantic value of the Lithuanian perfect is identified in the present analysis—namely, the cumulative-retrospective perfect, drawing on observations made by Dahl (2020) and Nau, Spraunienė & Žeimantienė (2020).

Apart from the perfect values mentioned above, I argue that a significant proportion of the (omitted) copula with past active participle construction instances do not represent perfects, but rather copular constructions with adjectival participles that could be the non-grammaticalized source of the Lithuanian perfect construction. These copular constructions are closely intertwined with subject-oriented resultative perfects, so that the two groups overlap, and are not easy to distinguish.

In general, the goal of the present analysis is to put the whole range of the semantic values of the Lithuanian perfect in the perspective of grammaticalization, ranging from the least grammaticalized to the most grammaticalized. Figure 2 below shows the proportion of each semantic value in the data analysed.

Figure 2. Proportions of the different values of the perfect construction in the data

Adjpap — adjectival participles in copular constructions

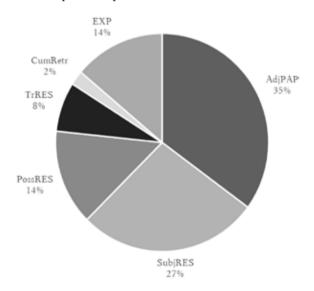
Subjres — subject-oriented resultative perfects

Possres — possessive resultative perfects

Trres — transitive resultative perfects

CumRetr — cumulative-retrospective perfects

EXP — experiential perfects



4.2. Adjectival participles in copular constructions and subject-oriented resultatives

The first step of the analysis of the data was to determine what kind of lexical input is used in the Lithuanian perfect. Taking as criteria telicity and transitivity of the verbs, we can see that a very large proportion, 65%, of the instances of copula and past active participle construction are formed with telic intransitive verbs, as in (2) and (3).

- (2) sovietinis mentalitetas dar niekur
 Soviet.NOM.SG.M mentality.NOM.SG.M yet nowhere
 nera ding-es
 NEG.be.PRS.3 disappear-PST.PA.PL.M
 'The Soviet mentality has not disappeared anywhere yet.'
- (3) veganai yra issziuv-e, perbal-e,
 vegan.pl.m be.prs.3 dry_out-pst.pa.pl.m become_pale-pst.pa.pl.m
 [pajuodusiais paakiaia ir pavandenijusiomis akimis]

 'Vegans are skinny, pale, [with dark under-eye circles and watery eyes.]'

The construction with such lexical input has been defined in Geniušienė & Nedjalkov (1988) and applied by Arkadiev & Daugavet (2016) in their corpus-based study of the Lithuanian and Latvian perfects as a subject-oriented or subjective resultative which conveys a state or a quality of the subject, as opposed to the objective resultative, conveying a state or a quality of the object. This is according to the definition of the subjective resultative by Nedjalkov & Jaxontov (1988, 9), where the orientation towards the subject or the object should be understood as a reference to the actant whose state has changed as a result of the preceding action.

Such definition implies two elements of the resultative meaning—the current state and the preceding action which generated it. However, it seems that in many instances of the (omitted) copula and past active participle construction, such as in (3), the state conveyed by the participle can hardly be related to any preceding action on semantic rather than morphological grounds. There is no doubt about the resultative etymology of the past active participle suffix, which imparts a resultant-state meaning to the participle. According to Ambrazas, the resultant-state meaning of the Lithuanian past active participle comes directly from the old derivational meaning of the suffix -us which is itself derived from the

Indo-European perfect participle suffix *-wos. Such examples as $r\bar{u}ges$ pienas 'sour.pst.pa.sg.m milk' 'soured milk' or $l\bar{u}zusi$ koja 'break.pst.pa.sg.f leg' 'broken leg' with attributive participles made from 'atelic' verbs without any prefix that could express resultativity show that the resultant-state meaning is due precisely to the suffix (Ambrazas 2006, 171). However, resultant-state meaning, characteristic of the past active participle suffix, should be distinguished from the resultative perfect meaning, characteristic of the construction as a whole and focusing not only on the state, but also on the past action that generated the state, too.

Ambrazas also notes that with some prefixed intransitive verbs the meaning of the 'resultant quality' is so strong that almost no connection to a prior action can be conceived of—for example, pasiutęs (go_wild.pst.pa.sg.m) šuo 'rabid dog', sustiręs (stiffen.pst.pa.sg.m) sijonas 'stiff skirt', išdykęs (become_naughty.pst.pa.sg.m) vaikas 'naughty child', apsiblausę (dim.pst.pa.pl.m) akys 'bleary eyes'—in such cases the participles convey permanent qualities that can't be semantically related to any prior action (Ambrazas 1979, 39). Similarly, in (3) and many other examples from the data chosen for this study, the past event that generated the current state or quality can hardly be presupposed.

This is especially obvious with defective verbs lacking some finite past tense forms altogether (4) as well as with verbs whose finite past tense forms are very infrequent (5) or have a different meaning (6), (7). Past tense forms of the verbs used in (4) and (5), susijo and išpruso, do not have any instance of usage in the Facebook comments corpus of this study, and in the 208-million-word DLKT corpus present only 10 and 14 instances, respectively, in the 3rd person, and none in the 1st or 2nd singular or plural. At the same time, the past active participle forms of the same verbs are rather frequent—for instance, there are 23 instances of susijęs in the data used for this study, and more than 10 thousand in DLKT.

⁵ The concept of telicity here adopted by Ambrazas is closer to the so-called 'Eastern view'—a verb is considered telic if and only if it entails both the 'T property' and the 'P property', as discussed by Dahl (1981). The verbs cited here— $l\bar{u}\bar{z}ti$ 'to break.IPFV' and $r\bar{u}gti$ 'to sour.IPFV'—could be more precisely termed imperfective. They form an opposition with the perfective prefixed verbs $sul\bar{u}\bar{z}ti$ 'to break.PFV' and $sur\bar{u}gti$ 'to sour.PFV'. In other words, the participle suffix can impart the 'P property' to a bare form of an imperfective verb that in itself only has the 'T property'.

- (4) O musu istorija visgi susij-usi nevertheless CONI 1PL.GEN history.nom.sg.f relate-PST.PA.SG.F CCCPsu with USSR 'Our history is nevertheless related to the USSR.'
- (5) labai kramtyt kokia negražu gumą, chew.inf how.sg.f very NEG.nice gum.ACC ne-išprus-us

NEG-educate-PST.PA.SG.F

'It's not nice to chew gum, she's so uneducated.'

- (6) Ž.L. kad ir at-si-lup-es kartais bet Ž.L. even though sometimes but PVB-RFL-peel-PST.PA.SG.M vstk družokas :D still friend.NOM 'Even though Ž.L. is sometimes muddle-headed, he's still a friend.'
- (7) Darbdaviai visada link-e nepermokėti:) employer.pl.m always bend-pst.pa.pl.m NEG.overpay.INF 'The employers are always inclined not to overpay.'

Regarding (6) and (7), although the past tense forms of these verbs are not rare, the figurative usage is characteristic of the participles, while the past tense forms usually retain the literal meaning—atsilupo 'peeled off' and linko 'bent'.

In some cases, such as in (3), (8), and (9) the verb itself is compatible with the assumption of a past event, but it is not clear if a past event actually is presupposed as a part of the meaning of the sentence, as these participles are completely lexicalized.

- (8) Kad pa-si-kėl-ęs, taip, menininkai tai that PVB-RFL-lift-PST.PA.SG.M artist.NOM.PL PTC yes visi keistoki strange.NOM.PL all.nom.pl 'That he is arrogant [lit. 'lifting himself'], it's true, all artists are rather strange.'
- (9) Šiuolaikiniai tėvai išprotėję, visai modern.NOM.PL.M parent.nom.pl.m totally go_crazy.PST.PA.PL.M [duoda vaikams tokius vardus] 'Modern parents are totally crazy, [they give such names to their children.]'

(10) Bet Ineta matosi pavarg-usi...
but Ineta.nom.sg.f see.prs.3.rfl tire-pst.pa.sg.f

[nieko issimiegos po kokiu metu...]

'But Ineta is obviously tired... [It's all right, she will be able to sleep as long as she wants in a year or so.]'

Thus, it seems that the adjective-like participles from the examples above are subject to the process of adjectivization. Based on the data used for this study, the following features could be considered signs of the adjectivization of the participle, all of which preclude the presupposition of a state resulting from a prior action (the list is not exhaustive):

- 1. the participle is used very frequently while the past tense of the verb is either extremely rare, or even on the verge of ungrammaticality;
- 2. the participle has acquired a new meaning that is absent if the verb is used in a past tense or some other form;
- 3. the participle is a very common lexical element without any synonym in the adjective class.

Given that the resultative perfect should comprise both elements of the resultative meaning —that of the current state, and that of the prior event the state stems from, and given that in the examples such as (3)—(10) above only the former element is present, it seems that such cases should not be considered perfects but rather ascriptive copular constructions with adjectivized participles. The abundance of such cases in Lithuanian has also been noticed by Servaitė (1988, 87), who identifies them as grammatical statives or quasiresultatives, as defined by Nedjalkov and Jaxontov (1988, 13–14). In these constructions the derivational meaning of the suffix is obscured and the participle conveys a state or a quality of the subject, without relating it to any prior event. The participles here are used in a characterizing function—they get to express, not even a state, but a quality, which can be temporary or not, possibly resulting from a previous event or not—in such cases this is irrelevant.

It is important to note that the adjectivization of certain participles, causing the loss of the grammatical resultant-state meaning of the participial suffix, is a separate process from the grammaticalization of the perfect. It affects only some, not all, lexical elements that can be used in the-copula-and-past-active-participle construction. In the data, a significant proportion of all tokens assigned to the category of adjectival participles in

copular constructions, as well as some of the subject-oriented resultative perfects, are instances of the copula and past active participle construction being ambiguous between an analytical verbal phrase and a characterizing usage of the participle in an ascriptive copular construction, even though there are no signs of the adjectivization of the participle.

In (11)—(13), it is not clear if the participles <code>sušalę</code>, <code>supuvęs</code>, <code>užsisėdėję</code> do presuppose some vague prior event or if they rather express just a state of the subject. Similar cases of ambiguity have been mentioned and briefly discussed by Ambrazas (2006, 171), who notes that the Lithuanian past active participles used in periphrastic perfect⁶ constructions are not clearly differentiated from copular constructions with participles that still retain many traits of their nominal usage (Ambrazas 2006, 172). The fact that in certain cases past active participles can be understood either as adjectival predicates with the copula or as analytical verb forms (verbal phrases) has also been described by Holvoet and Pajėdienė (2004, 134) as well as by Mikulskas (2009, 136). In the latter two studies the example given of such ambiguity is formed with the verb <code>jsitikinti</code> 'convince oneself'.

- (11) **susal-e** visi, net su subom:D freeze-pst.pa.pl.m all.pl.m.nom even with fur_coat.pl.ins. 'Everybody is freezing, even with fur coats'
- (12) jeigu valstybes valdymas supuv-es
 if state.sg.gen administration.sg.m.nom rot-pst.pa.sg.m

 [tai jau nieko nepakeisi]

 'If the state administration is rotten, [nothing can be changed any more.]'
- (13) uzsisedej-e mokytojai klasese
 oversit-pst.pa.pl.m teacher.pl.m.nom classroom.pl.f.loc
 [tegu grinam ore pabuna i sveikata jiems]
 'The teachers have been staying in the classrooms for too long, [let them stay outside for a while, it will be healthy for them.]'

The verbal interpretation in (15) activates the second element of the perfect meaning—the presupposition of the prior event that generated the current state of the subject, while in (14), the participle could also be translated

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⁶ Ambrazas' definition of the periphrastic perfect here is broader, including also the pluperfect formed with the past tense of the verb $b\bar{u}ti$.

with 'sure', even though the verbal interpretation, entailing an event of 'being convinced' at some point in the past, can't be excluded either.

- (14) Esu įsitikin-ęs, [kad esama ir gerų, ir blogų žmonių.]
 be.PRS.1SG convince-PST.PA.SG.M

 'I am convinced [that there are both good and bad people.]'
- (15) Ne kartą esu įsitikin-ęs,

 NEG time.SG.ACC be.PRS.1SG convince-PST.PA.SG.M

 [kad esama ir gerų, ir blogų žmonių.]

 'More than once I have been convinced [that there are both good and bad people.]'

Arguably, such cases represent the situation of ambiguity characteristic of Stage II in the Overlap Model of grammaticalization of the auxiliaries described by Heine (1993, 48–53). In Heine's terms, the adjectival usage of the participle with the copula would be the source, and the verbal interpretation would be the target in the grammaticalization chain of the Lithuanian perfect. In other words, copular constructions with adjectivized participles in (3)—(10) would represent the source of grammaticalization of the Lithuanian perfect—Stage I. Ambiguous examples in (11)—(13) represent Stage II, while (15), which exemplifies one of the more grammaticalized values of the perfect discussed in further sections, allowing only the verbal representation, would represent Stage III.

Grammaticalization chains have both synchronic and diachronic dimensions. This study deals with synchronic data in which all three stages can be seen. Further research is necessary in order to establish the diachronic data and to verify the claim that the ascriptive copular constructions are in fact the source of grammaticalization of the Lithuanian perfect, and to see if different instances found in the synchronic data do reflect the historic development. In the meantime, synchronically, the following stages can be distinguished, ranging from ascriptive copular constructions with adjectives to subject-oriented resultative perfects:⁷

- 1. ascriptive copular constructions with adjectives;
- 2. ascriptive copular constructions with adjectivized past active participles;

⁷ It is understood that the 'stages' here referred to are relative—they "merely represent certain points, perhaps focal points, along the relevant continuum" (Heine 1993, 48).

- 3. ascriptive copular constructions with non-adjectivized participles, ambiguous between the adjectival and verbal interpretations;
- 4. subject-oriented resultative perfects, entailing both elements of the meaning—the past event and the resultant state.

It is to be expected that grammaticalized (verbal) and non-grammaticalized (adjectival) instances of the same construction coexist. The question at this point, however, is how to distinguish between such copular constructions with adjectivized participles and subject-oriented resultative perfects, or, in other words, between predicative and characterizing usage of the participles. No clear-cut boundary can be established but there are several important factors that draw a sentence closer to the subject-oriented resultative perfect or to the ascriptive copular construction.

Semantically, the main difference between participles in adjectival predicates and in perfect constructions can be identified by the presence or the absence of the possibility to relate the state of the subject to some prior action or event that generated it. Regarding examples (14) and (15), Mikulskas suggests, in cognitive terms, that an adjectival participle conveys only the final stage of 'gaining certainty', while a verbally interpreted participle conveys all stages of an event (2017, 45). However, this distinction is rather subject to case-by-case interpretation.

Next, as noted by Servaitė (1988, 86–87) and Mikulskas (2017, 45), the verbal interpretation can be triggered by other elements of the sentence, such as the adverbials. This is what happens in (15) with the adverbial *ne kartą* 'more than once'. The verbal interpretation is also generally triggered by the most frequent adverbials in the data—*jau* 'already' and *dar* 'still, not yet', as in (2) and the following examples:

- (16) Ta partija **jau supuv-us.**DEM party.NOM.SG.F already rot-PST.PA.SG.F

 'That party is already rotten.'
- (17) [daugely šalių tai jau norma, na o]

 tūlas lietuvis... dar nera

 certain.nom.sg.m. Lithuanian.nom.sg.m still neg.be.prs.1sg

 subrend-es.

 mature-pst.pa.sg.m

'[In most countries it is already a norm, while] certain Lithuanians are not mature enough yet.'

The adverbials can also point in the other direction—there is a range of adverbials modifying the participle that trigger the adjectival interpretation. First of all, these are the adverbials and pronouns indicating gradability, such as *labai* 'very', *toks/tokia* 'so, so much', *koks/kokia* 'how, how much', *per daug /pernelyg* 'too much'. Naturally, if something or someone can be assigned a feature that is more or less intensive, it is probably a quality, and not a state resulting from prior action.

- (18) Šimašius **labai** jau **įsitemp-ęs**Šimašius.NOM.SG.M very PTC tense_up-PST.PA.SG.M

 [nelieskit manęs ir panasiai kas per jautrumas?]

 'Šimašius is very tense, [don't touch me and so on, why so sensitive.]'
- (19) ziauru ko **toks nusimin-es**. cruel.na why so gloom-pst.pa.sg.m 'It's awful, why are you so gloomy.'
- (20) Dažniausiai mokytojai per jautrūs,
 usually teacher.nom.pl.m too sensitive.nom.pl.m
 pernelyg atsidav-ę darbui.
 too dedicate-pst.pa.pl.m work.dat
 'The teachers are usually too sensitive, too dedicated to their work.'

Another group of adverbials testifying in favour of the adjectival interpretation are the ones indicating stability and continuity, such as *pastoviai* 'constantly' or *visa laiką* 'all the time', expressing a stable quality. Interestingly, a stable quality can also be conveyed by a different form of the copula—namely, the habitual $b\bar{u}na$:

- (21) [Reikia dar daugiau parduotuvių,]
 iuk visi pastov
 - jukvisipastoviaiperalk-ę,PTCall.NOM.PL.Mconstantlystarve-PST.PA.PL.Mištrošk-ę,pikti,nepakantus.thirst-PST.PA.PL.Mangry.PL.Mimpatient.PL.M'[We need even more shops,] as everyone is constantly starving, thirsty, angry, impatient.'
- (22) Vestuvėse žmonės būna labai wedding.PL.LOC people.NOM.PL be.HAB.PRS.3 very pasipuoš-ę.
 dress_up-PST.PA.PL.M
 'At weddings people are very dressed up.'

Apart from the adverbials, another element of sentential context licencing the adjectival interpretation is the possibility of coordination with adjectives, such as in (20), (21), (23), (24). This factor is not absolute, because it is possible to find more grammaticalized instances of the perfect that due to their morphology and agreement rules can be coordinated with adjectives. However, in most ambiguous cases, the coordination with adjectives draws the construction closer to the adjectival interpretation.

- (23) [Jeigu bendrakeleivis samoningai seda i auto, zinodamas,]

 kad vairuotojas isger-es / girtas —

 COMPL driver.NOM.SG.M drink-PST.PA.SG.M drunk.SG.M

 [taip, jis bendrininkas.]

 '[If a passenger consciously gets into the car while knowing] that the driver is tipsy/drunk [yes, he is an accomplice.]'
- (24) [Tokios prezidentės tikrai nebeturėsime, visada pasitemp-usi, sąžininga, nekonfliktiška, always gather-PST.PA.SG.F fair.sg.F NEG.feuding.sg.F mokanti daug kalbu. niekur nowhere know.prs.pa.sg.f a lot language.GEN.PL Lietuvai. nepadarė gėdos NEG.do.PST.3 shame.gen Lithuania.DAT '[No way will we ever have such a president again—she is always smart, fair, non-feuding, knows many languages, nowhere has she caused embarrassment for Lithuania.

The broad category of telic intransitive verbs in the data analysed can be divided into more specific lexico-semantic classes. It is important to note that, as all of the examples above demonstrate, the subject of the sentences with the (omitted) copula and the past active participle in the data is almost exclusively animate and agent-like. Thus, in the category of the copular constructions with adjectival participles, the following groups of verbs, describing the subject in some way, are the most numerous:

- Bodily states, sometimes used figuratively, such as in (3), (11), (21) or (23). These verbs do regularly have past tense forms and a past event can in theory be presupposed, but the focus is on the state and often no synonym in the adjective class is available.
- Mental states and character traits, such as in (5), (6), (8), (9), (17), (18), (19) or (24). These seem to be more constant or irreversible states that can be considered qualities.

• Civil and stage-of-life states, with participles <code>augęs</code> (+LOC) 'grown up (somewhere)', <code>gimęs</code> 'born', <code>miręs</code> 'dead', <code>vedęs</code> 'married (masculine)', (<code>iš)tekėjusi</code> 'married (feminine)', <code>išsiskyręs</code> 'divorced', <code>kilęs</code> (<code>iš</code>) 'originating (from)' represent a very ambiguous case. There is no doubt that such states are generated by specific past events, but on the other hand, they do not have any alternative whatsoever in the adjective class, are very frequent, and it seems that they are mainly used in order to attribute a feature to the subject, without taking into account a specific past event of birth, marriage, or divorce.

The remaining constructions with participles derived from telic intransitive verbs that do not show signs of adjectivization and that entail a past event that generated the current state expressed by the participle, thus comprising both elements of the resultative perfect meaning, have been assigned to subject-oriented resultative perfects. This is by far the largest group of perfects identified in the data. They also represent the prototypical examples of the Lithuanian perfect. Subject-oriented resultative perfects express a state of a subject, which semantically is usually an agent, together with the past event that generated such state. However, the main element of the meaning, where the focus is located, is the state of subject, not the past event.

The semantic range of verbs in the group of subject-oriented resultative perfects is more varied, compared to copular constructions with adjectivized participles. Although some are still physical or mental change-of-state verbs (25, 26), there are also verbs meaning 'to become' (27) or 'to change' (28), 'to appear' or 'to disappear' (2) as well as reflexive verbs meaning 'to begin' (29) and 'to finish' (30).

- (25) Tai mes atsibud-e [ir ner uz ka balsuot]

 PTC 1PL.NOM wake_up-PST.PA.PL.M

 'Well, we're awake, [and there's no one to vote for.]'
- (26) [buvusi gana kukli] mergina greit
 girl.NOM.SG.F quickly
 isdrasej-usi,....
 become brave-PST.PA.SG.F

'The girl that used to be quite modest has quickly become confident.'

(27) [Europos pozicijos dar nėra,]
nes ji yra tap-usi
because 3SG.F.NOM be.PRS.3 become-PST.PA.SG.F

situacijos įkaitė. situation.gen hostage.nom

'[Europe doesn't have a position yet,] because they have become hostages of the situation.'

- (28) [Galit komentuoti apie policija gerai, blogai, bet faktas tas,] pasikeit-us kad policija labai COMPL police.nom.sg.f change-PST.PA.SG.F verv into puse, [nebetie pareigunai, kas buvo pries 10 metu] geraia good.acc.sg.f.nom. side.Acc '[You can say anything you want about the police, but the fact is] that the police has changed a lot for the better, [the officers are not the
- same as 10 years ago.]'

 (29) [sako su metais proto padaugėja bet čia matosi]

 marazmas žmogui prasidėj-es

 senility.NOM.SG.M person.dat.SG.M begin-PST.PA.SG.M

 '[They say people acquire intelligence with age, but here it's obvious
- (30) [Ar valanda ar penkios minutės likę,]
 kol darbo laikas
 until work.GEN time.NOM.SG.M
 ne-pasibaig-es [turi priimti ateinančius]

that] for this person senility has begun.'

NEG-finish-pst.pa.sg.m

'[It doesn't matter if there's an hour or five minutes left,] as long as the working hours are not finished, [they have to serve those who are coming.]'

The largest lexical class in the group of subject-oriented resultative perfects in the data is formed with various verbs of motion (31, 32), inhibited motion (33), and changes in spatial configuration in general, also figurative (34).

(31) [niekas nenori pirkti net ledines masinos]

nesjinuvazev-usi300tukstanciubecause3SG.F.nomgo-PST.PA.SG.F300thousandone240CONJNEG240

'[Nobody wants to buy even a very cool car] because it's been driven 300 thousand km, and not 240.'

(32) Nesvarbu, kad issideklarav-es — isvyk-es.

NEG.important.na compl declare_out-pst.pa.sg.m leave-pst.pa.sg.m

[Elektronine bankininkyste reikia tureti]

'It doesn't matter, even if you have cancelled your residence or left the country. [You still need to have online access to your bank account.]'

- (33) Bet deja dar atsilik-usi, užstrig-usi but alas still lag behind-pst.pa.sg.f stuck-pst.pa.sg.f Lietuva laike ta time.Loc Lithuania.nom.sg.f DEM 'But alas, Lithuania is still lagging behind, still stuck in time.'
- (34) O dar Bavarija **neisir-us**?

 conj yet Bavarija.nom.sg.f dissolve-pst.pa.sg.f
 'But hasn't Bavarija (a music band) dissolved yet?'

The meaning of subject-oriented resultative perfects with movement verbs can be generalized as follows: the subject has (or has not) changed its location in space from point A to point B, and is now located in point B. Participles derived from such verbs necessarily involve a clear past action, namely, the movement (or non-movement, with verbs such as *likti* 'stay, remain').

The orientation towards the subject, characteristic of this group of perfects, can also be understood in a more general sense, not only as the reference to the actant whose state has changed as a result of the preceding action, but also as a tendency to describe the subject in some way, as if based on a preceding action some conclusion could be made about them. This tendency can be due to the influence of the source ascriptive copular construction, and might be especially evident in the kind of data chosen for this study, as expressing judgements about somebody is very common in internet comments.

4.3. Possessive resultative perfects

Possessive resultatives have been defined by Nedjalkov & Jaxontov (1988, 9) as constructions with transitive verbs where "the result of the action affects the underlying subject rather than the immediate patient of the action." For Lithuanian, a possessive resultative perfect has been singled out by Geniušienė & Nedjalkov (1988) and identified by Arkadiev & Daugavet (2016) as a subtype of the subject-oriented resultative.

The lexical input for this class of perfects is telic transitive verbs expressing an event that affects the subject in one way or another. The object of such clauses is usually conceptually related to the subject—for

instance, it may be part of the subject or something in the possession of the subject. Thus, although the verb is transitive and there is an object that can be considered the patient, possessive resultative perfects express a change of state of the subject (agent), while the object (patient) is given a marginal role, whenever present.

Possessive resultative perfects are most frequently formed with verbs that belong to the following semantic groups:

- Verbs conveying the subject's coming into possession of something or losing something:
- (35) [Jam iki sąjudžio kurimo, kaip peėsčiam iki Šanchajaus.]
 visus nuopelnus yra pasisąvin-es.
 all.ACC.PL.M merit.ACC.PL.M be.PRS.3 appropriate-PST.PA.SG.M
 '[For him to establish Sąjūdis would be like walking to Shanghai.]
 All his merits are stolen.'
- (36) Fotografai juosteliu **prisipirk-e**photographer.NOM.PL.M film.GEN.PL.F buy_plenty-RFL.PST.PA.PL.M
 urmu
 wholesale.INS
 'Photographers have bought plenty of films at wholesale.'
 - Verbs describing changes in the looks of the subject, such as getting dressed, putting something on:
- (37) ruda kostiuma apsivilk-ęs
 brown.Acc.sg.m suit.Acc.sg.m put_on-pst.pa.sg.m
 [kad nieks nepastebetu kaip meluoja]
 'He has put a brown suit on, [so that nobody would notice when he's lying.]'
- (38) Nesvarbu, kad brilijantais apsikarsci-us,
 NEG.important.NA COMPL sparkler.INS.PL.M hang-RFL.PST.PA.SG.F
 [bet sneket nemoka]

 'Doesn't matter that she has got sparklers on, [but she can't speak
 [properly]].
 - Verbs conveying subject's movement of body parts or changes in posture, such as lowering one's head, raising one's hand and so on:
- (39) Labai žemai **nuleid-usi** galvą
 very low.ADV lower-PST.PA.SG.F head.ACC.SG.F
 'She has lowered her head very much.'

- (40) Jau visai smegenis **pašal-e** already totally brain.ACC.PL.F freeze-PST.PA.PL.M

 'Their brains are totally frozen already (=They are not thinking straight.)'
 - Some verbs of acquisition or state of knowledge, such as learning or forgetting something, acquiring a skill:
- išsilavin-usi. (41) Juk ji Raštinga. educate-RFL.PST.PA.SG.F literate.sg.F PTC 3SG.F.NOM Baig-usi aukštaji. ivaldži-usi finish-pst.pa.sg.f high.Acc.sg.m.def master-PST.PA.SG.F kompiuterines programas. program.ACC.PL.F computer.ADJ.ACC.PL.F 'After all, she is educated, literate, she has got higher education, she has mastered computer programs.'
- (42) [Valdininkai gyvena savo pasaulyje,]
 o apie paprastus žmones jie
 CONJ about simple.ACC.PL.M people.ACC.PL.M 3PL.M.NOM
 pamirš-ę
 forget-PST.PA.PL.M
 '[The clerks live in their own world,] they have completely forgotten about simple people.'
 - Idioms where the object is figurative, so that the whole verb phrase with the object refers to the subject:
- (43) Tamsta truputeli **nuleid-us** gara
 2SG.NOM a_bit let_off-PST.PA.SG.F steam.ACC
 [po prezidentes pasisakymo]

 'You have let off some steam [after the president's speech.]'
- (44) [Parasė patarejai kalbą, nes pats bijo grybo pripjaut,]
 nes jau taip yra prisipjov-ęs
 because already PTC be.PRS.3 cut_plenty-PST.PA.SG.M
 '[His advisors wrote his speech, because he's afraid to say nonsense,
 (lit. cut a mushroom)] because he already has said plenty of
 nonsense.' (lit. has cut enough of a mushroom)

However the most salient group of verbs in this category are the ingestive verbs. The most prototypical examples of these are the verbs meaning 'to eat' and 'to drink', while in data from the Facebook comments corpus many verbs have been identified denoting various modes and ways of consuming psychoactive substances:

- (45) lasiniu mužikelis privalg-ias
 lard.GEN.PL.M churl.DIM.NOM.SG.M eat_plenty-PST.PA.SG.M
 'The churl has eaten a lot of lard.'
- (46) Raimondai nusišneki gal
 Raimondas.voc.sg.m talk_nonsense.prs.2sg maybe
 padar-ęs gramą?
 make-pst.pa.sg.m gram.acc.sg.m
 'Raimondas, you're talking nonsense, maybe you had a drop too much?'

Sentences with ingestive verbs correspond to what Næss (Næss 2007, 51–84) describes as cases of Affected Agent. According to her, ingestive verbs are not prototypical examples of transitivity, despite being often exemplified as such. Clauses with Affected Agent deviate from the semantic prototype of transitivity, as "the distinctness of the semantic roles of the participants in a two-participant event is a crucial factor in semantic transitivity" (Næss 2007, 51), while clauses with ingestive verbs cannot be considered such. Eating is an action performed for the sole purpose to obtain an effect on the agent, not the patient. The agent volitionally instigates the event but has the additional property of being itself affected by the event (Næss 2007, 53).

Næss shows that as a result, ingestive verbs cross-linguistically often demonstrate 'intransitive behaviour'—they tend to be expressed in formally intransitive clauses. This account can also help to explain why while in the data the proportion of perfects with transitive verbs is relatively small (cf. next section), the category of possessive resultatives is fairly large, thus suggesting that this use of the Lithuanian perfect is more common. The line of development of the Lithuanian perfect can be seen as leading from the basic non-grammaticalized copular constructions with adjectival participles, expressing states and qualities of the agent and almost unrelated to any prior event, towards resultative perfects with transitive verbs where the main element of the meaning is the past event put in place by the agent and affecting mostly the patient. In such a scale the possessive resultative perfects represent 'middle ground'—the clauses are formally transitive but both the initiator of the action and the affected entity is the agent.

A frequent phenomenon in this group is clauses with indefinite object deletion—the object being inferable from the verb:

(47) [nesvarbu ar slidu, ar tamsu, ar stabdžiai atsisakę,] ar vairuotojas girtas, ar if driver.nom.sg.m drunk.nom.sg.m if užsimet-ęs,

PVB.RFL.throw-PST.PA.SG.M [galvos i šonus nepasuks]

'[It doesn't matter if it's slippery, or cold, or if the brakes are not working], or if the driver is drunk, or tipsy (lit. 'has thrown [some drink] onto himself')—[he won't take a look around.]'

A similar example has also been given in (23), as an instance of an adjectivized participle in a copular construction. Næss explains that "[i]f one wishes to focus on the effect on the agent, then this effect can be construed as measuring out the event. On such a construal, the agent is cast as the endpoint of the event, and the event is completely described once the agent has been specified —both the initiating entity and the endpoint of the action are included in the description of the event, since they are both the same entity. When the event is construed in this way, reference to the patient is simply superfluous, since the event already has a delimiting argument" (Næss 2007, 57). In fact, in many cases it seems that the object is deleted exactly because it is superfluous and is easily inferred from the verb. The participles derived from transitive verbs with deleted object often seem to be no less adjectivized than the ones formed from telic intransitive verbs, discussed in section 2—they are frequently coordinated with adjectives (47, 48), accompanying adverbials testify in favour of the adjectival interpretation (49, 50), although a past action of consumption of course can always be presupposed, and they do not lack past tense forms.

- (48) *a jie durn-i ar ne-da-ėd-ę.

 whether 3PL.M crazy.PL.M whether NEG-PVB-eat-PST.PA.PL.M*'Are they [just] crazy or are they starving?'
- (49) Truputi **pri-lup-es**slightly PVB-guzzle-PST.PA.SG.M
 'He is slightly drunk.'
- (50) Jis gal $pri-pis-es^8$ biške? 3.SG.M.NOM maybe PVB-fuck-PST.PA.SG.M a bit 'Is he a bit wasted, maybe?'

⁸ Rude.

In general, possessive resultative perfects can be described as formally transitive clauses that are still subject-oriented, despite the presence of the patient, which is closely related to the subject or is a part of the subject. A significant proportion of the possessive resultative perfects are clauses with transitive verbs used intransitively, that is, with indefinite-object deletion. The latter participles show signs of lexicalization, similarly to the adjectival participles formed out of telic intransitive verbs in copular constructions. In general, instances of possessive resultative perfects are closely related to the prototypical examples of the Lithuanian perfect—subject-oriented resultative perfects with telic intransitive verbs. Possessive resultative perfects are somewhere in the middle of the continuum of the perfect's grammaticalization from the basic non-grammaticalized copular constructions expressing the subject's qualities towards the loss of a clear affectedness of the agent in other more grammaticalized perfect constructions.

4.4. Transitive resultative perfects

The perfects with prototypically transitive verbs where the subject is entirely distinct from the object and not directly related to it, differently from the possessive resultative perfects, have been labelled by Arkadiev & Daugavet (2016) as 'current relevance perfects'. Constructions with such lexical input can't be said to convey solely the change of state of the agent, as the past action expressed by the participle affects the patient as much as the subject and the focus shifts away from the current state towards the past event itself:

(51) [Ukrainiečiams nieko nėra neimanoma.] **7uk** jie Juodaja jūrą PTC Black.Acc.sg.f.Def 3PL.M.NOM sea.ACC.SG.F iškas-e ir Karpatu kalnus dig-pst.pa.pl.m and Carpathian.GEN.PL.M mountain.ACC.PL.M supyl-ę pour-PST.PA.PL.M '[For Ukrainians there's nothing impossible.] After all, they have dug out the Black Sea and poured out the Carpathian Mountains.'

(52) Grąžinkit pensijas kurias restore.IMP.2PL pension.ACC.PL.F REL.ACC.PL.F

per krizę nurėž-ę, through crisis.ACC.SG.F cut-PST.PA.PL.M [nei daug nei mažai - 190 litų į mėnesį 4 metams, štai taip!!!!] 'Restore the pensions you have cut down during the crisis, [it's not too much and not too little—190 litas a month for 4 years, that's what I say!!!]'

Although such perfects are absolutely grammatical, as the construction in Lithuanian can be formed with any verb, it is obvious from the quantitative analysis that perfects with transitive verbs are not that frequent—they only represent 8% of the total. This can be explained by considering transitive perfects as an extension of the prototypical subject-oriented resultative perfects. The two main distinctive features of the subject-oriented resultative perfects are:

- the orientation towards the subject—the copula and participle construction necessarily conveys a state of the subject;
- 2) the resultative meaning, arising from the resultative derivative meaning of the participle suffix and from the telicity of the verb—the construction conveys not just any state or quality of the subject, but one stemming from a prior action or event.

The resultative meaning is not necessarily present in the non-grammaticalized source construction with the verb *to be* functioning as a copula and not yet as an auxiliary, and with the participle used in a characterizing function rather than as a part of a periphrastic verbal construction. Conversely, in the case of perfects with transitive verbs, the resultative meaning is essential while the necessity to convey exclusively the state of the subject has to be rendered marginal, given the distinctness of the object from the subject. The low frequency of the transitive resultative perfects shows that the tendency of the orientation towards the subject is not readily abandoned.

The tendency of the Lithuanian perfect construction to draw focus towards the subject could also explain why almost half of all resultative perfects with transitive verbs in the data have the middle-reflexive marker -si-. Such cases of the Lithuanian reflexive marker usage as in (53, 54), have been described by Panov (2020) and termed 'weak autobenefactives'. With weak autobenefactives, the middle-reflexive marker is not obligatory and its omission does not drastically change the meaning of the sentence. It

provides only a weak reference to the subject, indicating that the subject somehow benefits from the action or is affected by it (Panov 2020, 349).

- (53) Kodėl pertraukinėja svečią, kurį
 why interrupt.prs.3 guest.ACC.SG.M REL.ACC.SG.M

 pasikviet-ę į studiją?
 invite-rfl.pst.pa.sg.m into studio.ACC.SG.F

 'Why are they interrupting the guest that they have invited to the studio?'
- (54) [nebegazdinkit tu pensininku kurie] katik gave išmanu tele ir just get.pst.pa.pl.m smart.Acc.sg.M phone.NA and pasijung-e Facebook turn on-RFL.PST.PA.PL.M '[Don't scare those pensioners who] have just got smartphones and turned Facebook on.'

Both in (53) and in (54) a non-reflexive version of the verb could also have been used; however, the reflexive verbs sound more natural here, as they enable the retention of at least some orientation towards the subject.

In view of the copular ascriptive constructions, whose function is to ascribe a quality to the subject, as a source of the Lithuanian perfect, resultative perfects with transitive verbs seem the ones most distant from the source model, thus, highly grammaticalized, even when compared to the experiential perfects and the cumulative-retrospective perfect subtype to be discussed further.

4.5. Cumulative-retrospective perfects

Another subtype of the Lithuanian perfect values is the cumulative-retrospective perfect. The double term has been borrowed from Nau, Spraunienė & Žeimantienė (2020) and from Dahl (2020). Nau, Spraunienė & Žeimantienė (2020, 51–55) in their article on the passive in Lithuanian describe a cumulative passive construction, conveying subsumed experience and referring to "actions in the past of the life of a person or a group of persons which are either recurrent or which took a long time", while the iterativity is additionally expressed using such adverbials as *tiek* 'so much', *kiek* 'how much', *kiek daug* 'how much', *tiek kartų* 'so many times':

(55) [Kur norėtumėte groti, kad klausytojų būtų daugiau? Labiausiai aišku užsienyje. Nes čia viskas yra tas pats.] Visq gyvenimą čia gyven-t-a, gro-t-a, whole.Acc.sg life.Acc.sg here live-pst.pp-na play-pst.pp-na ei-t-a į koncertus.

attend-pst.pp-na to concert.Acc.pl

'[Where would you like to play in order to have more listeners? m: Most of all of course we would like to play abroad. Because here everything is the ame.] Here we have lived, played and gone to concerts all our lives.' (Nau, Spraunienė & Žeimantienė 2020, 51–52)

Dahl (2020) has observed a similar value of the Lithuanian perfect in the data from the Lithuanian translations of the Bible, naming these 'retrospective uses' and describing such instances as cases in which "the speaker looks back at the past, generalizing over it or referring in one way or other to events or sets of events that tend to be presupposed rather than asserted" (Dahl 2020):

(56) Eikite pažiūrėti žmogaus, kuris pasakė see.INF say.pst.3 go.IMP.2PL man.gen.sg REL.NOM.SG man viska. ka *e*\$11 padari-usi. everything.Acc do-pst.pa.sg.f REL.ACC be.prs.1sg 'Come, see a man who told me all the things that I have done. (Dahl 2020)

Although not very frequent, such uses can also be found in the Facebook comments data. Differently from the passive cumulative construction, about which Nau, Spraunienė & Žeimantienė (2020, 51–55) note that it is usually formed with atelic intransitive verbs but can also occur with telic and transitive verbs, the cumulative-retrospective perfects are mainly formed with telic transitive verbs. Based on their lexical input they could be assigned to the resultative perfects discussed in the previous section; however, they convey not a past action with its relevant result, but rather a summarized past experience comprised out of multiple occurrences of events.

(57) [Kas kas, bet Maskva patylėti turi...] nukov-usi Kiek ji γra arhow much be.prs.3 crush-PST.PA.SG.F 3SG.F.NOM ornužudži-usi? kill-pst.pa.sg.f Pvz: *Afganistane* 1989 metais išžudyta e.g.: Afghanistan.Loc 1989 year.pl.ins kill off.pst.pp.na visa šeima, family.sg.nom all.sg.nom

[sustatyti savi komunistai, Čečenijos genocidas...]

'[More than anyone else, Moscow should stay quiet...] How much have they crushed or killed? For example, in Afghanistan in 1989 a whole family was killed, [their own communists have been put in place, the genocide in Chechnya...]'

(58) Ji fantastiška. Tiek žmonių
3SG.F.NOM fantastic.NOM.SG.F so_much people.GEN.PL
padėj-usi
help-PST.PA.SG.F
'She is fantastic. She has helped so many people.'

Thus, differently from experientials, the focus in cumulative-retrospective uses of the perfect is not so much on the 'state of experience' of the subject, but rather on the 'accumulation' of past events that tend to be presupposed. (57) has an exclamative interpretation which highlights the presupposition of the 'accumulation' of events, and the cumulative perfects are followed by the passive cumulative construction in the next sentence of the same comment, thus maintaining the line of cumulative predicates. In (58), the most plausible interpretation is that the second sentence of the comment gives grounds for the writer's opinion on the subject, conveyed in the first sentence. In other words, the presupposed 'accumulation' of events gives rise to the conclusion, namely, to assign a quality (conveyed by the adjective) to the subject.

4.6. Experiential perfects

The experiential reading of the perfect has been defined in the literature as conveying an event that has occurred at least once during an interval ending at reference point. The experiential perfect value is considered the second obligatory meaning in order for a gram to qualify as a perfect by Velupillai & Dahl (2013) and for perfects developing from resultative

⁹ As noted by one of the reviewers of this article, the cumulative-retrospective perfects, conveying multiple events, could be compared to pluractional perfects in Portuguese (European (Squartini & Bertinetto 2000) as well as Brazilian (Cabredo Hofherr & Laca 2011)). In case of this Lithuanian construction, cumulative-retrospective is merely an interpretation that can arise in certain contexts and with certain lexical input, normally accompanied by adverbs or other elements that strengthen the pluractional interpretation. The perfect construction in itself is not pluractional.

constructions, it shows a step forward in the scale of grammaticalization. In Lithuanian, experiential perfects can be clearly distinguished from all other types of perfects due to their lexical input—while all other perfects, and even the ascriptive copular constructions with adjectival participles are formed with telic verbs, if an atelic verb of state or activity appears in its place, the perfect immediately acquires an experiential reading:

(59)	taip	keista,	ne-gyven-usi	Lietuvoje,			
	so	strange.NA	neg-live-pst.pa.sg.f	Lithuania.Loc			
	o	taip	dzukuoja,	saunuole			
	CONJ	so	speak_Dzukian.prs.3	great_person.nom			
	ʻIt's so	'It's so strange, she hasn't lived in Lithuania, but she speaks Dzukian					
	so well, she's great.'						

(6o)	tik	toks	klausimas:		
	just	such.noм	ques	tion.NOM	
	0	Zukas		yra	kariav-es?
	CONJ	Zukas.nom.sg	.M	be.prs.3	be_at_war-pst.pa.sg.m
	'Just a question: has Zukas been at war?'				

However, some constructions with telic verbs can also have the experiential reading. This is possible when the direct consequences of the event conveyed by a telic verb are not valid up to the present moment and the subject is no longer in the state generated by it, but rather in the state of having an experience of such an event. It is understood from (61) that the speaker's fingers are not currently frostbitten, but he is rather explaining his experience of such an event.

(61)	kalnuose mountain.LOC.PL		esu	nušal-es	9		
			be.prs.1sg	freeze_off-pst.pa.sg.m	9		
	rankų	pirš	tus				
	hand.GEN.PL	fing	ger.ACC.PL				
	[Chirurgai gazdino, bet gangrena nepagriebe.]						
	'I have frozen off 9 fingers in the mountains. [The surgeons were						
	scaring me, but there was no gangrene.]'						

As can be seen from Figure 2, the experiential perfects in the data are rather frequent, and in particular—significantly more frequent than the resultative perfects with transitive verbs. Confronting the experiential perfects with the prototypical subject-oriented resultative perfects, it is important to note that out of the two core features of the latter, namely,

the orientation towards the subject and the resultative meaning, in order to obtain an experiential reading the latter element has to be abandoned, while the orientation towards the subject stays in focus. Experiential perfects still convey a state of the subject, which can be generalized as 'having certain experience' due to performing a certain action or participating in some event at some point in the past. Naturally, as is usual with perfects, the exact moment of such action is indefinite, and there is nothing to be said about the occasion in which it occurred. The whole focus again is on the state of having certain experience that is being assigned to the subject:

(62)	jaunu zn		iu	reikia	kurie		
	young.GEN.PL	peopl	e.GEN.PL	need.prs	REL.NOM.PL.M		
	pa-buv-e		yra	europoje	ir		
	PVB-be-PST.PA.P	L.M	be.prs.3	Europe.Loc	CONJ		
	zino	kas	vyksta				
	know.prs.3 what happe		happen	.PRS.3			
	'We need young people that have been in Europe and know what is						
	happening.'						

In this sense, the experiential perfect seems to be less distant from the subject-oriented resultative perfect than the resultative perfect with prototypically transitive verbs. The frequency of the experientials in the data testify in favour of the idea that, in the case of the Lithuanian perfect, the resultative meaning can be abandoned more readily than the orientation towards the subject. This means that even though the Lithuanian perfect is based on a resultative construction, it is not the resultative perfect that is better established and more common, but rather the experiential.

Nevertheless, there are some exceptional features that distinguish the experiential from other perfect values. The first one is limited lexical input. Although it is grammatical to use any atelic verb in the construction, in the data the lexical input is very limited. Instances of only two verbs—būti 'to be' and matyti 'to see'—form 36% of all experientials. 50% of all experientials are formed with only 7 different verbs (būti, matyti, gauti 'to receive', girdėti 'to hear', pasakyti 'to say', skaityti 'to read', turėti 'to have'). This is exceptional, compared to other groups discussed so far, where no particular verb can be said to dominate in the lexical input to such an extent, but in the case of experientials, it is probably not that surprising, as these are precisely the verbs most frequently used in order

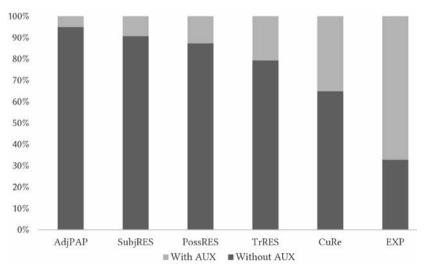
to convey certain experience of having been somewhere or having seen something:

(63) Esu ir Gruodi žaibu
be.prs.1sG too December.ACC lightning.GEN.PL
mat-es.
see-pst.pa.sg.m
'I have seen lightning even in December.'

(64) Didžioji dauguma lietuvių big.nom.sg.def Lithuanian.GEN.PL majority.nom Baltijos nėra buv-ę prie jūros by Baltic.GEN NEG.be.PRS.3 sea.GEN be-PST.PA.PL.M nes ant kuro neturi for fuel.gen because NEG.have.prs.3 'The great majority of Lithuanians haven't been to the Baltic Sea because they can't afford the fuel.'

Most interestingly, there is a formal feature that differentiates the experientials from other perfects—it is the frequent occurrence of the auxiliary. While with other perfect values the auxiliary is either rare (subject-oriented and possessive resultative), or infrequent (transitive resultative and cumulative-retrospective), there is a clear difference in the group of the experientials, where the auxiliary is present in more than 70% of all cases (Figure 3).

Figure 3. The proportions of each value of the construction with and without the auxiliary



It is possible that such a tendency is especially evident exactly in the kind of data chosen for this study—an informal language variety, as in formal language the copula tends to be used more in general. Although this claim should be checked on a different type of data, it is highly likely that this formal difference of experientials from all other perfect values is an example of a phenomenon that can be identified only thanks to the inclusion of an alternative source of data into grammar studies.

4.7. Auxiliary usage and negation patterns

As already mentioned in the previous section, the omission of the auxiliary does not seem accidental in the data, as it is clearly used more often with the experiential perfects, comparing to all other perfect values. A related tendency has been noted by Mikulskas (2017, 208)—although specifying that in most cases the omission of the copula does not carry any significant meaning and is done for reasons related to prosody and style, he also notes that in certain constructions, namely in the context of syntactic subordination, the absence of the copula may be linked to tense indefiniteness. In the case of the Lithuanian perfect, the time of the past event conveyed by the participles is always indefinite, however experiential perfects, conveying an event that has happened at least once in the period of time ending at the moment of utterance, do have a clearer temporal frame than the other values identified.

It should be noted, however, that the insertion of the copula with adjectivized participles, subject-oriented, possessive resultative, transitive resultative and cumulative-retrospective perfect would in all cases be perfectly grammatical, so the decision to omit it has to be considered a freely available option, not a restriction. But the copula is almost obligatorily omitted in one particular circumstance—namely, if the participle is negated. Generally, the negation can be attached either on the auxiliary (65) or on the participle (66).

- (65) Popiežiaus nesat ma-t-e štoli (空でいる)
 Pope.GEN NEG.be.PRS.2PL see-PST.PA.PL.M PTC
 'Have you never seen the Pope, or what.'
- (66) Supraskit kaimo Jurgis understand.IMP.2PL village.GEN Jurgis.NOM.SG

nei karvės, nei arklio

NEG COW.GEN neg horse.GEN

Ne mat acl Stumbras išvis retanybėlio

ne-mat-ęs! [Stumbras išvis retenybė! (1968)]

NEG-see-PST.PA.SG.M

'You need to understand, he's a country cousin, he has never seen a cow or a horse. [A wisent is an absolute rarity!]'

In the data used for this study, the negation on the participle clearly prevails—the participle is negated in 85% of all negation cases, except for the experiential perfects, where the negation on the auxiliary is more common (66%). However, only 8 cases such as (64), of the non-omitted auxiliary with a negated participle have been found. In most of them, the participle seems somewhat adjectivized together with the negation particle:

(67) Esu **ne-link-usi** keršyti.
be.PRS.1SG NEG-incline-PST.PA.SG.F revenge.INF
'I am not inclined to revenge.'

The other examples include *neisigilinęs* (NEG.go_deep.pst.pa.sg.m), *neprigėrę* (NEG.drink_up.pst.pa.pl.m), *neprirūkę* (NEG.smoke_up.pst.pa.pl.m). The meaning of the first one can be translated as 'superficial [about something]' while the latter two—as simply 'not under influence'.

Arkadiev (2015) has written about the choice of place of negation being used in order to overtly distinguish a higher and a lower scope of negation. Following McCawley (1999) and other authors, the higher scope of negation with the perfect is generalized as 'it is not true that situation V has current relevance', while the lower scope—as 'situation not-V has current relevance'. Identifying the negation on the auxiliary as the higher interpretation, and the negation on the participle as lower interpretation, Arkadiev concludes that "the use of the lower negation in the perfect in Lithuanian is mainly employed for the discursive highlighting of the event of not doing something and asserting the relevance of the state arisen from such a 'negative event' at the reference time, in contrast to the higher negation, which serves to merely deny the existence or current relevance of an event in a neutral way" (2015, 7–8).

However, such a distinction is impossible to confirm based on the data used in this study— in the overwhelming majority of cases negation is attached to the participle, and the most plausible explanation would be that it is on the participle not because of the discursive highlighting of the

'not-V' event, but simply because of the preference to omit the auxiliary. Without it, the negation on the participle remains the only choice available. Another factor testifying in favour of such an explanation is the fact that the insertion of the non-negated auxiliary is very uncommon if the negation is already present on the participle—as mentioned above, only 8 such examples have been identified out of the total of 192 constructions with negated participles (4%).

Still, it would be incorrect to deny that the choice of discursive high-lighting described by Arkadiev is available to the speaker in the group of experiential perfects, where the proportion of negated auxiliaries and participles is more balanced and negation is also significantly more frequent, compared to other values—41% of all experientials are negated, while with other perfects it is only 10%. In fact, it seems that the higher negation is more frequently employed with the first person (68), maybe in order to suggest a more neutral interpretation of the subject's lacking certain experience, while with the second and third person the lower negation is more common.

```
(68) Prisipazinsiu — nesu
                                                         maci-us.
                                         jo
     admit.FUT.1SG
                       NEG.be.PRS.1SG
                                         3.SG.M.GEN
                                                         see-PST.PA.SG.F
     0
              girdei-us
                                    tiek
              hear-pst.pa.sg.f
                                    so much
     atsiliepimu. [Butinai reikes paziureti.]
     review.gen.pl
     'I admit that I have never seen it. But I have heard so much about it.
     [I really need to watch it.]'
```

This could be explained having in mind the type of discourse chosen as the data for this study—expressing various judgements and accusations is very common in Facebook comments when talking about other people, who may be the topic of the article the comments are referring to (69), or in the case of a discussion between the commenters (70).

(69) [Na ir parašė 48-senutė,o tai 35-jau pusamžis vyras ir moteris? Kas čia tokius straipsmius rašinėja?]

```
Gal
                                              žmonių
          ne-mat-es
                                  senų
maybe
          NEG-see-PST.PA.SG.M
                                  old.GEN
                                              people.GEN
ir
          nežino
                             iki
                                       kiek
CONI
          NEG.know.prs.3
                             until
                                       how much
              gyvena?
žmonės
people.nom
              live.prs.3
```

'[What nonsense he has written, 48 means a granny, and 35 is already a middle-aged man or woman? Who is writing such articles?] Maybe they haven't seen old people and don't know until what age people live?'

(70) [drasuoliai jus nuo jusu komentaru bloga...] garantuoju vienas ne-buv-e guarantee.prs.1sG NEG one NEG-be-PST.PA.PL.M net kariuominej... toi even DEM army.Loc '[How courageous, your comments make me sick...] I can guarantee none of you has even been to the army..'

Thus, it is not surprising that the lower negation is chosen in such contexts, where the 'not-experience' event can be highlighted as more relevant, in contrast with the sentences in first person where the speaker, of course, does not wish to express a harsh judgement on themselves. Still, it is hard to deny that a similar effect of judgement or accusation can be obtained with the negation on the auxiliary, as well:

(71) [tu cia kaimas muzike :)]

[jei nesi mat-es geresnio :D

if NEG.be.PRS.2SG see-PST.PA.PL.M better.GEN.SG.M

'[you are the one from a village, churl :)] if you haven't seen a better one :D'10

5. Conclusions

The analysis of the doculect chosen for this study, the 2-million-word *Facebook* comments corpus, has shown that the perfect construction in this data is almost always used with an agent-like, animate subject, while the vast majority of the verbal lexical input are telic intransitive or low-transitivity verbs. Such is the most frequent and prototypical instance of the Lithuanian perfect, namely, the subject-oriented resultative perfect that conveys the state of the subject stemming from a prior event. The meaning of subject-oriented resultative is composed of two elements—the current state of the subject and the prior event that generated such a state. Of these two elements, the focus is on the state of the subject, while the

¹⁰ As suggested by one of the reviewers of this article, (71) might also be a special kind of negated clause with a strong suggestion that the negated content is, in fact, true.

prior event or action that generated it remains backgrounded. The same considerations hold for perfects formed with certain lexical groups of low-transitivity verbs with an Affected Agent (Næss 2007), termed possessive resultative perfects. Although formally transitive, ingestive verbs, verbs of possession, verbs conveying body movements or changes in outward appearance of the subject, when used in a perfect construction, express the state of the subject, not the object, and thus are closer to subject-oriented resultatives rather than to the transitive perfects.

In about half of all constructions consisting of (usually omitted) copula and present active participle based on intransitive verbs or low-transitivity verbs with object deletion, the second meaning element, namely, the past event from which the subject's current state might be viewed as stemming, is lacking. It seems that in many cases no preceding action can be presupposed— although the presupposition of the past event generating current state can sometimes be subject to interpretation, many instances have been found where verbs used in the construction are defective and lack past tense forms altogether. In such cases the participle functions as an adjective and often seems to be rather strongly lexicalized. Such clauses, conveying exclusively the subject's state or even a stable quality that can hardly be related to any preceding action, are frequently accompanied by adverbials that highlight the stability of the state or quality, and are freely coordinated with adjectives. They can also be derived with the habitual form of the copula $b\bar{u}na$, suggesting a constant or repetitive state or quality and, thus, once again denying the possibility of a two-component resultative perfect meaning of past action together with current state. It seems reasonable to claim that these sentences are not instances of the perfect construction but should rather be described as ascriptive copular constructions with adjectivized participles.

The lack of connection to any prior action in such constructions has been already identified or mentioned by Ambrazas (1979), Holvoet & Pajėdienė (2004) and Mikulskas (2009, 2017). However, the informal-language databased approach taken in this study has shown that copular constructions with adjectivized participles form a significant part of all constructions that formally correspond to the Lithuanian perfect. Therefore, they cannot be relegated to a margin of accidental cases involving only a few lexicalized participles, but rather need to be integrated into the whole picture of the development of the Lithuanian perfect.

It is important to point out that the process of adjectivization of the participles does not coincide with the direction of the development of the Lithuanian perfect construction as a whole. Cross-linguistically, perfects grammaticalize from lexical sources and resultative constructions via the expansion of lexical input and via the acquisition of new perfect values, such as experientials (Dahl 1985, Bybee & Dahl 1989, Bybee, Perkins & Pagliuca 1994, Lindstedt 2000, Squartini & Bertinetto 2000, among others). Such a process can be seen in the Lithuanian perfect as well, while the lexicalization of certain participles is a separate process affecting separate lexical elements. It does not affect all the participles and for the ones that are adjectivized, it is valid not only in the construction with the copula examined here but also in any other context where the participle might be used.

Regarding the frequency of such ascriptive copular constructions in the data analysed here, it seems that such copular constructions are the source from which the Lithuanian perfect grammaticalized in the first place. Although further diachronic data-based research would be necessary to confirm this, it seems plausible that the stages of development can be seen as follows:

- 1. ascriptive copular constructions with adjectives;
- 2. ascriptive copular constructions with adjectivized past active participles;
- 3. ascriptive copular constructions with non-adjectivized participles, ambiguous between the adjectival and verbal interpretations;
- 4. subject-oriented resultative perfects, entailing both elements of the meaning—the past event and the resultant state.

The hypothesis of the ascriptive copular construction as a source for the perfect would explain the ambiguity that may sometimes arise between the verbal and the adjectival interpretation of the past active participle. Drawing on Heine's Overlap Model (1993, 48–53) such cases represent the point of ambiguity characteristic of Stage II in the grammaticalization of auxiliaries, where more and less grammaticalized structures that are formally identical coexist in a language synchronically.

Keeping in mind the ascriptive copular constructions as the source of grammaticalization of the Lithuanian perfect, it is not surprising to find that almost all instances of the perfect identified in the data, even the ones with prototypically transitive verbs and experientials, which are normally considered a 'further step' in the development of a perfect, are still affected by the source construction. The influence of the basic, non-grammaticalized construction can be felt in the persistent orientation of the Lithuanian perfect towards the subject and its state. This is confirmed by the following observations:

- The most frequent value of the Lithuanian perfect is the subject-oriented resultative, followed by the possessive resultative, which is formally transitive but still conveys a state of the subject, not the object.
- Perfects with transitive verbs are infrequent, as they are the most distant from the grammaticalization source. The presence of a clearly distinct object moves the focus away from the subject, as it is no longer possible to say whose state has changed as a consequence of a preceding action that of the subject or that of the object.
- In more than a half of the already infrequent transitive perfects, the lexical verbs are weak autobenefactives (Panov 2020) containing an optional middle-reflexive marker. Such transitive verbs, expressing a change of state somehow affecting the subject, are a more natural input to the perfect, given its tendency towards subject orientation, even with transitive verbs where the subject and the object are clearly distinct.
- Experiential perfects are significantly more frequent than transitive resultative perfects. Although the Lithuanian perfect is based on a resultative construction, the experiential value is better established than transitive resultative perfects. This is at odds with, for instance, the development of the Romance *have* perfects (Squartini & Bertinetto 2000), where first the resultative meaning is firmly established, and the experiential value is a second, or even a third, step in the development. However, in case of Lithuanian, the experiential value is less distant from the grammaticalization source, as in order to obtain the experiential meaning there is no need to abandon a clear orientation towards the subject.

At the same time, it is important to note that experientials do differ in some ways from all other perfect values. Firstly, it is evident from the data that the auxiliary is much more frequently used with experientials than with any other value. While the proportion of other perfects with an auxiliary is 15%, with experientials it is 70%. It is likely that this observation could only have been made thanks to the particular kind of data chosen

for the study. In formal language the copula might be more frequent in general and less present in informal language for reasons of brevity, so its persistence with experientials in particular can be considered significant.

The experiential perfects also stand out because of the relatively limited and repetitive lexical input. More than a third of all experientials are formed with 2 verbs only— $b\bar{u}ti$ 'to be' and matyti 'to see', while 7 most frequent verbs account for around a half of all experientials. These features mark its distance from the grammaticalization basis in ascriptive copular constructions.

It seems that the development of the Lithuanian perfect is going in two separate but also related directions that diverge but also have some intersection points. Each of these directions corresponds to a gradual abandonment of one of the two semantic features of the prototypical Lithuanian perfect—the subject-oriented resultative. Its semantics are distinguished by:

- the expression of the subject's state (orientation towards the subject), encoded in the participle by morphological means as well, as the participles agree with the subject in gender and number;
- 2. resultativeness, encoded in the telicity of the lexical input verbs, so that the whole construction expresses not just any state, but a state that has changed as a consequence of a preceding action.

Arguably, of these two features the first one is stronger. The resultative meaning is absent in copular constructions with adjectivized participles, so its appearance can precisely be considered the point at which the construction becomes a resultative perfect. It is the resultative perfect meaning again that is more easily abandoned with the experiential value, as the development of the perfect progresses.

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ABBREVIATIONS

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1 — first person, 2 — second person, 3 — third person, ACC — accusative, ADJ — adjective, ADV — adverb, COMPL — complementizer, CONJ — conjunction, DAT — dative, DEF — definite, DEM — demonstrative, EVD — evidential, F — feminine, FUT — future tense, GEN — genitive, HAB — habitual, IMP — imperative, INF — infinitive, INS — instrumental, INT — interrogative, IPFV — imperfective, LOC — locative, M — masculine, NA — invariable, NEG — negation, NOM — nominative, PA — active participle, PFV — perfective, PL — plural, PP — passive participle, PRS — present tense, PST — past tense, PTC — particle, PVB — preverb, REL — relative pronoun, RFL — reflexive, SG — singular, VOC — vocative
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The perfects in Latvian and Lithuanian: A comparative study based on questionnaire and corpus data

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This paper presents a comprehensive comparative analysis of the functions of the present, past and future perfect forms in standard Latvian and Lithuanian based on two complementary types of data: the typological questionnaire devised for the study of the perfect for the Eurotyp project and the Lithuanian-Latvian parallel corpus. We analyse the data qualitatively as well as quantitatively and demonstrate that the two Baltic languages show both similarities and important differences in their perfect grams. While the Present Perfect in Latvian clearly shows a higher degree of grammaticalisation than in Lithuanian, manifested in the frequency of use, obligatoriness and functional extent, the differences between the two languages in the uses of the other tenses of the perfect are more intricate and largely pertain to the expression of modal and discourse-oriented functions.

Keywords: aspect, Baltic, discourse modes, Latvian, Lithuanian, parallel corpus, perfect, pluperfect, questionnaire, tense

1. Introduction¹

Despite the fact that the Baltic languages have robust perfect grams, these have not received the attention they deserve in the literature on tense and aspect. Neither the seminal study by Dahl (1985) on the typology of

¹ We thank all our Lithuanian and Latvian consultants for their generous help, and Nicole Nau and two anonymous reviewers for their useful comments on the first version of the paper, as well as Östen Dahl, Axel Holvoet, Vladimir Plungian, Dmitri Sitchinava, Björn Wiemer and a number of other colleagues for their help and feedback in the course of this study. All faults and shortcomings remain ours. This research has received funding from the European Social Fund (project No. 09.33-LMT-K-712-01-0071) under grant agreement with the Research Council of Lithuania (LMTLT).

tense and aspect systems, nor even the discussion of the European perfects in Dahl & Hedin (2000) and Lindstedt (2000) mention Baltic languages, and the recent monograph by Drinka (2017, 383–392) only discusses the marginal possessive resultative constructions. The few theoretically and typologically informed works dealing with the perfect constructions in Baltic mainly focus on Lithuanian (e. g., Geniušienė & Nedjalkov 1983, 1988, Geniušienė 1989; Wiemer 2012, Arkadiev 2012, 2016, 2021; Sakurai 2016). The only such work on Latvian that we know of, Nau (2005), is published in Latvian and hence is virtually inaccessible to a broader audience, besides being limited to the present perfect. Work comparing Lithuanian and Latvian perfects has been heretofore altogether lacking, with Arkadiev & Wiemer (2020) being the only recent exception (the discussion in Wiemer & Giger 2005, Ch. 4 focuses on resultative uses only).

The goal of the present article is to fill this gap by providing a detailed comparative investigation of the uses and semantics of the perfect grams in standard Latvian and standard Lithuanian in all three tenses that the perfect forms occur in, on the basis of a typological questionnaire and of a parallel corpus. The results of the questionnaire-based analysis have been published as Arkadiev & Daugavet (2021). The current article combines an update to the latter with an analysis of new corpus data.

The tense systems of Lithuanian and Latvian (for overviews, see Mathiassen 1996; Arkadiev *et al.* 2015, 20–35) comprise both synthetic (simple) and analytic forms, the latter constituting the perfect domain which is the central topic of this article. Both languages have synthetic forms of present, past and future tenses; Lithuanian additionally distinguishes between the simple and the habitual grams in the past domain. While the future tenses in both languages involve a dedicated suffix -s- (with allomorphs), and the Lithuanian Habitual Past has the dedicated suffix -dav-, the expression of present and simple past tenses is more complex and involves cumulation with person-number, allomorphy and stem changes. The formal details, however, are of no importance for the current exposition.

² Baltic languages are likewise not included into the scope of the currently ongoing project dedicated to the study of European perfects on the basis of parallel corpora, https://time-intranslation.hum.uu.nl/. For a recent parallel-corpus-based study including Baltic and Slavic languages, see Sitchinava (2016).

The periphrastic perfect forms in both languages consist of the auxiliary 'be' (Lith. $b\bar{u}ti$, Latv. $b\bar{u}t$) in the appropriate tense and the past active participle with the suffix -us- (with allomorphs). In Latvian, the auxiliary can also have a special evidential form, but in Lithuanian the corresponding function is signaled by the auxiliary in the form of a present active participle.3 The auxiliary shows suppletion according to tense and (in the present tense) person. If there is a nominative subject in the clause, the auxiliary agrees with it in person and number (which is neutralised in the 3rd person) and the participle in gender and number (as well as in nominative case). In masculine singular and plural forms the participle shows irregular cumulative suffixes instead of the expected combinations of the -us- suffix with appropriate agreement desinences. Tables 1 and 2 schematically show the simple and perfect forms of Lithuanian and Latvian, respectively, for the verb 'love' in the 3rd person. It is not uncommon for the auxiliary to be omitted, resulting in 'bare' past active participles. These can be synonymous to full-fledged perfect forms or have the meaning of past evidential.

Table 1. Simple and perfect forms in Lithuanian

	simple	perfect	
Present	myli	yra	
Past simple	mylėjo	buvo	mylėj-ęs (M.SG) / mylėj-ę (M.PL) /
Past Habitual	mylėdavo	būdavo	mylėj-us-i (F.SG) / mylėj-usi-os (F.PL)
Future	mylės	bus	

Table 2. Simple and perfect forms in Latvian

	simple	perfect	
Present	mīl	ir	
Past	mīlēja	bija	mīlēj-is (M.SG) / mīlēj-uš-i (M.PL) /
Future	mīlēs	būs	mīlēj-us-i (f.sg) / mīlēj-uš-as (f.pl)
Evidential	mīlot	esot	

³ On the Baltic evidential see Wälchli (2000), Holvoet (2007, Ch. 4), Kehayov (2008).

A characteristic example of the Present Perfect in both languages is given in (1), which also shows the format of presentation of the data we employ:

```
(1) LiLa
    Latvian (original)
    Par
               t-o
                                            iau
                               es
                                                         esmu
    about
               DEM-ACC.SG
                               1SG.NOM
                                            already
                                                         be.prs.1sg
    dzirdēi-us-i.
    hear-pst.pa-nom.sg.f
    Lithuanian (translation)
    Apie
               tai
                                     iau
                                                  es-u
    about
               that
                                     already
                                                  be.prs-1sg
                        1SG.NOM
    girdėj-us-i.
```

hear-pst.pa-nom.sg.f

'I have already heard about it.'

Our research is based on data from two different sources that complement each other, a typological questionnaire and a parallel corpus. Each has its own advantages and limitations. On the one hand, a questionnaire provides a clearly defined set of contexts, specifically designed with the purpose of producing a form with a particular meaning, sometimes so uncommon in ordinary written texts that it is impossible to detect it in a corpus. On the other hand, for the same reason, a questionnaire often fails to reflect the actual frequency of a particular use. Beside that, questionnaires deplete linguistic forms of their natural contexts, often creating ambiguity between different uses. A corpus, by contrast, provides access to the distribution of uses of the forms in question in texts, at the same time often obscuring the possibility of using alternative expressions in the same context. Additionally, a parallel corpus may be misleading as one is in danger of mistaking a poor translation slavishly following the original for a genuine use.

Bearing all this in mind, this research is designed in the following way, reflected in the structure of the article. In section 2 with the help of the typological questionnaire from Dahl (ed. 2000), we establish whether the perfect forms are used in certain diagnostic contexts in Latvian and/or Lithuanian, as well as which other forms the perfect grams compete with in these contexts. Then in section 3 we use the parallel corpus (LiLa) to

search for the perfect forms in order to establish their uses and frequencies in actual texts. The results of the search are then considered from two different viewpoints. First, we analyse the original Latvian and Lithuanian texts as separate subcorpora establishing the range of uses of the perfect grams in each language, and second, we analyse the translations of the perfect forms from Lithuanian into Latvian and from Latvian into Lithuanian, thus comparing the uses of the perfects between the two languages. At the final stage, we compare the results of the questionnaire study with those from the corpus (section 4) and formulate perspectives for future research (section 5).

2. The Perfect Questionnaire

2.1. Collecting and evaluating data by means of the Perfect Questionnaire

The Perfect Questionnaire (PQ, Dahl ed. 2000, 800–809) contains 88 entries, but since many entries themselves include several subentries the actual number of entries is almost twice as large. An entry consists of the context (a description of the situation, in square brackets), and a sentence in English with the verb (or verbs) in the infinitive, see (2). The purpose of using the infinitive form is to prevent informants from being influenced by the English grammar.

(2) 2: [A: It seems that your sister never finishes books.] B: (That is not quite true.)

She READ this book (= all of it).

In our investigation, the PQ was translated by seven Lithuanian and five Latvian informants, all female and most of them born in the 1980s, with two Lithuanian speakers born in the 1960s and one Latvian speaker born in 1991. All informants are professional linguists or philologists who might be more conscious of their speech as well as of possible variation than an average person.

The data from all questionnaires were pooled into Excel spreadsheets according to a pattern represented in Table 3. Lines correspond to the questionnaire entries, and columns to the informants, with separate sheets for Latvian and Lithuanian.

Table 3. PQ data according to informants (Latvian)

		LV1	LV2	LV3	LV4	LV5
_	read	izlasīja	ir izlasījusi	lasa	ir izlasījusi	ir izlasījusi
2	Teau	PST_PREF ⁴	PRF.PRS_PREF	PRS_NPREF	PRF.PRS_PREF	PRF.PRS_PREF

Additionally, a different kind of table was used in order to compare similar questionnaire entries between the two languages, see Table 4. The column in the middle shows the questionnaire entry, where the digit stands for the number of the entry, and the verb for the form in question. The columns on the left and on the right of it show the number of informants that used particular grammatical forms to translate this entry into Lithuanian and Latvian, respectively.

Table 4. PQ data according to grammatical forms

Lithuania	n			Latvian		
PRF.PRS	PST	PRF.PST		PRF.PRS	PST	PRS
0	7	О	2-read	3	1	1

We considered a certain form as prevailing in the translations if it was used by more than a half of our informants, that is by more than three Lithuanian informants out of seven, and by more than two Latvian informants out of five. In Table 4 the figures for the prevailing forms are in bold. 'Bare' participles without the auxiliary (abbreviated as PST.PA) were treated together with Present Perfect forms except in contexts where the Present Perfect is not expected (mostly in evidential uses). Rare in-

⁴ 'PREF' and 'NPREF' stand for 'preverb' and 'no preverb' correspondingly, but this information was not taken into account in this research.

⁵ Note that sometimes the number of translations for an entry was greater than seven for Lithuanian (resp. five for Latvian), since in many cases the same informant offered more than one translation for a single entry. We only counted cases when a form was offered by four different informants in Lithuanian, or three different informants in Latvian. When one of the informants offered two versions containing the same form and differing, e. g. in the choice of lexeme, we only counted such cases once.

⁶ Cf. Arkadiev & Daugavet (2021) where 'bare' participles are analysed separately.

stances of the Past Habitual Perfect in the Lithuanian version of the PQ were counted together with the rest of the Past Perfect forms.

2.2. Occurrences of perfect forms in the Perfect Questionnaire

Since the questionnaire is mainly designed with the present perfect in mind, most entries inevitably serve to reveal present perfects, rather than past perfects or future perfects. But rather than the number of entries containing each of the tenses, what interests us at this point is the number of entries featuring the perfect forms in Latvian vs Lithuanian.

Table 5 contains the number of all entries that are translated with a perfect form by at least one informant in each of the two languages. Table 6 shows the number of all entries where a perfect form was prevailing. Both tables have separate columns, labelled 'shared', for the number of entries translated by means of a perfect form in both languages. The entries counted in the 'shared' columns are also counted in the columns for the individual languages.

The tables reveal two important tendencies. First, there is a noticeable difference in the number of the Present Perfect entries, while the numbers for the Past Perfect and the Future Perfect in both languages are fairly similar. Moreover, the difference in the number of the Present Perfect examples becomes especially prominent when we compare the entries where a perfect form is offered by the majority of the informants. This means that not only the Present Perfect appears more frequently in Latvian but it is also used more consistently. Second, the set of entries showing the Present Perfect in Lithuanian is basically a subset of the entries containing the corresponding form in Latvian, which points to a higher degree of grammaticalisation of the Present Perfect in Latvian as opposed to Lithuanian.

Table 5. Entries translated with a perfect form by at least one informant

	Latvian	Lithuanian	shared
PRF.PRS + PST.PA	57	40	38
PRF.PST	15	17	10
PRF.FUT	9	7	6

	Latvian	Lithuanian	shared
PRF.PRS + PST.PA	39	16	12
PRF.PST	8	9	7
PRF.FUT	4	3	2

Table 6. Entries translated with a perfect form by a majority of informants

2.3. Types of perfect meanings in the Perfect Questionnaire

In the sections to follow we analyse each of the three perfect tenses individually. Each section deals with all entries where a corresponding tense form is found in Latvian and/or Lithuanian. Since a tense form is associated with certain types of meaning or function, the latter are evaluated with respect to the number of entries where a particular meaning type is found.

2.3.1. Present Perfect uses and their number of entries

Most entries where a Present Perfect form is used in Latvian and/or Lithuanian can be divided into those where it is found in both languages and those where it is only found in Latvian. In addition, a very small third group contains entries where the Present Perfect is exclusively found in Lithuanian. The first and the second group are each associated with their own set of functions, listed in Table 7, that will be given a more detailed account in the sections below. Tables 8 and 9 provide details on the number of entries that actually have the prevailing Present Perfect form in the first and the second groups. For the Lithuanian-only members of the third group it is enough to say that both entries have the prevailing Simple Past form.

Those entries that are found with the Present Perfect in both languages only feature experiential, subject-oriented resultative and possessive resultative uses (Table 8). Another set of functions is found in the entries where the Present Perfect is only offered by Latvian informants, comprising the meanings of current relevance, 'hot news', and the only instance of the inclusive meaning, also known as the perfect of persistent situation (Table 9).

Two more sets of functions are each split between the first and the second group. Entries exhibiting the inferential meaning and 'biographic' uses are predominately translated by means of the Present Perfect into Latvian. Their Lithuanian versions, however, only list the Present Perfect as a second choice. Finally, the reportative meaning is found in entries where the Present Perfect emerges as a second choice in both Latvian and Lithuanian. (The two entries where the Present Perfect is completely absent from Latvian provide no specific functions and are counted together with experiential and reportative uses, respectively.)

Table 7. Entries containing Present Perfect in Latvian and/or Lithuanian

Present Perfect in both		experiential	18
Latvian and Lithuanian		subject-oriented resultative	10
		possessive resultative	6
	38	reportative	2
		inferential	1
		'biographic'	1
Present Perfect exclusively		current relevance	7
found in Latvian	19	'hot news'	3
		'biographic'	3
		inferential	3
		experiential	2
		persistent situation	1
Present Perfect exclusively		experiential	1
found in Lithuanian		reportative	1
all entries	59	all functions	59

Table 8. Present Perfect in both Latvian and Lithuanian

Present Perfect prevails in Latvian but only occasionally offered in Lithuanian		experiential subject-oriented resultative	7
		possessive resultative	1
		inferential	1
		ʻbiographic'	1
Present Perfect prevails in both		experiential	7
Latvian and Lithuanian		possessive resultative	3
		subject-oriented resultative	2
Present Perfect only occasionally	6	experiential	2
offered in both Latvian and Lithuanian		reportative	2
Lithuaman		subject-oriented resultative	1
		possessive resultative	1
Present Perfect occasionally of-		experiential	2
fered in Latvian but prevails in Lithuanian		subject-oriented resultative	1
		possessive resultative	1
all entries	38	all functions	38

Table 9. Present Perfect exclusively found in Latvian

Present Perfect prevails		inferential	3
		'biographic'	3
		current relevance	2
	11	'hot news'	1
		experiential	1
		persistent situation	1
Present Perfect found only oc-		current relevance	5
casionally		'hot news'	2
		experiential	1
all entries	19	all functions	19

It is clear from this description that not only do the Lithuanian entries with the Present Perfect constitute a subset of the Latvian ones, but the functions of the Present Perfect found in the Lithuanian entries are also a subset of the functions found in the Latvian entries. These are the experiential, the subject-oriented resultative, and the possessive resultative, which thus make up the nucleus of the Baltic Present Perfect. Well-represented in Latvian but less common for Lithuanian are inferential and 'biographic' uses. As a result of a more advanced development, the Present Perfect in Latvian also covers the meanings of current relevance and 'hot news', absent from Lithuanian. On the periphery of the Baltic Present Perfect there are certain reportative uses suggested by some of the informants in both languages. For convenience, Table 10 assigns each function a number of entries where it is found at least once and where it prevails.

In the next sections we shall describe and exemplify each of the functions.

Table 10. Present Perfect uses according to number of entries

	at least once			majority		
	Latv	Lith	shared	Latv	Lith	shared
Present Perfect prevails in both Latvian and Lithuanian						
experiential	20	19	18	15	9	7
subject-oriented resultative	10	10	10	8	3	2
possessive resultative	6	6	6	4	4	3
Present Perfect prevails in Latv	ian and	offere	d by some	inform	ants in	Lithuanian
inferential	4	1	1	4	0	0
'biographic'	4	1	1	4	0	0
Present Perfect only present i	n Latvi	an				
current relevance	7	О	0	2	0	0
'hot news'	3	О	О	1	0	0
persistent situation	1	0	0	1	0	0
Present Perfect offered by some informants in Latvian and Lithuanian					ian	
reportative/'hot news'/ subject-oriented resultative	2	3	2	0	0	0
all entries	57	40	38	39	16	12

2.3.1.1. Present Perfect prevails in both Latvian and Lithuanian

Experiential

The experiential (or existential) function refers to a situation of a certain type occurring at least once during a period in the past up to a certain point in time (Dahl 1985, 141) or up to the present (Comrie 1976, 58). See the example from the PQ in (3).

(3) 32: [Note: use BE or VISIT, or some other predicate, according to what sounds the most natural in L.] You BE to (VISIT) Australia (ever in your life)?

Latv	Tu	es-i	bij-is	Austrālij-ā?	
	2SG.NOM	be.PRS-2SG	be-pst.pa.nom.sg.m	Australia-Loc.sg	
Lith	Ar	es-i	buv-ęs	Australij-oje?	
	Q	be.PRS-2SG	be-pst.pa.nom.sg.m	Australia-Loc.sg	
'Have you been to Australia?'					

It is seen from the first three columns of Table 10 that both Latvian and Lithuanian informants use the Present Perfect in order to convey the experiential meaning in roughly the same entries. However, it becomes evident from the next three columns that the experiential use of the Present Perfect is more consistently found with the Latvian informants, who offer it as the prevailing form in 15 out of 20 entries, while in the Lithuanian part of the questionnaire the respective number only amounts to 9 out of 19 entries. See (4) as an example with the Present Perfect in Latvian corresponding to the Simple Past in Lithuanian.

(4) 7: [Question: Can you swim in this lake? (= Is it possible for anybody to swim in this lake?) Answer:] Yes, at least I swim in it several times.

Latv	∃ā,	vismaz	es	tajā	esmu		
	yes	at_least	1SG.NOM	DEM.LOC.SG	be.prs.1sg		
	peldēj	-ies		vairāk-as	reiz-es.		
	swim-	PST.PA.NOM.S	G.M.RFL	several-ACC.PL.F	time-ACC.PL		
Lith	Таір,	bent	jau	aš	plaukioj-au		
	yes	at_least	already	1SG.NOM	swim-pst.1sg		
	j-ame	ke	let-ą	kart-ų.			
	3-LOC.	SG.M se	veral-Acc.sg	time-gen.pl			
	'Yes, I have at least swum in it several times.'						

Both Latvian and Lithuanian informants suggest the Simple Past as an alternative to the Present Perfect. However, certain examples, all involv-

ing the verb 'meet', are also translated by means of the Past Perfect (in Lithuanian only), as in (5).

(5) 6: [Question: Do you know my sister? Answer:] Yes, I MEET her (so I know her).

Latv	Jā,	es	viņ-u	esmu	satic-is.
	yes	1SG.NOM	3-ACC.SG	be.prs.1sg	meet-PST.PA.NOM.SG.M
Lith	Таір,	aš	buv-au	j-ą	sutik-ęs.
	yes	1SG.NOM	be-PST.1SG	3-ACC.SG.F	meet-PST.PA.NOM.SG.M
	'Yes, I	have met he	er.'		

Resultative

According to Nedjalkov & Jaxontov (1988, 6), the resultative meaning is found in a form referring to a state brought about by a concrete preceding event (the so-called 'target state', Parsons 1990). Such forms are derived from telic verbs and predicate the resultant state to the participant of the situation that undergoes the change of state. Intransitive verbs denoting a change of state of the subject yield the subject-oriented (or subjective) resultative, while the majority of transitive verbs, which denote a change of state of the patient (direct object) yield the object-oriented (objective) resultative expressed by means of the passive participle. Only a subset of transitive verbs denote a change of state of the subject, which is normally interpreted as a change of literal or metaphoric possession, hence the term 'possessive resultative' (Nedjalkov & Jaxontov 1988, 9–10).

Subject-oriented resultative

Derived from intransitive verbs, subject-oriented resultative uses describe a person's psychological or physical state as well as states brought about by creation or destruction of objects, things changing their appearance, position or location (Geniušienė & Nedjalkov 1988, 380), see example (6).

(6) 30: [A: Don't talk so loud! You'll wake the baby.] B: He wake up already.

Latv	Viņ-š	jau	ir	pamod-ies.
	3-NOM.SG.M	already	be.prs.3	wake_up-pst.pa.nom.sg.m.rfl
Lith	J-is	jau	pabud-ęs.	
	3-NOM.SG.M	already	wake_up-	PST.PA.NOM.SG.M
	'He has woke	n up already	·.'	

The subject-oriented resultative meaning is found in exactly the same entries in both languages, however, much like the experiential meaning,

it is only expressed consistently with the Present Perfect in Latvian, the Present Perfect prevailing in 8 out of 10 examples. The Lithuanian informants agree on the use of the Present Perfect in only 3 out of 10 entries, while the rest of the entries more often contain the Simple Past, as in example (7). See also Geniušienė & Nedjalkov (1988, 381) on the interchangeability of the resultative perfect and Simple Past in isolated sentences.

(7) 29: [B's sister is known to have gone to another town. Question:] A: Your sister COME BACK?

Curiously, the Latvian alternative to the Present Perfect in certain instances is a combination of the Simple Present form of the copula with an adverb, rather than a Simple Past form, as in example (8). Besides, example (8) contains an adverbial of duration, not compatible with the perfect in other languages (Nedjalkov & Jaxontov 1988, 15–16). For instance, translating 28-GO_AWAY into English yields *She is still gone* rather than **She has still gone*. See 3.4.2. on this type of examples in the corpus.

(8) 28: [B's sister is known to have gone to another town. Question:] A: Your sister <u>COME BACK</u>? (Note: a free translation may be needed for B's answer.) B: No, she still <u>GO AWAY</u>.

Latv	Nē,	viņ-a	vēl	ir	prom.
	no	3-NOM.SG.F	still	be.prs.3	away
Lith	Ne,	j-i	dar	išvyk-us-i.	
	no	3-NOM.SG.F	still	depart-PST.PA	-NOM.SG.F
	'No, she is still away.'				

Possessive resultative

The possessive resultative is a transitive variety of the subject-oriented resultative restricted to certain lexical groups of verbs, usually expressing acquisition or loss of objects, as in example (9). However, the list of verb classes admitting the possessive resultative in Lithuanian provided in Geniušienė & Nedjalkov (1988, 382–384) is so extensive that one gets

an impression that transitive verbs are used in the possessive resultative meaning rather freely, as long as the object that the result is attributed to remains available to the agent. Consequently, the only requirement setting such transitive resultative uses apart from those with the meaning of current relevance seems to be that the resulting state should follow from the lexical meaning of the verb rather than pragmatic considerations (in terms of Parsons 1990, such forms denote the 'target state', and not the 'resultant state').

(9) 44: [Question: I was told you intend to collect 300 different dolls. How many you already COLLECT? Answer:] I COLLECT some two hundred dolls by now.

```
Laty
         L\bar{\imath}dz
                  šim
                                        sakrāj-is
                          esmu
                                        collect-pst.pa.nom.sg.m
         until
                  now
                          be.prs.1sG
                                        lell-es.
         kād-as
                            divsimt
         some-ACC.PL.F
                                        doll-ACC.PL
                            200
Lith
         Es-u
                        surink-es
                                                     du
                                                                 šimt-us
                        collect-pst.pa.nom.sg.m
                                                                 hundred-ACC.PL
         be.prs-1sG
                                                     two.acc
         lėli-ų.
         doll-gen.pl
         '(By now) I have collected (some) two hundred dolls.'
```

Distinctly from the subject-oriented resultative and the experiential, the possessive resultative is consistently expressed with the Present Perfect in both Latvian and Lithuanian. The Present Perfect is used by the majority of the informants in 4 out of 6 entries in each of the languages. Notably, alongside the Present Perfect, Lithuanian uses a special variety of the perfect with the auxiliary *turėti* 'have', specialised in the possessive resultative meaning, see Wiemer (2012). An important feature of the *turėti* construction is that it is compatible even with verbs that do not yield the possessive resultative meaning in combination with the auxiliary *būti* 'be' (Geniušienė & Nedjalkov 1988, 385). Still, the construction with *turėti* is very infrequent in Lithuanian texts, and it is only suggested by one of the informants in the entry illustrated in (10). Curiously, the Latvian form prevailing in this particular entry is actually Simple Past, which is also the form that is found as an alternative to the Present Perfect elsewhere.

(10) 46: [A is setting out on a long journey in an old car. B asks: What if something goes wrong with your car on the way?] A: I BUY spare parts and tools in case something happens (= I have got them now).

Laty Esnopirk-u rezerv-es dal-as buy.pst-1sg 1SG.NOM reserve-gen.sg part-ACC.PL darbarīk-us. un and tool-ACC.PL [ja nu gadījumā kas notiktu.] Lith Turi-u nu-si-pirk-es atsargini-u PVB-RFL-buy-PST.PA.NOM.SG.M have-prs.1sG spare-GEN.PL dali-u part-gen.pl [tam atvejui, jei kas nutikty]. 'I have bought spare parts and tools [in case something happens.]'

2.3.1.2 Present Perfect prevails in Latvian and is offered by some informants in Lithuanian

The majority of the Latvian informants choose the Present Perfect in entries identified with the so-called 'biographic' use of this form, and in the inferential meaning.

'Biographic' use

According to Nau (2005, 148) the Present Perfect can be employed in Latvian in contexts listing the main facts of a person's biography, starting from birth and childhood (a person being born, brought up, receiving education, having adventures and relationships; such a use of the Present Perfect is also attested in Modern Greek, see Horrocks 2020, 496–497). Even though they are not part of a longer list, the two Questionnaire entries in (11) can be seen as instances of this use. The first of the entries (A) is the one where the Present Perfect is also suggested by some of the Lithuanian informants, the Simple Past prevailing in the Lithuanian translations of the other entries.

(11) 22: [Note: These sentences do not necessarily imply the passive voice though BE BORN happens to be formally a passive in English. Treat it as a single lexical unit.] A: When you BE BORN? — B: I BE BORN on the first of June 1950.

Latv Kad tu es-i dzim-is?
when 2sg.nom be.prs-2sg be_born-pst.pa.nom.sg.m
Es esmu dzim-is
1sg.nom be.prs.1sg be_born-pst.pa.nom.sg.m
[1950. gada pirmajā jūnijā.]

```
Lith a. Kada
                 tu
                              gim-ei?
        when
                              be born-PST.2SG
                 2SG.NOM
     b. Kada
                              (es-i)
                 tu.
                                               gim-es?
        when
                 2SG.NOM
                              (be.prs-1sg)
                                               be _born-pst.pa.nom.sg.m
        Gimi-au
                            1950 met-ais
                                               birželi-o
        be born-pst.1sg
                            1950 year-INS.PL
                                              June-GEN.SG
        pirm-a
                        dien-a.
        first-Acc.sg
                        day-Acc.sg
        'When were you born? I was born [on the first of June 1950.]'
```

In the Latvian part of the Questionnaire there are other candidates for this use referring, however, to central facts in a history of artifacts rather than a story of a human life. In these entries, the Present Perfect prevails in Latvian, but they are unanimously translated by means of the Simple Past in Lithuanian, as in (12).

(12) 26: [Question: What do you know about this novel? Note: This sentence does not necessarily imply the active voice or the word order given here if it is not natural in L. Answer:] Graham Greene WRITE it.

Latv	T-o	ir	sarakstīj-is	
	DEM-ACC.SG.M	be.prs.3	write-pst.pa.1	NOM.SG.M
	Grehem-s	Grīn-s.		
	PN-NOM.SG	PN-NOM.SG		
Lith	J-į	paraš-ė	Graham-as	Gryn-as.
	3-ACC.SG.M	write-pst.3	PN-NOM.SG	PN-NOM.SG
	'Graham Gree	ne wrote it.'		

So far as we are concerned with the Questionnaire entries, the 'biographic' use can be seen as a variety of the resultative meaning peculiar to sentences where the verb does not introduce a new event. (The mere existence of a person/book presupposes they have once been born/written.) In (11) 'an adverbial of the time of action is re-interpreted as a kind of qualitative characteristics of the underlying subject of state' (Nedjalkov & Jaxontov 1988, 54). In (12), such qualitative characteristics are represented by a non-topical subject and are assigned to the topical object.

Inferential

In Lindstedt's (2000, 375) words, the inferential meaning is 'resultativity the other way round'. It is present in statements where the speaker 'draws evidence from the visible results of a non-witnessed event' (ibid.).

(13) 71: [An archaeologist, having investigated an excavation site, says:] This BE a huge city.

Š-ī Laty bij-us-i milzīg-a ir DEM-NOM.SG.F be.prs.3 be-pst.pa-nom.sg.f huge-nom.sg.F pilsēt-a. city-nom.sg Lith a. Tai didžiul-is buv-o miest-as. huge-nom.sg.m city-nom.sg that be-pst.3 b Tai buv-ęs didžiul-is yra be-PST.PA.NOM.SG.M that be.prs.3 huge-nom.sg.m miest-as. city-nom.sg c. Čia bū-t-a dideli-o miest-o. here be-PST.PP-NA big-gen.sg.m city-gen.sg 'This must have been a huge city.'

Like the 'biographic' use, the inferential meaning is consistently expressed with the Present Perfect in Latvian, whereas in Lithuanian it is offered by some of the informants in only one of the four entries, where it competes with the Simple Past and the evidential passive (13c); see Nau et al. (2020, 114–119) on the latter. It is interesting, however, that another competing construction in Lithuanian, and to a lesser extent Latvian, involves the Future Perfect, see 2.5.3.

2.3.1.3. Present Perfect exclusively found in Latvian

Present Perfect forms are absent from those entries in the Lithuanian version of the Questionnaire that correspond to the contexts of current relevance and 'hot news', where they are all invariably expressed with the Simple Past (but see 2.4.4.). A single entry representing the inclusive meaning is translated into Lithuanian by means of the Simple Present.

Current relevance

While the experiential refers to event types, the meaning of current relevance introduces singular event tokens in the past (Dahl & Hedin 2000, 389). The difference from the resultative is that the effect of the previous situation is 'not directly derivable from the meaning of the verb' (Dahl & Hedin 2000, 392), which therefore is not necessarily telic. Thus, in order

to understand $(14)^7$ one has to know that lack of sleep usually induces tiredness⁸.

(14) 47: [Question: Why do you look so tired? (Note: you may replace 'three days' by 'three nights' or whatever seems most natural.) Answer:] I NOT SLEEP for three days.

```
Latv Es ne-esmu gulēj-is tr-īs

1SG.NOM NEG-be.PRS.1SG sleep-PST.PA.NOM.SG.M three-ACC.PL

nakt-is.

night-ACC.PL

'I have not slept for three nights.'
```

In this section, the entries with the meaning of current relevance are united together with the entry describing an anterior event, as in (15), where the participant's wish to speak about a film can be seen as a consequence of seeing the film.

(15) 54: [The speaker meets his friend about once a week; 'the film' refers to a different film each time:] Every time I MEET him, he TELL me about the film he (just) SEE.

```
Latv [Ikreiz, kad satieku viņu, viņš man stāsta par filmu,]
k-o nupat (ir) noskatīj-ies.
what-ACC just (be.PRS.3) watch-PST.PA.NOM.SG.M.RFL
'[Every time I meet him, he tells me about the film] he has just seen.'
```

Examples (14)–(15) are also the only entries expressing current relevance where the Present Perfect is chosen by the majority of the informants. In the other entries the prevailing form is the Simple Past, see (16).

(16) 40: [The window is open but A has not noticed that. A asks B: why is it so cold in the room?] B: I OPEN the window.

```
Latv a. Es atvēr-u log-u.

1SG.NOM open.PST-1SG window-ACC.SG
b. Esmu atvēr-is log-u.
be.PRS.1SG open-PST.PA.NOM.SG.M window-ACC.SG
'I (have) opened the window.'
```

⁷ This is a revision of our interpretation of this example in Arkadiev & Daugavet (2021, 20).

⁸ See also Arkadiev (2021) on negated perfects.

Some of the factors behind the informants' choice in favour of the Present Perfect are revealed by looking at the entries in Table 11. The Latvian Present Perfect shows a preference for contexts that refer to states holding over longer time intervals and imply longer time intervals between the speech time and the situation. The latter might seem surprising as the perfect is known for its tendency to express recent events across languages, but see also the analysis of the inclusive uses below.

Table 11. Comparison between PQ entries 18, 19, and 47

Simple Past only	18: [A question asked at 9 o'clock a.m.: Why do you look so tired? Answer:] I NOT SLEEP well during the night.
Present Perfect (some informants)	19: [A question asked at 3 o'clock p.m.: Why do you look so tired? Answer:] I NOT SLEEP well during the night.
Present Perfect (most informants)	47: [Question: Why do you look so tired? (Note: you may replace 'three days' by 'three nights' or whatever seems most natural.) Answer:] I NOT SLEEP for three days.

'Hot news'

Schwenter (1994, 997) applies the label 'hot news' to 'immediate or recent past situations that speakers consider to be significant at speech time'. According to him, the use of the Present Perfect 'marks the situation as salient due to its surprise value'. See example (17).

(17) 56: [A has just seen the king arrive. The event is totally unexpected.]
A: The king Arrive!

Latv	(<i>Ir</i>)	atbrauc-is	karal-is!
	(be.prs.3)	arrive-PST.PA.NOM.SG.M	king-noм.sg
Lith	Atvyk-o	karali-us!	
	arrive-pst.3	king-noм.sg	
	'The king ha	s arrived!'	

It is probably not a coincidence that the Present Perfect only prevails in the entry which refers to a change in a person's location. The fact that the entry is also compatible with a resultative interpretation might have influenced the informants' choice. Cf. (18) where the Simple Past is the main choice of the informants with a lexical verb not implying any change of state.

(18) 57: [Telling what a baby just Do. 'N' should be replaced with a girl's name.] N just SAY her first word!

Latv a	. Ann-a	tikko	pateic-a	sav-u
	PN-NOM.SG	just	utter-PST.3	RFL.POSS-ACC.SG
	pirm-o		vārd-u!	
	first-Acc.so	G.DEF	word-Acc.sg	
b	. Ann-a	tikko	ir	pateik-us-i
	PN-NOM.SG	just	be.prs.3	utter-pst.pa-nom.sg.f
	sav-u		pirm-o	vārd-u!
	RFL.POSS-A	CC.SG	first-ACC.SG.DI	ef word-acc.sg
Lith	On-a	ką tik	ištar-ė	pirm-ąjį
	PN-NOM	just	utter-pst.3	first-ACC.SG.M.DEF
	savo	žod-į!		
	RFL.POSS	word-A	CC.SG	
	'Anna has	just uttei	ed her first wo	ord!'

Inclusive

The inclusive meaning, also called 'universal' (Iatridou *et al.* 2001, 155; Dahl 2021) or 'perfect of persistent situation' (Comrie 1976, 60), refers to a durative situation (a state or a process) that starts in the past and continues up to the moment of speech, as in (19).

(19) 50: [A is still living in this town. As in 49, the intended meaning of Live is 'to dwell somewhere', not 'to spend one's life'.] A: I Live here all my life.

Latv	Es	te	esmu	no-dzīvoj-is	
	1SG.NOM	here	be.prs.1sg	PVB-live-PST.PA	.NOM.SG
	vis-u	тūž-и.			
	all-acc.sg	life-ACC.	SG		
Lith	Gyven-u	čia	vis-ą	savo	gyvenim-ą.
	live-prs.1sg	here	all-Acc.sg	RFL.POSS	life-ACC.sG
	'I have been	living he	re for all my li	fe.'	

This meaning is expressed by means of the Latvian Present Perfect in the only entry where it also prevails. The meaning itself, however, is also found in other entries of the Questionnaire where it is exclusively translated by means of the Simple Present into both languages, see Table 12. Comparison between the entries reveals that the Latvian Present Perfect shows a preference for contexts that refer to states holding over longer time intervals and imply longer time intervals between the speech time and the starting point of the situation. These are also the factors that seem to have influence on the use of the Latvian Present Perfect in

the meaning of current relevance. A possible explanation is that longer time intervals are associated with the cumulative meaning of the perfect as it is defined by Nau *et al.* (2020, 95): 'it denotes that some actions, so to speak, 'accumulated' in the past because they occurred many times or lasted for a long time.'

Table 12. Comparison between PQ entries 48–50 in Latvian

Simple Present only	48: [She is still watching television! How long she до that? Answer:] She watch (it) for three hours.
Simple Present only	49: [A is still living in this town.] A: I LIVE here for seven years.
Present Perfect (most informants)	50: [A is still living in this town. As in 49, the intended meaning of LIVE is 'to dwell somewhere', not 'to spend one's life'.] A: I LIVE here all my life.

2.3.1.4. Present Perfect offered by some informants in Latvian and Lithuanian

The following three entries provide contexts for the evidential meaning implying that the speaker did not witness the situation. In the two entries illustrated by (20) the speaker relays a piece of news. Both entries are predominantly translated by means of the Simple Past into Lithuanian and the Evidential Perfect into Latvian, that is, a Present Perfect form with an Evidential form of the auxiliary. We do not discuss the latter forms in this article (see Arkadiev & Daugavet 2021), and the reason why these entries are included in the analysis is that they are also translated into Lithuanian and Latvian with 'bare' participles and/or full-fledged Present Perfect forms by some informants. While it is possible that the 'bare' participles are meant to express evidentiality, their use might as well be triggered by the meaning of 'hot news' as well as the subject-oriented resultative meaning, also present in both entries.

(20) 67: [Said by a person who has just heard about the event but has not seen it.] The king ARRIVE!

Latv	a.	Karal-is	es-ot	ierad-ies!
		king-noм.sg	be.prs-evid	arrive-PST.PA.NOM.SG.M.RFL
	b.	Karal-is	atbrauc-is!	
		king-noм.sg	arrive-pst.pa.no	M.SG.M

```
Lith a. Karali-us atvyk-o!
king-NOM.SG arrive-PST.3
b. Karali-us atvyk-ęs!
king-NOM.SG arrive-PST.PA.NOM.SG.M.RFL
'[They say that] the king has arrived!'
```

By contrast, in (21) the speaker supposedly relates the contents of a history textbook, although the inferential interpretation cannot be altogether excluded. The Simple Past prevails in the translations of the sentence into both languages, with a single full-fledged Present Perfect form suggested by one of the Lithuanian informants.

(21) 73	: [A guid	e, showin	g ruins to t	ourists:] Th	is ве a hi	ıge city.
Lith a.	Čia	buv-o	didžiul-	-is	miest-as	
	here	be-PST.3	huge-N	OM.SG.M	city-no	M.SG
b.	Čia	yra	buv-ęs	•	did	žiul-is
	here	be.prs.3	be-рsт.	PA.NOM.SG.M	hug	e-nom.sg.m
	miest-as	S.				
	city-no	M.SG				
Latv	Š-ī		bij-a	milzīg-a		pilsēt-a.
	DEM-NO	M.SG.F	be-PST.3	huge-nом	.SG.F	city-nom.sg
	'[It is be	elieved th	at] this was	a huge city.	,	

2.3.1.5. Preliminary conclusions on the Present Perfect in the Perfect Questionnaire

The experiential and the resultative uses are shared by both Latvian and Lithuanian, although they are more consistently found in Latvian, with an exception of the possessive resultative that appears to be equally robust in both languages. However, in the experiential uses, Lithuanian employs the Past Perfect as an alternative construction, which might explain the small number of entries with the Present Perfect in this function.

Since the 'biographic' uses contained in the Questionnaire can be interpreted as instances of the subject-oriented resultative meaning, the more consistent use of the Present Perfect in Latvian in the corresponding entries is therefore simply in accordance with the already established pattern. The low occurrence of the Lithuanian Present Perfect in the inferential uses can be linked to the existence of alternative Lithuanian constructions, namely the impersonal passive and the Future Perfect, see 2.5.3. on the latter.

The current relevance and 'hot news' uses are unique to Latvian, pointing to a greater degree of grammaticalisation of the Latvian Perfect. Some of the current relevance examples can be also assigned a cumulative reading, and this is also true for the only instance of the inclusive perfect in Latvian. The 'hot news' examples also allow a resultative interpretation due to the verbs' lexical meaning.

The reportative uses of the Present Perfect seem to be possible in both languages, but they are even more ambiguous as the examples not only contain what might be perceived as 'hot news', but their lexical input does not exclude a resultative interpretation, either. It is possible, however, that this is a case of vagueness rather than ambiguity, shedding additional light on the development of both the 'hot news' and the reportative functions out of the subject-oriented resultative.

2.3.2. Past Perfect uses and their number of entries

Similar to the Present Perfect, the entries where a Past Perfect form is used in Latvian and/or Lithuanian fall into three groups depending on whether the Past Perfect features in the translations into both languages, Lithuanian only or Latvian only. These groups are of comparable size and turn out to be each associated with its own meanings, see Table 13.

By 'perfect in the past' we understand the group of uses that are the past equivalents of the Present Perfect meanings (resultative in the past, experiential in the past etc.). The latter, as well as the meaning of cancelled result specific to the Past Perfect, are found in entries where the Past Perfect is given priority in both languages. The experiential with present reference time is well represented in the Lithuanian version of the Perfect Questionnaire, where it is sometimes the prevailing form, but is only occasionally found in some Latvian entries. Finally, there are peripheral uses of the Past Perfect in the meanings of distant past, inferential and anterior (with present reference time) that are only found in one of the languages. See the data from Table 13 elaborated in Tables 14 and 15, the latter comprising the entries unique to one of the languages.

Table 13. Entries containing Past Perfect in Latvian and/or Lithuanian

Past Perfect in both Latvian and Lithuanian	10	perfect in the past cancelled result experiential (present)	4 4 2
Past Perfect exclusively found in Lithuanian	7	experiential (present) anterior (present)	6
Past Perfect exclusively found in Latvian	5	distant past inferential experiential (present)	3 1 1
all entries	22	all functions	22

Table 14. Past Perfect in both Latvian and Lithuanian

Past Perfect prevails in both Latvian and Lithuanian	7	perfect in the past cancelled result	4 3
Past Perfect only occasionally of- fered in both Latvian and Lithuanian	2	experiential (present)	2
Past Perfect prevails in Latvian but only occasionally offered in Lithuanian	1	cancelled result	1
all entries	10	all functions	10

Table 15. Past Perfect exclusively found in one of the languages

Past Perfect absent from Latvian but occasionally found in Lithuanian	5	experiential (present) anterior (present)	4
Past Perfect absent from Latvian but prevails in Lithuanian	2	experiential (present)	2
Past Perfect occasionally found in Latvian but absent from Lithuanian		distant past inferential experiential (present)	2 1 1
all entries	11	all functions	11

The meaning of cancelled result and those functions that have correspondences in the Present Perfect clearly form the nucleus of the Past Perfect category in Baltic. A specific Lithuanian development (emerging in Latvian only occasionally) is the use of the Past Perfect for the expression of the experiential meaning with present reference time, which is normally associated with the Present Perfect. The only Lithuanian entry where the Past Perfect serves to convey the anterior meaning, also with present reference time, could be viewed as an expansion of the same tendency. The Latvian-only entries with the Past Perfect in the meaning of distant past and the inferential meaning all come from the same informant and therefore should be viewed with caution. See Table 16 where the same data is structured according to the uses of the Past Perfect.

Table 16. Past Perfect uses according to number of entries

	at least once			majority		
	Latv	Lith	shared	Latv	Lith	shared
Past Perfect prevails in	both Latv	vian and	Lithuania	n		
perfect in the past	4	4	4	4	4	4
cancelled result	4	4	4	4	3	3
Past Perfect prevails in Lithuanian, offered by some informants in Latvian						
experiential (present)	3	8	2	0	2	0
Past Perfect offered by some informants in Latvian or Lithuanian						
distant past	3	0	0	0	0	0
inferential	1	0	0	0	0	0
anterior (present)	0	1	0	0	0	0
all entries	15	17	10	8	9	7

2.3.2.1. Past Perfect prevails in both Latvian and Lithuanian

Past tense correspondences of the Present Perfect meanings

These include the functions of subject-oriented (22) as well as possessive resultative (23), the experiential (24), and the anterior (25), all with past reference time. That the Simple Past is not entirely prohibited from these contexts is seen from the fact that some of the informants actually suggest it, but they are clearly in the minority.

(22) 76: [A's sister was not at home when A arrived. Question: Did you find your sister at home? A answers:] No, I did not (find her). She LEAVE.

```
Latv a. Vin-a
                         bij-a
                                      aizgāj-us-i.
         3-NOM.SG.F
                         be-PST.3
                                     leave-pst.pa-nom.sg.f
     b. Vin-a
                         aizgāj-a.
         3-NOM.SG.F
                         leave.pst.3
Lith
         7-i
                         buv-o
                                      išėj-us-i.
         3-NOM.SG.F
                         be-pst.3
                                      leave-PST.PA-NOM.SG.F
         'She had left.'
```

(23) 75: [A's sister finished writing two letters just before A came home. A tells:] When I come home yesterday, my sister write two letters.

Lith [Kai grįžau namo,] mano sesuo jau buv-o 1SG.POSS sister.NOM.SG already be-pst.3 paraši-us-i dulaišk-us. write-pst.pa-nom.sg.F letter-ACC.PL two.acc Latv [Kad es vakar ierados mājās,] man-a mās-a bij-a be-PST.3 1SG.POSS-NOM.SG.F sister-nom.sg uzrakstīj-us-i div-as vēstul-es. letter-ACC.PL write-pst.pa-nom.sg.f two-acc.pl.f '[When I came home yesterday], my sister had already written two letters.'

(24) 77: [A meets в's sister. Later A moves to the town where в and в's sister live. Still later, в asks A: When you came to this town a year ago, did you know my sister? A answers:] Yes, I меет her.

```
Latv a. Jā,
                                         bij-u
                                                        satic-is.
                es
                             viņ-u
        yes
                             3-ACC.SG
                                         be.psT-1sG
                                                        meet-pst.pa.nom.sg.m
                1SG.NOM
     b. ₹ā,
                                         satik-u.
                es
                             vin-u
        yes
                1SG.NOM
                             3-ACC.SG
                                         meet.psT-1sG
Lith a. Taip,
                  buv-au
                                 j-ą
                                                 mat-ęs.
        yes
                  be-PST.1SG
                                  3-ACC.SG.F
                                                 see-PST.PA.NOM.SG.M
     b. Taip,
                                 pažinoj-au
                  aš
                                                    j-ą.
                                 know.pst-1sg
        yes
                  1SG.NOM
                                                    3-ACC.SG.F
         'Yes, I had met her.'
```

The anterior example is not straightforward because it additionally involves habituality, that is overtly marked on the Lithuanian verbs 'meet' and 'tell' in (25) by the special Past Habitual form. Out of four Lithuanian informants who use the Past Perfect in order to translate 'see/watch' here,

only one also makes use of the auxiliary in the Past Habitual, the other three giving the auxiliary in the Simple Past.

(25) 79: [The speaker used to meet his friend once a week, but nowadays he does not see him at all. 'The film' refers to a different film each time:] Every time I MEET him in those years, he TELL me about the film he just SEE.

```
Latv
         [Tolaik katru reizi, kad es viņu <u>satiku</u>, viņš man <u>stāstīja</u> par filmu,]
                             tikko
                                       bija
                                                    redzēj-is.
         which-Acc.sg
                                      be-PST.3
                             iust
                                                    see-PST.PA.NOM.SG.M
         [Kiekvieną kartą, kai jį susitikdavau, jis pasakodavo man apie filmą,]
Lith
                             bū-dav-o
                                               neseniai
                             be-нав-рsт.3
         which-Acc.sg.M
                                               not long ago
         pažiūrėj-ęs.
         watch-pst.pa.nom.sg.m
        '[Every time I met him he would tell me about the film] he had
        just seen.'
```

It is interesting that, distinctly from Latvian, Lithuanian employs the Simple Past rather than the Present Perfect as the main means of expressing the anteriority to a regularly occurring event in the present, see (26). It does not seem unlikely that Lithuanian only marks anteriority with a Perfect form in (25) because the Simple Past is used to make reference to the main event, cf. Wiemer (2009, 169–170). When the main event is in the present tense, as in (26), the Simple Past in enough to differentiate between the temporal localisations of the two events.

(26) 54: [The speaker meets his friend about once a week; 'the film' refers to a different film each time:] Every time I MEET him, he TELL me about the film he (just) <u>SEE</u>.

```
Laty
         [Ikreiz, kad satieku viņu, viņš man stāsta par filmu,]
         k-o
                                  (ir)
                                                 noskatīj-ies.
                        nupat
         what-acc
                        just
                                  (be.prs.3)
                                                watch-PST.PA.NOM.SG.M.RFL
         [Kiekvieng karta, kai jį sutinku, jis man pasakoja apie filma,]
Lith
                              neseniai
                                                 žiūrėj-o.
         kur-i
         which-Acc.sg.м
                              not long ago
                                                watch-PST.3
         '[Every time I meet him he tells me about the film] he has just seen.'
```

Cancelled result

Squartini (1999, 57) views the meaning of cancelled result as a special subtype of the perfect in the past, but Dahl (1985, 146–147) and Plungian

& van der Auwera (2006) include it in the domains they call, respectively, 'past temporal frames' and 'discontinuous past' (see also Cable 2017, who tries to reduce 'discontinuous past' to 'cessation implicatures'; we prefer to remain agnostic as to the best analysis of this function). The Past Perfect forms of telic verbs signal that the result of a prior action is no longer holding at the time of speech, as in (27).

(27) 37: [It is cold in the room. The window is closed. Question:] You open the window (and closed it again)?

Latv	Tu	bij-i	atvēr-is	log-u?		
	2SG.NON	м be.psт-2sc	open-pst.pa.nom.sg.m	window-Acc.sg		
Lith	Ar	buv-ai	atidar-ęs	lang-ą?		
	Q	be-PST.2SG	open-PST.PA.NOM.SG.M	window-acc.sg		
	'Did you open the window?'					

2.3.2.2. Past Perfect prevails in Lithuanian and occasionally appears in Latvian

In order to express the experiential meaning with a present reference time, Lithuanian, like Latvian, uses the Present Perfect, but the latter often yields ground to the Past Perfect, see example (28).

(28) 6: [Question: Do you know my sister? Answer:] Yes, I MEET her (so I know her).

Latv		Jā,	es	viņ-u	esmu	satic-is.
		yes	1SG.NOM	3-ACC.SG	be.prs.1sG	meet-PST.PA.NOM.SG.M
Lith	a.	Taip,	es-u	j-ą	sutik-us-	·i.
		yes	be.prs-1sG	3-ACC.SG.F	meet-pst.	PA-NOM.SG.F
	b.	Таір,	buv-au	j-ą	sutik-us	-i.
		yes	be-PST.1SG	3-ACC.SG.F	meet-pst.	PA-NOM.SG.F
		'Yes, I l	nave met her	,		

One of the Latvian informants offers the Past Perfect forms only in contexts containing dates, where both languages prefer the Simple Past, see (29).

⁹ An anonymous reviewer rightly draws our attention to the fact that it is only the lexically determined 'target state' (in terms of Parsons 1990) that is canceled (in (27) it is 'the window being open'), not the more general consequences of the event (in this case 'the room being cold').

(29) 35: [Question: You meet my sister (at any time in your life up to now)? Note: All these alternative answers should be translated.]c) Yes, I meet her in January 1987.

```
Latv a. 7ā.
               es
                            vin-u
                                       satik-u
               1SG.NOM
                                       meet.psT-1sG
        yes
                           3-ACC.SG
                                           satic-is
     b. Ŧā.
                bii-u
                              vin-u
                                           meet-PST.PA.NOM.SG.M
        ves
               be.psT-1sG
                              3-ACC.SG
         1987.
                gad-a
                              ianvār-ī.
        1987
                year-gen.sg
                              January-Loc.sg
Lith a. Taip,
                sutik-au
                                i-a
                meet-pst.1sg
        ves
                                3-ACC.SG.F
     b. Taip,
                  buv-au
                                sutik-es
                                                          j-a
                  be-PST.1SG
                                                          3-ACC.SG.F
        yes
                                meet-PST.PA.NOM.SG.M
         1987
                  met-u
                                 saus-i.
                  year-GEN.PL
         1987
                                January-Acc.sg
         'Yes, I met her in January 1987.'
```

According to Sitchinava (2013, 31–33) experiential uses of the pluperfect have their origin in discontinuous past contexts where any occurrences of a situation are perceived as not taking place any more. One might also suggest that reference to a specific date also enhances the contrast with the present.

2.3.2.3. Past Perfect offered by some informants in Latvian or Lithuanian

The same Latvian informant chooses the Past Perfect form in two more entries containing a date and a reference to a historical event, see (30). Otherwise both are translated by means of the Simple Past.

(30) 25: [Question:] When Columbus ARRIVE at America for the first time?¹⁰ [Answer:] He ARRIVE at America in 1492.

Latv	a.	V iņ-s	atceļoj-a	
		3-NOM.SG.M	arrive.pst-3	
	b.	Viņ-š	bij-a	atceļoj-is
		3-NOM.SG.M	be.pst-3	arrive-PST.PA.NOM.SG.M
		Amerik-ā	1492. ga	ıd-ā.
		America-Loc.so	3 1492 ye	ar-Loc.sg

¹⁰The question part of the entry was not translated.

```
Lith Kolumb-as atvyk-o į Amerik-ą
PN-NOM.SG arrive-PST.3 in America-ACC.SG
1492 met-ais.
1492 year-INS.PL
'He/Columbus arrived in America in 1492.'
```

Although it is unclear if the answers provided by a single informant are representative of general tendencies in the development of the Latvian Past Perfect, they nonetheless could be explained by assigning them the meaning of discontinuous past, contrasted with the present situation (Plungian & van der Auwera 2006), see similar uses in LiLa in 3.4.6. The difference from (28) above is that the form refers to a singular event rather than an event type. Since a past event does not necessarily need to be remote in time in order to be contrasted with the present, it does not seem too far-fetched to discern the same meaning behind the choice of the Past Perfect, by the same informant, in (31). The time adverbial 'during the night' stresses the implication that it is not raining any more, justifying the use of the Past Perfect as well. However, this context is more naturally interpreted as inferential, and the rest of the Latvian informants consistently translate the entry by means of the Present Perfect, the Lithuanian informants suggesting either the Simple Past or the evidential passive.

(31) 14: [It is morning. A wakes up, looks out of the window and sees that the courtyard (or the street) is wet.] A: It rain during the night.

```
Latv a. Pa
               nakt-i
                               ir
                                            lii-is.
         at
               night-Acc.sg
                               be.prs.3
                                            rain-PST.PA.NOM.SG.M
     b. Pa
               nakt-i
                                bij-a
                                            lii-is.
         at
               night-Acc.sg
                               be.pst-3
                                            rain-PST.PA.NOM.SG.M
Lith a. Nakt-i
                          lij-o.
         night-Acc.sg
                          rain-pst.3
     b. Nakt-i
                          ly-t-a.
        night-Acc.sg
                          rain-PST.PP-NA
         'It must have rained during the night.'
```

In its purest form the discontinuous past meaning is seen in (32), also provided by the same informant. Otherwise the entry contains the Simple Past.

(32) 53: [As in 51 and 52.] A: I LIVE here for seven years, but then I had to move away.

```
Laty a. Es
                              bij-u
                                             no-dzīvoj-is
                      te
                     here
                              be.pst-1sg
                                             PVB-live-PST.PA.NOM.SG.M
         1SG.NOM
     b. Es
                      te.
                              no-dzīvoi-u
         1SG.NOM
                      here
                              PVB-live.PST-1SG
         [septiņus gadus, bet tad man nācās pārvākties.]
Lith
                      gyven-au
                                     čia
                                              septyneri-us
                                                                 met-us.
         1SG.NOM
                      live-pst.1sG
                                     here
                                              seven-ACC.PL.M
                                                                 year-ACC.PL
         [bet paskui turėjau išsikraustyti.]
         'I had lived here for seven years, [but then I had to move away.]'
```

Finally, one of the Lithuanian informants uses the Past Perfect form to convey the present anterior meaning (which can be also interpreted as one of current relevance) in an entry otherwise translated by the Simple Past into Lithuanian, and by the Present Perfect into Latvian, see (33). While this single use might as well be accidental, it is possible to view it as a further expansion of the Past Perfect into contexts involving present reference time, revealed by the experiential uses of the Past Perfect above.

(33) 54: [The speaker meets his friend about once a week; 'the film' refers to a different film each time:] Every time I MEET him, he TELL me about the film he (just) SEE.

```
Latv
         [Ikreiz, kad satieku viņu, viņš man stāsta par filmu,]
                         nupat
                                   (ir)
                                                  noskatīi-ies.
         what-acc
                        iust
                                   (be.prs.3)
                                                  watch-PST.PA.NOM.SG.M.RFL
Lith a. [Kiekvieną kartą, kai su juo sutinku, jis man pasakoja apie filmą,]
                              ka tik
                                        žiūrėj-o.
         which-Acc.sg.M
                                        watch-PST.3
                              iust
     b. [Kai tik jį susitinku, jis pasakoja man apie apie filmą,]
                              ka tik
                                         buv-o
         kur-i
                                                      mat-ęs.
         which-Acc.sg.M
                              just
                                         be-pst.3
                                                      see-PST.PA.NOM.SG.M
         '[Every time I meet him he tells me about the film] he has just seen.'
```

2.3.2.4. Preliminary conclusions on the Past Perfect in the Perfect Questionnaire

In both Latvian and Lithuanian the Past Perfect equally serves to express the resultative and the experiential meanings with a reference point in the past. Moreover, Lithuanian does not differ from Latvian in using the Past Perfect in order to convey anteriority in the past, even though Lithuanian does not use the Present Perfect to express anteriority to an event in the present. In other words, the standard perfect functions are employed by Lithuanian more consistently when the reference point is in the past, probably because the Simple Past, which is a form that is frequently used instead of the Present Perfect, has its own meanings in these contexts that need to be differentiated from resultative, experiential and anterior uses. The expansion of the Lithuanian Past Perfect into experiential contexts with a reference point in the present, usually reserved for the Present Perfect, might be another facet of the higher degree of grammaticalisation shown by the Past Perfect in Lithuanian.

Apart from the past tense correspondences of the Present Perfect, the Past Perfect is also found in both languages with the meaning of cancelled result. The use of the Past Perfect in the related meaning of discontinuous past, although provided by one informant only, deserves our attention because similar uses are abundant in LiLa, see 3.4.6.

2.3.3. Future Perfect uses and their number of entries

The first group of examples with the Future Perfect comprises those entries where the form prevails in Latvian and is also found in Lithuanian. These have the future resultative and the future anterior meanings. The entries where the Future Perfect only appears in Latvian are those where it introduces a condition for a future action. The third group unites entries where the Future Perfect is occasionally used in both languages (and even prevails in the Lithuanian versions of one of the entries) to convey conjectures made on the basis of evidence (the inferential meaning) or general knowledge (the epistemic meaning). The data are summarised in Tables 17 and 18.

Table 17. Entries containing Future Perfect in Latvian and/or Lithuanian

prevails in Latvian and also found in Lithuanian		resultative in the future	2
		anterior in the future	2
occasionally offered in Latvian, absent from Lithuanian	3	condition	3
miscellaneous	3	inferential	2
		epistemic	1
all entries	10	all functions	10

Table 18 . Future Perfect	t uses according to	number of entries
----------------------------------	---------------------	-------------------

	at least once			majority			
	Latv	Lith	shared	Latv	Lith	shared	
Future Perfect prevails in	Latvian	and also	found in	Lithuan	ian		
resultative in the future	2	2	2	2	2	2	
anterior in the future	2	2	2	2	0	0	
Future Perfect occasionally offered in Latvian, absent from Lithuanian							
condition	3	0	0	0	0	0	
Miscellaneous							
inferential	1	2	1	0	1	0	
epistemic	1	1	1	0	0	0	
all entries	9	7	6	4	3	2	

2.3.3.1. Future Perfect prevails in Latvian and is also found in Lithuanian

Resultative in the future

In both languages, the Future Perfect is used to refer to a state resulting from a previous action and achieved before another situation in the future.

(34) 84: [B is setting out on a journey. A intends to sell her own house while B is away. A tells B about this:] A: When you COME BACK next year, I SELL my house.

Laty Kad athrauk-s-i nākamgad, *tu* es when come back-FUT-2SG next year 2SG.NOM 1SG.NOM bū-š-u pārdev-is sav-u тāi-и. be-fut-1sg sell-pst.pa.nom.sg.m RFL.POSS-ACC.SG house-ACC.SG Lith Kai aš рo met-ų grįš-i, when after year-GEN.PL return.FUT-2SG 1SG.NOM bū-si-u pardav-es iau savo sell-pst.pa.nom.sg.m already be-FUT-1SG RFL.POSS nam-a. house-Acc.sg

'When you come back next year, I will have (already) sold my house.'

The next example is also counted as a resultative, although it would be more correct to speak of the cumulative meaning, see 2.3.4. In case of (35),

the 'accumulation', which is signaled by the use of the telicizing preverb, started in the past, continues into the present and will finally reach the upper point at some time in the future.

(35) 85: [A began working here in June almost thirty years ago. It is April and A tells that the anniversary is approaching:] A: In June this year I work here for thirty years.

```
Laty
         Š-ā
                          gad-a
                                          jūnij-ā
                                                          es
                                                                      te
                          year-gen.sg
                                          June-Loc.sg
                                                                      here
         DEM-GEN.SG.M
                                                          1SG.NOM
         bū-š-u
                        no-strādāj-is
                                                        trīsdesmit
         be-FUT-1SG
                        PVB-work-PST.PA.NOM.SG.M
                                                        thirty
         gad-us.
         year-ACC.PL
Lith
         Š-i
                            biržel-į
                                              bū-si-u
                            June-Acc.sg
         DEM-ACC.SG.M
                                             be-FUT-1SG
         iš-dirb-ęs
                                                 trisdešimt
                                         čia
                                                               met-ų.
         PVB-work-PST.PA.NOM.SG.M
                                        here
                                                 thirty
                                                              year-GEN.PL
         'In June this year I will have been working here for thirty years.'
```

Anterior in the future

The two entries where the anterior meaning is found serve to express a promise that a certain future event (expressed by the Simple Future) can only take place following another future event (expressed by the Future Perfect), as in (36). The Future Perfect is the prevailing form in Latvian, but it only appears as a marginal choice in Lithuanian, where the Simple Future and the Future Passive Resultative are employed instead.

(36) 83: [Question: Can I get my wages now? Answer:] I PAY you your wages after you finish the entire job.

```
Laty a. Es
                     tev
                                  maksā-š-u
                                                  alg-u,
                                                                   kad
                                                                   when
        1SG.NOM
                     2SG.DAT
                                  pay-FUT-1SG
                                                  wages-ACC.SG
                     pabeidz-is
                                                             darb-u.
        bū-s-i
                                                vis-u
                     finish-pst.pa.nom.sg.m
                                                             work-acc.sg
        be-FUT-2SG
                                                all-Acc.sg
     b. Es
                     tev
                                  sa-maksā-š-u
                                                       alg-u,
        1SG.NOM
                     2SG.DAT
                                  PVB-pay-FUT-1SG
                                                       wages-ACC.SG
        kad
                                           pabeig-s-i
                                                             darb-u.
                  tu
                               pilnīgi
                                          finish-FUT-2SG
        when
                                                            work-acc.sg
                  2SG.NOM
                               entirely
Lith
        Su-mokė-si-u
                                         atlyginim-q,
                            tau
        PVB-pay-FUT-1SG
                                         wages-Acc.sG
                            2SG.DAT
     a. kai
                  baig-s-i
                                     darb-a.
        when
                  finish-FUT-2SG
                                     work-acc.sg
```

b.	kai	darb-as	bu-s	baig-t-as.
	when	work-nom.sg	be-ғит.3	finish-pst.pp-nom.sg.m
c.	kai	bū-s-i	baig-ęs	darb-ą.
	when	be-FUT-2SG	finish-pst.pa.	NOM.SG.M work-Acc.SG
	'I'll pay y	you your wages	when you finis	h the (entire) job.'

2.3.3.2. Future Perfect occasionally offered in Latvian but absent from Lithuanian

Condition

In Latvian, the Future Perfect is offered by some informants in translations of entries describing a situation in the future as a condition for another future event, as in (37). The prevailing way of translation is by means of the Simple Future, which is also the only option found in Lithuanian.

(37) 86	86: If I GET my wages tomorrow, I вич you a beer.								
Latv a.	J a	es	$r\bar{\imath}t$		da	bū-š-u			
	if	1SG.NOM	ton	norrow	get	-FUT-1SG			
b.	J a	es	$r\bar{\imath}t$		bū-	·š-u	dabūj-is		
	if	1SG.NOM	tom	orrow	be-i	FUT-1SG	get-PST.PA.NOM.SG.M		
	[savu	algu, es nopir	kšu t	ev alu.]					
Lith	Jeigu	rytoj		gau-si-u		atlygin	im-ą,		
	if	tomorrow	7	get-FUT-1	SG	wages-	ACC.SG		
	[nupi	rksiu tau alau	<i>s</i> .]						
	er.]'								

Miscellaneous

Lithuanian is slightly more consistent in using the Future Perfect in inferential entries than Latvian, where the prevailing form in (38) is the Present Perfect, with the Simple Past being the second choice in both languages.

(38) 59: [A comes from the kitchen where he has just seen the sad remains of the cake. He tells B what he assumes to have happened:] A: The dog EAT our cake!

Latv a.	Sun-s	ır	aped-ıs		musu
	dog-nom.sg	be.prs.3	eat-pst.pa.nom.sg.m		1PL.GEN
	kūk-u!				
	cake-Acc.sg				
b.	Sun-s	apēd-a	mūsu	$k\bar{u}k$ - u !	
	dog-nom.sg	eat-PST.3	1PL.GEN	cake-Acc.s	iG.

However, the Latvian informants favour the Future Perfect over all other options in (39), where a conjecture is made on the basis of general knowledge. In Lithuanian, this entry is overwhelmingly translated by means of the Simple Past.

(39) 70: [A and B are not in the room in which B's son has been doing his homework. Question: A: Is your son still doing his homework?] B: No, (I think) he finish (it) by now (or: already).

vin-š

bū-s

Latv a. Nē.

nu

iau

These data are, however, too scarce to make any generalisations on the use of the Future Perfect in evidential and epistemic contexts.

2.3.3.3. Preliminary conclusions on the Future Perfect in the Perfect Questionnaire

Latvian and Lithuanian share the resultative uses of the Future Perfect. The anterior uses in temporal and conditional clauses are only established in Latvian. While both languages can sometimes employ the Future Perfect for making conjectures about the past, Latvian also uses the Present Perfect in this function, see 2.3.3.

2.4. Preliminary conclusions based on the Perfect Questionnaire

The resultative uses are those where the perfect forms are found most consistently in all three tenses in both languages. The Latvian and Lithuanian Past Perfect forms also convey the meaning of cancelled result. Another well-established use is the experiential, regularly found with the Present and the Past Perfect, although the Lithuanian Past Perfect is also capable of expressing the experiential meaning with a reference point in the present. Only Latvian consistently uses perfect forms to mark anteriority with respect to situations in the present or future, but anteriority in the past is conveyed by the Past Perfect forms of both Latvian and Lithuanian. Inferential and epistemic uses, expressing conjectures that are made on the basis of evidence or general knowledge, are possible in both Latvian and Lithuanian, although Lithuanian mostly employs the Future Perfect in this function, while Latvian also uses the Present Perfect. Current relevance and 'hot news' uses are the unique development of the Latvian Present Perfect, not found in the Lithuanian translations of the Perfect Questionnaire. Inclusive uses are absent from both languages, although a single example from Latvian might be assigned this reading (along a cumulative one). Slight evidence for reportative uses of the Present Perfect in Latvian and Lithuanian is not convincing, either.

The higher degree of grammaticalisation of the Latvian perfect is revealed in the uses of the Latvian Present Perfect conveying current relevance and 'hot news' meanings, which are commonly considered to develop on the basis of the resultative meaning (see e.g. Bybee *et al.* 1994, 68–69; Lindstedt 2000, 366–368). The Present Perfect in Latvian is also more firmly associated with inferential and epistemic uses, which are found with other constructions in Lithuanian.

The most entrenched perfect form in Lithuanian is the Past Perfect, which does not only stand in contrast to the Simple Past in order to distinguish the different 'layers' of the past, but also expresses meanings usually reserved for the Present Perfect.

3. LiLa Corpus

3.1. Collecting data from LiLa

The Parallel Corpus of Lithuanian and Latvian (LiLa) contains texts of various genres and their translations into the other Baltic language. Consequently, LiLa includes two subcorpora, one containing original Lithuanian texts and their translations into Latvian (3.5 mln words), the other original Latvian texts and their translations into Lithuanian (1.7 mln words). These are mostly represented by works of modern Lithuanian and Latvian fiction, as well as non-fiction literature. While LiLa also contains a third subcorpus comprising non-direct translations of normative documents via English, the latter were excluded from our data, together with those normative documents that might result from a direct translation.

One consequence of using works of fiction for the analysis is that our data combine the deictic register of speech, usually found in conversations, with the narrative register (Paducheva 2011[1996], Smith 2003 and references therein), which has immediate influence on the interpretation of tense forms, thus creating two distinct types of the Present and Past Perfect uses, discussed in detail in Section 4.¹¹

Since LiLa is not annotated, our search for perfect forms concentrated on past active participles that make up a perfect form together with an auxiliary. We only considered feminine singular forms as their final sequence *-usi* (in both languages) is less likely to occur outside participles and hence be ambiguous. At the next step, we manually selected all combinations of the participles thus acquired with an auxiliary in all possible tenses. As the frequency per million in Table 19 shows, they are four times more frequent in the Latvian subcorpus than in the Lithuanian one.

¹¹ For the analysis of the Present Perfect in non-narrative texts see Nau (2005) on Latvian and Kapkan (2021) on Lithuanian.

Table 19. Frequencies of perfect forms in LiLa

source language	corpus	be + PST.PA	ipm
Lithuanian	3.5 mln	572	163
Latvian	1.7 mln	1171	689

Negated versions of the auxiliary were, however, excluded from the sample as negation has additional influence on the meaning of perfect forms, see Arkadiev (2021). In this our LiLa data diverge from the Perfect Questionnaire data where negation is built into some of the entries. Another difference from the questionnaire data is that 'bare' participles were not included in the sample as it is not always easy to distinguish their perfect uses from evidential ones. Still, 'bare' participles can be found as translation equivalents of full-fledged Present Perfect forms in 17% of sentences translated into Latvian and 10% of sentences translated into Lithuanian; consider (40) and (41). They are analysed together with other translation equivalents in the sections to follow.

(40) Lithuanian (original) Žmon-a apie jus yra daug wife-nom.sg about much 1SG.DAT 2PL.ACC be.prs.3 pasakoj-us-i. tell-pst.pa-nom.sg.f Latvian (translation) Siev-a man daudz par jums wife-nom.sg much about 1SG.DAT 2PL.DAT stāstīj-us-i. tell-pst.pa-nom.sg.f

(41) Latvian (original)

<>	sieviet-e	ir	nez	kur
	woman-nom.sg	be.prs.3	unknown	where

pagais-us-i.

vanish-pst.pa-nom.sg.f

Lithuanian (translation)

'My wife has told me a lot about you.'

<...> moter-is nežinia kur ding-us-i.
woman-nom.sg unknown where vanish-pst.pa-nom.sg.f
'The woman has vanished in an unknown direction'

We use LiLa in two ways in our research. On the one hand, we compare the uses of the perfect forms in the original texts and their translation into the other Baltic language. On the other hand, we compare the frequencies of perfect forms in the original texts themselves.

3.2. Frequencies of perfect forms and verb frequencies in original texts

Latvian and Lithuanian differ not only in the overall frequencies of perfect forms in the corpus but also in the frequencies of each of the tenses. As shown in Table 20, the two languages have in common the low frequency of the Future Perfect, but here the similarities end. In Latvian the most frequent perfect tense is the Present Perfect, with the Past Perfect following slightly behind. In Lithuanian, however, the overwhelming majority of perfect examples belong to the Past Perfect, the Present Perfect being four times less frequent. The explanation for this discrepancy may be that in Lithuanian the auxiliary is more frequently omitted in the present tense than in Latvian, so the real frequency of the Present Perfect in Lithuanian might be higher.

Table 20. Frequencies of perfect forms in LiLa according to tenses

forms	Lithuanian (original)		Latvian ((original)
be + pst.pa	572	100%	1171	100%
PRF.PRS	99	17%	620	53%
PRF.PST	451	79%	505	43%
PRF.FUT	22	4%	46	4%

Given the distribution of perfect forms in the original texts, it does not come as a surprise that the main means of translating the Latvian Present Perfect into Lithuanian is the Simple Past, see 3.3.

A glimpse into the meanings of the perfect forms in each of the original subcorpora is provided by the frequencies of lexical verbs used in the

While Lithuanian additionally differentiates between the Simple Past and the Habitual Past, the latter is so rare with the perfect (9 examples) that one can count it together with the Simple Past (442 examples).

perfect, see Table 21 where the five most frequent verbs are given. Verbs of perception are shared by both languages, as well as verbs referring to changes in physical and cognitive states. The former, together with the verb 'be', only present at the top of the Latvian list, can be linked to the experiential contexts (see 3.4.1), the latter to the resultative (and stative) contexts (see 3.4.2). Although the connection between the lexical meaning and the type of the perfect use appears less straightforward when we turn to actual examples, we can claim at this stage that the experiential uses prevail in Latvian, and the resultative uses in Lithuanian.

Table 21. Frequencies of verbs in perfect forms in LiLa

Lithuanian (original)						
įsitikinti 'become convinced'	25	4%				
pasiryžti 'become determined'	24	4%				
girdėti 'hear'	12	2%				
pamiršti 'forget'	10	2%				
mirti 'die'	9	2%				
total	572	100%				
Latvian (original)	Latvian (original)					
redzēt 'see	38	3%				
<i>būt</i> 'be'	33	3%				
dzirdēt 'hear'	26	2%				
aizmirst 'forget'	21	2%				
nogurt 'get tired'	19	2%				
total	1171	100%				

3.3. Translating the perfect

While it is logical to expect that a language with a perfect gram should use it in the translations of the perfect forms of another language, this has not always proved to be the case. Our data show that the share of original perfect examples translated by means of the perfect varies

depending on several factors, including the direction of translation, the tense of the original perfect form, and the meaning that the original use expresses. In what follows we briefly describe how each of three perfect tenses are translated from Lithuanian to Latvian and from Latvian to Lithuanian, but we shall postpone the discussion of the meanings until the next section.

3.3.1. Present Perfect

Of all three tenses, the difference between Latvian and Lithuanian is the greatest in the Present Perfect, which is usually translated by non-perfect forms from Latvian into Lithuanian, although Latvian regularly translates the Lithuanian Present Perfect by means of its own Present Perfect.

Table 22. Tra	nslations	of the	Present	Per	fect
---------------	-----------	--------	---------	-----	------

	Latvian (translation)		Lithuanian (translation	
PRF.PRS	57	58%	123	20%
PST.PA	17	17%	54	9%
PRS	15	15%	45	7%
PRF.EVID	4	4%	4	1%
PST	2	2%	350	56%
PST.PP	2	2%	3	0%
PRF.PST	1	1%	8	1%
EVID.PRS	1	1%	0	0%
HAB.PST	_	_	13	2%
other	0	0%	19	3%
totall	99	100%	620	100%

Latvian (translation)

The Lithuanian Present Perfect is translated with the Latvian Present Perfect in more than half of the examples; see Table 22. Other representatives of the perfect family among the translation equivalents are 'bare' participles (17%), the Evidential Perfect (4%) and a single example translated by means of the Past Perfect, see (42).

(42) Lithuanian (original)

[Todėl Orinta, jausdama pavydą,]

nekart su paniek-a Edvard-ui **yra** not_once with contempt-ins.sg pn-dat.sg be.prs.3 **tėšk-us-i**.

slap-PST.PA-NOM.SG.F

[kad jis savo pinigais stengiasi nusipirkti dukters meilę.]

Latvian (translation)

[Tāpēc Orinta, juzdama skaudību,]

ne reizi vien ar nicinājum-u **bij-a** Edvard-am not_once PTCL with contempt-ACC.SG be.PST-3 PN-DAT.SG **noskaldīj-us-i**,

chop-pst.pa-nom.sg.f

[ka viņš par savu naudu cenšoties nopirkt meitas mīlestību.]

'[For this reason, Orinta, being jealous,] has/had repeatedly told Edward with contempt [that he is/was trying to buy her daughter's love with his money.]'

All instances of the Simple Present among the Latvian translations (15%) are combinations of a copula with a passive participle or an adjective. Additionally, there are two similar examples involving 'bare' passive participles without a copula. The forms that they all serve to translate are combinations of the copula with a statively used participle rather than the Present Perfect proper (see the section on statives), as in (43). The only instance of the Evidential Present is also found among the translations of such forms.

(43) Lithuanian (original)

<...> es-u įsitikin-us-i,

be.prs-1sg assure.rfl-pst.pa-nom.sg.f

[kad jūsų pypkė bus daug malonesnė negu mano pakeleivio cigaretės.] Latvian (translation)

<...> esmu pārliecinā-t-a,

be.prs.1sg assure-pst.pp-nom.sg.f

[ka jūsu pīpe būs daudz patīkamāka par mana ceļabiedra cigareti!] 'I'm sure [that your pipe is going to be much more pleasant than my companion's cigarette.]'

The Simple Past is only found in two Latvian translations of the Lithuanian Present Perfect, both involving the same verbs of saying, cf. (44).

(44) Lithuanian (original) [Į nekilnojamąjį turtą,]

iuk saki-us-i! jums es-11 PTCL 2PL.DAT already be.prs-1sg say-PST.PA-NOM.SG.F Latvian (translation) [Nekustamajā īpašumā,] teic-u! iau jums 1.SG.NOM already 2PL.DAT say.PST-1SG '[Into real estate], I told you!'

Lithuanian (translation)

In more than half of the examples, the Latvian Present Perfect is translated into Lithuanian by means of the Simple Past, as in (45). A small number of the Lithuanian translations contain the Habitual Past, which is a category absent from Latvian.

(45) Latvian (original)

[Ko jūs teicāt,]

jūs es-at bij-us-i baletdejotāj-a?

2PL.NOM be.PRS-2PL be-PST.PA-NOM.SG.F ballet_dancer-NOM.SG
Lithuanian (translation)

[Ką jūs sakėte,]

jūs buv-o-te balet-o šokėj-a?

2PL.NOM be-PST-2PL ballet-GEN.SG dancer-NOM.SG '[What did you say?] You have been a ballet dancer?'

Present Perfect forms comprise only 20% of the Lithuanian translations, and 9% contain 'bare' participles. In several examples the Lithuanian Present Perfect has an additional evidential meaning expressed by the participal form of the auxiliary, as in (46).

(46) Latvian (original)

Vai Named-a ir redzēj-us-i? vin-u PN-NOM.SG be.prs.3 see-PST.PA-NOM.SG.F Q 3-ACC.SG Lithuanian (translation) ArNomed-a es-ant-i j-ą Q PN-NOM.SG be.prs-prs.pa-nom.sg.f 3-ACC.SG.F mači-us-i? see-pst.pa-nom.sg.f 'Has Nameda seen her?'

The use of the Simple Present found in 7% of the Lithuanian translations is very different from the use of this tense in the translations of the Lithuanian Present Perfect into Latvian. Rather than combinations of a copula with an adjective or an adjectivised passive participle, these are cases of narrative (47) or habitual (48) present.

(47) Latvian (original)

saknieb-us-i Es esmu lūp-as 1SG.NOM be.prs.1sG press-PST.PA-NOM.SG.F lip-ACC.PL atbild-u <...> un and answer.prs-1sG Lithuanian (translation) irΑš sukand-u dant-is atsak-au <...> press-PRS.1SG tooth-ACC.PL and answer-prs.1sG 1SG.NOM 'I press my lips (Lithuanian translation: teeth) together and answer <...>'

(48) Latvian (original)

Cik bieži es-i nonāk-us-i konflikt-ā how often be.prs-2sG conflict-Loc.sg come-PST.PA-NOM.SG.F ar sev-i? with self-ACC Lithuanian (translation) Kaip dažnai pykst-uo-si sav-imi? suhow often be.angry-prs.1sg-rfl with self-ins 'How often I feel internal conflict (Lithuanian translation: am angry with myself)?'

As distinct from translations into Latvian, 'bare' passive participles form a separate group from the Simple Present.

(49) Latvian (original)

tikai Vin-a ir sabojāj-us-i sav-u be.prs.3 only 3-NOM.SG.F ruin-PST.PA-NOM.SG.F POSS-ACC.SG rakstur-u <...> character-Acc.sg 'She has only ruined her character.' Lithuanian (translation) Tiki-os charakter-is sugadint-as <...> only 3-GEN.SG.F character-NOM.SG.M ruin-PST.PP-NOM.SG.M 'Only her character has deteriorated.'

Another small group of examples that are only found in the translations of the Latvian Present Perfect into Lithuanian comprises various

cases where the original finite verbs are substituted by non-finite forms that modify verbs and nouns or serve as participial complements. In one example, the Latvian Present Perfect corresponds to a deverbal noun. This group is labelled as 'other' in Table 22 because it also contains an imperative form (50).

```
(50) Latvian (original)
     Ŧūs
                   es-at
                                   pastiep-us-i
                   be.prs-2pt
                                   extend-pst.pa-nom.sg.f
     2PL.NOM
                              pirkst-in-u.
     maz-o
     little-ACC.SG.M.DEF
                              finger-DIM-ACC.SG
     [un pamazām viņš sagrābs ne tikai Jūsu roku.]
     Lithuanian (translation)
     Tik
                išties-ki-te
                                    j-am
                                                    maž-a ji
     only
                extend-IMP-2PL
                                    3-DAT.SG.M
                                                    little-ACC.SG.M.DEF
     piršt-el-į,
     finger-DIM-ACC.SG
     [ir jis kaipmat susigrobs ne tik Jūsų ranką.]
     'You have only given (Lithuanian translation: Just give) him your lit-
     tle finger [and he will eventually have not only your arm.]'
```

Discussion

The main difference between the two languages lies in the use of the Simple Past, which is the most common way of translating the Latvian Present Perfect into Lithuanian but is almost never found in the translations of the Lithuanian Present Perfect into Latvian. The Present Perfect is used in translations in both directions, but it is at least three times more frequent in the translations into Latvian, even if we only count the full-fledged analytical forms in the indicative. It is interesting that both languages sometimes employ perfect forms with the evidential form of the auxiliary as translation equivalents of the regular indicative Present Perfect.

The contrast between the percentages of the Simple Present is less stark, but the identical labels hide essentially different entities depending on the direction of translation. On the one hand, the present tense copula is combined with adjectives and passive participles in Latvian when translating perfect-like combinations of statively-used active participles from Lithuanian. On the other hand, Lithuanian finite verbs in the Simple Present with a habitual and historical present meaning are found in translations of genuine perfect forms in one of the non-trivial uses of the Present Perfect in Latvian, see 3.4.5.

3.3.2. Past Perfect

The translation equivalents of the Past Perfect show more similarity between the two languages, even though the share of non-perfect forms in Lithuanian is still high.

Table 23.	Translations	of the	Past	Perfect
-----------	--------------	--------	------	---------

	Latvian (translation)		Lithuanian (translation	
PRF.PST	316	70%	241	48%
PST	70	16%	216	43%
PST.PA	42	10%	19	4%
PRF.EVID	8	1%	0	0%
PRF.PRS	6	1%	2	0%
PST.PP/ADJ	2	0%	4	1%
PRS	0	0%	2	0%
HAB.PST	_	_	12	2%
other	7	2%	9	2%
totall	451	100%	505	100%

Latvian (translation)

The Latvian Past Perfect is found in 70% of the translations of the Lithuanian Past Perfect, including 3 out of 9 examples of the Habitual Past Perfect. Other representatives of the perfect family include 'bare' participles (10%), perfect forms with the auxiliary in the evidential (1%) and the Present Perfect (1%), see examples (51) and (52).

(51) Lithuanian (original)							
	Matyt,	galv-oje	visu	omet	jau	bū-dav-o	
	evidently	head-10c.s	G alwa	ays	alread	y be-нав-рsт.3	
	suplanav-us-	·i	pamok-ą		minut-	ės	
	plan-pst.pa-nom.sg.f		lesson-Acc.sg		minute	e-GEN.SG	
	tikslum-u.						
	precision-INS.	SG					
	Latvian (translation)						
	Acīm redzami,	stund-	и	viņ-a			
	evidently	lesson	-ACC.SG	3-NOM	I.SG.F		
	izplānoj-us-i		galv-ā		ar	minūt-es	
	plan-PST.PA-NO	OM.SG.F	head-Loc.	SG '	with	minute-gen.sg	

precizitāt-i.

precision-ACC.sg

'Evidently, she used to have a lesson planned to a minute in her head.'

(52) Lithuanian (original)

[Pirmadieni Gediminas man sakė,]

jog buv-o-te jau apsiramin-us-i,

that be-pst-2pl already calm_down-pst.pa-nom.sg.f

[todėl grįžote į Kauną.]

Latvian (translation)

[Pirmdien man Gedimins teica,]

ka jūs es-ot nomierināj-us-ie-s

that 2PL.NOM be.prs-evid calm_down-pst.pa-nom.sg.f-rfl

[un tāpēc atgriezusies Kauņā.]

'[Gediminas told me on Monday] that you had calmed down already [and therefore returned to Kaunas.]'

The rest of the Latvian translations (16%) contains the Simple Past. As in the translations of the Lithuanian Present Perfect, they are for the most part represented by combinations of a copula with an adjective or a passive participle that serve to translate perfect-like combinations of a copula and an adjectivised active participle of the original. See also a combination with a noun in the locative in (53).

(53) Lithuanian (original)

Aš **buv-au** puikiai **nusiteik-us-i**.

1SG.NOM be-PST.1SG wonderfully feel_disposed-PST.PA-NOM.SG.F
Latvian (translation)

Bij-u lielisk-ā noskaņojum-ā. be.pst-1sg wonderful-loc.sg mood-loc.sg

'I was in a wonderful mood.'

A couple of examples with an omitted copula also belong to this type.

(54) Lithuanian (original)

Ši-oji vienatv-ė **buv-o** DEM-NOM.SG.F.DEF loneliness-NOM.SG be-PST.3

susij-us-i

connect13-PST.PA-NOM.SG

[su nepaaiškinamu nerimu.]

This verb in Lithuanian actually does not have any forms but the past active participle. See Kapkan (2021) on such 'spurious' perfect forms.

Latvian (translation)

Š-ī vientulīb-a **saistī-t-a**

DEM-NOM.SG.F loneliness-NOM.SG connect-PST.PP-NOM.SG.F [ar neizskaidrojamu nemieru.]

'This loneliness was (Latvian translation: is) linked [to inexplicable anxiety.]'

Still, some of the translations containing the Simple Past are actually finite verbs, as in (55).

(55) Lithuanian (original)

Mam-a **buv-o išpranašav-us-i**, mom-nom.sg be-pst.3 predict-pst.pa-nom.sg.f

[kad nebus iš manęs buhalterės.]

Latvian (translation)

Mamm-a pareģoj-a, mom-nom.sg predict-pst.3

[ka grāmatvede no manis gan neiznāks.]

'My mother (had) predicted [that I wasn't going to be a good accountant.]'

The last group, labelled 'other' in Table 23, includes nominalisations and participles that modify verbs, as well as the compound form of the subjunctive.

Lithuanian (translation)

Almost half of the Latvian Past Perfect examples are also translated into Lithuanian by means of the Past Perfect, which is noticeably more frequent in comparison to the number of Present Perfect correspondences in the Lithuanian translations of the Latvian Present Perfect (the difference is statistically significant, $\chi^2 = 49.153$, p < 0.0001). 'Bare' participles make up 4% of the translations, and less than 1% of examples contain the Present Perfect. A feature only found with the Lithuanian 'bare' participles is that they can be derived from the Habitual Past stem (found in 2 out of 19 examples), see the Lithuanian sentence in (56).

(56) Latvian (original)

Florenc-e reiz-i bii-a ret-u time-Acc.sg be.pst-3 PN-NOM.SG rare-ACC.SG gāj-us-i līdzi māt-ei baznīc-ā. church-Loc.sg go.PST-PST.PA-NOM.SG.F along mother-DAT.SG

Lithuanian (translation)

Florencij-a retai **ei-dav-us-i** su pn-nom.sg rarely go-hab-pst.pa-nom.sg.f with motin-a i bažnyči-a. mother-ins.sg in church-acc.sg

'Florence rarely accompanied her mother to the church.'

The Simple Past, as in (57), is almost as frequent as the Past Perfect (43% vs 48%), especially if we add 2% of examples translated with the Habitual Past (58).

(57) Latvian (original)

Kam tad bij-i atstāj-us-i tu whv then 2SG.NOM be.pst-2sg leave-pst.pa-nom.sg.f durv-īs zīmīt-i? door-LOC.PL note-ACC.SG Lithuanian (translation) Tai kam palik-ai dur-yse then why leave-pst.2sg door-loc.pl 2SG.NOM raštel-i? note-ACC.SG

'Then why did you leave a note in the door?'

(58) Latvian (original)

Pirms tam **bij-u domāj-us-i**, earlier be.pst-1sG think-pst.pa-nom.sg.f [kā nez tie šampinjoni aug, kā nez sēnes lasa Īrijā?]

Lithuanian (translation)

Anksčiau **galvo-dav-au**, earlier think-HAB-PST.1SG

[kaipgi tie pievagrybiai auga, kaip tuos grybus Airijoje renka?]

'Before, I used to contemplate: ["How do those champignons grow and how do they collect mushrooms in Ireland?"]'

The Simple Present is used in two Lithuanian translations which contain a finite verb.

A separate group is formed by 'bare' passive participles; most of them can be identified with the evidential passive in Lithuanian (59).

(59) Latvian (original)

Vien-am gulb-im lod-e **bij-a**one-dat.sg.m swan-dat.sg bullet-nom.sg be.pst-3
trāpīj-us-i galv-ā.
hit-pst.pa-nom.sg.f head-loc.sg

Lithuanian (translation)

Vien-ai gulb-ei kulk-os **pataiky-t-a** one-dat.sg.f swan-dat.sg bullet-gen.sg hit-pst.pp-na i galv-a.

in head-Acc.sg

'One swan got shot with a bullet in its head.'

The group 'other' (2%), as usual, contains participles and other words that modify verbs or nouns.

Discussion

The two main forms that are found in the translations of the Past Perfect in both directions are the Past Perfect itself and the Simple Past, although the exact percentages are different. It is noteworthy that not only Lithuanian uses the Simple Past of finite verbs in translations of the Latvian Past Perfect, but also Latvian sometimes chooses the same strategy with respect to the Lithuanian Past Perfect. Otherwise, the translations of the Past Perfect generally confirm the tendencies seen in the translations of the Present Perfect, including the extensive use of adjectives and passive participles combined with past tense of the copula in order to translate perfect-like stative constructions of Lithuanian. An important observation is, however, provided by the fact that 'bare' participles cannot be summed up with the Past Perfect forms as the former appear to have their own function. The evidential forms, too, have the auxiliary in the present rather than the past tense.

3.3.3. Future Perfect

The Future Perfect is the perfect form with a minimum divergence between the two languages, as shown in Table 24.

Table 21. 7	Translations	of the	Future	Perfect
--------------------	--------------	--------	--------	---------

	Latvian (translation)		Lithuanian (translation)	
PRF.FUT	13	59%	24	52%
PRF.PRS	1	5%	0	o%
FUT	7	32%	11	24%
PST	О	o%	11	24%
other	1	5%	О	o%
totall	22	100%	46	100%

Latvian (translation)

The Lithuanian Future Perfect corresponds to the Latvian Future Perfect in more than half of the examples. One example is translated with the Present Perfect into Latvian, cf. (60).

(60) Lithuanian (original)

Panaš-u, kad **bū-s-i išsidav-us-i**, similar-na that be-fut-2sg betray.rfl-pst.pa-nom.sg.f Severij-a?

Latvian (translation)

Izskat-ā-s, *ka* **es-i** sev-i seem.prs-3-rfl that be-fut-2sg self-Acc

nodev-us-i, Severij. betray-pst.pa-nom.sg.f pn.voc

'It seems that you have (Lithuanian original: will have) betrayed yourself, Severija?'

Less than one third of the data contains the Simple Future, all examples being combinations of a copula with an adjective or a passive participle. A single example contains a participle modifying the verb.

Lithuanian (translation)

The share of the Future Perfect in the Lithuanian translations is similar to its share in the Latvian translations (59% and 52%). The rest of the data is equally divided between the Simple Future (61) and the Simple Past (62), the latter examples expressing conjectures about unwitnessed situations in the past.

(61) Latvian (original)

Man-a $dz\bar{\imath}v$ -e $b\bar{u}$ -s $dr\bar{\imath}z$ 1SG.POSS-NOM.SG.F life-NOM.SG be-FUT.3 soon

pagāj-us-i.

finish.pst-pst.pa-nom.sg.f

Lithuanian (translation)

Mano gyvenim-as veikiai **baig-si-s**.

1SG.POSS life-NOM.SG soon finish-FUT.3-RFL
'My life will soon end (Latvian original: will have ended).'

(62) Latvian (original)

Droši vien $b\bar{u}$ -s-i kaut k-o ne $t\bar{a}$ probably be-fut-2sg something-ACC not thus

pateik-us-i.

say-PST.PA-NOM.SG.F Lithuanian (translation)

Tikriausiai kažk-ą ne taip **pasak-ei**. probably something-ACC not thus say-PST.2SG 'You must have said something wrong.'

Discussion

The Future Perfect is translated by means of the Future Perfect in more than half of the examples, and this holds for both directions of translation. Likewise, the second most frequent option is the Simple Future, although in Latvian the latter characterises the form of the copula combined with adjectives and passive participles, while in Lithuanian the Simple Future appears with finite lexical verbs. The most important difference lies in the use of the Simple Past in the Lithuanian translations of the Latvian Future Perfect. This strategy is never found in Latvian, the closest thing being the translation of the Lithuanian Future Perfect by means of the Latvian Present Perfect.

3.3.4. Conclusions on the translation equivalents

More often than not, the Lithuanian perfect tenses do not provide translation equivalents for the Latvian perfect tenses, although the availability of a Lithuanian perfect form for a translation of a Latvian one increases from 20% of the translations in the Present Perfect towards 50% in the other two tenses. The main alternatives are the simple tenses. The Lithuanian Simple Past is found in almost 60% of the translations of the Latvian Present Perfect and in 40% of the translations of the Latvian Past Perfect. Half of the Lithuanian translations of the Latvian Future Perfect are divided between the Lithuanian Simple Future and the Lithuanian Simple Past.

The share of the Lithuanian perfect forms that are translated by means of a perfect form into Latvian shows less variation across the tenses, from 60% in the present to 70% in the past and future, without counting the 'bare' participles and the evidential forms proper. When Latvian does resort to the use of simple tenses, it is mostly in translating perfect-like constructions with adjectivised participles rather than genuine perfect forms of Lithuanian.

The analysis of the translations in both directions also reveals that the Present and Past Perfect (but not the Future Perfect) are sometimes translated into the other Baltic language with what qualifies as unambiguous evidential forms, thus raising the question of the evidential function of the perfect forms. Even more common are 'bare' participles that are found as translation equivalents of both the Present and Past Perfect in Latvian and Lithuanian. What their exact function is and how much they can be reduced to a shortened version of the perfect or the evidential is still to be found out.

3.4. Meanings of the perfect

The meaning of perfect tenses, as well as simple ones, is usually understood as related to the time of speech via reference point or topic time (Reichenbach 1947, Klein 1994). However, this is not always so, as the interpretation of a tense form depends on the discourse mode, or register. The meaning of a tense form is only directly related to the actual speech time in the deictic register, which is the default mode of discourse found in conversations and also applied to isolated sentences. The deictic register is opposed to the narrative register. In narratives, tense forms are interpreted relative to previous events and temporal adverbials rather than the time of speech (Smith 2003, 93). While it is conventional to use past tenses in narrative, no correlation can be made between a tense form and the moment of speech because the speaker/narrator is distanced from the listener (see e.g. Fleischman 1990). The choice between the present and the past tense in narratives reflects the distinction between foreground and background (Fleischman 1985) or the degree to which the narrator wishes the listener to be distanced from the narrated event and/or the narrator, the narrative or historical present cancelling this distance (see e.g. Padučeva 1996, 286, 289; Paducheva 2011, 137-138, 142). Since our corpus data comprises narrative texts that also contain direct speech, the differentiation of the two registers is important for the analysis.

Generally, perfect forms are not expected to be found in narratives (see e.g. Dahl 1985, 139), and our PQ data confirms this assumption (Arkadiev & Daugavet 2021, 22–23). Nevertheless, an important clarification has to be made pertaining to the distinction between bounded and unbounded situations. The former move narrative time, but the latter present background

information and are simultaneous with the time previously established in the text (Smith 2003, 26–27). States, including those expressed by perfect forms, belong to the latter type.

The difference in the interpretation of a perfect form in the deictic and the narrative register can be seen from the following two examples. In (63) the resultant state holds at the time of speech, but in (64) the resultant state is simultaneous with the previous event, expressed by the Simple Past form in the preceding clause.

(63) Latvian (original)

Vai	esmu		atpalik-u	s-i		no
Q	be.prs.1s	G	fall.behind	l-pst.p	A-NOM.SG.F	from
sav-a		laik-	-a	vai	aizsteig-us-ie-s	3
RFL-GF	N.SG.M	time	e-GEN.SG	or	hurry.away-рs	T.PA-NOM.SG.F-RFL
t-am		prie	kšā?			
DEM-D	AT.SG.M	ahea	ad			
'Have I fallen behind my time or hurried away ahead of it?'						

(64) Latvian (original)

```
Just-s man viegli piebikstīj-a, jo bij-u
PN-NOM.SG 1SG.DAT gently nudge.PST-3 because be.PST-1SG

palik-us-i iepakaļ.
fall.behind-PST.PA-NOM.SG.F behind

'Justs nudged me gently because I had fallen behind (him).'
```

It is evident that the Past Perfect is often employed to convey the resultative and other functions in narratives, but the relationship between the Past Perfect and the narrative register is not straightforward. On the one hand, a narrative can be told in the Simple Present tense, background information being conveyed by means of the Present Perfect. See (65) where the resultant state is simultaneous with the event expressed by the Simple Present. On the other hand, the Past Perfect is used in the deictic register to refer to states that obtained in the past but ceased to hold before the moment of speech (the meaning of cancelled result), see (66).

(65) Latvian (original)

Pieceļ-o-s		sēdus,	bet	Rut-e	man	
rise.prs-1sg-rfl		sitting	but	PN-NOM.SG	1SG.DAT	
ir	uzgriez-us-i			mugur-u		un
be.prs.3	turn.away-pst.pa-nom.sg.f			back-Acc.sg		and

aiztur asar-as cik spēk-a.
hold.prs.3 tear-ACC.pl how.much strength-gen.sg
'I sit up but Rute has turned her back on me and is doing her best to hold her tears.'

(66) Latvian (original)

Kam tad tu **bij-i atstāj-us-i** why then 2.SG.NOM be.PST-2SG leave-PST.PA-NOM.SG.F $durv-\bar{i}s$ $z\bar{i}m\bar{i}t-i?$ door-loc.PL note-ACC.SG

'Then why did you leave the note in the door?'

In what follows, we do not differentiate various functions of perfect forms according to the tense of the auxiliary unless the function in question is only found with one of the tenses. It is convenient to start with the experiential, as it is less complicated than the resultative and is highly reminiscent of the experiential use of the perfect in English (3.4.1). The resultative function with its many issues involving the perfect-like statives, the difference between the subject-oriented and the possessive resultative, and the compatibility with adverbials of duration, comes second in our list (3.4.2). The inner logic of the grammaticalisation process then leads us towards the current relevance use in the deictic register (3.4.3) and the related anterior use in the narrative register (3.4.4). Further development in Latvian brings about the use of the perfect to refer to events of the narrative taking place 'behind the scenes' (3.4.5). Functions specifically associated with the Past Perfect are reference to cancelled result and discontinuous past (3.4.6). The former is shared by both Baltic languages while the latter is another Latvian development. Finally, the Future Perfect specialises in the epistemic use (3.4.7.).

3.4.1. Experiential

In both Baltic languages the core of the experiential examples is found with verbs that refer to receiving and giving information: girdėti/dzirdēt 'hear', matyti/redzēt 'see', skaityti/lasīt 'read' etc.¹⁴, see (67) and (68).

¹⁴ Recall that the verbs 'hear' and 'see' are also among the most frequent verbs in each of the samples. Nevertheless, according to a reviewer, verbs of perception can be ambiguous between an experiential interpretation, when they refer to event types, and a current relevance interpretation, when they refer to event tokens.

(67) Lithuanian (original)

Es-u girdėj-us-i,

be.prs-1sg hear-pst.pa-nom.sg.f

[kiti sako, kad kaime žmonės sunkiai gyvena.]

'I have heard other people saying [that life is difficult in the country.]'

(68) Latvian (original)

Florenc-e **ir** redzēj-us-i krēpjvilk-us PN-NOM.SG be.PRS.3 see-PST.PA-NOM.SG.F mane_wolf-ACC.PL zooloģisk-ajā dārz-ā.

zoological-loc.sg.def garden-loc.sg

'Florence has seen maned wolves in a zoo.'

It has been suggested for both Latvian (Nau 2015, 146) and Lithuanian (Geniušienė 1989, 290; 1990, 139) that the experiential use is associated with atelic / imperfective verbs. While our data confirms this tendency, examples of telic / perfective verbs showing the experiential meaning can still be found (69), especially with transitive verbs which leave fewer chances for an experiential interpretation to be blocked by a resultative one. Additionally, experiential readings can be triggered by such words as Lithuanian *ne kartą* 'more than once' etc. See also an intransitive example in (70):

(69) Lithuanian (original)

J-ų dėka ne kartą **es-u** pigiau 3-GEN.PL thanks not_once be.PRS-1SG cheaper **įsigij-us-i**

purchase-PST.PA-NOM.SG.F

[daržovių, duonos, balto saldaus pieno sūrio ir, žinoma, mėsos bei medaus.] 'Thanks to them I have repeatedly purchased cheaper [vegetables, bread, paneer cheese and, naturally, meat and honey.]'

(70) Lithuanian (Mikulskas 2017, 197)

Ne kartą es-u įsitikin-ęs, not_once be.prs-1SG convince.rfl-pst.pa.nom.sg.m [kad esama ir gerų, ir blogų žmonių.]

'More than once I have been able to convince myself [that there are both good and bad people.]'

In the original Lithuanian data from LiLa, uses similar to (70) are only found in the Past Perfect (71), which suggests that the experiential meaning is triggered by such adverbials as $t\bar{u}kstanti$ kartu 'a thousand times'

together with the Simple Past form of the auxiliary while the perfect form itself only expresses the subject-oriented resultative.

(71) Lithuanian (original)

Cha, j−i, M. V., jau buv-o ha be-PST.3 3-NOM.SG.F PN already tūkstant-i kart-u numir-us-i, thousand-Acc.sg die-pst.pa-nom.sg.f time-GEN.PL prisikėl-us-i

resurrect.RFL-PST.PA-NOM.SG.F

[ir daugiau nebesunaikinama.]

'Ha ha, she, M. v., has already died and come from the dead (literally: had been dead and resurrected) thousand times, [and she is now unvanquishable.]'

Nevertheless, in some Latvian examples the experiential meaning seems to take scope over resultant states corresponding to a subject-oriented resultative (72); see also Geniušienė (1989, 289; 1990, 138), who claims that the verb's telicity is lost in the resultative use.

(72) Latvian (original)

sacietēj-us-i.

[Interesanti caur cik roku desmitiem tās klīdušas,] io gandrīz katr-a ir almost because each-nom.sg.f be.prs.3 satecēj-us-i, sakus-us-i atkal undrip-pst.pa-nom.sg.f melt-pst.pa-nom.sg.f again and

harden-pst.pa-nom.sg.F

'[I wonder how many dozens of hands they (candies) have changed,] because almost each of them has thawed, melted and hardened again.'

As suggested by the data outside of LiLa (73), the combination of the experiential and the resultative use is sometimes made explicit by adding the perfect markers twice to the same expression, that is, to the lexical verb (samirkt > ir samirkusi) and then to the auxiliary of the perfect form (ir samirkusi > ir bijusi samirkusi).

(73) Latvian (lvTenTen14)

<...> ja pas-e ir bij-us-i if passport-nom.sg be.prs.3 be-pst.pa-nom.sg.f samirk-us-i

soak-pst.pa-nom.sg.f

[un pēc izžāvēšanas lapas vairāk nav tādas kādas bija <...>] '<...> if a passport has (ever) got wet [and the pages look different after drying.]'

In experiential contexts telic verbs are also associated with the cumulative meaning in (74) and (75); see 2.3.4.

(74) Lithuanian (original)

[Dvejojau, ar pasakyti jam savo viešbuti,]

nes **buv-au** jau tiek because be-PST.1SG already so.much

pri-si-klausi-us-i

PVB-RFL-listen-PST.PA-NOM.SG.F

[apie Rytuose tykančius pavojus ir apie ypač pavojingus kašmyriečius.] '[I was in doubt whether I should tell him my hotel,] because I had already heard so much [about the dangers of the Orient and about the scary Kashmiri people.]'

(75) Latvian (original)

Jau piec-us tād-us kaln-us already five-ACC.PL.M such-ACC.PL.M mountain-ACC.PL

esmusa-gāj-us-i,vis-ube.PRS.1SGPVB-go-PST.PA-NOM.SG.Fall-ACC.SG $m\bar{u}\bar{z}$ -u $staig\bar{a}j$ -ot <...>life-ACC.SGwalk-CVB.PRS

'I have already gone through five such mountains, all my life on the road.'

Most inclusive contexts can be grouped together with the experiential uses in Latvian as they refer to event types rather than individual events, as in (76). As distinct from genuine experiential uses, they describe a person's habits that still hold at the time of speaking and often correspond to the Simple Present in the Lithuanian translations.

(76) Latvian (original)

Kopš divpadsmit gad-u vecum-a viņ-a from twelve year-GEN.PL age-GEN.SG 3-NOM.SG.F ir rakstīj-us-i gandrīz katr-u be.prs.3 write-PST.PA-NOM.SG.F almost every-Acc.sg dien-u. day-Acc.sg

Lithuanian (translation) dvylik-os Nuo met-u amži-aus i-i from twelve-gen.sg year-GEN.PL age-GEN.SG 3-NOM.SG.F raš-o kone kasdien. write-prs.3 almost every_day

'Since she was twelve, she has been writing (poems) almost every day.'

Compare example (77), where the Simple Past appears in the Lithuanian translation of an example which portrays a person's traits as a background for a situation in the past, also rendered in the Latvian original by the Present Perfect.

(77) Latvian (original)

[Kopš vien sevi atceros,]

esmu dzīvoi-us-i šaub-ās par be.prs.1sG live-pst.pa-nom.sg.f doubt-loc.pl.f about izpras-t tēl-us, sav-ām spēj-ām ability-DAT.PL understand-INF image-ACC.PL RFL.POSS-DAT.PL [man tik ļoti gribējās dejot, bet es sevi plosīju.]

Lithuanian (translation)

[Kiek save atsimenu,]

gyven-au abejo-dam-a savo sugebėjim-u live-pst.1sG doubt-cvb-sg.f rfl.poss ability-ins.sg

vaidin-ti;

perform-inf

[aš labai norėjau šokti, bet draskiau save abejonėmis.]

'[Since I remember myself,] I have always lived in doubts about my ability to perform roles. [I badly wanted to dance, but I tormented myself.]'

3.4.2. Resultative

From statives to resultatives

The resultative use is believed to reflect the first step in the development of the Latvian and Lithuanian perfect (Ambrazas 1990, 183–186). It is still possible in both languages to use a combination of the copula 'be' and the active past participle, often lexicalised, in a purely stative meaning (Servaitė 1988; Ambrazas 2006, 171–172; Holvoet & Pajėdienė 2004, 134), cf. (78) and (79). This construction is formally reminiscent of the perfect but implies no previous action; see Nedjalkov & Jaxontov (1988, 5–7) on statives.

(78) Lithuanian (original)

Dien-a buv-o apniuk-us-i <...>
day-nom.sg be-pst.3 frown-pst.pa-nom.sg.f

'The day was cloudy <...>'

(79) Latvian (original)

<...> koksn-e bij-a satrupēj-us-i wood-nom.sg be.pst-3 rot-pst.pa-nom.sg.f [un poraina kā sūknis.]

'The wood was rotten [and porous like a sponge.]'

Rather than being marginal, such perfect-like constructions with a stative meaning constitute a significant part of the Present Perfect uses in Lithuanian (Kapkan 2021). Likewise, the share of these constructions in the original Lithuanian subcorpus of LiLa amounts to about one third of all Present Perfect examples, with similar frequencies in the other tenses. Since the frequency of such use in Latvian is much lower, the Latvian translations of such Lithuanian examples usually contain adjectives (80) or lexicalised passive participles (81), as mentioned in 3.3; see also Servaitė (1986; 1988) on Lithuanian and Nau (2005, 142) on Latvian.

(8o) Lithuanian (original)

[<...> mūsų šalis pritaria susitarimui]

ir **yra pasireng-us-i** prisijung-ti and be.prs.3 prepare.rfl-pst.pa-nom.sg.f join-inf prie Europ-os Sąjung-os. at Europe-gen.sg union-acc.sg

[<...> mūsu valsts piekrīt norunai]

un ir gatav-a pievieno-tie-s Eirop-as and be.prs.3 ready-nom.sg.f join-inf-rfl Europe-gen

Union-dat.sg

'[Our country joins the agreement] and is ready to join the European Union.'

(81) Lithuanian (original)

Taip, naivuol-ė **buv-o** švent-ai yes naïve_being-nom.sg be-pst.3 holy-Adv **isitikin-us-i**.

convince.RFL-PST.PA-NOM.SG.F

[kad dieną naktį perrašinėju jos dienoraščius!]

```
Latvian (translation)
                             naivul-e
                                                       bij-a
Ŧā,
        š-ī
yes
                             naïve_being-nom.sg
                                                       be.pst-3
        DEM-NOM.SG.F
svēt-i
              pārliecinā-t-a,
holy-ADV
              convince-PST.PP-NOM.SG.F
[ka augām dienām un naktīm pārrakstu viņas dienasgrāmatas!]
'Yes, the silly thing was absolutely convinced [that I was copying her
diaries night and day.]'
```

Certain adjectivised participles (*įsitikinusi* 'convinced', *pasiryžusi* 'determined', *pasirengusi* 'ready', *mirusi* 'dead') are so common in Lithuanian that they occupy the top positions in the frequency list, together making up more than 10% of the lexical items used in the perfect(-like) constructions. Still, even in Lithuanian the same forms can have a true resultative meaning implying a preceding event. In such cases their Latvian translations also involve perfect forms, as in (82).

```
(82) Lithuanian (original)
```

```
[fis buvo prie to pripratęs pirmaisiais gyvenimo Londone metais,]
tačiau
             angl-u
                                kontržvalgyb-a
                                                               jau
however
            English-GEN.PL
                                counterintelligence-NOM.SG
                                                                already
               buv-o
seniai
                             isitikin-us-i.
               be-PST.3
                             convince.RFL-PST.PA-NOM.SG.F
long ago
[kad jis iš tikrųjų yra švarus.]
Latvian (translation)
[Pie tādām lietām viņš bija pieradis pirmajā laikā pēc apmešanās
Londonā,]
bet
        angl-u
                            pretizlūkošan-a
                                                             sen
but
        English-GEN.PL
                            counterintelligence-NOM.SG
                                                             long_ago
             bij-a
                            pārliecināj-us-ie-s,
jau
                            convince-PST.PA-NOM.SG.F-RFL
already
             be.pst-3
[ka viņš patiešām ir tīrs.]
'[He got used to it in his first years in London,] but the English counter-
intelligence had long ago become convinced [that he was actually clean.]'
```

Even as the resultative construction corresponds to the first stage of grammaticalisation of the perfect, the ability to combine with adverbials of duration and continuation ('still') sets it apart from the perfect proper (Nedjalkov & Jaxontov 1988, 15–16). Although rare, such examples are found in a few original sentences in Lithuanian, as well as in their translations into Latvian, all representing subject-oriented resultatives, cf. (83). (For

an example of a possessive resultative in combination with a duration adverbial, see Geniušienė & Nedjalkov 1988, 383.)

(83) Lithuanian (original)

Αš vis dar buv-au prie still be-PST.1SG 1SG.NOM at 3-GEN.SG.M prisiglaud-us-i. press.RFL-PST.PA-NOM.SG.F Latvian (translation) Vēl aizvien viņ-am bii-u still 1SG.NOM 3-DAT.SG.M be.pst-1sg piekļāv-us-ie-s klāt. close press-PST.PA-NOM.SG.F-RFL

Possessive resultative

'I was still holding close to him.'

Another issue involving resultative uses of the perfect concerns the verb's transitivity. Subject-oriented resultatives, associated with intransitive verbs, are twice as common as possessive ones, based on transitive verbs. The latter make up a distinct type in Lithuanian due to the appearance of reflexive marking (Kapkan 2021) and a special auxiliary, see 2.3.2. Their Latvian counterparts, however, are not easily distinguishable from other uses of the perfect, cf. the original Lithuanian example and its Latvian translation in (84), as well as the original Latvian example translated into Lithuanian by means of the auxiliary *turėti* 'have' in combination with a reflexive transitive verb in (85).

(84) Lithuanian (original)

Tubū-s-i susikrov-us-i vis-us be-FUT-2SG 1SG.NOM pack.rfl-pst.pa-nom.sg.f all-ACC.PL.M daikt-us. savo thing-ACC.PL RFL.POSS Latvian (translation) bū-s-i Tu sakravāj-us-i vis-as be-FUT-2SG pack-PST.PA-NOM.SG.F 1SG.NOM all-ACC.PL.F sav-as mant-as. RFL.POSS-ACC.PL.F thing-ACC.PL 'You will have packed all your belongings.'

(85) Latvian (original)

Jūs-ustāst-uesmujau2PL-GENstory-ACC.SGbe.PRS.1SGalready

nolik-us-i rok-ai. рa put-PST.PA-NOM.SG.F under hand-DAT.SG Lithuanian (translation) Ŧūs-u apsakym-a iau turi-u 2PL-GEN story-Acc.sg already have-prs.1sG rank-a. pasidėj-us-i рo put.rfl-pst.pa-nom.sg.f under hand-ins.sg 'I'm keeping your story at hand' (Literally: 'I already have your story placed at hand.')

A metaphoric extension of the possessive resultative involves an inanimate subject, often in the focal position (86), (87).

(86) Lithuanian (original)

<...> Julij-q buv-o apėm-us-i
PN-ACC.SG be-PST.3 overtake-PST.PA-NOM.SG.F
sunkiai pakeli-a-m-a įtamp-a.
hardly lift-PRS-PP-NOM.SG.F strain-NOM.SG
'Julia was overtaken by an unbearable strain.'
(Literally: 'An unbearable strain had overtaken Julia.'

(87) Latvian (original)

Vis-u jau bij-a skār-us-i
all-ACC.SG already be-PST.3 touch-PST.PA-NOM.SG.F
aizmirstīb-a.
oblivion-NOM.SG
'Everything was touched by oblivion.'
(Literally: 'Oblivion had touched everything.')

While retaining the syntax of the subject-oriented resultative, such examples have the meaning of the objective resultative which can also be expressed by passive morphology, as in (88) (Geniušienė & Nedjalkov 1988, 384); see also Holvoet *et al.* (2019).

(88) objective resultative

a. Lithuanian (LithuanianWaC)

[Pasibaigus regėjimui,]

Bernadet-a yra apim-t-a gil-aus pn-nom.sg be.prs.3 overtake-pst.pp-nom.sg.f deep-gen.sg.m liūdesi-o. sorrow-gen.sg

'[After the vision is gone,] Bernadette is overtaken with deep sorrow.'

b. Latvian (lvTenTen14)

kur-š <...> no t-iem ir from which-nom.sg.m DEM-DAT.PL be.prs.3 slimīh-as vāiāk-ais vai weaker-nom.sg.m.def illness-gen.sg or skar-t-s. touch-pst.pp-nom.sg.m

'<...> which of them is weaker or is touched by an illness.'

3.4.3. Current relevance

On the continuum involving 'gradual relaxation of requirements on current relevance' (Dahl & Hedin 2000, 391–392), from the 'continuance of the inherent result' towards 'repercussions that are not directly derivable from the meaning of the verb', Latvian has a more advanced position in comparison to Lithuanian. One consequence of this is the interpretation of atelic predicates as those that can exert immediate influence on the situation at hand. In the Lithuanian translation they correspond to the Simple Past, as in (89).

(89) Latvian (original)

[Jā, izskatās,] ka pārāk ilgi tues-i that enough long be.prs-2sg 2SG.NOM staigāj-us-i saul-ē bez cepur-es. walk-pst.pa-nom.sg.f without sun-Loc.sg cap-gen.sg Lithuanian (translation) [Taip, atrodo,] vaikštinėj-ai kad tu gana ilgai that walk-pst.2sg 2SG.NOM

enough long he. saul-ėie kepur-ės. sun-Loc.sg without cap-gen.sg

'[Yes, it seems] that you have walked too long in the sun without a cap.'

If the situation is not specifically construed as a process or state, a telicising/perfectivising prefix is added to the corresponding Lithuanian verb. The Present Perfect is then found alongside the Simple Past; see the difference between the translations of two nearly identical Latvian sentences from the same author, both referring to events of national history, in (90). (90) a. Latvian (original) Es pelnīj-us-i. esmu t-o 1SG.NOM be.prs.1sG DEM-ACC.SG deserve-pst.pa-nom.sg.f Lithuanian (translation) Αš nusipelni-au. t-o deserve.pst-1sG 1SG.NOM DEM-GEN.SG.M b. Latvian (original) Es pelnīj-us-i. t-o esmu 1SG.NOM be.prs.1sG deserve-pst.pa-nom.sg.f DEM-ACC.SG Lithuanian (translation) Αš nusipelni-us-i. es-u t-o 1SG.NOM be.prs-1sG deserve-pst.pa-nom.sg.f DEM-GEN.SG.M 'I have deserved this.'

In Lithuanian, the perfect forms of atelic verbs can only have experiential meaning, although they come close to conveying current relevance in certain cases, as in (92), which is, curiously, translated into Latvian by means of the Simple Past.

(91) Lithuanian (original) [Į nekilnojamąjį turtą,] iuk saki-us-i! iums es-u already PTCL 2PL.DAT be.prs-1sg say-PST.PA-NOM.SG.F Latvian (translation) [Nekustamajā īpašumā,] es jau jums teic-u! already 1SG.NOM 2PL.DAT say.PST-1SG '[Into real estate,] I told you!'

With telic verbs, the meaning of current relevance is also possible in Lithuanian (Geniušienė 1989, 290; 1990, 139). Our sample suggests that it is mostly found with the same classes of verbs that are associated with the resultative meaning, which makes differentiation between the two types of use difficult, ¹⁵ especially with intransitive verbs that place less restrictions on the lexical meaning in resultative uses, cf. (92).

While admitting the 'fuzzy' area between resultative and current relevance uses, Geniušienė & Nedjalkov (1988, 385, 382) claim that unclear cases are almost always disambiguated by the context. In our samples ambiguous contexts are nevertheless quite common. Another obstacle is the LiLa corpus itself, which does not provide broader context of sentences.

(92) Lithuanian (original)

kuri-os T-a ramyb-ė, lauki-a-te. which-gen.sg.f wait-PRS-2PL DEM-NOM.SG.F peace-NOM.SG vra atėi-us-i. bet iūs come-PST.PA-NOM.SG.F but be.prs.3 2PL.NOM ne-paži-sta-te i-os. NEG-recognise-PRS-2PL 3-GEN.SG.F

'The peace that you have been waiting for has come, but you do not recognise it.'

The use of the perfect in contexts of current relevance is not obligatory in Lithuanian, as is seen from the following example (93), where the Latvian Present Perfect is translated by means of the Lithua3ian Simple Past. For comparison the resultative (stative?) use of the same verb is provided in (94), which appears as a perfect form in both languages.

(93) current relevance

Latvian (original)

Ai, kā es **esmu nogur-us-i**! ah how 1SG.NOM be.PRS.1SG get.tired-PST.PA-NOM.SG.F [— viņa teica, pāri galdam uzsmaidīdama man.]

Lithuanian (translation)

Ak, kaip aš **priils-au**! ah how 1SG.NOM get.tired-PST.1SG

[— pasakė ji, per stalą nusišypsodama man.]

'God, I have got so tired, [she said as she smiled to me across the table.]'

(94) resultative/stative

Latvian (original)

[Bet tad es ieskatījos pārdevējas sejā un redzēju,]

ka viņ-a **ir** ļoti **nogur-us-i**. that 3-NOM.SG.F be.PRS.3 very get.tired-PST.PA-NOM.SG.F Lithuanian (translation)

[Bet paskui pažvelgiau pardavėjai į veidą ir pamačiau,]

koki-a j-i išvarg-us-i.

which-nom.sg.f 3-nom.sg.f get.tired-pst.pa-nom.sg.f

'[But then I looked closely into the saleswoman's face and saw] that she was very tired.'

The meaning of current relevance is easier to establish with telic verbs of more general semantics that, while referring to changes, do not specify the results of the change. While it is not clear if (95) is indeed a posses-

sive resultative, one still can imagine the result of *sumanyti* 'devise' as a plan in the agent's possession (on the agent's mind). The result of the colloquial verb *prisidirbti* 'cause damage by inconsiderate actions' in (97), on the contrary, does not suggest the existence of an entity connected to the agent.

(95) possessive resultative (?)

Lithuanian (original)

[<...> net toks Fiodoras tinka tam,]

k-q **es-u sumani-us-i**. what-ACC be.PRS-1SG plan-PST.PA-NOM.SG.F

'[Even somebody like Fiodor is suitable for] what I have planned.'

(96) current relevance

Lithuanian (original)

Es-i ši-o t-o nelabai be.prs-2sg dem-gen.sg.m dem-gen.sg.m not_quite

švar-aus **pri-si-dirb-us-i**.

 $clean\hbox{-} Gen. sg. m \qquad \hbox{pvb-rfl-work-pst.pa-nom.sg.f}$

'You have created a mess with your semi-legal actions.'

3.4.4. Anterior

The meaning of current relevance is associated with the deictic register, as the previous event is understood to be relevant at the moment of speech. However, a similar connection can also be found between a point in a narrative and another event in the past which takes place prior to that point. Since narratives are commonly rendered in the Simple Past, the use of the Past Perfect not only marks this connection but also distinguishes between two different time planes, that of the narrative and of a previous event. In case of a narrative being told in the Simple Present, the Present Perfect appears instead. Such instances of the perfect as in the original Latvian sentences in (97) and (98) can be called anterior, see Nau (2005, 142–143).

(97) Latvian (original)

[Un tanī brīdī manā apziņā <u>uznira</u> vārds,]

kur-u veltīgi **bij-u meklēj-us-i**

REL-ACC.SG in.vain be.pst-1.sg search-pst.pa-nom.sg.f

vārdnīc-ās.

dictionary-LOC.PL

Lithuanian (translation)

[Ir tą akimirką mano sąmonėje <u>šmėstelėjo</u> žodis,]

kuri-o taip veltui **ieškoj-au** REL-GEN.SG.M so in.vain search.pst-1sg

po žodyn-us.

in dictionary-ACC.PL

'[And at that moment the word] that I had looked for in vain in dictionaries [came to my mind.]'

(98) Latvian (original)

Esmu pabeig-us-i darb-u,
be.prs.1sg finish-pst.pa-nom.sg.f work-acc.sg

[Āris jau piebraucis, sēž un lasa avīzi.]

Lithuanian (translation)

Darb-ą **pabaigi-au**,

work-acc.sg finish-pst.1sg

[Aris jau atvažiavęs <u>sėdi</u> ir <u>skaito</u> laikraštį.]

'I have finished work, [Aris has already arrived, he <u>is sitting</u> and <u>reading</u> a newspaper.]'

Even though the Lithuanian translations of (98) and (99) contain the Simple Past, the anterior use of the perfect can also be found in Lithuanian (99).

(99) Lithuanian (original)

[Paskui jau tekinom leidomės Senos pakrante autobuso link,]

nes vadov-ė **buv-o pasaki-us-i** because guide-NOM.SG be-PST.3 say-PST.PA-NOM.SG.F griežtai: strictly

[vėluojantys turistai namo keliaus pėsčiomis.]

'[Later we started running along the Seine in order to catch our bus] because the guide had said in no uncertain terms: [those tourists who are late are going to return home on foot.]'

A similar distribution of the perfect and simple tenses is seen in Latvian and Lithuanian versions of temporal clauses, see also Nau (2005, 143). In (100) and (101) below *kad* 'when' is used in the sense of 'after'; the two examples differ in information structure, see also 2.5.2.

(100) Latvian (original)

Kad bij-u izdarīj-us-i š-o when be.pst-1sg do-pst.pa-nom.sg.f dem-acc.sg atklājum-u,

discovery-Acc.sg

[sāku blociņus visur staipīt līdzi.]

Lithuanian (translation)

Kai šitai **suvoki-au**, when this realise-PST.1SG [pradėjau visur nešiotis bloknotėlius.]

'When (=after) I discovered this, [I started carrying my notebook with me everywhere.]'

(101) Latvian (original)

[— Sašausiet vēl kādu bērniņu, — viņa turpināja diskusiju,]

kad Florenc-e bij-a pierādīj-us-i,
when pn-nom.sg be.pst-3 prove-pst.pa-nom.sg.f

[ka viss ir likumīgi.]

Lithuanian (translation)

[Dar nušausit kokį vaiką, – ginčijosi toliau,]

kai Florencij-a **irod-ė**, when PN-NOM.SG prove-PST.3

[kad elgiasi teisėtai.]

'[You may accidently shoot some straying child, she continued to argue] when (=after) Florence proved (Latvian original: had proved) [that everything was legal.]'

Apart from narratives, the anterior use in time clauses is also found with the Latvian Future Perfect referring to plans or other imaginable events in the future. (In this particular example the Latvian phasal verb corresponds to a telicising prefix in Lithuanian.)

(102) Latvian (original)

Kad tu bū-s-i beig-us-i

when 2.SG.NOM be-FUT-2.SG finish-PST.PA-NOM.SG.F *mazgā-tie-*s,

wash-inf-rfl

[nāc lejā uz vakara tēju.]

Lithuanian (translation)

Kai **nu-si-prau-s-i**,

when PVB-RFL-wash-FUT-2.SG

[nusileisk žemyn vakarinės arbatos gerti.]

'When you finish (in Latvian, literally: will have finished) washing, [come down for the evening tea.]'

In Lithuanian the prior event is only marked with the Perfect when the verb meets the requirements for the resultative, as in (103).

(103) Lithuanian (original)

[Pastebėjau, kad didžiausios abejonės <...> mane visada apima tuomet,]

kai es-u pasiek-us-i

when be.prs-1sg reach-pst.pa-nom.sg.f

[ar bent jau bepasiekianti išsvajotą ramybę.]

'[I have noticed that I am always assailed with the strongest doubts at the time] when I have reached or at least am approaching the peace longed for.'

3.4.5. 'Behind the scenes'

A situation that is given as anterior with respect to one of the events in a narrative sometimes emerges as a parallel development 'behind the scenes', as in (104), where two parties simultaneously try to hide the evidence of a murder. When one of the parties returns from their task, they are presented with the results of the other party's efforts.

(104) Lithuanian (original)

[Ir jie abu patraukė atgal į rūmą, kur tylioji Kasiulė viena pati,

nepaisydama savo metų, skaudančių sąnarių ir nebelanksčios nugaros,]

per t-q laik-q jau **buv-o** during DEM-ACC.SG time-ACC.SG already be-PST.3 stebėtinai **išblizgin-us-i** akmenin-es

remarkably polish-PST.PA-NOM.SG.F stone-ACC.PL.F grind-is, nušveit-us-i smėli-u,

floor-ACC.PL scrub-PST.PA-NOM.SG.F sand-INS.SG išvali-us-i kilim-o dėm-es,

clean-PST.PA-NOM.SG.F carpet-GEN.SG stain-ACC.PL

nukrausči-us-i stal-a ir sudegin-us-i

clean-pst.pa-nom.sg.f table-acc.sg and burn-pst.pa-nom.sg.f

[visas mirtinas išėdas su derva židiny,]

visk-q **pasmilki-us-i** kadagi-ais all-ACC.SG fumigate-PST.PA-NOM.SG.F juniper-INS.PL

[ir dar kažin kokiom kvapiom žolelėm, ir viskas buvo lyg anksčiau, kaip niekur nieko <...>]

'[And they both headed back for the manor where the silent Kasiulė, alone, in spite of her years, hurting joints and stiff back], had in that

time already polished the stone floor remarkably clean, scrubbed it with sand, cleaned the stains on the carpet, cleaned the table and burned [all the deadly leftover with tar in the fireplace], fumigated everything with incense [and other unfamiliar odorous herbs, and everything was as it had been before, as if nothing had happened.]'

Such uses are not common in Lithuanian but develop into a separate function of the Latvian Perfect, where it is employed as a stylistic device. They refer to situations that took place without being observed until the character, or the reader, is confronted with their results. As follows from this description, this function is only compatible with telic verbs. (All verbs in our examples contain prefixes, both in the Latvian original and in the Lithuanian translation, but we only gloss the prefixes in forms of the Simple Present in Lithuanian.)

In the simplest case, the situation is not observed because the character is engaged elsewhere, so that the Past Perfect conveys a parallel line of the narrative at the moment when it becomes known and reconnected with the main line. See the original Latvian examples in (105), narrated in the Simple Past, and (106), told in the Simple Present, with the events 'behind the scenes' expressed with the Past Perfect and Present Perfect respectively. It is noteworthy that the Lithuanian translations only contain the simple tenses.

(105) Latvian (original)

Kamēr mazgāj-o-s, while bathe.pst-1sg-RFL mās-a bij-a sagatavoj-us-i be.pst-3 prepare-PST.PA-NOM.SG.F sister-nom.sg stipr-us kokteil-us. div-us strong-ACC.PL.M cocktail-ACC.PL two-acc.pl.m Lithuanian (translation) Kol maudži-au-si, while bathe.psT-1sG-RFL sesuo paruoš-ė du preprare-PST.3 sister.Nom.sg two.acc.pl.m stipri-us kokteili-us. cocktail-ACC.PL strong-ACC.PL.M 'While I took a bath, my sister prepared (in Latvian, literally: had prepared) two strong cocktails.'

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(106) Latvian (original)
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```
laik-ā
Mūs-u
             sarun-as
             conversation-GEN.SG
                                       time-Loc.sg
1PL-GEN
Irēn-a
               ir
                           paraudzīj-us-i
PN-NOM.SG
              be.prs.3
                           procure-PST.PA-NOM.SG.F
vakarin-as.
supper-ACC.PL
Lithuanian (translation)
Mums
            kalb-a-nt-is.
1PL.DAT
            talk-prs-cvb-rfl
Iren-a
                pa-rūpin-a
                                       vakarien-ę.
                PVB-provide-PRS.3
PN-NOM.SG
                                      supper-ACC.SG
```

'While we speak, Irena provides (Latvian original: has provided) supper.'

The parallelism is created by explicitly marking the simultaneity of the events by means of such expressions as per tą laiką 'during this time' (104), kamēr mazgājos 'while I took a bath' (105), and mūsu sarunas laikā 'at the time of our conversation' (106). A more sophisticated use of the Past and Present Perfects in this meaning is associated with an event that does not create a branching in the narrative but is introduced with delay by marking only its endpoint. The reference to a process leading to the endpoint is substituted by a direct reference to the time that it takes as eins-zwei in (107), but it might be omitted altogether, as in (108). Together with (106), the latter belongs to a group of examples where the Latvian Present Perfect is translated into Lithuanian by means of a prefixed verb in the Simple Present, see Holvoet et al. (2021).

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(107) Latvian (original)
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```
[Eins-zwei,]
                          bij-a
                                       uzzīmēj-us-i
un
         vin-a
                                                                   11.7.
and
                          be.prs.3
         3-SG.NOM.F
                                       paint-PST.PA-NOM.SG.F
                                                                   on
Andželo
                               sarkan-balt-sarkan-as
              vaig-a
                                                           strīp-as.
PN.GEN.SG
              cheek-gen.sg
                               red-white-red-ACC.PL.F
                                                          stripe-ACC.PL
Lithuanian (translation)
[Eins-zwei]
                                                  Andželo
ir
                        išpiešė
                                         ant
and
                        paint-pst.3
                                                  PN.GEN.SG
        3-SG.NOM.F
                                         on
skruost-o
                   raudonai-baltai- raudon-as
                   red.ADV-white.ADV-red-ACC.PL.F
cheek-gen.sg
juost-as.
stripe-ACC.PL
```

'Eins-zwei, and she drew (literally: had drawn) red-white-red stripes on Angelo's face.'

(108) Latvian (original)

Es **esmu saknieb-us-i** $l\bar{u}p$ -as un 1.SG.NOM be.PRS.1SG press-PST.PA-NOM.SG.F lip-ACC.PL and atbild-u <...>

answer-prs.1sG

'I press (literally: have pressed) my teeth together and answer.' Lithuanian (translation)

Aš su-kand-u dant-is ir 1.SG.NOM PVB-press-PRS.1SG tooth-ACC.PL and atsak-au <...>

answer-PRS.1SG

'I grind my teeth together and answer.'

Interestingly, a similar narrative use is known for the Old French Present Perfect (*passé composé*), as in (109) from Fleischman (1990, 138), which she describes in the following terms: "Observe that the act of cutting off Marsile's right hand is not itself narrated—we see Roland approach his enemy; the next frame shows us the result: Marsile's right hand is missing. This technique is common in cinematographic narration <...>"

Old French, La Chanson de Roland, 1902f¹⁶ (109) le Vait ferir en guise injure.INF go.PRS.3SG in 3SG.M.ACC manner.OBL.SG de baron: of baron.obl.sg **Trenchet** li ad li cut.PTCP 3SG.DAT have.prs.3sg DEF.NOM.SG.M le. destre quens poign. count.Nom.sg DEF.OBL.SG.M right.obl.sg.m hand.obl.sg 'Noble that he is, he goes to strike him, Count [Roland] has his [Marsile's] hand cut off."

3.4.6. Cancelled result and discontinuous past

Earlier we discussed the meaning of cancelled result as arising in certain uses of the Past Perfect in the deictic register, see the original Latvian

 $^{^{16}}$ We thank Nalalia Zaika, Andrzej Żak, and especially Teresa Giermak-Zielińska for the invaluable help with the glosses.

example (57) above, here repeated as (110), and the original Lithuanian example in (111).

(110) Latvian (original)

Kam tad bij-i atstāj-us-i tu why then be.pst-2sg leave-pst.pa-sg.f 2.SG.NOM durv-īs zīmīt-i? door-LOC.PL note-ACC.SG Lithuanian (translation) Tai kam palik-ai dur-vse

then why 2SG.NOM leave.PST-2SG door-LOC.PL raštel-i?

note-ACC.SG

'Then why did you leave (in Latvian, literally: had left) the note in the door?'

(111) Lithuanian (original)

Buv-au užmirš-us-i,

be-PST.1SG forget-PST.PA-NOM.SG.F

[kad universitete dirbi.]

'I forgot (literally: had forgotten) at some point [that you worked at a university.]'

In the narrative register, however, similar examples come close to the avertive meaning, indicating an imminent situation that was not realised (Kuteva 1998), see (112) and (113). On the relation between cancelled result and avertive, which belong to the broader domain of "antiresultative" (Plungian 2001) or "non-realisation" (Kuteva *et al.* 2019), see Sitchinava (2013, 29–30).

(112) Lithuanian (original)

[Pirma minute, kai susitiko ant laipty,]

Mat-ui iš tiesų **buv-o kil-us-i**PN-DAT.SG in_truth be-PST.3 arise-PST.PA-NOM.SG.F

mint-is

idea-nom.sg

[pasakyti jam apie Mildos atneštą popierėlį.]

Latvian (translation)

[Iesākumā, satiekoties uz kāpnēm,]

Mat-am nudien **pavīdēj-a** dom-a PN-DAT.SG in_truth arise.PST-3 idea-NOM.SG

[pateikt viṇam par Mildas atnesto papīrīti.]

'[The first moment when they met on the stairs] Matas actually thought (in Lithuanian, literally: had thought) [about mentioning to him the small paper that Milda had brought.]'

(113) Latvian (original)

Kād-ubrīd-ibij-usome-ACC.SGmoment-ACC.SGbe.PST-1SGnoturēj-us-ilatern-uparmistake-PST.PA-NOM.SG.Fstreet.lamp-ACC.SGforsaul-i.sun-ACC.SG

'For a moment I took (literally: had taken) a street lamp for the sun.'

Such examples, containing telic verbs, are possible in both Latvian and Lithuanian, but, as one can see from (112) and (114), they are not always chosen as translation equivalents in the other Baltic language. In Latvian, atelic verbs are similarly used to refer to states that are contrasted to the situation at the time of reference; they are translated by means of the Simple Past into Lithuanian, cf. Arkadiev (2012, 104).

(114) Latvian (original)

Un k-o tād-u tad es and what-acc such-Acc.sg then 1SG.NOM bij-u cerēj-us-i ieraudzī-t? be.pst-1sg hope-pst.pa-nom.sg.f see-INF Lithuanian (translation) 0 k-a gi aš jau taip and what-acc already thus PTCL 1SG.NOM tikėj-au-si pamaty-ti? hope-pst.1sg-rfl see-INF

'And what exactly did I hope (Latvian original: had I hoped) to see?'

Lithuanian examples of this type are few and seem to be more dependent on context, cf. (115), where the character's actions in the main narrative line are explicitly contrasted with the same actions she carried out in the past.

(115) Lithuanian (original)

[<...> nusipraususi ji taisėsi, šukavosi ir puošėsi kur kas kruopščiau,] nei kad dari-us-i buv-o t-ą when do-pst.pa-nom.sg.f than be-PST.3 DEM-ACC.SG per praėjusi-us met-us <...> during previous-ACC.PL.M year-ACC.PL

'[After washing she was busy dressing, brushing her hair and making herself pretty with much more care] than she did (literally: had done) it in the course of the previous year.'

Such instances of atelic verbs come very close to the meaning of discontinuous past, see 2.4.4., in reference to the timeframe before the events in the narrative started, that is, for example, situations from a character's childhood, as in (116).

(116) Latvian (original)

[Pāri līcim labi varēja aplūkot vītoliem apaugušu zemes pleķi,] k-o vin-a vis-u what-ACC all-Acc.sg childhood-Acc.sg 3-NOM.SG bii-a sauk-us-i Kapteinsalu. par call-pst.pa-nom.sg.f be.pst-3 for captain.island-Acc.sg Lithuanian (translation) [Kitoje įlankos pusėje gerai matėsi gluosniais apaugęs žemės lopinėlis,] kur-i vaikyst-ės nuo pat childhood-gen.sg which-асс.sg.м from PTCL vadin-o Kapiton-o sal-a call-PST.3 island-INS.SG captain-gen.sg

'[On the other side of the gulf one could see a small patch of ground thickly grown with willows] that she used to call Captain's Island in her childhood.'

However, the Past Perfect can also present previous events from the narrative itself, probably not so distant in time, but divided from the reference point by important turns of the plot, as in (117).

[Murmulītis uzmeklēja lielo akmeni, uz kura tupot jaunā elfa]

(117) Latvian (original)

bii-a dziedāj-us-i vin-am dziesm-u, be.pst-3 3-DAT.SG.M sing-PST.PA-NOM.SG.F song-ACC.SG sauk-us-i par vienīg-o draug-u call-pst.pa-nom.sg.f for friend-Acc.sg only-ACC.SG.DEF

un aicināj-us-i dejo-t.
and invite-PST.PA-NOM.SG.F dance-INF

Lithuanian (translation)

[Murmuliukas susirado didelį akmenį, ant kurio nutūpusi jaunoji elfė]

dainav-o dain-a, vadin-o j-į call-PST.3 3-DAT.SG.M sing-PST.3 song-ACC.SG 3-ACC.SG.M kviet-ė šok-ti. vieninteli-u draug-u only-ins.sg.m friend-INS.SG invite-PST.3 dance-INF and

'[Little Murmer found the big stone on which the young elf], sitting (on the stone), had sung him a song, called him her only friend and asked him for a dance.'

As is seen from the translations, Lithuanian generally prefers the Simple Past in these contexts; the Habitual Past is also common, as in (118).

```
(118) Latvian (original)
       Iedomāj-ie-s,
                                           teik-us-i
                               bij-a —
                                                                  Egl-e, —
      imagine.IMP-2SG-RFL
                               be.pst-3
                                           say-PST.PA-NOM.SG.F
                                                                  PN-NOM.SG
      [devinpadsmitā gadsimta kapitālismu — traki, vai ne?]
      Lithuanian (translation)
                            saky-dav-o –
      Isivaizduo-k,
                                                Egl-\dot{e}, -
      imagine-IMP.2SG
                            say-HAB-PST.3
                                                PN-NOM.SG
      [devyniolikto amžiaus kapitalizmą — siaubas, ar ne?]
      'Just imagine [the 19th century capitalism], Egle used to say.
      [Isn't it terrible?]'
```

The most inventive Lithuanian translation contains a 'bare' participle derived from the habitual stem (119).

(119) Latvian (original)

Florenc-e	ret-u	re	iz-i	bij-a	ı		
PN-NOM.SG	rare-ACC.	sg tii	ne-ACC.SG	be.ps	ST-3		
gāj-us-i		līdzi	māt-ei		baznīc-ā.		
go.PST-PST.PA-N	NOM.SG.F	along	mother-DA	г.sg	church-Loc.sg		
Lithuanian (translation)							
Florencij-a	retai	ei-dav-	us-i		su		
PN-NOM.SG	rarely	до-нав-	-PST.PA-NOM.S	G.F	with		
motin-a	į	bažnyči-ą	! .				
mother-INS.SG	in	church-A	CC.SG				
'Florence rarely accompanied her mother to the church'							

'Florence rarely accompanied her mother to the church.'

The Habitual Past is also employed in translations of telic verbs that can have a discontinuous past habitual interpretation in such contexts (120).

(120) Latvian (original)

```
[<...> atradu pāris desmitu krāsainu atklātņu,]
k-o
               vairāk-u
                                 gad-u
                                                  laik-ā
what-ACC
               several-GEN.PL
                                                  time-Loc.sg
                                 year-GEN.PL
         kārtīgi
                        bii-u
loti
                                       saņēm-us-i
         regularly
very
                        be.psT-1sG
                                       receive-pst.pa-nom.sg.f
```

no Hert-as Baltman-es from pn-gen.sg pn-gen.sg

[uz visiem valsts svētkiem un personiskām goda dienām.]

Lithuanian (translation)

[<...> atradau gal dvi dešimtis spalvotų atvirukų,]

kuri-uos daugyb-e met-u which-ACC.PL.M multitude-Acc.sg vear-gen.pl labai reguliariai gau-dav-au iš verv regularly receive-HAB-PST.1SG from Hert-os Baltman-ės

Hert-os Baltman-ės PN-GEN.SG PN-GEN.SG

[visų švenčių — valstybinių ir mano asmeninių — proga.]

'[I found two dozen colourful cards] that I had regularly received from Herta Baltmane for years [on the occasion of all national holidays and personal celebrations].'

3.4.7. Epistemic

A function of the Perfect, specifically associated with the Future Perfect, is to make a conjecture on the basis of general knowledge, see also 2.5.3. Interestingly, it is found in the deictic, as well as in the narrative register, cf. the examples in (121) and (122).

(121) Lithuanian (original)

Bij-au, kad tavo moterišk-a fear.prs-1sg that 2sg.poss feminine-nom.sg.f intuicij-a š-į kart-ą

intuition-NOM.SG DEM-ACC.SG.M time-ACC.SG

bu-s apgav-us-i <...>

be-fut.3 deceive-pst.pa-nom.sg.f

Lithuanian (translation)

ka Baid-o-s. tav-a sieviet-es fear.prs-1sg-rfl that 2SG.POSS-NOM.SG.F woman-gen.sg intuīcii-a šoreiz bū-s tev-i intuition-NOM.SG this time be-FUT.3 2SG-ACC

pievīl-us-i!

deceive-pst.pa-nom.sg.f

'I'm afraid your feminine intuition has failed you this time.'

(122) Lithuanian (original)

[Negalėjau tuo patikėti, todėl pamaniau,]

kad bū-si-u iš siaub-o that be-fut-1.sg from terror-gen.sg

apkurt-us-i.

become deaf-pst.pa-nom.sg.f

Latvian (translation)

[Es nespēju tam noticēt, tāpēc nodomāju,]

ka aiz šausm-ām **bū-š-u zaudēj-us-i** that from terror-dat.pl be-fut-1.sg loose-pst.pa-nom.sg.f

hearing-Acc.sg

'[I was not able to believe that and therefore I thought] that I had lost (literally: will have lost) my hearing after experiencing such fear.'

While the Lithuanian epistemic Perfect regularly finds its translation equivalents in the corresponding Latvian forms, the latter are often translated into Lithuanian by means of the Simple Past (123).

(123) Latvian (original)

Droši vien **bū-s-i** kaut k-o ne tā probably be-fut-2sg something-ACC not thus **pateik-us-i**.

say-PST.PA-NOM.SG.F

Lithuanian (translation)

Tikriausiai kažk-ą ne taip **pasak-ei**.
probably something-ACC not thus say-PST.2SG

'You must have said something wrong.'

All examples of the epistemic meaning above involve telic verbs. Atelic verbs are less common but they are equally possible in the original Latvian examples and their Lithuanian translations (125).

(124) Latvian (original)

[Tur, kur kalnā ir nobrukums,]

bū-sstāvēj-us-ikaln-avaldniek-abe-FUT.3stand-PST.PA-NOM.SG.Fhill-GEN.SGlord-GEN.SGpil-s <...>

castle-nom.sg

Lithuanian (translation)

[Tenai, kur matyti nuogriuva,]

ir **bu-s stovėj-us-i** kaln-o and be-fut.3 stand-pst.pa-nom.sg.f hill-gen.sg valdov-o pil-is <...>
lord-gen.sg castle-nom.sg

'[In the place where the hill is collapsed,] there must have stood a castle that belonged to the lord of the hill.'

The epistemic meaning can be almost indistinguishable from the inferential meaning whereby the conjecture is formed on the basis of physical evidence, as in (125) below.

(125) Latvian (original)

Bū-s pievāk-us-i kād-as
be-FUT:3 collect-PST.PA-NOM.SG.F some-ACC.PL.F
patron-as,
cartridge-ACC.PL
[ja soma tik smaga.]
'She must have collected some cartridges; [her bag is so heavy.]'

3.5. Discussion

The tables below provide frequencies for the most common functions that are found with each of the Perfect tenses in the two languages. Since the number of Past Habitual examples in Lithuanian is negligible, they are counted together with the Simple Past.

Although included in the frequency calculations and the analysis, a noticeable part of the examples in the corpus are not genuine perfect forms but rather their grammaticalisation source, that is, combinations of the copula 'be' and the past active participle conveying the stative meaning (cf. the same conclusions in Kapkan 2021). However, the two Baltic languages differ as to how widespread this construction really is. The main factor is whether past passive participles are employed as an alternative to past active participles in the stative meaning, as is found in Latvian, where the perfect-like statives are only found in a small part of the original subcorpus. The Latvian translations of the Lithuanian lexicalised active participles contain adjectives or lexicalised past passive participles.

Table 25. Perfect uses in the Lithuanian subcorpus

function	all tenses		Present		Past + Habitual Past		Future	
resultative	259	45%	29	29%	228	51%	2	9%
stative	134	23%	33	33%	91	20%	10	45%
anterior	95	17%	2	2%	93	21%	О	o%
experiential	42	7%	25	25%	17	4%	О	0%
cancelled result	14	2%	О	o%	14	3%	0	0%
current relevance	10	2%	10	10%	О	o%	О	o%
epistemic	10	2%	О	o%	О	o%	10	45%
cumulative	7	1%	О	o%	7	2%	0	0%
inferential	1	o%	О	0%	1	o%	О	o%
totall	572	100%	99	100%	451	100%	22	100%

Table 26. Perfect uses in the Latvian subcorpus

function	all tenses		Present		Past		Future	
resultative	289	25%	141	23%	134	27%	14	30%
current relevance	279	24%	279	45%	o	o%	О	o%
anterior	225	19%	16	3%	202	40%	7	15%
experiential	161	14%	126	20%	35	7%	О	o%
discontinuous past	95	8%	О	0%	95	19%	0	o%
stative	45	4%	25	4%	19	4%	1	2%
behind the scenes	29	2%	20	3%	9	2%	О	o%
epistemic	23	2%	О	0%	0	0%	23	50%
cumulative	11	1%	9	1%	2	0%	О	0%
cancelled result	8	1%	О	0%	8	2%	О	0%
inclusive	4	0%	4	1%	0	0%	0	0%
inferential	2	0%	О	0%	1	o%	1	2%
totall	1171	100%	620	100%	505	100%	46	100%

The uses of the perfect proper include the resultative as the most wide-spread regardless of the tense in Lithuanian. The experiential use comes second in the Present Perfect and the anterior one in the Past Perfect. In the Future Perfect, the epistemic use prevails. Latvian is similar to Lithuanian in so far as the resultative use remains one of the most common ones, the experiential use retains its relatively high frequency in the Present Perfect, and the epistemic use dominates the Future Perfect. Nevertheless, what makes Latvian different from Lithuanian is the increased frequency of the anterior and the development of the current-relevance use, the latter being only marginal in Lithuanian. The current relevance is the most frequent function of the Latvian Present Perfect, overshadowing both the resultative and the experiential. Likewise, the anterior predominates in the Past Perfect and constitutes a considerable share of the Future Perfect.

The epistemic function aside, these frequencies mean that Lithuanian mostly employs its Perfect to characterise discourse participants in terms of changes they have undergone (the resultative use) and their history (the experiential use), while also establishing the connection between events belonging to the main narrative line and those that precede them. In Latvian, establishing the connection between events, in the narrative register, or between an event and the moment of speech, in the deictic register, becomes the main function of the Perfect. The relatively frequent use of the Latvian Past Perfect to refer to discontinuous past also serves this general purpose as it conveys lack of connection between the events being referred to and the point of reference. At the same time, it should be borne in mind that both the anterior use and that of discontinuous past are associated with the narrative register, and their high frequencies in our data reflects the nature of our sources. This is also true of one of the more marginal uses the Latvian Perfect in reference to narrative events as seen through their results ('behind the scenes').

Other uses of the perfect that are less common in our data comprise the meaning of cancelled result, the cumulative, the inferential, as well as the inclusive, which is peculiar to Latvian.

4. Comparing PQ and LiLa

We have analysed the two sources both qualitatively and quantitatively. By the qualitative aspect we mean the differences and similarities in the set of the functions assigned to the perfect form, while the quantitative aspect is concerned with the number of entries containing the perfect forms in the PQ, as well as the frequencies of the perfect forms in the original subcorpora and the translations. These two aspects are, however, related in a straightforward way, as lower frequency of the perfect forms in our data is always connected to a less differentiated set of functions, and vice versa. Both the Perfect Questionnaire and the LiLa corpus reveal that the Present Perfects differ most strikingly between the two languages, while in the Future Perfects the difference is minimal. Our sources do not agree on the Past Perfect, though, as the PQ data suggest that the Past Perfect is employed more or less similarly in both languages, whereas the LiLa data place the Past Perfect somewhere between the Present Perfect and the Future Perfect in terms of the degree of similarity between the two languages. The discrepancy is mostly due to those uses of the Latvian Past Perfect that are associated with narrative mode.

Our sources are unanimous in that the resultative and the experiential uses of the Present Perfect are well established in both Latvian and Lithuanian while the current-relevance use is a Latvian innovation. PQ does not confirm the current-relevance uses in Lithuanian, but the original Lithuanian subcorpus of LiLa reflects earlier stages in the development of the current-relevance function, where it has not yet reached atelic verbs, as distinct from Latvian (a somewhat similar situation is found in e.g. Old Geg Albanian, see Schumacher 2020, 517, 519–529). Inferential as well as 'hot news' uses of the Present Perfect can be established on the basis of PQ for Latvian and, to a lesser extent, Lithuanian, but these findings are not confirmed by LiLa, probably because such contexts are uncommon in the genres presented in LiLa.

The resultative and the experiential uses are not restricted to the present tense, as they are also found in the Past Perfect, the reference point usually coinciding with the main narrative line. Besides, the resultative use is also quite frequent in the Future Perfect. Another function of the perfect not restricted to a particular tense is anterior. It is quite consistently found in the Latvian data in both PQ and LiLa, while the evidence for Lithuanian is less ample. This is, probably, unsurprising as the development of the anterior function seems to be connected to that of the current-relevance use.

However, the Past Perfect and the Future Perfect also have their own sets of meanings in each of the languages. PQ hints at the epistemic use of the

Future Perfect in both Lithuanian and Latvian, and LiLa indeed confirms it as the main function of the Future Perfect in the two languages. The Past Perfect is more diverse, and its diversity is further expanded in Latvian.

Data from both PQ and LiLa suggest that the Lithuanian and Latvian Past Perfects have the meaning of cancelled result, but LiLa provides evidence that this use was further extended in Latvian to include atelic verbs thus developing the meaning of discontinuous past, also hinted at in PQ. The other functions are, however, only confirmed by either PQ or LiLa, which is easily explained by the peculiarities of each of the two sources. On the one hand, PQ reveals that the Past Perfect competes with the Present Perfect in Lithuanian in the experiential contexts with a reference point in the present. On the other hand, LiLa sheds light on another use the Latvian Past Perfect associated with the narrative register, namely, the one describing events 'behind the scenes'. As part of the narrative present strategy, the latter can also appear in the Present Perfect.

The two languages differ not only in the frequencies of the perfect uses in each of the three tenses, but also in how productive each tense is with respect to the perfect forms. In Latvian, the Present Perfect adopts the anterior as well as 'behind the scenes' uses otherwise associated with the Past Perfect. In Lithuanian, on the contrary, the Past Perfect presents an alternative to the Present Perfect as an expression of the experiential function.

A difference unrelated to tense is to what extent each of the two languages favours lexicalisation of active past participles in the source construction. For obvious reasons, this is only revealed by the 'form-to-meaning' approach in LiLa, which shows that about 20% of tokens formally resembling the perfect forms in Lithuanian are, in fact, combinations of an adjectivised active participle with the copula. In Latvian, their share is much less impressive.

5. Perspectives

Our research characterises the uses of the perfect forms in Latvian and Lithuanian, in all of their tenses, and establishes the main differences and similarities between the two languages with respect to the uses and semantics of the perfect. Nevertheless, it leaves some of the old questions unanswered and calls attention to new ones, thus suggesting topics for future research.

The first one is made evident by the discrepancy in our data. While we count 'bare' participles as the Present Perfect forms in PQ, they are left outside of our LiLa sample, for the sake of simplicity. It will be logical to extend our LiLa sample to include 'bare' participles, which should be analysed both as a separate group and pooled together with the full-fledged perfect forms.

Another topic is brought about by certain disadvantages of our form-to-meaning approach to the corpus data. While it allows us to establish new contexts where the perfect forms are used, unattested in PQ, we cannot be sure that the perfect is the only one or even the predominant choice in these functions; see, for example, the anterior use or the discontinuous past use. This issue can be resolved by searching for particular types of contexts, rather than the perfect forms, as well as by designing a new questionnaire, specifically aimed at such contexts, and collecting new data on its basis. Also, some well-established uses of the perfect in Latvian and Lithuanian, such as the experiential function, can become a separate object of a new analysis, now that we better understand their place in the overall network of the perfect uses in each of the two languages.

Finally, our LiLa data only represent a scrupulously edited variety of written language, mostly in the narrative mode. It has proved useful in establishing some interesting functions of the perfect, but further research should also take into account other genres, reflecting other modes of discourse; for an example of such a study based on Facebook comments, see Kapkan (2021).

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ABBREVIATIONS

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1 — 1st person; 2 — 2nd person; 3 — 3rd person; ACC — accusative; ADJ — adjective; ADV — adverb; CVB — converb; DAT — dative; DEF — definite; DEM — demonstrative; DIM — diminutive; EVID — evidential; F — feminine; FUT — future; GEN — genitive; HAB — habitual; IMP — imperative; INF — infinitive; INS — instrumental; IRR — irrealis; LOC — locative; M — masculine; NA — non-agreeing form; NEG — negation; NOM — nominative; OBL — oblique; PA — active participle; PL — plural; PN — proper name; POSS — possessive; PP — passive participle; PRF— perfect; PRS — present; PST — past; PTCL — particle; PTCP — participle; PVB — preverb; Q — question particle; REL — relativiser; RFL — reflexive; SG — singular; VOC — vocative.
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Sources

LiLa = Parallel Lithuanian-Latvian-Lithuanian corpus, available at http://lila.korpuss.lv

LithuanianWaC = Lithuanian Web corpus, available at https://app.sketchengine.eu

lvTenTen14 = Latvian Web corpus, available at https://app.sketchengine.eu

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The Lithuanian passive perfect and its history

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The aim of the article is to establish the existence and structure of the passive perfect in Lithuanian. This language has a periphrastic active perfect, but its passive counterpart, consisting of 'be' and a past passive participle, is not completely severed from its grammaticalisation source, the object resultative. Experiential uses are attested, which suggests that the resultative has to some extent become a perfect, but it is not clear to what extent the two can be teased apart. On the other hand, the experiential passive perfect has dedicated marking of its own as well, though it is not frequent. The Lithuanian passive perfect is thus a rather diffuse and weakly entrenched gram. The failure of the language to develop a clearly defined passive perfect can probably be explained formally and functionally by the overall low degree of grammaticalisation of the perfect (including the active perfect) in Lithuanian.

Keywords: Lithuanian, passive, perfect, object resultative, resultative perfect, experiential perfect, evidential

1. Introduction¹

While the body of literature on the active perfect both as a language-specific gram and a cross-linguistically identifiable gram-type is now vast (Comrie 1976, 52–64, Dahl 1985, 129–153, Lindstedt 2000, Ritz 2012, Velupillai & Dahl 2013 etc.; as 'anteriors' in Bybee, Perkins & Pagliuca 1994, 51–105), its passive counterpart has not received the same amount of attention. In some languages, defining a passive perfect is straightforward: in English, it is a passive whose auxiliary is in the perfect:

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(1) The Letter of Implementation has now been signed by all parties.

In many languages, however, it is less easy to define what exactly can be described as a passive perfect because of the closeness of this category to the resultative construction from which it has developed. Resultative constructions, which are recognised as a cross-linguistically identifiable construction type referring to a state resulting from a previous event (Nedjalkov, ed. 1988), are potential sources for both passives and perfects. Passives consisting of a copula and a passive participle (a type more or less restricted to Indo-European languages according to Haspelmath 1990, 29) are originally copular constructions used to characterise the result of a past process, and a certain persistent ambiguity between a dynamic and a stative interpretation is a hallmark of this type of passive (Keenan & Dryer 2007, 337). Perfects, on the other hand, often arise from the combination of a copula or a 'have'-construction with a past participle (Bybee & Dahl 1989, 67–68), and in the case of a passive perfect this will obviously be a passive participle.

In the Baltic languages, the point of departure for the passive is an originally copular construction with the so-called past passive participle:

(2a) Lithuanian

Langai yra uždaryti². window.nom.pl be.prs.3 close.pst.pp.nom.pl.m

(2b) Latvian

Logi ir aizslēgti.

window.nom.pl be.prs.3 close.pst.pp.nom.pl.m

'The windows are shut.'

The creation of a system of passive forms on the basis of this originally copular stative passive³ involved, in both Baltic languages, processes of reanalysis (stative passives becoming reanalysed as dynamic) as well as extension by means of additional lexical and morphological devices. A process of reanalysis has led to Lithuanian constructions as illustrated in

² When no textual reference is given, the example has been constructed by the authors.

³ We here use the term 'stative passive' in accordance with Geniušienė (2016, 47). 'Stative passives' satisfy the definition of 'object resultatives' given in Nedjalkov & Jaxontov (1988, 8–9). In our article, we use the terms '(object) resultatives', 'resultative passives' and 'stative passives' synonymously.

(2a) acquiring past-tense or perfect interpretations ('The windows were/have been closed') in addition to the original present resultative function. Extension of the paradigm through introduction of new morphological devices took different directions in the two Baltic languages. In Lithuanian, the passive paradigm was expanded through the introduction of the present passive participle (the -m-participle) to provide progressive (imperfective) passive forms alongside the resultative/perfective forms based on the past participle, as illustrated in (3):

(3) Lithuanian

Langai yra uždaromi. window.nom.pl be.prs.3 close.prs.pp.nom.pl.m 'The windows are being closed.'

In Latvian, the expansion of the paradigm was achieved through introduction of the verb tikt 'get, become' (formerly also tapt and $k\bar{l}u\bar{t}$, with the same meaning) as an auxiliary alongside 'be', as a means of providing unequivocally dynamic (actional) passive forms alongside resultative/perfect forms based on the past participle; this is shown in (4):

(4) Latvian

Logi tika aizslēgti. window.nom.pl become.pst.3 close.pst.pp.nom.pl.m 'The windows were shut.' (dynamic reading)

While the forms with -*m*-participles in Lithuanian and *tikt* in Latvian are grammatically unambiguous, forms based on 'be' show frequent and sometimes multiple ambiguity (cf. Geniušienė & Nedjalkov 1988, 372; Geniušienė 2016, 48). The following should be pointed out for Lithuanian:

- (5) Langai yra uždaryti window.nom.pl be.prs.3 close.pst.pp.nom.pl.m
 - (a) present tense of stative passive ('the windows are closed')
 - (b) perfect tense of dynamic passive ('the windows have been closed')
- (6) langai buvo uždaryti
 window.nom.pl be.pst.3 close.pst.pp.nom.pl.m
 - (a) past tense of stative passive ('the windows were closed, i. e., not open')
 - (b) past tense of dynamic passive ('the windows were closed')
 - (c) pluperfect tense of dynamic passive ('the windows had been closed')

- (7) langai bus uždaryti
 window.nom.pl be.fut.3 close.pst.pp.nom.pl.m
 - (a) future tense of stative passive ('the windows will be closed, i. e., not open')
 - (b) future tense of dynamic passive ('the windows will be closed')
 - (c) future perfect tense of dynamic passive ('the windows will have been closed')

While (6a-c) and (7a-c) are rather straightforward instances of ambiguity, the case of (5a) and (5b) is less obvious. A passive perfect may coexist with a present tense of the resultative (stative) passive, as shown by the example of English *has been closed* and *is closed*, but in view of the closeness of the resultative perfect to the resultative, and the lack of a formal distinction between the two in Lithuanian, we may ask whether they have indeed become sufficiently differentiated to warrant the claim that there is a relationship of ambiguity rather than vagueness between them.

The purpose of this article is to find an answer to the questions already indicated above: does Lithuanian have a passive variety of the prototypical perfect with the usual resultative/experiential function cluster, or is the passive perfect a not fully emancipated or not fully entrenched gram? The structure of the article is as follows. We will first discuss the treatment of the passive perfect in Lithuanian grammars (where it does not always figure under this name) and formulate the descriptive problem of how to integrate these forms in the passive paradigm. The next sections provide a historical background for the discussion by describing the picture that emerges from Old Lithuanian texts. Then, on the basis of modern language data, we will deal with the problem of the passive resultative perfect, and whether it can be teased apart from the present tense of the resultative. Next, we will examine the passive experiential perfect and its formal variants. In the final section, we will attempt to formulate some conclusions.

2. What the grammars say

In Lithuanian reference grammars, the grammatical interpretation is dictated by the tendency to view the verbal system as a set of correlations enabling the arrangement of inflectional forms in tense paradigms neatly represented in tabular form. Thus, the English-language Lithuanian Grammar (Ambrazas, ed., 2006, 324–325) calls *esu (at)neštas* be.PRS.1SG

bring.PST.PP.NOM.SG.M 'I have been brought' a present perfect of the passive. But this does not reflect the description given in the Academy Grammar (Ulvydas, ed., 1970, 162–167), where such forms are cautiously described as 'passive constructions with past participles', while the notion of perfect does not appear at all, being alien to the older grammatical tradition of the language. The Academy Grammar describes the meaning as twofold, and the formulations offered correspond to the notions of resultative (stative) and actional (dynamic) passive respectively. Now that we have the notion of the perfect as a cross-linguistically valid gram-type (Dahl 1985, 129-153), we can pose the question whether esu atneštas is an instance of this gram-type. Taking our cue from the Academy Grammar as well as from Geniušienė (2016, 47, 227-230, 231-245), we can interpret this expression as representing at least the resultative (stative passive). Is it also a passive perfect? We should note that the language also has a construction with perfect form of the auxiliary, formed by present tense form of the auxiliary 'be' followed by past active participle of 'be', of a type comparable to English has been closed.

(8) Už smurta L. B. buves for violence.Acc.sg be.prs.3 be.pst.pa.nom.sg.m išvežtas ir uždarytas take away.pst.pp.nom.sg.m and lock up.pst.pp.nom.sg.m policijoje, teistas. police.Loc convict.pst.pp.nom.sg.m 'For violent behaviour L. B. has (on one or more occasions in the past) been taken away and put in police custody, and also convicted.4

This construction, as we will see, is rare, and the grammars do not note its existence (Ulvydas, ed., 1970, 164–167). The function illustrated in (8) is experiential. Is this variety always experiential? Is the experiential perfect passive always of this form, or can passives as illustrated in (5) also be experiential? The situation is undoubtedly more complex than the reference grammars suggest, and the passive forms can probably not be squeezed into neat conjugational tables as we find them in Ambrazas, ed. (1996, 323–326).

⁴ https://e-teismai.lt/byla/115481079643281/A2_9_-622-363/2016 (accessed 2021-06-25)

3. Diachronic aspects

The development of an actional passive out of a resultative passive, a form characterising a state resulting from a prior event, involves a meaning shift foregrounding the prior event, so that, for instance, a present-tense resultative passive comes to be reinterpreted as a past-tense actional passive. This development is shown in (9):

(9) yra uždarytas
be.PRS.3 close.PST.PP.NOM.SG.M
initial meaning: 'is closed'
new meaning 'was closed/has been closed'

At an initial stage *yra uždarytas* was ambiguous between the old meaning (stative passive) and the new meaning (past or perfect-tense of the actional passive), much as in the case of Latin *ianua clausa est* 'the door is closed' or 'the door was closed'. This ambiguity has been at least partly eliminated in modern Lithuanian, where the past-tense actional passive has a past-tense auxiliary:

(10) yra atrastas
be.PRS.3 find.PST.PP.NOM.SG.M

→ buvo atrastas
be.PST.3 find.PST.PP.NOM.SG.M

That is, in modern Lithuanian *yra uždarytas* has lost its past-tense function; whether it has retained or acquired a perfect function is a question we will consider further on.

In Old Lithuanian both forms, the older one with the present-tense form of the auxiliary and the new one with the past-tense auxiliary, seem to have been used more or less interchangeably in what can be recognised as typical past-tense function, a function that can be identified on the basis of the ability to be used in narrative text portions. The following examples are from the 17th-century Chyliński Bible:

(11) Numire teypag ir ans bagoczius, likewise die.pst.3 also that.nom.sg.m rich man.nom.sg irpakastas buwo. bury.pst.pp.nom.sg.m be.pst.3 Chyliński NT Luke 16.23 'The rich man also died, and was buried,5'

⁵ The English translation of the Bible verses cited is taken from the King James Bible.

(12) [Ó waykey Izraelaus łaydes nog Beeroth-Bene-Jaakan, ir Moferos:] ten numire Aaron. ir pakastas bury.pst.pp.nom.sg.m there die.pst.3 Aaron and ten ira. there be.prs.3 [ó funus jo Eleazar atprowinejo Kunigifzki-uredą wietoy jo.] Chyliński, от, Deut. 10.6 '[And the children of Israel took their journey from Beeroth of the children of Jaakan to Mosera:] there Aaron died, and there he was buried; [and Eleazar his son ministered in the priest's office in his stead.]'

When did forms of the type *yra pakastas* lose their past-tense function? There is probably no easy answer to this question because the Old Lithuanian texts are translations, whose linguistic features may be influenced by those of the source texts. The problem can be seen from the following example:

(13) Ir waykas. iraugo ans and grow.PST.3 that.nom.sg.m child.nom.sg and atjunkitas ira piena. nog wean.pst.pp.nom.sg.m be.prs.3 from milk.gen.sg 'And the child grew, and was weaned.' Chylińskis, от Gen. 21.8 *crevit igitur puer et ablactatus est* (Vulgate) rosło tedy dziecię, i zostawione iest od piersi (Polish Danzig Bible) ende het kint wert groot, ende wert gespeent (Dutch Statenvertaling).

Though the Dutch version, which was the primary source of Chyliński's Bible translation, has an auxiliary in the past tense (wert), both the Latin and the Polish (secondary sources) have present-tense auxiliaries. Latin ablactatus est is a normal passive perfect (perfective past), whereas the Polish form is as problematic as the Lithuanian one—it could also have had, at that stage, different tense values. While the tense forms of the auxiliary could have influenced the choice of the tense form in the Lithuanian translation, there is no direct dependency on other language versions: in (14) the Polish version has the present tense of the auxiliary, but the Lithuanian one the past tense:

(14) Teypo pastypryntas buwo ans so confirm.pst.pp.nom.sg.m be.pst.3 DEM.NOM.SG.M łaukas ir lindyne kuriv ten field.nom.sg and cave.nom.sg REL.NOM.SG.F there buwo,
be.PST:3
[Abrahomuy and teywaynifzkio-pakafima]
Chyliński ot Gen. 2320
'And the field, and the cave that is therein, were made sure
[unto Abraham for a possession of a buryingplace].'
I oddane iest pole i iaskinia, która była na nim, Abrahamowi w osiadłość
grobu

However, judging from our data, examples like (13–14) were not numerous and the tense form of the passive auxiliary in Lithuanian Bible translations largely corresponds to that of the source text. In Bretke's Bible, 94% of *yra* + PST.PP constructions correspond to a present tense auxiliary in Luther's Bible, and 97% of *buvo* + PST.PP correspond either to the auxiliary 'be' or 'become' (18% and 82% of corresponding examples respectively) in the past tense. In Chyliński's Bible, 90% of *yra* + PST.PP correspond to the auxiliary 'be' in the present tense in the *Statenvertaling* and 100% of *buvo* + PST.PP correspond either to the auxiliary 'be' or 'become' (52% and 48% of the cases respectively) in the past tense. In Ruhig's and Giedraitis' Bible translations, the number of matching examples is similar (approximately 90%).

Though we can never be sure about the possible influence of other language versions (Latin, Polish, Dutch etc.) on the choice of the tense form of the auxiliary in individual cases, it seems likely that in the 17th century the two varieties of the past actional passive were both fully alive.

In order to establish when the variety with the present-tense form of the auxiliary went out of use, we compared four versions of the New Testament. We selected Bible translations as our source because they enable a comparison of longer parallel texts. However, this can only be a pilot study as for Bretke's Bible only a limited number of books from the New Testament are available in electronic form; we restricted ourselves therefore to the Gospels. As our material we chose the translations by Johannes Bretke (1590), Samuel Boguslaus Chyliński (1660), Philipp Ruhig (1727) and Juozapas Arnulfas Giedraitis (1816). In the following, we will give some background information about the four Bible translations, their authors and the possible translation sources.

Johannes Bretke (Lith. Jonas Bretkūnas, 1536-1602) was a Lutheran pastor, born in the Duchy of Prussia. He was the author of the first Bible translation into Lithuanian. He translated the whole Bible text in the span

of more than 10 years, and finished his work in 1590. There is no doubt that his main source was Luther's Bible (1534) though he presumably also used some older translations from Vilentas' *Evangelijos bei epistolos* ('Gospels and Epistles', 1579). It is believed that Bretke tried not to be a blind follower of Luther and while translating he expressed the wish to be assisted by a person knowing Hebrew, in order to compare his text with the original, but no such person was found. Although Bretke's Bible was completed, it never appeared in print but is extant in the manuscript (Bukantytė 2006).

Samuel Boguslaus Chyliński (1631-1668) was a Calvinist pastor, descendant of a Polish pastor, Adrian Chyliński, and a Lithuanian mother from the gentry family Minvydas. The author undoubtedly spoke both Lithuanian and Polish. The source text for his Bible translation was most certainly not the Hebrew or Greek original but the Dutch *Statenvertaling* (the Translation of the Estates General, 1637), which was highly regarded among Lithuanian Protestants. Chyliński also episodically used the principal Polish Calvinist translation—the Danzig Bible (1632). The printing of Chyliński's Bible translation was stopped in 1660, and only the printed part of the Old Testament and the manuscript of the New Testament have survived until our times (Kavaliūnaitė, 2008).

The so-called Ruhig Bible was actually a collective work, and among other translators we should mention Christoph Rebentisch (1682–1724) and Hiob Naunien (1672–1730). However, Philipp Ruhig (1675–1749), Lutheran pastor, philosopher and philologist, was the main translator. Ruhig's Bible was most certainly translated from Luther's Bible. This is confirmed by lexical and syntactic similarities as well as structural features, such as the fact that the text was printed in two columns: the German version on the left and the Lithuanian version on the right. Like the earlier Lithuanian Bible translations, the Ruhig Bible was not based on the originals.

Juozapas Arnulfas Giedraitis (Józef Arnulf Giedroyć, 1754–1838) was Bishop of Samogitia, then part of the Russian Empire. His New Testament translation saw the light in difficult circumstances. Giedraitis was forced to have his translation printed by the (Protestant) British Bible Society, of which a section had been established in Vilnius with the Czar's support. It was a complex situation in which he had to manoeuvre between the Pope and the Czar (Prašmantaitė 2000). Giedraitis' language and the sources of his translation have not been researched thoroughly. It is as-

sumed that his main translation source was the Greek original, but there is no firm evidence. It is also acknowledged that Giedraitis' translation was influenced by the Bythner New Testament (1701).

For the purpose of our study, a corpus based on the aforementioned translations was created on the Sketch Engine platform (392728 tokens). From this corpus we compiled a sample of passive constructions with an overt auxiliary in the present tense (*yra*) or in the past tense (*buvo*). In our search for relevant forms we used a formula consisting of the passive past participle (further -*t*-participle or PST.PP) endings (-*tas*, -*ta*, -*ti*, -*tos*) preceded or followed by an auxiliary verb in the present tense (*yra*) or in the past tense (*buvo*). As a starting point we took Chyliński's Bible and found 206 Gospel fragments that had either the *yra* + PST.PP or the *buvo* + PST.PP construction. After that the corresponding verses were collected in other translations. In total, 824 examples were collected. The collected passages were then compared with the source texts: the Luther Bible (1534), the Dutch Statenvertaling (1637) and the Danzig Bible (1632) as well as the modern Lithuanian Bible translation by Kostas Burbulys (1999).

The collected data was then divided according to the type of structure used to describe the event in individual translations. The following table shows the results:

Bible translation	yra + PST.PP	buvo +	PST.PP	active (incl. reflexive)	other	Total
Bretke (1590)	89	39	15	18	45	206
Chyliński (1660)	126	77	0	О	3	206
Ruhig (1727)	52	35	65	18	36	206
Giedraitis (1816)	82	60	22	28	14	206
Total	349	211	102	64	98	824

⁶ For this information I am indebted to Gina Kavaliūnaitė. The Bythner New Testament was a collective translation from the Greek original, carried out at the behest of the Reformed Synod of the Grand Duchy and printed in Prussia thanks to the efforts of Samuel Bythner (c. 1632–1710).

As can be seen in the table, the most prominent group are constructions with auxiliary verb in the present and past tense. A relatively large number of examples with the *-t*-participle do not have an overt auxiliary, which is a striking feature characteristic of Ruhig's translation; in such cases it is hard to determine which form of the auxiliary is omitted. This issue will be discussed in detail further on in the paper.

As already mentioned, the emergence of the passive system involves reanalysis of originally copular constructions. As is argued for the corresponding active constructions by Kapkan (2021), in a significant portion of constructions with *yra* the participle can be interpreted as describing a state or quality not necessarily viewed as a result of prior action. In our material numerous constructions with overt present tense auxiliary (45 examples) and without it (32 examples) can be interpreted as containing adjectival participles rather than verbal past passive participles. This function is retained even in the most recent translations, cf. (17):

- (15) Pafchlowinti ira, kurie Dwafifchkai glorify.pst.pp.nom.pl.m be.prs.3 rel.nom.pl.m spiritually ubagais ira poor.ins.pl.m be.prs.3 Bretke nt Matthew 5.3

 Selig sind, die da geistlich arm sind 'Blessed are the poor in spirit'
- (16) Paßlawinti (ira) ubagey Dwasioy
 glorify.PST.PP.NOM.PL.M be.PRS.3 poor.NOM.PL.M spirit.Loc.sG
 Chyliński NT Matthew 5.3
 Zalig zijn de armen van geest
 Statenbijbel NT Matthew 5.3
 'Blessed are the poor in spirit'
- (17) Palaiminti vargšai dvasia...
 bless.pst.pp.nom.pl.m poor.nom.pl.m spirit.ins.sg
 Burbulys nt Matthew 5.3
 'Blessed are the poor in spirit'

As Kapkan (2021) notes, such adjectival participles can be identified on the basis of their not presupposing a prior event, or having acquired a new meaning diverging from that of the finite verb. In our Bible translations we can also single out a group of -t-participles meeting these criteria, such as: pašlavintas/palaimintas 'blessed', (cf. Greek μακάριος, Latin beatus, Ger-

man selig, Dutch salich; 22 examples), priligintas 'similar' (Greek ὡμοιώθη, Latin simile factum est, but German gleich, Dutch gelijck; 16 examples). It is basically constructions with participles denoting a state implying a prior action that are relevant for the development of the passive. Such yra + PST.PP constructions are numerous in the analysed texts (236 examples) and they could be interpreted either as the present tense of the resultative or the perfect of the dynamic passive, as illustrated in example (18):

- (18) (a) Wel rafchita Diewo taipaieg ira write.pst.pp.na God.gen.sg again therefore be.prs.3 *Wieschpaties* gundinti. tawo ne turi lord.gen.sg 2SG.POSS must.prs.3sg tempt.INF NEG Bretke Matthew 4.7
 - (b) Paraßyta teypag ira: Negundÿnsi
 write.pst.pp.na therefore be.prs.3 neg.tempt.fut.2sg
 Pona Diewa tawo.
 lord.gen.sg god.gen.sg 2sg.poss
 Chyliński Matthew 4.7
 - (c) Wėl paraßyta Ne gundik vra: write.pst.pp.na again be.prs.3 NEG tempt.IMP.2SG Diewa fawo Wießpati. god.Acc.sg RPO lord.Acc.sg Ruhig Matthew 4.7
 - (d) Wel paraszita ira: Ne gundinsi again write.pst.pp.na be.prs.3 NEG tempt.FUT.2SG *Wieszpaties* Diewo tawo. lord.gen.sg god.gen.sg 2SG.POSS Giedraitis Matthew 4.7

'It is written again, Thou shalt not tempt the Lord thy God.'

The same ambiguity or vagueness can be observed in the contemporary language. However, as mentioned above, yra + PST.PP constructions can also be interpreted as preterital. According to Bybee and Dahl (1989, 57), resultative constructions may become passive perfects, which subsequently may develop into past-tense forms. This scenario implies that we must posit a passive perfect as an intermediary stage in the process of creation of the passive preterite. As the relationship between preterite and perfect is hierarchical (the existence of a perfect presupposes the existence of a preterite), this implies that the category of perfect had been previously

established, e.g., in the form of an active perfect consisting of 'be' + past active participle. In the opposite case, we must assume the original resultative to have developed into an undifferentiated preterite/perfect. To support this claim, consider (19), where the form yra + PST.PP co-occurs with a definite time adverbial 'when eight days were accomplished'. Such use indicates that yra + PST.PP in (19) should be interpreted as preterital, especially when we take into consideration that in Ruhig text the same event is rendered in an active past-tense form, and in the modern language the construction buvo + PST.PP is used:

- (19) (a) Ir ifsipilde [...], kaip aschtonias dienas and when eight.nom.f day.nom.pl fulfill.pst.rfl.3 wadintas eſt ia call.pst.pp.nom.sg.m be.prs.3 3SG.M.GEN wardas Iesus... name.nom.sg PN.NOM Bretke NT Luke 2,21
 - (b) 7r kad aßtonios dienos ifipiłde [...], when eight.nom.f day.nom.pl fulfill.rfl.pst.3 ira wardas pramintas call.pst.pp.nom.sg.m be.prs.3 name.Nom.sg ₹ezus... 3SG.M.GEN PN.NOM Chyliński NT Luke 2,21
 - (c) Ir aßtůnos Dienos [...],kaip iffipilde and when fulfill.rfl.pst.3 eight.nom.f day.nom.pl tadda Wardu praminne Iėzumi... call.pst.3 then 3SG.M.ACC name.ins.sg PN.INS Ruhig, NT Luke 2,21
 - (d) Praslinkus aštuonioms dienoms [...], huvo 7am elapse.cvB eight.dat.f day.dat.pl 3SG.M.DAT be.pst.3 duotas vardas... Jėzaus give.PST.PP.NOM.SG.M PN.GEN name.Nom.sg Burbulys, NT Luke 2,21 'And when eight days were accomplished [...], his name was called **IESUS**

The interpretation of individual Old Lithuanian forms with the presenttense auxiliary *yra* is often difficult; the perfect (of the active) is not as strongly grammaticalised in Lithuanian as, say, in English, and even in modern Lithuanian it can often be replaced with a simple past. In (20a), the form *ira regietas* could be interpreted either as a past tense or as a perfect; subsequent translators offer either the perfect (20b) or the preterite (20c) of the active here. The past tense *kieles* suggests that *regietas ira* should perhaps be read as a preterite as well:

- (20) (a) Wießpats tykrey kieles. ir regietas lord.nom.sg truly rise.pst.3 and see.PST.PP.NOM.SG.M ira Simona. nog be.prs.3 of PN.GEN Chyliński NT Luke 24.34
 - (b) Wießpat's tikkray prifikėlęs, ir Simonui lord.NOM.SG truly rise.PST.PA.NOM.SG.M and PN.DAT pafiródęs.

 appear.PST.PA.NOM.SG.M
 Ruhig NT Luke 24.34
 - (c) uźtikra kéles Wieszpats, ir pasirode
 truly rise.PST.3 lord.NOM.SG and appear.PST.3
 Simonuy.
 PN.DAT
 Giedraitis NT Luke 24:34
 'The Lord is risen indeed, and hath appeared to Simon.'

A precondition for the ultimate loss of the past-tense meaning in forms like *yra regėtas* was the introduction of forms with the past-tense form of the auxiliary in past-tense function. This form was not in itself new, for even at the resultative stage there had to be, alongside the present-tense form *yra parašyta* 'it is written', a past-tense form 'it was written'. In the Old Lithuanian texts it is already firmly established as a past-tense dynamic passive. 96% of the constructions (100% in Chyliński's text) with *buvo* in the analysed material correspond in the source texts to passives with the auxiliary 'be' or 'become' in the past tense:

(21) Bet buwo prieg tos wietos. kur but be.pst.3 this.gen.sg.f place.gen.sg where buwo nukrizawotas Darzas... be.pst.3 crucify.pst.pp.nom.sg.m garden.nom.sg Bretke мт John 19.41 Es war aber an der Stätte, da er gekreuziget ward, ein Garten 'Now in the place where he was crucified there was a garden.'

(22) \acute{O} buwo and kame anos wietoσ and be.pst.3 where on this.gen.sg.f place.gen.sg buwo nukryziawotas, darzaσ be.pst.3 crucify.pst.pp.nom.sg.m garden.nom.sg Chyliński NT John 19.41 En er was in de plaats, waar Hij gekruist was, een hof (Statenbijbel) A był na onem miejscu, gdzie był ukrzyżowany, ogród (Danzig Bible) 'Now in the place where he was crucified there was a garden'

In a small number of instances buvo + PST.PP represents the past tense of the resultative passive:

(23) Bet Pétras. ir kurrie ſи iůmi but with PN.NOM and REL.NOM.PL.M 3SG.M.INS buwo. Miegu buwo apimti. be.pst.3 sleep.ins.sg be.pst.3 envelop.pst.pp.nom.pl.m Ruhig NT Luke 9.32 Petrus aber, und die mit ihm waren, waren voll Schlafs. (Luther) 'But Peter and they that were with him were heavy with sleep.'

Finally, *buvo* + PST.PP could also function as a pluperfect; in (24) it conveys the meaning of 'Perfect in the Past' (for the term, see Daugavet & Arkadiev, this volume), more specifically, experiential in the past:

(24) Ir ataia Nazareth kur buwa ing and come.psr.3 where be.pst.3 to PLN. uźchaugintas. bring up.pst.pp.nom.sg.m Bretke NT Luke 4.16 vnd er kam gen nazareth / da er erzogen war (Luther) endy hy quam tot Nazareth daer hy opgevoedt was (Statenbijbel) 'And he came to Nazareth, where he had been brought up.'

An important step in the development of the dynamic passive was the introduction of the -*m*-participle⁷ alongside the -*t*-participle. It is already firmly established in Bretke's Bible translation, in agreement with Am-

⁷ The -*m*-participle is formed on the basis of the present-tense stem and is therefore labelled 'present passive participle'. In modern Lithuanian passive forms with the -*m*-participle are always dynamic, regardless of the actionality class of the input verb. In the present tense -*m*-passives may refer to an ongoing action or a habitual situation, they may also acquire impersonal, generic and modal uses, while in the past tense -*m*-passives are used mostly for atelic processes and activities (for details see Nau, Spraunienė & Žeimantienė 2020, 53–74).

brazas' assumption that in West Aukštaitian (reflected in Bretke) the -m-participle entered the passive paradigm much earlier than in other dialects of Lithuanian (Ambrazas 2001, 15). In the researched material there are only 19 instances of passives with the -m-participle, 15 of them in Bretke's text and 4 in Ruhig's New Testament. The -m-participle is also well attested in Chyliński's Bible. Already in Bretke, the -m-participle occurs in two tense varieties, present and past (Bretke: 6 yra, 8 buvo; Ruhig 1 yra, 2 buvo):

- (25) (a) akis laikamas buwa, iu eve.NOM.PL 3PL.GEN hold.prs.pp.nom.pl.f be.pst.3 idant pazintû. ne that know.irr.3 3SG.M.GEN NEG Bretke NT Luke 24.16
 - (b) akis ju **buwo uzturetos**eye.NOM.PL 3PL.GEN be.PST.3 hold.PST.PP.NOM.PL.F
 jog nepazyna jo
 that NEG.know.PST.3 3SG.M.GEN
 Chyliński NT Luke 24.16
 - (c) jû dwiejû Akis buwo 3PL.GEN two.gen eye.NOM.PL be.pst.3 laikomos. Ιo paźinno. jog ne hold.prs.pp.nom.pl.f that 3SG.M.GEN NEG know.pst.3 Ruhig NT Luke 24.16 'But their eyes were holden that they should not know him.'

The introduction of the -*m*-participle into the passive paradigm presumably changed the division of tasks between auxiliary and participle as far as tense marking was concerned. As the present tense of the auxiliary in combination with the -*m*-participle referred to an event evolving in the present (at speaking time) rather than a state resulting from a prior event, the only means of conveying past-tense reference if a construction with the -*m*-participle was to refer to the past was to use the past-tense forms of the auxiliary. Though the material is too scarce to confirm such a hypothesis, it seems at least plausible that the increased functional weight carried by the past-tense form of the auxiliary contributed to its generalisation and extension to constructions with the -*t*-participle.

While in 16th and 17th century texts the passive forms with the -t-participle and the present-tense form of the auxiliary can still have past-

tense function, in Ruhig's Bible these uses do not seem to appear any more. What we do see is the appearance of the past-tense auxiliary *tapti* (4 examples) in the passive past tense:

- (26) (a) Bet ftaghifi eſt kaip numire be.prs.3 how happen.pst.pa.na die.pst.3 nefchtas ubagas, ir buwa beggar.nom.sg and carry.pst.pp.nom.sg.m be.pst.3 fterbli Abrahama. nog Angelû ing from angel.GEN.PL to bosom.acc.sg PN.GEN Bretke NT Luke 16.22
 - (b) 7r stojos numire jog ans and happen.pst.3 that die.pst.3 this.nom.sg.m elgieta, irnugabentas ira beggar.nom.sg and carry.PST.PP.NOM.SG.M be.prs.3 priegłaupstÿn nog Aniełu Abrahoma. bosom.ILL.SG from angel.gen.sg PN.GEN Chyliński NT Luke 16.22
 - (c) Bet nufidawe, jog Ubbag's numirre, but happen.pst.3 that poor man.NOM.SG die.pst.3 ir Angelû nuneßtas tape and angel.GEN.PL carry.pst.pp.nom.sg.m become.pst.3 į Prieglobsta Abraomo. bosom.Acc.sg PN.GEN Ruhig NT Luke 16.22
 - (d) Ir stojos jog numire pawargelis; and happen.pst.3 that die.pst.3 beggar.nom.sg ir buwo nunesztas par be.pst.3 and carry.PST.PP.NOM.SG.M by Aniołus ant prigłopstes Abraomo. angel.ACC.PL on bosom.gen.sg PN.GEN Giedraitis Luke 16.22

'And it came to pass, that the beggar died, and was carried by the angels into Abraham's bosom.'

Ambrazas (1990, 193) also mentions that periphrastic passive forms in Old Lithuanian could be formed with the auxiliary *tapti* 'become'. He gives two illustrations, both from Bretke: *surischts tapa* 'was bound' (from the hymnal *Giesmės duschaunas*, 1589) and *pakasti tampa* 'are being buried' (from Bretke's Postil, 1591). According to Jakulienė (1968, 212–213), in Old

and hate thine enemy.'

Lithuanian the 'imperfective passive' could not only be expressed by present passive participles combined with the auxiliary $b\bar{u}ti$ 'be', as in modern Lithuanian, but also by present and past passive participles occurring with different auxiliaries: $b\bar{u}ti$, 'be', tapti 'become', stotis 'happen' etc. She cites two examples with the passive auxiliary tapti 'become': one from Bretke's Postil (1591) and one from Daukša's Postil (1599). Thus we see that in Old Lithuanian the passive could be expressed by various competing structures (including reflexive verbs, Jakulienė 1968)). The variation of passive forms was often dialectally determined but, as the passive became more grammaticalised, the structure $b\bar{u}ti$ 'be' + PRS.PP/PST.PP ousted the other means of expressing the passive.

Where Ruhig has *yra* + PST.PP it is a perfect or the present of a resultative passive:

(27) Girdėjot, fakyta jog vra: Artima hear.pst.2pl say.pst.pp.na neighbour.Acc.sg that be.prs.3 fawo mvlėk. 0 Neprietela fawo RPO love.IMP.2SG and enemy.gen.sg RPO nekesk. hate.IMP.2SG Ruhig Matthew 5.43 'Ye have heard that it hath been said, Thou shalt love thy neighbour,

What is most characteristic of Ruhig's translation is the frequent occurrence of a bare past passive participle where other translations have an overt auxiliary (65 examples). In a number of instances (37 examples) the omitted auxiliary corresponds to the present-tense auxiliary of other translations, and the value is that of a resultative passive:

(28)	(a)	Wėl	prilygini	ta	Dang	aus		
		again	equate.ps	T.PP.NOM.SG.F	heave	en.GEN.SG		
		Karalyste		Tinklui,	į	Marres		
		kingdom. įmestam		net.DAT.SG	to	sea.ACC.SG		
		throw.ps7	r.pp.dat.sg.	M				
		Ruhig NT Matthew 1347						
		Abermal ist gleich das Himmelreich einem Netz (Luther)						
	(b)	Wel,	pryligini	ta	ira	$dangau\sigma$		
		again	equate.ps	T.PP.NOM.F	be.prs.3	heaven.gen.sg		

Karalifte newaduy uzmeftamuy

kingdom.nom.sg net.dat.sg throw.pst.pp.dat.sg.m

Mariofna,

sea.ILL.PL

Chyliński NT Matthew 1347

Wederom is het Coninckrijck der hemelen gelijck een net... (Statenbijbel)

'Again, the kingdom of heaven is like unto a net, that was cast into the sea'

(29) 3mogau, tawo Griekai taw man.voc.sg 2sg.poss sin.nom.pl 2sg.dat atléifti.

forgive.pst.pp.nom.pl.m

Ruhig NT Luke 5.20

Mensch, deine Sünden **sind** dir **vergeben**. (Luther)

Zmogau, griekey tawo ira tau atłaysti. (Chyliński)

'Man, thy sins are forgiven thee.'

However, in other cases (7 examples) the PST.PP without overt auxiliary clearly has the value of a past tense, as the context is narrative:

(30) [Kaip Marya jo Mótina pazadėta buwo Iozėpui dar ne parwefta]

rafta jiji nefʒćia iβ find.pst.pp.nom.sg.f 3sg.f.nom pregnant.nom.sg from

Szwentôs Dwafês. holy.gen.sg spirit.gen.sg

Ruhig Matthew 1.18

radofe, kaip ana nefchcze buwo nug fchwentos Dwafies (Bretke)

atrasta ira nießcza iß Dwasios ßwętos (Chyliński)

'[When as his mother Mary was espoused to Joseph, before they came together,] she was found with child of the Holy Ghost.'

This situation seems to be in conformity with what we find in the modern language. We will discuss this further on.

The lack of clear instances of a past-tense value of forms with the present-tense form of the auxiliary in Ruhig's Bible might suggest that in the 18th century this function had been lost. However, this claim should be formulated cautiously as yra + PST.PP in the past-tense function reappears once again in Giedraitis' Bible:

(31) [O kad iszsipilde asztuonios dienos, idant apipjaustitu waykeli;]

pramintasirawardasjocall.pst.pp.nom.sg.mbe.prs.3name.nom.sg3sg.m.gen

Jezus, kursay pramintas buwo nuog
PN.NOM REL.NOM.SG.M call.PST.PP.NOM.SG.M be.PST.3 from
Aniolo...
angel.GEN.SG
Giedraitis NT Luke 2.21
'[And when eight days were accomplished for the circumcising of the

child,] his name was called JESUS, which was so named of the angel'

The reason for the reappearance of these forms can be explained by the fact that it is believed that the author often used older translations, prominently the Bythner New Testament translation (1701):

(32) wardas pramintas ira jo name.Nom.sg 3SG.M.GEN call.pst.pp.nom.sg.m be.prs.3 kurfai buwo pramintas nůg IEZUS. call.pst.pp.nom.sg.m PN.NOM REL.NOM.SG be.pst.3 from Angeło angel.gen.sg Bythner мт Luke 2.21

In spite of the difficulties in interpreting the data of Old Lithuanian texts, the following conclusions seem to emerge from this brief overview. In the course of the Old Lithuanian period forms consisting of the present-tense auxiliary 'be' and the -t-participle shed the past-tense function which they still show well into the 17th century (the present-tense form of the auxiliary was replaced in this function with the past-tense form of 'be', less frequently 'become'). They did not, however, develop into a dedicated form for the perfect because they retained the function of a present resultative passive. In 18th-century texts forms without auxiliary appear; they can have the value both of a past tense and of a perfect.

4. Teasing apart the passive perfect and the resultative passive in contemporary Lithuanian

In this section we will take a closer look at the range of uses that predicative past passive participles may assume in contemporary Lithuanian in order to find out which of these uses pertain to the expression of the passive perfect, and which types of perfects may be distinguished. Our data is taken from the internet corpus Lithuanian WaCv2 (abbreviated LtWaCv2), containing more than 48 m. words, available on https://www.

sketchengine.eu/. We chose this particular corpus because it is morphologically annotated and can generate a random sample of any size. We adopted the following method of data collection: first, a search⁸ of past passive participles including both agreeing and non-agreeing forms (negated as well as non-negated) was performed. The search yielded 659,584 results from which a random sample of 1000 examples was obtained and filtered manually for uses of predicative passive participles either with an auxiliary in present or past tense, or without any auxiliary. Our decision also to include cases with past-tense auxiliary into the sample was motivated by the fact that it is well known from the literature that the Lithuanian perfect (of the active) is relatively weakly grammaticalised, and its functions are often assumed by preterite forms (see, e.g. Daugavet & Arkadiev 2021). Daugavet & Arkadiev have also found that the combination of past active participles with past tense auxiliary—the pluperfect form—may assume uses characteristic of the present perfect gram type, namely the experiential use. However, as the passive pluperfect is homonymous with the passive preterite, it is impossible to say whether a combination of a past-tense auxiliary with a past passive participle, when used in a function reminiscent of the present perfect, is an instance of a preterite or a pluperfect. The filtered sample contained 282 examples. All the examples cited in sections 4 and 5 come from the corpus Lithuanian WaC v2, unless otherwise stated.

A few words are in order about the constructions that were not included in the sample. Apart from adnominal passive participles, which made up a considerable amount of the sample, we also filtered out cases with predicative participles which were clearly adjectivised, e.g. <code>itemptas</code> 'tense, intensive', <code>pagristas</code>, <code>paremtas</code> 'based (on)', <code>ribotas</code> 'limited', <code>izoliuotas</code> 'isolated', <code>priverstas</code> 'forced (to)', <code>pasmerktas</code> 'doomed (to)', <code>užimtas</code> 'busy', <code>girdėtas</code> 'familiar'. Such participles are only morphologically related to the respective verbs, as they denote states or qualities with no implication of prior events, e.g.:

(33) Mokytojo darbas **pagrįstas**teacher.gen.sg work.nom.sg base.pst.pp.nom.sg.m

 $^{^8}$ We used the query: [tag="Vppnpspn..."] |[tag="Vppnpsno"] |[tag="Vpnnpspn..."] |[tag="Vpnnpspn..."]

meile, supratimu.

love.INS.SG understanding.INS.SG

'A teacher's work is based on love and understanding.'

Adjectival participles often occur with degree adverbs, such as *labai* 'very', *pernelyg* 'too', *šiek tiek* 'somewhat, a little':

(34) Nors tradicinė koncepcija
although traditional.nom.sg.f notion.nom.sg
svarbi, ji šiek tiek
important.nom.sg.f 3sg.nom.f a_little
ribota.

limit.pst.pp.nom.sg.f

'Although the traditional notion is important, it is a little limited.'

In her paper on the Lithuanian perfect, Kapkan (2021) argues that a significant number of instances of past active participles (with or without a copula) do not represent "perfects, but rather adjectival participles in copular constructions". Kapkan shows that although some of those participles are lexicalised adjectives, others are clearly verbal, but many of them are ambiguous between an analytical verb phrase and an ascriptive copular construction with an adjectival participle. The situation is similar with past passive participles. It is well known that the Lithuanian past passive participles with the suffix *-to were originally deverbal adjectives, neutral with respect to voice, and only later on developed passive meaning (Ambrazas 1979, 53, Nau & Holvoet 2015, 7). Lithuanian passive constructions originated from copular constructions (for details see Holvoet 2001) and have retained strong ties with the source construction. Many actional passives in Lithuanian are homonymous with copular constructions, mostly with object resultatives. All instances susceptible of a verbal interpretation, such as *irengtas* 'equipped', padarytas 'made', pateiktas 'given', were included in our sample. However, we must admit that the distinction between adjectivised and non-adjectivised participles is fuzzy and there were borderline cases, e.g. the participle skirtas 'earmarked':

(35) [Wfa turtas, perkeltas prie pagrindinio kapitalo, rezervų, kito turto ir būsimojo pelno,]

pirmiausia yra **skirtas** būsto primarily be.prs.3 earmark.pst.pp.nom.sg.m house.gen.sg statybai remti building.dat.sg promote.inf 'Wfa's transferred capital, reserves, assets and future profits are still **earmarked** for housing promotion.'9

Example (35) was included into the sample because it presupposes a prior action performed by an agent ('X earmarked the assets for ...'). The example represents an objective resultative (stative passive), which we will deal with below.

Another construction type excluded from the sample was evidentials (for details on passive participles used as evidentials see, e.g. Nau, Spraunienė & Žeimantienė 2020 and the references therein):

(36)	Turgų	būta	pačių	įvairiausių:
	market.gen.pl	be.pst.pp-na	EMPH.GEN.PL	various.super.gen.pl
	valstiečių,	žuvų,	malkų,	
	peasant.gen.pl	fish.GEN.PL	firewood.gen.	PL
	sendaikčių	ir kt.		
	old_stuff.gen.pl	and_etc.		
	/=			

^{&#}x27;[Judging from the evidence that we have], there **were** various markets: peasants' markets, fish markets, firewood markets, flea markets etc.'

Lastly, we filtered out examples which occurred in headlines, incomplete sentences, or which were difficult to interpret because of bad orthography etc. Table 2 gives an overview of the results from a formal perspective, i.e. the frequency of the structures:

Table 2: Occurrence of past passive participles in different structures in the sample

be.prs pst.pp	PST.PP	be.pst pst.pp	Total	
22 (7.8%)	142 (50.2%)	119 (42%)	283 (100%)	

The figures in Table 2 show that the bare past passive participle is most frequent in the sample: it accounts for half of the cases. A combination of past-tense auxiliary with past passive participle makes up 42% of all cases and the use of a present tense auxiliary is rare—it occurs only in 7.8% of the data. In this connection it is important to mention that Ambrazas (1990,

 $^{^9}$ The example, as well as its English version, are from https://eur-lex.europa.eu/legal-content/ LT-EN/TXT/?from=LT&uri=CELEX%3A32006Do737&qid=1626424381730 .

194) states that predicative passive participles without an overt auxiliary occur considerably more rarely (than cases with an overt auxiliary). This statement is contrary to our findings and makes us hypothesise that the frequent auxiliary omission we observe in modern Lithuanian texts might be a recent development. A separate research is required though to test this hypothesis.

In the following we will provide an analysis of the examples in terms of what temporal meaning they convey in order to find out which of them may be attributed to the passive perfect.

4.1. Resultatives

52 examples (18.4% of the sample) were identified as objective resultatives (stative passives). 12 cases were with present-tense auxiliary, 4 with past-tense auxiliary and in the remaining 36 cases the auxiliary was left out.

Stative passives can only be distinguished from the preterite and perfect forms of dynamic passives by their meaning: they refer to states resulting from a prior event (cf. Nedjalkov & Jaxontov 1988, 6). Therefore, they are not denotationally synonymous with corresponding active clauses, and cannot be replaced with them in a text without a meaning difference (Geniušienė 2006, 49–51; 2016, 81). (37ab) is an illustration:

- (37) (a) [Iš tvartų išlenda berniukas. Jis ... nueina prie klėties durų.]

 Ant durų ... įkabinta spyna.

 On door[PL].GEN hang.PST.PP.NOM.SG.F padlock.NOM.SG

 [Vaikis atrakina, ... durys atsidaro ...] (I. Simonaitytė)

 '[From the barns a boy emerges. He ... walks toward the store-room door.] On the door, ... a padlock is suspended. [The lad unlocks [it] ... the door opens...]'
 - (b) [Iš tvartų išlenda berniukas. Jis ... nueina prie klėties durų.]

 Ant durų ... įkabino spyną.

 on door[PL].GEN hang.PST.3 padlock.ACC.SG

 [Vaikis atrakina, ... durys atsidaro ...]

 '[From the barns a boy emerges. He ... walks to the store-room door.]

 On the door, [they] hung a padlock. [The lad unlocks [it] ... the door opens...]' (Geniušienė 2006, 50, our glossing)

In (37a) the resultative *įkabinta* occurs in a chain of perfective verbs in the active voice, denoting a sequence of actions. In this case it refers to "a state that exists while the actions are performed". Replacing the resultative in (37a) with its active counterpart in (37b) "breaks the sequence of a chain of actions" (Geniušienė 2006, 51).

As far as lexical input is concerned, it is important to note that stative passives may only be derived from perfective telic verbs (cf. Geniušienė & Nedjalkov 1988, 369), with the exception of *qualitative resultatives*, on which see below. Another feature characteristic of stative passives is that they are compatible with durative time adverbials, such as *visą laiką* 'all the time', *visada* 'always', *ilgai* 'for a long time', although this criterion does not apply to all objective resultatives. Here is an example of a stative passive from our data:

(38) Mano veidas išpieštas tatuiruotėmis,
1SG.POSS face(M).NOM.SG paint.PST.PP tattoo.PL.INS
ausyse įverti auskarai.
ear.LOC.PL insert.PST.PP.NOM.PL.M earring.NOM.PL
'My face is painted with tattoos, earrings inserted in my ears.'

Only stative passives may be coordinated with adjectives (Geniušienė 2016, 91), as (39) shows:

(39) Visiškai buvo išleista neseniai quite recently be.pst.3 release.pst.pp.nom.sg.f nauja knygos versija šios new.nom.sg.f this.gen.sg.f book.gen.sg version.nom.sg

However, the Lithuanian aspect system is far more complex and rather different from that of Slavic languages, which has even made some authors (e.g. Arkadiev 2011) argue that Lithuanian does not have aspect as a grammatical category at all. For an alternative view of aspect in Lithuanian, see Holvoet, Daugavet & Žeimantienė (2021).

The terms 'perfective verbs' and 'imperfective verbs' are problematic in Lithuanian grammar. Perfective verbs often have a perfectivizing preverb, which their imperfective counterparts lack, e. g.:

⁽i) J-is stat-ė nam-ą. 3NOM.SG.M build.PST.3 house.ACC.SG 'He was building a house.'

⁽ii) J-is pa-stat-ė nam-ą.

3NOM.SG.M PFX-build.PST3 house.ACC.SG
'He built/has built a house.'

kuri yra atnaujinta, pilnesnė full.comp.nom.sg.F REL.NOM.SG.F be.prs.3 update.pst.pp.nom.sg.f irdar įdomesnė. and even interesting.COMP.NOM.SG.F 'A new version of this book, which is updated, more complete and interesting, has been released quite recently'

Lithuanian also has a special subtype of resultatives, namely *qualitative* resultatives (for details, see Nau, Spraunienė & Žeimantienė 2020, 81–85) which permit imperfective predicates:¹¹

(40) O Lapių bažnyčia yra statyta
but PLN church.Nom.sg be.prs.3 build.pst.pp.nom.sg.f
1620 metais
in_1620
[ir yra dvylikta bažnyčia Lietuvoje pagal amžių.]
'But Lapiai church was built (literally: is built) in 1620 [and it is the 12th church in Lithuania according to age.]'

In (40) it is presupposed that the church has been built, and it is ascribed the distinguishing feature of having been built in 1620, which means that it is of considerable antiquity. Qualitative resultatives usually need a qualifying element: it may be a definite time adverbial as in (40) or an agentive adverbial receiving emphatic stress, as in (41), where the act of composition is presupposed and authorship is established:

(41)	Visas		šios	operos	libretas		
	entire.nom	.SG.M	this.gen.sg.f	opera.GEN.SG	libretto.nom.sg		
	yra	mano	rašytas.				
	be.prs.3	1SG.POS	s write.pst	P.P.NOM.SG.M			
	'The entire libretto of this opera is written by me ' (LtTenTen14)						

From the syntactic point of view the absolute majority of objective resultatives have referential subjects, that is, they are subjectful passives. This follows from the definition of the construction: if an objective resultative denotes a resultant state of an entity (previous object which is now

We are not saying that perfective telic verbs are totally excluded from qualitative resultatives; we just want to say that the use of imperfective verbs is characteristic of the qualitative resultative construction and that such use distinguishes them from resultatives proper which cannot be formed from imperfective verbs.

promoted to subject), then this entity needs to be expressed and have a referent (cf. Geniušienė 2016, 47; 231). Geniušienė mentions, however, that stative passives may occasionally be derived from intransitives and thus be subjectless, e.g.:

(42) Kambaryje prirūkyta, prišiukšlinta.
room.loc.sg smoke.pst.pp.na litter.pst.pp.na
'The room has been smoked in and littered (= The room is full of smoke and litter.)' (Geniušienė 2016, 47; our glossing)

According to Geniušienė, in (42) the resultant state is predicated of a place. Almost all examples which we have classified as resultatives are agreeing subjectful passives with the exception of one instance with a non-agreement form:

(43) [Visa portale vz.lt esanti medžiaga priklauso uab "Verslo žinios",]

jeigu nenurodyta kitaip.

unless Neg.state.pst.pp.na otherwise

'[All materials on the vz.lt portal belong to uab Verslo Žinios,] unless otherwise stated.'

4.2. Passive past tense

Past-tense forms of the dynamic passive make up 172 examples (61%) in our data set. They are easiest to identify, as they denote past events and the time of the event is often expressed by a definite time adverbial:

baisaus (44) Po 1963 m. žemės drebėjimo, terrible.gen.sg.m after year 1963 earthquake.gen.sg smarkiai miestas buvo sugriautas. city.nom.sg be.pst.3 severely destroy.pst.pp.nom.sg.m 'After a terrible earthquake in 1963, the city was utterly destroyed.'

Compared with resultatives, past-tense forms of the dynamic passive include, to a larger extent, subjectless passives (13 cases out of 161):

(45) [Tai pasakytina ir apie skulptūrą.] Čia buvo sugrįžta prie bronzos here be.pst.3 return.pst.pp.na to bronze.gen.sg kaip plastiškos medžiagos. material.gen.sg plastic.gen.sg.f

'[The same is true of sculpture.] Here there was a return to bronze as a sculptural material.'

Unlike stative passives, the lexical input of past-tense forms of the dynamic passive is not restricted to perfective verbs. Examples with imperfective verbs are rare in our sample, but they are attested:

todėl (46) Gal štabavietės. iriskaitant therefore including maybe headquarters.Nom.sG and Vilko fiurerio **būtent** guolį, Führer.gen.sg Wolf.gen.sg Lair.Acc.sg exactly tuose miškuose rengtos. those.LOC.PL forest.LOC.PL set up.pst.pp.nom.pl.f 'Maybe that's why the headquarters, including the Führer's Wolf's Lair, were set up in those forests.'

The form rengtos has a past habitual meaning and could be reformulated as $b\bar{u}davo$ rengiamos, with a past habitual form of the auxiliary and the present passive participle. On the other hand, omission of finite auxiliary as well as inferential meaning (making a guess) brings (46) close to evidential constructions.

As shown in Table 2, past passive participles with omitted auxiliaries constitute the majority of our sample. Although in the literature on the Lithuanian passive it is generally assumed that auxiliary omission is equivalent to its use in the present tense (cf. Geniušienė 2006, 30, Wiemer 2006a, 276), Nau, Spraunienė & Žeimantienė (2020, 58) draw attention to the fact that the auxiliary with past passive participle is often omitted in a past-tense context, where it would be incorrect to assume omission of a present-tense auxiliary. Our data also confirmed that the bare participle may be used with a past-tense value:

buvo (47) 1959 m. Veisiejų rajonas in_1959 PLN.GEN region.Nom.sG be.pst.3 panaikintas. 1960 m. Veisiejuose abolish.pst.pp.nom.sg.m in 1960 įsteigtas žemės ūkio technikumas. agricultural found.pst.pp.nom.sg.m technical school.NOM.SG.M [1975 m. Veisiejų žemės ūkio technikumas panaikintas.] 'In 1959 the Veisiejai region was abolished. In 1960 an Agricultural Technical School was founded in Veisiejai. [In 1975 the Veisiejai Agricultural Technical School was closed...']

(47) is a typical example where only the first passive has an overt pasttense auxiliary, while the subsequent instances have a zero auxiliary. In fact, in 40% of the preterite examples in our sample the past-tense auxiliary is left out.

Compared to stative passives, past-tense forms of the dynamic passive contain more instances of subjectless passives:

(48) Be to, buvo rekomenduota ištaisyti
in_addition be.pst.3 recommend.pst.pp.na correct.inf
likusius trūkumus,
remain.pst.pa.acc.pl.m shortcoming.acc.pl
[ypač susijusius su Banko tikslais.]
'In addition, it was recommended that the remaining shortcomings be addressed, [in particular as regards the Bank's objectives.]'

A small group of past-tense forms of the dynamic passive (7 examples) stand out from the rest of the cases. Although they have an overt past-tense auxiliary and formally should be categorised as passive preterites, they do not contain adverbials of exact time and they also exhibit meanings characteristic of the present perfect gram type. In some of these examples, reference is made to an event that occurred in the recent past and which has a result that holds at the moment of speech. In other words, they satisfy the definition of resultative perfect (Dahl & Velupillai 2013). Such cases may contain a relative time adverbial, such as *visiškai neseniai* 'quite recently' as in the first part of Example (39), repeated here for the sake of convenience as (49):

(49) Visiškai neseniai buvo išleista quite recently be.pst.3 release.pst.pp.nom.sg.f nauja šios knygos versija ... new.nom.sg.F this.gen.sg.f book.gen.sg version.NOM.SG 'A new version of this book ... has been released quite recently ...'

The resultative perfect interpretation is often triggered when the preterite of the passive is preceded or followed by present-tense forms, e.g., in regulations:

(50)	Jei	buvo	duoti		visi	
	if	be.рsт.3	give.pst.pr	P.NOM.PL.M	all.N	IOM.PL.M
	vežim	ui	$bar{u}$ tini		sutik	imai,
	shipment.daт		necessary.	NOM.PL.M	cons	ent.NOM.PL
	kilmė.	S	valstybės	narės		kompetentingos
	origir	1.GEN.SG	state.gen.sg	member.G	EN.SG	competent.NOM.PL.F

leisti institucijos turi teise institution.NOM.PL right.Acc.sG authorise.INF have.prs.3 turėtoiui vvkdvti vežima holder.DAT.SG carry out.inf shipment.Acc.sg 'If all the consents necessary for shipment have been given, the competent authorities of the Member State of origin shall be entitled

Other preterite forms of dynamic passives which have the value of present perfect convey experiential meaning, as they refer to types of events which occurred at least once (or have never occurred) over a period of time, extending up to the moment of speech (Dahl & Velupillai 2013). Such clauses may contain adverbials characteristic of experientials, such as *daug kartų* 'many times', *ne kartą* 'several times':

to authorise the holder to carry out the shipment."2

(51) [Negalime patikrinti, ar ši teorija teisinga, ar ne; kas žino,] pasaulis, kuris. kad manome. vra world.nom.sg think.prs.1pl that be.prs.3 REL.NOM.SG.M unikalus, galbūt anksčiau buvo maybe earlier unique.Nom.sg.m be.pst.3 perkurtas daug kartu. many times redesign.pst.pp.nom.sg.m '[We cannot verify whether this theory is correct or not; who knows,] the world that we think is unique may have been redesigned many times before.'

(52) IAE ne karta buvo išjungta, PN several times be.pst.3 shut down.pst.pp.nom.sg.f bet apie tai sužinodavome tik but about it find out.pst.hab.1.pl only žiniasklaidos. iš from media.gen.sg 'Ignalina Nuclear Power Plant has been shut down several times, but we only found out about it from the media.'

We know from studies on the active perfect (e.g., Daugavet & Arkadiev 2021) that in Lithuanian the past tense can in most situations be used as

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The example, as well as its English version, is from https://eur-lex.europa.eu/legal-content/LT-EN/TXT/?from=LT&uri=CELEX%3A32006L0117&qid=1626968929256 .

an alternative to the perfect. This is related to a lesser degree of grammaticalisation of the Lithuanian perfect in comparison with, e.g., the Latvian or English perfect. Examples (49–52) suggest that the same is true of the passive preterite—it freely encroaches upon the semantic domain of the perfect.

4.3. Passive perfect

51 examples (18% of the sample) were classified as instances of the present perfect gram type (or at least they could be interpreted as such). The identification of perfects was more complicated than identification of other types of constructions, as they are homonymous with stative passives. As illustrated in Table 3, auxiliary deletion is also the most common option with perfects:

Table 3. Use of auxiliary with passive perfects

be.prs pst.pp	PST.PP	Total
8	43	51

As mentioned earlier, a fully-fledged present perfect must have at least two types—the resultative and the experiential type. We will start our analysis with examples which we have categorised as resultative perfects.

Resultative perfects differ from object-oriented resultatives in that they are verbal— they denote a completed past event and focus on results of this event which are relevant for the present (cf. Aikhenvald 2004, 112). Here are some unambiguous examples:

(53) [Tokia įmonė tiki, kad vartotojai antrą kartą pirks dėl to, kad yra patenkinami jų poreikiai,]

0	taip pat	suformuota		palanki		
and	also	form.pst.pp.nom.	SG.F	favorable.nom.sg.f		
visuome	enės	nuomonė	apie	įmonę		
society.	GEN.SG	opinion.nom.sg.f	about	company.Acc.sg		
ir	jos	siūlomą		prekę.		
and	3.GEN.SG.	f offer.prs.pp.ac	C.SG.F	product.Acc.sg		
'[Such a	company	believes that consu	mers wil	l buy a second time be-		
cause their needs are being met,] and also a favorable public opinion						
has been shaped about the company and the product it offers.'						

The dynamic rather than resultative character of (53) can be established with the aid of tests, e. g., coordination with adjectives is not possible:

(53') *o taip pat suformuota ir
and also form.pst.pp.nom.sg.f and
palanki visuomenės nuomonė
favourable.nom.sg society.gen.sg opinion.nom.sg.f

'[Intended meaning]: and also public opinion was shaped and favourable.'

A preterital interpretation of (53) is also highly unlikely because there is no definite time adverbial and the passive verb form *suformuota* is used in a present context. The focus is on the result of a past event which is relevant for the present. Consider also (54):

(54) [Čilėje tęsiama 33 kalnakasių kėlimo iš avarinės šachtos, kur jie praleido 69 dienas, operacija—]

žemės paviršių specialia to earth.gen.sg surface.Acc.sg special.ins.sg kapsule iškeltas 14-asis šachtininkas. capsule.ins.sg lift.pst.pp.nom.sg.m 14th miner.nom.sg '[In Chile, the operation of lifting 33 miners from an emergency mine, where they spent 69 days, continues—] the 14th miner has been lifted to the surface with a special capsule.'

In (54) coordination with adjectives is impossible, and the past passive participle refers to an event, not a state. So it cannot be a stative passive. The preterital interpretation is also unlikely, as the previous clause refers to an ongoing rescue operation (the present tense is used), and the past passive participle denotes an event of the recent past, which has a result that is relevant for the moment of speech.

The perfect interpretation may be triggered by time adverbials, such as *dabar* 'now', *jau* 'already', *nuo praėjusių metų pradžios* 'since the beginning of last year':

(55)	Dabar	"Augimo rib	os"	yra	išverstos	
	now	Growth Limits		be.prs.3	translate.pst.pp.nom.pl.f	
	į	daugiau	nei	30	kalbų	
	into	more	than	30	language.GEN.PL	
	ir	parduota	arduota apie		onų vienetų	
	and	sell.pst.pp.na	about	t 10 mill	ion unit.GEN.PL	

'Growth Limits has now been translated into more than 30 languages and has sold about 10 million copies.'

(56) Tokia kova sukramtomosios gumos such fight.nom.sg with chewing gum.GEN.SG spjaudytojais jau pradėta irspitter.INS.PL already start.pst.pp.nom.sg.f also Vokietijoje. PLN.LOC

'Such a fight against chewing gum spitters **has already begun** (literally: 'has already been started') in Germany.'

(57) Nuo praėjusių pradžios metų since last.gen.pl year[PL].GEN beginning.gen.sg užfiksuota penkiolika psichologiniu record.pst.pp.na fifteen psychological.GEN.PL and fiziniai penki išpuoliai. five.NOM.PL physical.NOM.PL attack.nom.pl 'Fifteen psychological and five physical attacks have been recorded since the beginning of the last year.'

Some examples, which we have classified as perfects, are indeed ambiguous between a perfect and a stative passive interpretation:

(58) Nuomonėje hūti turi nurodyta, opinion.Loc.sg be.inf state.pst.pp.na must.prs.3 kokia apimtimi neivykdytos 2 what.ins.sg NEG.fulfill.pst.pp.nom.pl.f extent.INS.SG straipsnio nuostatos¹³. provision.NOM.PL Article.gen.sg 'The opinion shall state the extent to which the provisions of Article

2 have not been complied with.'
'Det skal af udtalelsen fremgaa, i hvilket omfang bestemmelserne i artikel 2 ikke er opfyldt.'

In ex. (58), the ambiguity is revealed by different English and Danish versions where the English version uses present perfect, while the Danish version uses present tense of the stative passive.

The example, as well as its English and Danish translations are taken from https://eur-lex.europa.eu/legalcontent/LT-EN-DA/TXT/?from=LT&uri=CELEX%3A31973L0023&qid=1626 509223001.

5. Variation in the expression of the experiential passive perfect

There were only a few clear cases of experiential perfect in our sample. The experiential perfect may be signalled by such time adverbials as *ne kartą* 'repeatedly, several times', *daug kartų* 'many times', *kol kas* 'so far':

- (59) "Zepter" produktai yra ne kartą
 PN product.NOM.PL be.PRS.3 more_than_once
 apdovanoti
 award.PST.PP.NOM.PL.M
 [už aukštą kokybę, puikų dizainą ir sveikatinimo bei žmonių gerovės
 skatinimą.] 'Zepter products have repeatedly won awards (literally
 have been repeatedly awarded) [for high quality, excellent design
 and the promotion of health and human well-being.]'
- (60) Kol kas Lietuvoie neatlikta Lithuania.Loc so far NEG.perform.PST.PP.NOM.SG.F visuotinė Tokiu objektų inventorizacija, general.nom.sg such.GEN.PL object.GEN.PL inventory.nom.sg [todėl tikslus jų kiekis nežinomas.] 'So far, no general inventory of such objects has been drawn up in Lithuania, [therefore the exact amount is unknown.]'

Unlike the resultative perfect, the experiential perfect of the passive may also be expressed by a structure where the auxiliary $b\bar{u}ti$ 'be' is used in the present perfect tense. Such cases are quite rare—a separate search for $yra\ buves$ PST.PP in LtWaCv2 only yielded 3 examples (see (61)), one of which is actually a perfect form of the stative passive (62):

- (61) [275 m laivo ilgis šiaurinėje uosto dalyje uosto tarnybų atstovų negąsdina –] buves vra ivestas 274 m be.prs.3 be.pst.pa.nom.sg.m dock.pst.pp.nom.sg.m 274 m ilgio tanklaivis. length.gen.sg tanker.nom.sg [The ship in the northern part of the port is 275 m in length overall, which does not frighten the representatives of the port authorities at all—] a tanker of 274 m in length overall has been docked before.'
- (62) [Pareiškėjo prašymu padavęs protestą ankstesnio Bendrijos prekių ženklo savininkas turi pateikti įrodymus, kad penkerius metus iki paraiškos Bendrijos prekių ženklui paskelbimo ankstesnis Bendrijos prekių ženklas Bendrijoje iš tikrųjų buvo naudojamas žymint prekes ar paslaugas, kurioms

jis įregistruotas, ir kurias savininkas mini pagrįsdamas protestą, arba kad buvo rimtų priežasčių ženklo nenaudoti,]

jeigu	tą	die	ną	ankstesnis
if	DEM.ACC.SC	day day	ACC.SG	earlier.nom.sg.m
Bendrijos		prekių		ženklas
commun	ity.gen.sg	wares	.GEN.PL	mark.noм.sg
yra	buvęs		regis	struotas
be.prs.3	be.pst.p.	A.NOM.SG	.м regis	ster.pst.pp.nom.sg.m
ne	mažiau	kaip	penkerius	metus.
not	less	as	five.acc	year(PL).ACC

['If the applicant so requests, the proprietor of an earlier Community trade mark who has given notice of opposition shall furnish proof that, during the period of five years preceding the date of publication of the Community trade mark application, the earlier Community trade mark has been put to genuine use in the Community in connection with the goods or services in respect of which it is registered and which he cites as justification for his opposition, or that there are proper reasons for non-use,] provided the earlier Community trade mark has at that date been registered for not less than five years."4

It is well known from the literature that perfects may develop evidential uses (Aikhenvald 2004, 112; Dahl & Velupillai 2013). The basic grammatical means of marking evidentiality in Lithuanian is using participles—both active and passive—instead of finite verbs (cf. Wiemer 2006b, 35). As argued by Holvoet (2007, 81–105), omission of finite auxiliary is an essential element of such constructions, as the participle is advanced to the position of the finite verb.

Interestingly, a search for the structure *buvęs* PST.PP (with omitted finite auxiliary) in LtWaCv2 did not yield a single instance of a perfect—the absolute majority of the examples were evidentials (mostly reportative, but also inferential), cf. (63–65):

(63)	Esama	legendos,	jog	Mindaugas su	ı	
	be.prs.pp.na	legend.gen.sg	that	PN.NOM W	ith	
	sūnumis	buvęs		nužudytas		
	son.INS.PL	be.pst.pp.nom.sg.m		kill.pst.pp.nom.sg.m		and

¹⁴ The example, as well as its English version, is from https://eur-lex.europa.eu/legal-content/ LT-EN-DA/TXT/?from=LT&uri=CELEX %3A62008TJ0148&qid=1627046058413.

palaidotasAgluonojebury.pst.pp.nom.sg.mpln.loc

'there is a legend that Mindaugas and his sons were killed and buried in Agluona'

(64) [Miltono apmąstymuose Derrida, kaip ir Borgesas, išskiria netikėtai juos sudominusią idėją: Homeras iš tiesų nebuvęs aklas poetas.]

Jis tik **buvęs**

3NOM.SG.M merely be.PST.PA.NOM.SG.M

pavaizduotas aklas,

depict.pst.pp.nom.sg.m blind.nom.sg.m

[siekiant pabrėžti poezijos ne vizualinę, o girdimąją prigimtį.]

'[In Milton's reflections, Derrida, like Borges, singles out an idea that unexpectedly intrigued them both: Homer in fact was not a blind poet.] He **was** merely **depicted** blind [to emphasise the audible rather than the visual nature of poetry].'

(65) [Kadangi "Pilkainyje" rašoma: tikt pereit miestus Naujų Prūsų,]

o Naujieji Prūsai [...] **buvę** and pln be.pst.pa.pl.m

įkurtitikpo1796 m.,taiirfound.pst.pp.nom.pl.monlyafter1796thenalso

kūrinys **buvęs parašytas**

work.nom.sg be.pst.pa.nom.sg.m write.pst.pp.nom.sg.m

ne anksčiau kaip 1796–1797 m. NEG earlier than in 1796–1797.

'[Since it is written in Pilkainis: you shall pass through the cities of New Prussia,] and New Prussia (Neuostpreussen) **was founded** only after 1796, the work **must have been written** not earlier than 1796–1797.'

5. Conclusions

The conclusion emerging from what was shown above is that the passive perfect exists in Lithuanian, but seems to have been arrested in its development. It does not have dedicated and regular means of expression and is in most cases homonymous with the object resultative. The experiential variety of the passive perfect may additionally be expressed by the present perfect form of the auxiliary $b\bar{u}ti$ followed by the past passive participle of the main verb ($yra\ buves\ ištremtas$ 'has been deported'), though this is rare. The same structure without a finite auxiliary ($buves\ ištremtas$ 'been

deported') is never used as a perfect—it has developed an evidential use. Both the resultative and the experiential variety of the passive perfect are attested, but the latter seems to be less frequent than the former.

The passive perfect in Lithuanian is most often expressed by the bare past passive participle in predicative position, which, depending on the context, may also have the meaning of present resultative, and also of preterite and sometimes of pluperfect of the dynamic passive. Thus, Lithuanian passives with past passive participles are highly polysemous. In many cases the temporal meaning of a passive clause can be disambiguated with the help of time adverbials and other contextual clues, but there are also cases where it is impossible and even meaningless to try to distinguish dynamic passive perfects from object resultatives in Lithuanian (cf. Geniušienė 2016, 81). That is, the relationship between the passive perfect and the present resultative passive is often one of vagueness rather than of ambiguity.

All this creates an impression of the passive perfect as a gram that has not come to full development. The dedicated marking consisting in the use of the perfect of the auxiliary could provide a regular means of expression for a fully-fledged, autonomous passive perfect, but it is, as noted, rare and never extends to the resultative perfect. Looking at it from the functional side, we see that perfect-type meanings, in the passive domain, oscillate between three types of marking: present-tense auxiliary + PST.PP, perfect auxiliary + PST.PP, and past-tense auxiliary + PST.PP. It is probably this last type of marking that yields a clue as to why the passive perfect appears to be stuck in its emergent status: it is the overall low degree of grammaticalisation of the perfect, including the active perfect, in Lithuanian. As can be seen from Kapkan's (2021) analysis of close-to-spoken Lithuanian language, the Lithuanian active perfect has not moved very far away from the subject resultative. As a perfect in a strict sense, it experiences a strong competition from the preterite, by which it can always be replaced. It has, however, regular means of expression. In the domain of the passive, on the other hand, this low degree of grammaticalisation of the perfect manifests itself also in the failure to develop regular means of expression.

To attempt an answer to the question why the Lithuanian perfect was arrested in its development is beyond the scope of this article. The

areal context in which Lithuanian developed in historical times could hardly have supported the development of a perfect, active or passive. It was mainly that of the North Slavonic languages, where the inherited Common Slavonic perfect was transformed, at an early date, into a past tense (a process that is only indirectly reflected in Old Russian texts due to Church Slavonic influence). To the extent that language-internal factors were in play, they could have affected the development of the active and the passive perfect in ways specific to each. To different extents in different Lithuanian dialects, active and passive participles were put to use for the formation of evidential constructions, as mentioned above. These constructions could well have split off the resultative at an early, prehistoric stage, though opinions on the rise of the Baltic evidential are divided. Whether the strongly developed evidential profile of Baltic participles could have been a factor in the weaker development of the resultative profile is a question worth considering, though a definitive answer is unlikely to emerge.

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ABBREVIATIONS

ACC — accusative, COMP — comparative, CVB — converb, DAT — dative, DEM — demonstrative, EMPH — emphatic pronoun, FUT — future, GEN — genitive, HAB — habitual, ILL — illative, IMP — imperative, INF — infinitive, INS — instrumental, IRR — irrealis, LOC — locative, NA — non-agreeing form, NOM — nominative, PA — active participle, PFX — prefix, PL — plural, PLN — place name, PN — personal name, POSS — possessive, PP — passive participle, PRS — present, PST — past, REL — relative pronoun, RPO — reflexive possessive, SG — singular, SUPER — superlative, VOC — vocative

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Future tense and narrativity

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This paper investigates the use of future tense in Latvian and Lithuanian in narratives that are located in the past. The data come from corpora of the contemporary languages as well as from folktales documented at the end of the 19th century. While the future is rarely used to tell a story, it does appear in certain functions in clauses that meet all or a part of the criteria for narrative clauses. We distinguish three groups of uses, with increasing degrees of narrativity: (a) imagined and evoked scenarios, including evoking habitual actions in the past; (b) a cluster of meanings around intention, imminence, and inception; (c) functions of text organization and grounding. Purely textual functions are only found in the folktales. Furthermore, switches to future tense in Baltic folktales show similar characteristics as switches from past to present tense in Romance languages.

Keywords: future tense, narrative, narrative clause, Baltic, Latvian, Lithuanian, Latgalian

1. Introduction

Kann vielleicht auch mit dem Indikativ des Futurums erzählt werden? (Delbrück 1897, 306–307)

It is common knowledge in linguistics that there is no one-to-one correspondence between time and tense. Nevertheless, not only pedagogical grammars, but almost all descriptions of tense in Baltic take as their starting point the alignment of tenses according to the time before and

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after the moment of speech. With respect to the future, there is good reason for this persistence: when talking about a time that lies ahead, the future tense is the most frequent choice in Latvian and Lithuanian, and verbs in the future tense in the great majority of uses refer to a time after the moment of speech or after another reference point. However, neither does this observation cover all uses of the future tense, nor can all other uses be explained as some kind of extension of the future's basic, temporal-deictic function.

In this paper we study some untypical uses of the future tense in Baltic languages. Our focus is on narratives, and our study is guided by two research questions. First, we establish in which functions future tense occurs in *narrative texts* in Latvian, Lithuanian, and (less in detail) Latgalian. Second, we ask whether future tense does occur in narrative clauses— clauses that advance the plot, that tell 'what happened then'; the concept will be explained in more detail in Section 2. We find that the Baltic languages are special in this respect. Studies on tense in narratives in Romance languages and English have mostly looked at the use of various past tenses and present tense, while future tense seems to be excluded from narrative clauses (cf. Fleischman 1990, 26). Most of the uses of future in narrative clauses that we found belong to a register that has disappeared from the modern languages: they are well attested in folktales which reflect an oral tradition of storytelling, collected at the end of the 19th and the beginning of the 20th century. Our findings therefore also corroborate Fleischman's thesis that the difference between orally performed texts (where the author is present) and those with an absent author may be crucial for tense uses (Fleischman 1990, 3; 63; author is here to be understood as by Goffman 1981). As there are no earlier and no later records of this particular register, we do not make any claims about the historical development of future functions. Our study, though using material from different time periods, is mainly synchronic.

For folktales, we used the digitalized versions of the collections *Latviešu* pasakas un teikas (LPT) and Jono Basanavičiaus tautosakos biblioteka (BTB),

² We did some small pilot studies with corpora of contemporary Latvian and Lithuanian to corroborate this statement and found, for example, that in clauses with reference to 'tomorrow' Latvian used future tense in 67% and Lithuanian in 60% of the clauses (samples contained 350 sentences). Present tense occurred in 14% (Latvian) and 21% (Lithuanian) of the clauses.

and for the modern languages, we used several corpora; see Sources at the end of this paper.

In Section 2 we give some background information on the future tense in Baltic, on tense use in narratives, and on the concept of narrative clause. Sections 3–5 describe different groups of functions of the future in narratives, with a discussion of 'how narrative' the respective clauses are. In Section 6 we summarize the results, discuss implications, and compare our findings to functions of tense switching observed in other languages.

2. Background

2.1. The future tense in Baltic

With respect to the formal expression of future tense, the Baltic languages stand out among their relatives and neighbors. They have a special future morpheme, which is not typical for the modern languages of Europe (Dahl & Velupillai 2013). Other contemporary European languages with a morphological future belong to the Celtic and the Romance branches. As is widely known, the inflectional future in western Romance languages developed in historical times from a construction with 'have' and an infinitive. The Baltic future marker, in turn, goes back to one or two morphemes that can be reconstructed for the Indo-European protolanguage (see Hill 2014 for the thesis of two independent sigmatic formations as the origin of the Baltic future). This persistence of an inherited future morpheme is rare within the Indo-European family. Furthermore, the Baltic languages show little if any signs of grammaticalization of constructions with a lexical or modal verb into a periphrastic future, processes which are well attested cross-linguistically (cf. Bybee, Pagliuca and Perkins 1991). The Baltic future tense thus defies the thesis of an inherent instability of the future, which Fleischman (1982) sees as an outcome of the "continual fluctuation of the balance of modality and temporality in future forms" (Fleischmann 1982, 31). It seems that in Latvian and Lithuanian, modality and temporality have peacefully coexisted in the future tense for centuries, and most likely will continue to do so. Delbrück (1897, 323) even assumes that the Baltic future and present tenses are used in the same way as they were in the Indo-European ancestor language, and Brugmann (1916, 785) acknowledges the impossibility of disentangling temporal and modal meanings in the oldest layer of reconstructed future uses.

Grammars of modern Latvian and Lithuanian name a range of meanings of the future tenses, using various categorizations and terms (see Endzelin 1923, 746–748; Jablonskis 1922, 148–149, 268–269; LKG II, 1971, 113–129; MLLVG I, 1959, 597-599; Valeckienė 1998, 276; Ambrazas 2006, 247–248; LVG2013, 477–478). A list and uniform treatment of all these functions is far beyond the scope of this paper. We will therefore only name some aspects that are important for our main interest, the use of future tense in narrative contexts.

Future tense occurs in represented and reported speech and thought, both in direct speech and in complement clauses of predicates designating communication and mental processes (speaking, writing, thinking, hoping, remembering, expecting). The reference point is the time of the reported or represented utterance or mental act. There are no special rules of *consecutio temporum* as found in Western European languages such as English, German, or French. The moment of reporting does not play a role. Thus, out of context it is not determined whether the promise reported in (1) is still valid ('he will call').

```
(1) Lithuanian (ltTenTen14, non-fiction)
   Jis
                  man
                              pasakė
                                            kad
                                                     paskambins
                              say.pst.3
                                            that
                                                     PVB.call.FUT.3
    3SG.NOM.M
                  1SG.DAT
             dešimt
    рo
                         minučių.
                         minute.GEN.PL
    'He told me he will call in ten minutes.' or 'He told me he would call
    ten minutes later.'
```

Reported or represented speech and thought may appear in narratives also in independent clauses, without an explicit introduction. Then the switch to future tense by itself signals that the clause is not part of the narration, but represents a character's speech, thought or intention; cf. (2).

(2)	2) Latvian (LVK2018; Vizma Belševica, <i>Bille</i> . Riga 1995)						
	Durvis	aizcirtā	S,	un	istabā		
	door.nom.pl	slam.ps	T.3.RFL	and	room.LOC.SG		
	iešņirkstējās		no	patahtes			
	PVB.scratch.PST.3.1	в.scratch.psт.3.RFL		under_sofa.gen.sg			
	velkamais pull.prs.pp.nom.sg.m.def		čemod	āns.	Ies	projām.	
			suitcase.nom.se		до.гит.з	away	
	Vecāmāte		vienmēr	tā.			
	grandmother.nom	I.SG	always	so			

'The door banged, and the scratching noise of a suitcase being pulled from under the sofa resounded in the room. [She] **would go** (literally: will go) away. Grandmother [was] always like that.'

In extract (2) it is not clear whether *Ies projām* '[she] will go away' represents an announcement made by the grandmother or an assumption of the narrator, the granddaughter experiencing the scene. This shows the well-known affinity of reported speech to evidential and epistemic meanings. Clearly epistemic is the use of the future perfect to express conjectures about past events, as in (3) and (4); on this function see also Daugavet & Arkadiev (2021). Similar uses are well attested in other European languages.

(3) Latvian (LVK2018; Egīls Ermansons, Mala. Rīga 1999)

Kādēļ	es		vēl	esmu		$dz\bar{\imath}vs?$
why	1SG	.NOM	stil	l be.prs.1sc	3	alive.nom.sg.m
Anete		būs		aizmirsusi		man
Anete.nom	.SG	be.ғит.з		forget.pst.pa.sg.	F	1SG.DAT
uzlikt		cilpu		kaklā.		
PVB.put.INI	3	loop.acc.s	SG	neck.Loc.sg		
–						

'Why am I still alive? Anete **must have forgotten** to put the loop around my neck.'

(4) Lithuanian (ltTenTen14)

Matyt	bus	pasigavęs		kažkokią						
apparently	be.FUT.3	catch.rfl.pst.pa.nom.sg.m		some.ACC.SG						
žarnyno	bakteriją	su maist								
bowel.acc.sg	bacteriun	n.Acc.sg with	food.in:	S						
ar vander	ıiu.									
or water.	water.ins									
'Apparently, he must have caught some intestinal bacterium with										

'Apparently, he **must have caught** some intestinal bacterium with food or water.'

The uses of the future described so far are not bound to narrative texts, and the clauses in which they appear are non-narrative: they are not part of the story itself, but express reflections by the narrator or a character.

2.2. Tense use in narration

The special use and different effects of tenses in storytelling have long been a topic of linguistic inquiry, but future tense is rarely considered in this context. Noteworthy is Delbrück's (1897) treatment of this topic in the *Grundriss der vergleichenden Grammatik der Indogermanischen Sprachen* and Brugmann's (1916) elaborations in the second edition of this work—the comprehensive compendium of linguistic knowledge at the turn of the 19th/20th century. Delbrück devotes a special section to the use of future tense in narratives in Indo-European languages (*Das Futurum in der Erzählung*, Delbrück 1897, 306–308). He starts by summarizing the differences in the use of imperfect, aorist, and present tense, and adds the question whether future forms may also be used in narrating:

If one wants the listeners to imagine the development of events, one chooses the imperfect; if one only wants to state that something has happened, the aorist or (in Old Indic) the perfect is chosen. If the listener is meant, in a manner of speaking, to take a seat in front of the scene of action, one uses present tense. May it be possible to narrate with the future indicative as well? (Delbrück 1897, 306–307, our translation) ³

Almost 100 years later, Suzanne Fleischman in her seminal work on tense and narrativity in Romance gives a similar account, using the metaphor of 'narrating personae', each of which is associated with a tense-aspect category found in narration: the historian with the preterit (the *passé simple* in French), the memorialist with the perfect (*passé composé* in French), the painter with the imperfect (*imparfait*), and the performer with the present tense (Fleischman 1990, 43–44). The possibility of using future tense in narration is not considered by Fleischman. Delbrück in turn does not arrive at a definite answer to his question but concludes with caution that the Indo-European future tense *may* also have had the function "to name an expected link in a chain of narrated events, somewhat as a preterit" (Delbrück 1897, 309, our translation)⁴.

^{3 &}quot;Will man, dass der Zuhörer sich in der Phantasie die Entwicklung der Ereignisse vorstelle, so wählt man das Imperfektum; hat man lediglich die Absicht zu konstatieren, dass etwas geschehen ist, den Aorist oder (im Altindischen) das Perfekt. Wenn der Zuhörer sich gewissermassen im Geiste als Zuschauer vor der Bühne des Geschehens setzen soll, so gebraucht man das Präsens. Kann vielleicht auch mit dem Indikativ des Futurums erzählt werden?" (Delbrück 1897, 306–307)

⁴ "[...] konnte vielleicht auch gebraucht werden, um ein zu erwartendes Glied in einer Kette von erzählten Ereignissen zu bezeichnen, also gewissermassen präterital." (Delbrück 1897, 309)

What unites Delbrück's and Fleischman's accounts is the idea that tenses are used to different effects when telling a story. This seems to be more fruitful than the approach by Benveniste ([1959] 1966) and Weinrich ([1964] 1985), who propose a division between tenses according to discourse types or modes, opposing a narrative mode to a communicative or commenting mode. For more on this approach, problems it poses and further developments, see Fleischman (1990, 78-82); Carruthers ([2005] 2017, 26-29). Different approaches to constituting narration as a discourse type are summarized by Wiemer (1997, 1–38).

An alternative to thinking of narrativity as characterizing whole texts or genres is to associate it with smaller textual units such as sentences, or with syntactic clauses. In his analysis of grounding in narratives, Hopper (1979) distinguishes between foregrounding and backgrounding clauses and points out associated differences in the use of tenses. His foregrounding clauses are the actual narrative clauses, which "relate events belonging to the skeletal structure of the discourse", while backgrounding clauses provide "supporting material which does not itself narrate the main events" (Hopper 1979, 213). According to Hopper's conclusions, it is backgrounding clauses where we find the greatest repertoire of tenses, including pluperfect, future, and others, while foregrounding clauses may get by with one tense, typically a past tense (238–239).

Hopper's equation of foregrounding clauses with narrative clauses poses problems for more detailed analyses of grounding in narratives, for which a binary opposition of background vs foreground is insufficient (cf. Wehr 1984, 97–98; Givón 1987). However, his characterization of narrative clauses is useful and in line with that of most other researchers in the field. In their seminal paper, Labov and Waletzky (1967) establish as the crucial feature of narrative clauses that they are sequential; their order cannot be changed without changing the story. In simple terms, a narrative clause gives answers to the question 'And then?'. The importance of *narrative context* for tense systems is also highlighted by Dahl (1985, 112–114). Based on Dahl's and other previous work, Fleischman develops the following definition of narrative clause, which we adopt for our study:

A narrative clause is one that contains a unique event that, according to the narrative norm, is understood to follow the event immediately preceding it and to precede the event immediately following it. (Fleischman 1990, 109)

Defining features of narrative clauses are thus: temporal order, immediate sequence, and uniqueness of events. Furthermore, as established by Hopper (1979), narrative clauses advance the plot, make up the 'skeleton' of the story, and contain foregrounded content. Individual clauses within a text may show all or only some of these characteristics, and this makes *narrative clause* a gradient concept. Also, some of the criteria, such as immediateness or foregrounding, are gradient in themselves. Our task in the following sections 3–5 will be to determine which criteria defining narrative clauses are met by clauses with the future tense—thus, we ask *How narrative are clauses with future tense*?

Within a story, non-narrative clauses with future tense typically appear in comments and evaluations by the narrator, in represented speech, thoughts, or feelings of protagonists, and sometimes in descriptions. It is however not always so clear which clauses in a narrative text belong to the 'skeletal structure' and which provide 'supporting material', background information or evaluations, which clauses belong to a chain of temporally ordered events and which stand outside the timeline. In the following three sections we will discuss several doubtful cases.

3. Predicted, imagined, and evoked scenarios

In the academic grammar of Latvian published in 2013, 'narrative tense' ($v\bar{e}st\bar{i}juma\ laiks$) is mentioned as one of the uses of the future tense (LVG2013, 478; also Kalnača & Lokmane 2021, 237). What the authors have in mind here is text passages in narratives where a narrator devises a future situation as they imagine or predict it. Modern Latvian (and Lithuanian as well) seem not to differ in this use from other contemporary European languages. While it is technically possible to write a whole story in future tense, this is highly unusual and only found in modern experimental writing (cf. Fludernik 2009, 52). Rather, imagined situations are devised in a paragraph within a narrative whose main tense is past or present. It is questionable whether these text parts are narratives (stories) with narrative clauses. Most often, it is not an imagined story that is told, but rather a description of a situation, where actions and processes are named without strict temporal order. An example from a Latvian novel found in the corpus is given in extract (5).⁵

⁵ As this extract is rather long and the only grammatical phenomenon to note here is the use of future tense, we refrain from morphological glossing, but translate the future forms with future forms in English.

(5) Latvian (LVK2018; Dace Priede, Kamenes uz stīgām. Riga 1997) **Būs** viss kā bijis. **Klausīsies** viņa gudrajās runās par mūziku, kura pašai būs liegta. Tai vienkārši neatliks laika. Ja arī atļausies ko iebilst, tad saņems atbildi—ko tu saproti. Viņš ieslēgsies istabā un klausīsies ierakstus, bet viņa klās viesību galdus, jo Maldis ir sabiedrisks cilvēks. Pie tiem viņa nesēdēs, jo būs jāsavāc bērni, lai nemaisās pa kājām. Jāmazgā trauki un jāpasniedz deserts. Viņa būs tikai galda meita. Vīri, kas sēdēs ap galdu, slavēs vinas gatavotos ēdienus un Maldi.

'Everything will be as before. She will listen to his clever talk about music, which will be denied to herself. There simply will be no time left for it. Even if she will dare to express an observation, she will get the answer – what do you understand. He will shut himself into the bedroom and will listen to recordings, while she will lay the tables for a party, for Maldis is a sociable man. She will not sit down with them, for she will have to take the children so they are not in the way. She must do the dishes and serve the dessert. She will be only the table girl. The men, who will sit at the table, will praise her dishes and Maldis.'

Though the narrator may locate such scenes at a definite time posterior to the current time of the narrative (this evening, the next day), the future tense gives them a flavor of timelessness. While the named events may be in temporal order, they do not immediately follow each other and do not constitute a plot. Furthermore, the predicted scenario is often based on prior experience of the narrator. In extract (5), this is explicitly said at the beginning ('Everything will be as it has been'). The extract therefore does not talk about unique events, but refers to a type of events, whose recurrence is predicted for the future. This links this use of the future to evidentiality and epistemic modality.

Future tense may likewise be used for recurrent scenarios without a prediction for the future. In extract (6) from another contemporary Latvian novel, the scenario is located in general time ('always').

(6) Latvian (LVK2018; Dace Rukšāne, Beatrises gultas stāsti. Riga 2002) Stīvens man vienmēr bijis ārpus outside Stīvens.nom always be.pst.pl.sg.m 1SG.DAT laika notikumiem. Lai ko un event.DAT.PL time.gen.sg and PTC what.acc pārdzīvotu, lai nepatikšanās es experience.IRR PTC which.Loc.pl.F trouble.LOC.PL 1SG.NOM uzdzīvēs vai iekultos. viņš vienmēr revelry.loc.pl or get_into.IRR.RFL 3SG.NOM.M always

ir	bijis		tas,	kurš
be.prs.3	be.pst.	PA.SG.M	DEM.NOM.SG.M	rel.nom.sg.m
apsēdīsies		man	līdzās,	stāstīs
sit_down.fu	T.3.RFL	1SG.DAT	beside	tell.fut.3
visjaukākos		stāstus	un	smaidīs,
nicest.ACC.PI	L.M	story.ACC.P	L and	smile.FUT.3
		_		

[nosakot:- Ai, Beatrise, paskaties, cik pasaule tomēr ir skaista.]

'Steven [has] always been to me beyond time and events. Whatever I may experience, whatever troubles or revelries I may get myself into, he always has been the one who would sit down at my side, would tell the nicest stories, and would smile, [saying: Aye, Beatrise, look how beautiful life is after all.]'

In (6), the present perfect is used besides the future, which is another clear indicator that the passage is not narrative, as the perfect in Latvian is never used to tell a story.

In Lithuanian, we find future tense also for habitual actions located in the past, alongside the past or the past habitual tense (cf. LKG II, 127). Jablonskis writes in his *Lithuanian Grammar* that this use occurs in spoken Lithuanian, especially in the Samogitian dialect, where it is combined with the particle *liuob* (Jablonskis [1922] 1997, 149, 269). In modern standard Lithuanian, we often find the discourse marker $b\bar{u}davo$ with the habitual use of the future, a pragmaticalized form of the habitual past tense of $b\bar{u}ti$ 'be', cf. (7). The description in (7) starts with past tense, then switches first to future and then to present tense.

(7) Lithuanian (DLKT, Paul Koeck, *Po siestos: novelės*, translated into Lithuanian by Antanas Gailius. Vilnius, Tyto Alba 2004)
[Visados ir viską kuo puikiausiai spėjo [PST], tvarkingai laikėsi [PST] kontrakto,]

išgers,	būdavo	o, stiklinę	raudonojo
pvв.drink.fuт.3	PTC	glass.Acc.sg	red.gen.sg.def
vyno	su	mineraliniu	vandeniu
wine.gen.sg	with	mineral.ıns.sg.м	water.ins.sg

[—ne, kavos nenoriu, ačiū, paskui neužmigsiu—ir važiuoja [PRS] sau namo.] '[He always managed to do everything perfectly well, kept the contract,] he would drink, PTC, (= 'it happened many times that he drank') a glass of red wine with mineral water—no, thank you, [I don't want coffee, otherwise I won't sleep at night —and drove (literally: drives) home.]'

A parallel to this construction is found in Russian (and other East Slavic languages), where the discourse marker byvalo in combination with the perfective future tense form may be used for reference to a habitual past event (Sitchinava 2013, 291–293; Stojnova 2016). This discourse marker has an etymology similar to Lithuanian $b\bar{u}davo$: it stems from a past tense form of the existential verb byvat' 'be present from time to time'. This development is found in all East Slavic languages (Sitchinava 2013, 289). In Polish, the particle bywalo in combination with future tense (non-past of a perfective verb) is occasionally found in narrative texts from before 1940, by authors from the eastern parts of Poland. The construction can therefore count as an areal feature.

Another particle found with the future tense for habitual actions in Lithuanian is *kad* (see also Section 4). In (8), it signals the abrupt beginning of a very intensive event within a scenario depicted as recurrent. As in (7), the future tense in (8) is surrounded by past and present tense forms.

(8)	Lithuan	ian (DLK	т, Birutė́ į	Junuškaitė,	Didžioji sa	<i>la</i> 11 d., Vil1	nius, Vaga 1999)
	Seniokas	S	ilgai	pykti		nemokė	jo.
	old_ma	n.nom.sc	s long	be_a	ngry.INF	NEG.be	_able.psт.3
	Pavaiks	ščios,	parėl	kaus,	išsitra	uks	ne
	рvв.wal	k.fut.3	PVB.S	hout.FUT.3	PVB.RF	L.pull.ғит.	3 NEG
	itin	švarią		nosinę,		kad	pradės
	very	clean.A	CC.SG	handkercl	nief.nom.sc	G PTC	start.ғит.з
	pūsti	į	ją,	k	ad im	S	trinti
	blow.ini	F into	3.AC	C.SG P	гс sta	rt.fut.3	rub.1NF
	savo	ir	taip	jau	raudo	ną,	didžiulę
	RPOSS	and	so	already	red.Ac	CC.SG.F	huge.acc.sg.F
	kuprotą		nos	sį —	jums	visa	
	humped	l.acc.sg.:	F nos	se.ACC.SG	2PL.DAT	all.no	M.SG.F
	baimė		išgaruojo	ı	ir	pasigirsta	
	fear.non	A.SG	evapora	te.prs.3	and	PVB.RFL.b	e_audible.prs.3
	kikenim	as.					
	giggling	2.NOM.SG					

'The old man was not able to be angry for a long time. He [usually] walked and shouted for a while, [then he] pulled out his not very clean

⁶ We found examples in novels by Wasyl Stefanyk (born 1871 in Galicia, now Ukraine) and Bruno Jasieński (born 1901 in South Eastern Poland, spent his teens in Russia).

handkerchief and **suddenly started** blowing into it [very intensively], **suddenly started** rubbing his already red, huge, humped nose—and all your fear evaporated, and the pupils started giggling.'

Although the clauses in extract (8) contain events that immediately follow each other, they are not narrative clauses according to Fleischman's definition because they do not fulfill the criterion of relating *unique* events.

What extracts (6)–(8) have in common is that the passage told in the future tense gives an example for a point the narrator makes about a person (in other examples also an object, or a weather phenomenon). They serve as illustrations. The switch from past to future tense signals the beginning of such an illustration. It thus has a textual function in addition to the function of expressing habituality, which belongs to the domain of event quantification and thus is related to the grammatical category of aspect (cf. Hengeveld 2011). In this function, the future tense loses its temporal meaning, as also remarked by Wiemer (2021, 396). It neither points to a time after the moment of speech (it is *sprechzeitenthoben* 'removed from utterance time' in the terminology used by Wiemer), nor to a time posterior to another event.

A different function which may be related to the imagined future scenario as it was exemplified in extract (5), is the announcement of an individual event that, as the speaker knows, will follow events that have been located in the past. This function may be called *prospective* or, using a term from narratology, *proleptic*. In this use, which is rare in Baltic, the future tense points to a time posterior to another event, but anterior to the utterance time.

One pattern where a proleptic use may be observed contains a supplementary relative clause.⁷ Consider extract (9) from a blog where the author writes about her life in Turkey. She has just come home from a morning walk. The narrative tense is present tense.

(9) Latvian (Emuāri)

es	uzlieku	vārīties	гири,
1SG.NOM	PVB.put.PRS.1SG	cook.inf.rfl	soup.ACC.SG

We use the term *supplementary relative clause* as in Huddleston *et al.* (2002), rather than the more common term *non-restrictive relative clause*. The distinction between restrictive and non-restrictive relative clauses is of minor importance in Latvian grammar.

kas rakstot **pāries** pāri un rel.nom write.cvb spill_over.fut.3 over and **appludinās** plīti.

flood.fut.3 stove.acc.sg

'I put on soup to cook, which **would/will spill** over and **flood** the stove while [I was/am] writing.' (or 'spilled over', 'overflew'; literally: 'will spill over', 'will flood')

The relative clause in extract (9) can be seen as part of the narration, answering the question 'What happened then?'. The definition of narrative clause is met for the greatest part: the spilling over of the soup is a unique event that follows the previous action of putting on soup to cook. However, it does not follow immediately—something else happens between the two events, for example, the author sits down to write. The sentence in (9) concludes the text for which the author chose the title "10 minutes of a Saturday morning in Istanbul". The event depicted in the relative clause lies outside these 10 minutes—it is a look ahead, beyond the story. Thus, these clauses are not 'fully narrative', but they are 'more narrative' than the clauses expressing habitual situations in (6–8).

Examples such as (9) are rare in the corpora, and we did not find a comparable example from literary fiction. They were found a bit more often in the Latvian corpus of blogposts Emuāri. Blogposts as a register often display different degrees of narrativity, being between the poles of 'typical narrative' and 'typical report' that Vincent & Perrin (2009) establish in their analysis of stories/reports about one's day in conversation. Following Labov & Waletzky (1967) and later work by Labov, a distinguishing feature of narratives is that they 'have a point'. In reporting one's daily activities, be it in a conversation or a blogpost, this point may be less clear or even lacking. In travel blogs, for example, the mere listing of activities may be the point of the text. Nevertheless, individual events are temporally anchored and ordered as well as foregrounded, which makes the clauses narrative clauses. In extract (10) the whole day is reported in one sentence with three independent clauses, ending with a supplementary relative clause in future tense that points ahead to the next episode. In this extract, the narrative tense is past tense.

(10) Latvian (Emuāri)

Nākamajā dienā ļoti fiksi apstaigājām

next.loc.sg day.loc.sg very fast walk around.pst.ipl

vēsturisko		cent	ru,	iegājām	ı visos
historical.Acc.	SG.DEF	cent	er.Acc.sg	enter.p	ST.1PL alllocplm.def
lielākajos		vai	smukāko	ijos	tempļos
bigger.loc.pl.M	1.DEF	or	prettier.	LOC.PL.M.DE	ғ temple.loc.pl
kurus	atra	dām,	un	pēcpusa	lienā
REL.ACC.PL.M	find	PST.1PL	and	afterno	on.LOC.SG
devāmies	uz	autobi	ısu,	kurš	$mar{u}s$
head.pst.1pL	to	bus.Ac	CC.SG	REL.NOM.SO	G.M 1PL.ACC
vedīs	uz	Chiang	g Kong —	Laosas	
carry.FUT.3	to	Chian	g Kong	Laos.ge	N.SG
robežpilsētu.					

border town.Acc.sg

'The next day we made a very quick round through the historical center, went into all the larger or prettier temples that we found, and in the afternoon we headed for the bus (,) which **was to bring** us to Chiang Kong, the border town to Laos.'

The text following extract (10) makes it clear that the author and their companion indeed boarded the bus and arrived at their goal. It is unlikely that the future tense was used to express non-factuality or doubt. There is also no sign in the text that the sentence in (10) was written before boarding the bus, so a deictic interpretation of the future tense is equally unlikely. However, a perusal of the corpora showed that this use of the future tense is rare and therefore marked in some way. More often, prolepsis in narratives or reports does not trigger a tense switch, instead the author continues using the past tense.

The proleptic use of the future is equally rare in pure reports. An example from Lithuanian was found in the Academic Grammar, cf. (11). The report is given in present tense.

(11) Lithuanian (LKG II, 129)

Rugpjūčio	pradžioj	e	Gogenas		ima	
August.gen	beginni	ng.Loc.sg	Gauguir	1.NOM	start.pr	5.3
jau	keltis	iš	lovos	Pc	amažu	
already	rise.INF.	out_of	bed.gen	.sg g	radually	
jis	vėl	įpranta		vaikščio	ti.	
3SG.NOM.M	again	get_used	l_to.prs.3	walk.ın	F	
Paskutinėm	is mėnesio	di	enomis	įstengia		ir
last.ins.pl.F	month.g	en.sg da	ay.INS.PL	be_able_t	o.PRS.3	also
bent	kiek	tapyti.	Tačiau	. ši		
at_least	a_little	paint.INF	but	DEM.	NOM.SG.F	

rugpjūčio pabaiga jam **bus** August.gen end.nom.sg 3sg.dat.m be.fut.3 aitri

fierce.nom.sg.f

'In early August, Gauguin starts to get out of bed... Gradually, he gets used to walking again. In the last days of the month, he is able to paint at least a little. But this end of August is going to be fierce for him.'

The uses of the future discussed in this section have in common that they often may be translated into English by the conditional. English uses the conditional (optionally, just as the future in Baltic) both for past habitual and for prolepsis. The following examples from the British National Corpus illustrate habitual (12) and proleptic (13) uses. Prolepsis in English may further be expressed by *be to*, which in turn is polysemous and sometimes vague between prediction and obligation.

(12) English (BNC) Every day of the season she would travel in her carriage and six to Ashdown Park on top of the downs, where she would course for hares with her magnificent greyhounds and walk for twenty-five miles.

(13) English (BNC)

After two courses of treatment, he was driven home to Wiltshire, where he would remain until the start of the third course.

4. Intention, imminence, and inception

The three meanings discussed in this section are among those typically expressed by 'go'-futures in English (be going to do something) and especially French (aller faire quelque chose 'go to do something'); cf. Fleischman (1982, 18–19). They may be ordered with respect to factuality. The first is intention—an action that is only intended has not taken place and whether it will indeed happen is unclear. Second, an event seen as imminent or 'about to happen', likewise has not yet taken place, but is strongly expected; it will happen if the normal course of events is not disturbed. Other terms for this are prospective (Comrie 1976, 64–65) and proximative. Third, inception (also inchoative) means that an event has started and will, if not interrupted, continue in the future. In texts, these three meanings cannot always be clearly distinguished, and a given future form may combine more than one meaning.

Clauses expressing pure intention are not narrative clauses but provide background information. Clauses referring to the beginning of an action usually are narrative clauses, as they refer to actions that happen. With imminence, the question is similar to the much-discussed status of negated predicates (cf. Fleischman 1990, 110). Fleischman (ibid.) argues that some negated clauses are narrative, as they advance the plot (they are foregrounded in Hopper's sense). We hold that the same is true for predicates with an imminent meaning which are part of a temporal sequence, as the following examples will show.

In the modern Baltic languages, we find a combination of (or vagueness between) intention and imminence. Imminence alone is expressed by a construction with a lexical verb, for example Latvian *taisīties* 'be about to do/happen'. This verb may appear in various tenses and can have an inanimate subject, for example *Saule jau taisījās rietēt* 'the sun was about to set' (LVK2018). When imminence is expressed by a future tense, the expected action is intended by a human subject. Furthermore, in all examples that we found in the corpora (there were only a few), the intended, expected action was not carried out. It thus seems that this construction is developing an *avertive* meaning: a highly expected action does not happen (see Arkadiev 2019 for another avertive construction in Lithuanian). Typically, a future expressing imminence occurs in parts of narratives told in present tense and is followed by a clause starting with 'but'. In Lithuanian and Latgalian, the construction contains the particle *jau*. Extract (14) from Lithuanian shows all the characteristic features.

(14) Lithuanian (DLKT, Šimtmetis lyg mirksnis, Vytautas Girdzijauskas, Lietuvos rašytojų sąjungos leidykla, 1997) [Susivynioja, šiaip taip išvelka tuos patiesalus į kiemą,] užmeta ant žėglo jau PVB.throw.PRS.3 crossbar.gen.sg and PTC on tvos. bet pajunta, kad visos but PVB.feel.PRS.3 that all.nom.pl.f beat.ғит.з jėgos iau pasibaigusios strength.NOM.PL already PVB.RFL.end.PST.PA.PL.F '[he/she wraps up the mats and with great difficulty carries them into the yard,] throws them on the crossbar and is about to beat them but then feels that all his/her strength has gone'

In extract (15) from Latgalian, the story/report is mainly told in past tense. The extract contains two future forms. The first seems to express mere intention, while the second is part of the same construction as in the Lithuanian example. Again, the clause is followed by 'but', and the tense is switched to present tense.

(15) Latgalian (MuLa; blogpost from http://naktineica.lv/index. php/2009/02/13/medeibys/)

[Izkuopu [PST] augšys stuovā, dūmuoju [PST]—mož kaidom drēbem atlaidis. Drēbis lātuokys kai Viļānu tiergā, tok saprotu [PST], ka maņ tuos lupotys napateik [...]]

Apmešu i rinči jau īšu PVB.throw.FUT.1SG circle Acc so and PTC go.FUT.1SG prūm, pieški nazkaida kosmetikys away but suddenly some.NOM.SG.F cosmetics.GEN.SG prīškā. puordevieja skrīn sales woman.nom.sg ahead run.prs.3

'[I went up to the second floor and thought—maybe some clothes [will be] at a discount. The clothes [were] cheaper than at the market in Viļāni, but I recognized that I didn't like these rags [...]]

I **intended to make** a round and **was about to leave**, **but** suddenly some cosmetics sales-woman got in my way.'

For Latvian, example (16) was found in a recently published interview. After an orientation in past tense, the story is told in present tense. There is no particle *jau*, and the use of the future tense is vague between intention and imminence. The next sentence shows that the intended action was not realized.

(16) Latvian (Interview with singer Elīna Garanča, Ir 14.10.2020) Smieklīgs gadīiums. Kad vēl nebiia funny.Nom.sg.M incident.Nom.sg when NEG.be.PST.3 yet Covid-19, aizbraucu koncertu Londonā. concert.Acc.sg London.Loc.sg Covid-19 to PVB.go.PST.1SG No ieeiu dušā. of PVB.go.PRS.1SG shower.Loc.sg morning.GEN.SG krāsošos. Attaisu krāsu maku рvв.make.prs.1sG color.GEN.PL make up.FUT.1SG. bag.Acc.sg nav ne ēnu. ne tušas. NEG shadow.gen.sg NEG.be.PRS.3 mascara.GEN.SG NEG zīmula. ne pencil.gen.sg NEG 'A funny incident. Before Covid 19, I went to London for a concert. In

the morning I took (literally 'take') a shower and intended to / was

about to make up (literally: 'will make up'). I opened (literally: 'open') the make-up bag—there was (literally: 'is') no shadow, no mascara, no pencil.'

Examples (14–16) show that clauses with an imminent future tense form fulfill several criteria for narrative clauses: they express unique events that are depicted as immediately following the previous event. However, as they do not happen, the next clause does not tell what happens after the announced event, but what happens after the *intention* to carry out this activity, and/or names the reason why it was not carried out.

In addition to expressing intention and imminence, the future tense in extracts (14–16) has textual functions: it marks a turning point of the story and creates suspense.

In the modern languages, non-factuality is present in all examples we found. The close parallel of the contemporary Baltic languages suggests that this construction is inherited, although the counterfactual meaning component may be a more recent development. In the folktales documented in the 19th century, future forms with imminent meaning may refer to expected, intended events both when they are cancelled and when they indeed happen. The imminent (not avertive!) meaning of future tense in narratives is mentioned in the Latvian grammar by Endzelin (1923, 747), while grammars of Lithuanian (e.g. Jablonskis 1922, LG1971, Ambrazas *et al.* 2006) do not mention this function.

Furthermore, future tense is also used when an action has started (inceptive meaning). Extract (17) from a Latvian folktale shows two different values on the scale between intention and inception⁸.

(17)	Latvian	(LPT, <i>L</i>	āča de	ēls, 9;	Ezere, Sou	ther	n Cour	land, 1	879)	
	Priežurā	vējam		sirds		vie	etā,		iesmels	
	fir_rippe	r.DAT.S	SG	hear	t.nom.sg	pla	ace.Loc	c.sg	PVB.scoop	.FUT.3
	traukā		un	do	s;	bet	līd	z	šis	
	bowl.roc	c.sg	and	gi	ve.FUT.3	but	wh	ien	DEM.NOM.	SG.M
	palieksi	es	1	oie	katla,		tā	vīrelis		
	рvв.bend	l.fut.3.	t	o	pot.gen.sg	;	so	little_	man.nom.	SG
	no	mugui	ras		puses		čuprī		un	nu
	from	back.c	SEN.SC	3	side.GEN.SC	3	nape.i	LOC.SG	and	now

⁸ Endzelin (1923, 747) cites this example as part of a longer extract which shows different uses of the future tense in parratives.

-

dod un dod, cik ieiet.
give.PRS.3 and give.PRS.3 how_much PVB.go.PRS.3

'The fir-ripper [had] his heart at the right place. He **intended to scoop** [gruel] into a bowl and **to give** [it] [to the man who had asked for it]. But as soon as he **started to bend** down to the pot, the little man [sprang] from behind onto his neck and beat him with all his might.'

In (17), the first two future forms (*iesmels* 'will scoop', *dos* 'will give') express intended actions that as such are non-factual (no commitment as to whether these events happen), but the following *palieksies* 'will bend down' is factual'—the man in the tale indeed bent down when his adversary attacked him. Here the future highlights the initial phase of an action or process (inceptive meaning) that ends unexpectedly.

Future tense in Baltic folktales is especially frequent with verbs of motion, and with these verbs the meaning often oscillates between intentional and inceptive. Typically, a form such as Latvian *ies*, Lithuanian *eis* 'go.fut.3' expresses that the protagonist has made up their mind to reach a goal and sets off towards it. Whether they reach it is revealed in the following text. Consider (18) from Lithuanian: the hero wants to join a group of people and sets off towards them, but they run away from him, so he ultimately does not reach his goal. Nevertheless, the intended motion has started, so the predicate is factual.

(18) Lithuanian (BTB; Apie kalvio sūnų. Telšiai, Northern Samogitia, 1904) [Vienas kalvis turėjo [PST] sūnų milžionį. Sūnus buvo [PST] toks stiprus, kad jau 3 metų galėjo [PST] su mešku grumtis. Kaip jis suaugo į 12 metų, tėvas nukalo [PST] jam lazdą nuo 12 pūdų ir išleido [PST] į svietą tarnautų.] Sūnus išejo. Eidamas keliu, pamatė, way.ins.sg son.NOM.SG leave.pst.3 see.pst.3 go.CVB.SG.M kad žmonys ketveriais žemę people.pl.noм that four.coll.ins(pl).m land.Acc.sg ara. Jis eis prie tų plough.prs.3 3SG.NOM.M to go.FUT.3 DEM.GEN.PL.M žmonių. Žmonys, pamate people.GEN.PL people.NOM.PL see.PST.PA.NOM.PL.M ateinanti didili approach.prs.pa.acc.sg.m such.Acc.sg.M big.Acc.sg.m

⁹ This is also pointed out by Endzelin (1923, 747).

side.ACC.PL

dar geležine vyra, 0 su also man.Acc.sg and with iron.INS.SG didiliausia lazdu. išbėgiojo visas big.super.ins.sg.f stick.ins.sg run.pst.3 to all.acc.pl.f puses.

'[One blacksmith had a giant son. The son was so strong that already at the age of three he could grapple with a bear. When he became 12 years old, his father made him an iron stick of 12 puds weight and let him go out into the world to serve [people].] The son left. Going on a road, he saw some men who were ploughing the land with four oxen. He **went** (literally: will go) to those men (= 'made up his mind and set off'). The people, seeing such a big man approaching them with such a large iron stick, ran away in all directions.'

A purely inceptive meaning without the component of intention is attested also with verbs other than those of motion. In (19), a girl was urged to drink a certain jar of beer. She starts drinking and stops abruptly (with good reason: there is a baby werewolf in her drink).

(19) Latvian (LPT, Vilkata miršana 2; Garkalne, Vidzeme near Riga, from LP) Meitene dzers bet tūdaļ iekliedzas: arī. girl.nom.sg drink.FUT.3 but PTC at once PVB.cry.prs.3. mīksts!" "Kas te what.nom here soft.nom.sg.m 'The girl indeed **starts to drink** but cries out at once: "There is something soft!"

The link between future tense and inception is further manifested in the fact that verbs with the lexical meaning 'begin' often appear in future tense. In Latvian, this occurs mostly in folktales, cf. (20). The verbs are $s\bar{a}kt$, which has the general meaning of 'begin', and nemties, which additionally has an intentional meaning component.

(20) Latvian (LPT, Vienacis ar izdurtu aci, Krūte, Southern Courland) laika Dzēra, dzēra kāda рēс drink.pst.3 drink.pst.3 after some.GEN.SG.M time.GEN.SG sāks velns kalējam vaicāt: devil.nom.sg smith.dat.sg ask.inf start.FUT.3 'They drank for some time; after a while the devil started to ask the smith:

The future tense and the lexical meaning of the verb both signal a beginning—not only of the action expressed by the dependent verb (here: 'ask'), but of a new chain of events, a new textual unit. When translating such sentences into English or German, the use of the verb 'start' often seems slightly odd, unnecessary.

In Lithuanian, we find a construction where the future form of the verbs *pradėti* and *imti* 'start' is preceded by one of the particles *kad*, *kaip*, *kai*, *kadgi* (cf. Lkg II, 129). Examples with each of these verbs with the particle *kaip* (*kaip pradės*, *kaip ims*) were contained in extract (8) from a modern novel, cited above when discussing the habitual meaning. Example (21) shows the construction in a folktale.

(21) Lithuanian (втв; *Apie kalvio sūny*. Telšiai, Northern Samogitia, 1904) geruoju kad Milžionis prašė, in a friendly manner that giant.Nom.sg ask.pst.3 atstotų, paskui kaip pradės šaudyti leave alone.irr then begin.FUT.3 PTC beat.INF SIL lazdu velniams visi išlakioja! with stick.INS.SG devil.dat.pl all.nom.pl.m run away.pst.3 'The giant first asked them in a friendly manner to leave him alone, then [he] suddenly started to beat the devils with a stick—they all ran away!'

This construction is widespread in modern Lithuanian fiction texts written by authors from different parts of Lithuania. In addition to inception, it carries a meaning of unexpectedness, suddenness. The construction is also attested in various non-fiction texts of a narrative character. In fact, 29% (93 out of 318) of the occurrences of the sequence *kad pradės* (PTC begin.FUT.3) in the corpus ltTenTen14 belong to this construction. An example from modern language, coming from a blogpost, is given in (22).

(22) Lithuanian (ltTenTen14) pradės Staiga kad lyti ir. 0 suddenly PTC start.FUT.3 rain.INF and oh stebukle. aplink mane sausa! wonder.voc.sg around dry.na 1SG.ACC 'All of a sudden it **started** raining and, what a wonder, it [was] dry around me!'

The Lithuanian construction 'particle (*kaip*, *kad* etc.) plus future tense' may also be used with other verbs, though this is not as frequently found

as with the verbs meaning 'begin'. We did not find the construction in Latvian, but there was one example in a Latgalian fairytale, cf. (23)

(23) Latgalian (Ulanowska 1895; *Ap kalva sīva*; writing modernized) Aveirs īt jau vartūs, but husband.nom.sg look.sup go.PRS.3 PTC PTC рора dāls kai skrīs plyks run.FUT.3 naked.nom.sg.м pope son.NOM.SG PTC ра durs, by door.ACC.PL

'But the husband goes to have a look—**suddenly** the priest's son **runs** out naked through the door.'

However, without the particle, also in Latvian fairytales future tense is used for indicating a sudden action, unexpected for the characters from whose point of view the situation is described; see (24) and further discussion in Section 5.

(24) Latvian (LPT, *Cilvēks labprāt pārvēršas par vilkatu*, Vircava, Southern Semigallia)

Τā vienu rītu redzējusi [...] SO one.Acc.sg day.Acc.sg see.PST.PA.SG.F vedekla ielien apinu PVB.creep.PRS.3 daughter in law.nom.sg hops.gen.pl krūmā tūdal no otras unbush.Loc.sg and instantly from other.gen.sg.f puses izskries vilks. PVB.run.FUT.3 wolf.nom.sg side.gen.sg

'One day she saw [...]: her daughter-in-law crept into a bush of hops and instantly a wolf **ran out** at the other side.'

The Latvian data must be taken into account when evaluating parallels in areally related Slavic languages. The construction with a future form (in Lithuanian mostly 'begin') and a particle (Lithuanian *kad*, *kaip*, *kai*, *kadgi*, Latgalian *kai*) is an areal phenomenon with clear parallels at least in Russian (particle *kak*) and Polish (particle *jak*, usually followed by negation). In both these languages, the construction is productive in the modern standard varieties; for Russian see Stojnova (2016). The parallel also comprises the basic meaning of the particle, which is 'as'. It is possible that the construction in Lithuanian was formed after a Slavic model, as suggested by Senn (1966, 454–455), and in Latgalian after either a

Slavic or a Lithuanian model. However, the use of future tense for sudden, unexpected actions is more widespread in Baltic and can be connected to other uses of the future tense, especially the inceptive meaning. The areal distribution of these uses makes Slavic influence unlikely, and we cannot agree with Senn's (1949, 403) thesis that the use of future tense for past actions in general is a 'specifically Slavic phenomenon' that "was taken over by the Lithuanians, who substituted their own future tense for the Slavic (Polish and Russian) so-called perfective present".

Clauses with future forms expressing intention, imminence and/or inception may be coordinated to clauses in other tenses, cf. (25) from Lithuanian and (26) from Latvian.

- (25) Lithuanian (BTB; Apie kalvio sūny. Telšiai, Northern Samogitia, 1904) maišus vežimą į sack.ACC.PL PVB.RFL.carrv.PST.3 carriage.Acc.sg and to eist persivesti iš pievas arklius from field.GEN.SG PVB.take.INF horse.ACC.PL go.FUT.3 irvažiuos namon. Nueio irdrive.FUT.3 and home.ill.sg go.PST.3 and nebranda arklių! NEG.find.prs.3 horse.gen.pl 'He put the sacks into the carriage and **set off** to the field to fetch the horses and intended to drive home. He went there, but he did not find the horses!'
- (26) Latvian (LPT, Brīnuma lampa, 7. Skrunda, Southern Courland; from LP) pašas PVB.take.pst.pa.sg.m three DEM.ACC.PL.F EMPH.ACC.PL.F lietas ies pasaulē jaunu un thing.ACC.PL and go.FUT.3 world.Loc.sg new.Acc.sg meklēt. laimi luck.acc.sg search.INF 'He took these three objects and set off into the world to search for new luck.'

In such combinations, the future also marks the action explicitly as (immediately) following the preceding one, which is a defining feature of narrative clauses. In (26) the future predicate is coordinated to a past active participle: paṇēms [...] un ies 'take.pst.pa.sg.m and go.fut.3', 'having taken, he set off', which is a typical pattern in the folktales (see also (31) below from Lithuanian). The past active participle is one of the forms

used in narrating a tale, but when combined with other narrative forms (present or past tense), it expresses anteriority. In turn, a future tense in a chain of actions may signal posteriority. In (27), we see a sequence of three actions: the first is marked as anterior, the second is in functionally unmarked present tense, and the third is the future form of a motion verb.

(27) Latvian (LPT, Derības par sievas uzticību, 1. Zasulauks, Riga, from LP) Dabūjis cela zināt, tas get.pst.pa.sg.m way.gen.sg know.inf DEM.NOM.SG.M ieiūdz divi dižus zirgus harness.prs.3 two stately.ACC.PL.M horse.ACC.PL brauks šos uzturieni drive.FUT.3 that_place.acc.sg and DEM.ACC.PL.F to apsērst. PVB.visit.INF

'Having learned the way, he harnessed two stately horses and drove off to visit them there.'

The future in (27) has three functions: it marks an intended action, describes the beginning of a motion event ('will go' = 'sets off'), and it signals that the action follows another one. The latter function is found with all kinds of activities, not only movement, and also occurs without the meaning components of intention and inception. We will return to it in the next section.

5. Text structuring and grounding

In the previous two sections, we saw that the future forms almost always had a *textual function* in addition to temporal or aspectual meanings such as habituality or imminence. By textual functions we understand all functions of organizing the text, including "the strategies speakers use for controlling the rate of information flow in a discourse, for partitioning a discourse into smaller subunits and marking the boundaries between them, and for signaling levels of saliency or information relevance—for creating texture within text" (Fleischman 1990, 4). In this section we look at uses where these are the main if not the only functions of future tense forms in a narrative. We will first describe functions associated with the partitioning of a narrative and then turn to the complex field of grounding. In both instances it is not so much the future tense itself that expresses the function, but the fact that the tense is switched from past

or present to future tense. Tense switches are used in many languages as a marker of discontinuity, of beginnings and ends of textual units such as paragraphs (cf. Longacre 1979; Hinds 1979), as well as for foregrounding and backgrounding individual clauses or sequences of clauses (Hopper 1979; Wehr 1984; Carruthers 2005; Fludernik 2012). They are especially frequent in orally performed narratives, which has led linguists whose ideal of language is written prose to describe tense use in orally based verbal art as chaotic and ungrammatical (cf. Fleischman 1990, Chapter 3, for Romance languages).

The system of tenses in traditional Baltic folktales is very complex. Regional and individual variation make it difficult to describe in its entirety. The most stable and widespread components are simple past and present tense. Where these are opposed to each other, past tense is associated with background and present tense with foreground. For example, after an orientation in past tense ('There was a farmer who had three sons'), the action of the story may be told in present tense ('One day he goes to the field and...'). However, most often we find tense switches throughout the tale, with some stretches told in past and some in present tense. A switch from past to present, or from present to past tense may have several functions, which we will not discuss here (for Lithuanian, see Cotticelli-Kurras 2000). When the same tense is used over several clauses, it becomes functionally neutral. Thus, the narrative present as such is not functionally marked. Besides past and present tense, past active participles may be used in telling a story. This is frequent in the Latvian folktales that we used in this study. Here, the participle has the same function as the simple past tense and is not strongly associated with indirect evidentiality (hearsay), as it is in other registers. When used as a narrative tense, past participles may be the predicate of backgrounded as well as foregrounded clauses. The pluperfect is used for background information by some tellers.

In Latvian folktales, future tense can be used to signal a new episode, when introducing a new actor, and to highlight a new action. In the first two functions, it is found with verbs of motion and verbs of speaking that follow the motion. The appearance of new actors on the scene may be expressed by the verbs $n\bar{a}kt$ or $atn\bar{a}kt$ 'come'. The first action of a new actor often is a speech act. Extract (28) is the beginning of a tale, and the future tense signals the beginning of action after the orientation. Extract (29) is the beginning of a new episode in the middle of a tale. In

both examples, the verbs <code>atnākt</code> 'come' and <code>teikt</code> 'say' are the only ones used in future tense, while the surrounding clauses have present or past tense. The clauses are narrative clauses without doubt: they relate unique factual events that are ordered with respect to preceding and following events, and they are in the foreground.

(28) Latvian (LPT, *Ar brīnuma lietām iegūtā ķēniņa meita*, 5. Ūziņi, Southern Courland; from LP)

[Vienam ķēniņam nebija [PST] neviena bērna. Viņš sendienām par to gaužas [PRS], bet kas jau ir, tas ir.]

Te	vienreiz	atnāks	vecs	nabags
here	once	PVB.come.FUT.3	old.nom.sg.m	beggar.nom.sg
un	ķēniņš	izsūdz	savas	bēdas
and	king.noм.sc	g unload.prs.3	RPOSS.ACC.PL.F	trouble.Acc.pl
arī	tam.	Nabags	klausās,	klausās,
also	DEM.DAT.SG	beggar.nom.sg	listen.prs.3.	listen.prs.3.
beidz	ot teiks :			

finally say.fut.3

'[A king did not have a single child. He often lamented it, but it is as it is.] Now once an old beggar **came along** and the king poured out his complaints to him as well. The beggar listened for a while and finally **said**:'

(29) Latvian (LPT, Velns ar lāci rijā, 3. Dole, Vidzeme near Riga; from LP) velns $Otr\bar{a}$ rītā atnāks morning.Loc.sg PVB.come.FUT.3 devil.nom.sg other.Loc.sg teiks: pie rijkura un kiln heater.gen.sg say.FUT.3 and 'The next morning, the devil **came** to the kiln heater and **said**:'

This pattern is not found in Lithuanian (we checked all occurrences of the future of ateiti 'come' and sakyti 'say' in BTB). In Latgalian, we found one instance with $at\bar{t}t$ in future tense followed by the verb 'say' in present tense; however, in this instance $at\bar{t}t$ had the meaning 'go back', not 'come', and it did not introduce a new actor but marked an episode border with the same protagonist (after an encounter with a devil, a man goes home and tells his wife about it). Thus, the introduction of a new actor with a future form of 'come' seems to be special to Latvian. Note that only Latvian has a root with the meaning 'come', while in Lithuanian and Latgalian this meaning is expressed by the root of the verb 'go' plus a preverb (mostly at-). It is possible that the phonetic similarity between Latvian $n\bar{a}kt$ 'come'

and *sākt* 'begin' plays a role here. The latter also may mark the beginning of an episode, but this function is not much pronounced: as we saw in Section 4, verbs meaning 'begin' tend to be used in future tense also within episodes, in both Latvian and Lithuanian.

In Latvian, when a new actor appears on the scene with the verb 'come' in future tense, this appearance is often marked lexically as sudden or unexpected, or both, as in (30). This is again a parallel to the use of 'begin' in future tense, as already argued in Section 4. In (30), additional lexical means are used to express unexpectedness (*par brīnumiem* 'wondrously') and suddenness (*tik uz reizi* 'at once').

(30) Latvian (LPT; Burvju putns, 17. Ūziņi, Southern Courland, from LP) Zēns nosēžas kalna galā bov.nom.sg sit down.prs.3 hill.gen.sg top.Loc.sg un neko. Te brīnumiem bar and nothing.Acc.sG here for wonder.dat.pl nāks tik reizi trīs vīri 11.7. time.Acc.sg come.FUT.3 just at three man.NOM.PL no meža ārā un gremjas viens wood.gen.s and growl.prs.3 from out one.NOM.SG.M ka bail. uzotru. afraid other.Acc.sg that

'The boy sat down on top of the hill and nothing [happened]. Then wondrously three men suddenly **came out** of the wood and growled at each other in a scary way.'

In all three languages, a new episode may begin with the motion of the main protagonist. In this situation, a future form usually combines textual and non-textual functions: that of marking a new paragraph, and intention and inception as described in Section 4. A typical example is extract (26) above, where the hero sets off to new adventures.

Within a paragraph, a switch to future tense may indicate a turn in the episode, or just mark the action as salient. Extract (31) shows various functions of tense switching in a Lithuanian folktale.

(31) Lithuanian (vтв; Apie kalvio sūnų. Telšiai. Northern Samogitia, 1904) Paskui priejo prie girnu ir then millstone.GEN.PL and go.PST.3 up_to kad mato. i akmeni bėga ne see.PRS.3 that into stone.Acc.sg fall.prs.3 NEG

grūdai,	bet	smilčias.	Tas,	
grain.nom.pl	but	sand.nom.pl	DEM.NOM.SG	
pagriebęs		lazdą,	bėgs	ieškoti
PVB.grab.PST.PA.	NOM.SG.M	stick.acc.sg	run.FUT.3	search.inf
velnių	puo	kambarius,	del ko	jie
devil.gen.pl	around	room.ACC.PL	why	3PL.NOM.M
apmainė	savo	kviečius	ant	smilčių.
exchange.pst.3	RPOSS	grain.Acc.PI	for	sand.GEN.PL

'Then he **went** up to the millstones and **saw** that it was not grain, but sand that was falling into the millstone. **Having grabbed** his stick (= he grabbed his stick and), he **ran** around the rooms (literally: will run) searching for the devils, why they had exchanged the grain for the sand.'

In (31), each narrative clause is in a different tense. The first clause is in past tense, the unmarked tense within the narrative. The predicate of the second clause is the verb 'see' in present tense—in Baltic folktales as well as in other languages (cf. Fleischman 1990, 51), such perception verbs are often used in present tense. The past active participle in the third narrative clause marks anteriority with respect to the following verb (cf. the Latvian example (24) above). Finally, the future form bėgs 'will run' explicitly marks the action as following (posterior) and at the same time as salient. This extract shows that grounding cannot be understood by a simple dichotomy of foreground versus background, but must rather be treated as a gradient concept (cf. Givón 1987; Fleischman 1990, 129). The future tense is at the top of a foregrounding continuum: it marks saliency of a clause following other narrative clauses.

Extract (32) comes from a tale which in its first half is told mainly with past participles as a narrative tense (equal to simple past tense in other tales). The scene of the extract is witnessed by a young man in hiding. The actors are devils.

(32)	Latvian (lpt, Velns zarkā 7. No place mentioned. From lp)							
	∃ā,	ienesuši,		izņēmī	uši		miron	i
	yes	PVB.carry.	PST.PA.PL.M	PVB.ta	ke.psт.	PA.PL.M	corpse	e.ACC.SG
	un	vilks,	vadzi,	ādu		nost.	Viens	divi
	and	pull.FUT.3	PTC	skin.acc	c.sg	down	one	two
	tas		padarīts		un	nu	ņems	ies
	DEM.N	IOM.SG.M	PVB.do.PST	.PP.SG.M	and	now	begin	.FUT.3.
	miron	i	sadalīt	trijās		daļā	s	
	corps	e.ACC.SG	split.INF	three.L	OC.PL.F	part	.LOC.PL	

'Yes, they carried in the corpse, gutted it out and **pulled**, behold, the skin down. In a jiffy this [was] done, and now they **started** to split the corpse into three parts.'

The future tense of *nemties* 'begin' in the last clause of extract (32) is an instance of the inceptive future described in Section 4. In *vilks* 'will pull' in the first sentence, the future is used to mark the salience of this action—the skin of the corpse indeed has a special role in this tale. The interjection *vadzi* 'lo!', 'behold!' enforces the salience. In addition, the future marks the action as the last in a chain of actions. It is a kind of culmination point. A similar effect can be observed in extract (33), where the main narrative tense is the present. Here, the future may additionally carry an intentional and/or inceptive meaning.

(33) Latvian (LPT, Burvju putns 17. Ūziņi, Southern Courland. From LP) Mežsargs [...] tūlin plūc рīli nost forester.NOM.SG pluck.prs.3 duck.Acc.sg down at once un nu ceps. Necik ilgi pīle not much and roast.FUT.3 long duck.nom.sg PTC čurkst pannā. sizzle.prs.3 pan.Loc.sg 'The forester instantly plucked the duck and roasted/started to roast it. Not much later, the duck was sizzling in the pan.'

The foregrounding effect of the future tense is not always as clear as in the examples cited here. Especially in the Latvian collection, in tales collected in Southern Courland and Zemgale, future tense may be used with several verbs in one passage, and only the first occurrence can be interpreted as marking something new (a turn in the story, a new episode) or salient (an action more important than others, a peak in the story). It seems that the effect 'wears out' when overused, or, as said above, that the main effect lies in the switch between tenses, not in the meaning of an individual tense.

6. Discussion and conclusions

In her seminal book on tense and narrativity, Suzanne Fleischman (1990) argues that tense and aspect forms in narrative discourse often have pragmatic or textual functions, either as their main function or in combination with their temporal and aspectual meanings. Our study has

shown this to be true also for the future, a tense whose use in narratives is restricted in Romance and Germanic languages, while in Baltic it is found in various functions, especially in traditional folktales documented more than 100 years ago.

In Table 1, we give a summarizing overview of the functions of future tense in narratives in the order in which they were discussed in Sections 3–5. Some extracts contain more than one instance of future tense. If these have different functions, they are listed separately in the table; for example, (14-1) refers to the first future form in extract (14).

Table 1. Functions of future tense in narratives

Use	Temporal/aspectual reference	Textual function	Example					
Imagined events (Section 3)								
Imagined/predicted future scenario	posterior to narrative line		(5)					
2. Evoked scenario	habitual in general time	illustration; background	(6)					
3. Evoked scenario (past)	habitual in the past	illustration; background	(7), (8)					
4. Prolepsis	posterior to time- line	episode border; backgrounding	(9), (10), (11)					
Intention	n, imminence, inception	on (Section 4)						
5. Imminence + intention + counterfactual	within timeline	peak	(14), (15-2), (16)					
6. Intention	within timeline		(15-1), (17- 1,2), (25-2)					
7. Inception	within timeline	peak	(17-3), (19)					
8. Intention + inception; verbs of motion	within timeline	peak; beginning of episode	(18), (23-1), (26), (27)					
9. Inception; verbs meaning 'begin' (Lithuanian: construction with particle)	within timeline	turn in story; beginning of episode	(20), (32-2); (8-3,4), (21), (22),					
10. Sudden, unexpected event, verbs other than 'begin' (Latgalian: with particle)	within timeline	peak	(23), (24), (30)					

Use	Temporal/aspectual reference	Textual function	Example					
Text management (Section 5)								
11. New episode with new actor; 'come' and speech act (Latvian only)	within timeline	new episode, new actor	(28), (29), (30)					
12. New episode with same actor; verbs of motion	within timeline	new episode or turn in story	(25-1), (26), (27)					
13. Foregrounding	within timeline	salient action; culmination	(31), (32), (33)					

In the first use, which was the starting point in Section 3, the future tense has its temporal meaning of relating to a time later than the reference time, which here is the time at which the main narrative is located. We argued that such passages usually (maybe except for some literary experiments) are not real narratives: they do not tell a story, but describe a scenario. In this they are related to evoked scenarios that have no future time reference, but are allocated either to a general time or to the past, and depict events as recurrent, as types rather than tokens (uses 2 and 3 in Table 1). Such passages serve as illustrations for a point the narrator makes about a person, object, or phenomenon. Though imitating narration by listing actions that may be in a temporal sequence, clauses with a habitual meaning are not narrative clauses, because they don't relate unique events. They provide a background to the main story. In proleptic function (use 4), the future again has a temporal meaning as a relative tense and the event related is unique. However, with respect to the story these clauses also provide a background or additional information: the predicted event belongs to another story (or report) than the one currently told. The proleptic future tense therefore has a backgrounding effect, especially when used in supplementary relative clauses. It also functions as an episode border.

In the next cluster of functions, uses 5–10 (Section 4), we find combinations of meanings that despite their different nature can be seen as forming a continuum. At the one end, there is intention, a modal meaning often found with the future in its non-narrative uses and associated with a non-factual, but potentially true proposition. At the other end there is the aspectual meaning of inception, highlighting the initial phase of an

(actually happening) event. The meaning of imminence is connected to both: on the one hand, an event that is only about to happen is not (yet) factual; on the other hand, by pointing to the time immediately before the beginning of an event, it is a phasal meaning close to inception. In different types of narratives we find the future tense expressing sometimes only one of these meanings, sometimes intention together with either imminence ('be about to carry out an intended action') or inception ('setting one's mind and starting an action'). We argued that not only clauses naming the beginning of an action are narrative clauses, but also those where the future tense has an imminent meaning, despite their being non-factual. Furthermore, when intention is combined with imminence or inception, the action is foregrounded, while the reference to a pure intention usually is background information. These future forms appear at peaks or turning points in a story, while the lexical expressions are more neutral. A further role is played by the lexical class of the verb that is used in the future tense. In the folktales, motion verbs (especially 'go' and 'drive') in the future are frequently found with intentional-inceptive meaning ('set off for a purpose, to a goal') and signal either the beginning of a new adventure or a turning point in an ongoing episode. Verbs meaning 'begin' are often found in future tense, which results in a kind of double marking of inception and often carries a meaning of a sudden, unexpected start.

In Lithuanian and Latgalian folktales a special construction expressing a sudden, unexpected event is used, consisting in a future form and a particle 'as' (use 10 in Table 1). In Lithuanian this construction is also found in the modern standard language. Parallels in Slavic languages suggest that this is an areal feature, probably expanding from Slavic languages into Lithuanian and Latgalian. However, the use of future tense as such indicating suddenness, unexpectedness, is also found in Latvian folktales and can be interpreted as an extension of the inceptive meaning. Similarly, a Lithuanian construction with future tense and the particle $b\bar{u}davo$ (< 'it happened to be'; cf. Section 3) may have been formed after a Slavic model, while more generally the use of the future tense for habitual actions, serving as an illustration within a narrative, fits well into the use of the future tense for evoking a scenario attested also in Latvian, and is less likely to be a calque from Slavic. The two constructions may have contributed to preserving uses of the future tense for past events in Lithu-

anian, while these uses are no longer found in modern standard Latvian.

In Latvian folktales, we found more examples than in Lithuanian or Latgalian for uses where the textual functions dominate or are even the only ones (uses 11–13). We detected a pattern in Latvian where the arrival and first action of a new participant is marked by the verb 'come' and a speech-act verb in future tense. 'Newness' and 'start' are thus transplanted to the text plane, while the actions are not depicted as intended or inceptive (the new character comes along, arrives, they do not 'intend to come' or 'start to come'). As already mentioned, this is different when the main protagonist sets off and starts a new episode and thus inception is found on both content plane and text plane. The latter pattern is found in all three languages. Latvian offered also more examples for a pure foregrounding use of future tense, and in some tales a 'surplus' of future forms for which we did not find a motivation (these were not discussed in this paper). These (yet) unexplainable uses of the future however have in common with those where a textual function is evident the fact that they appear in clauses that are doubtlessly narrative clauses. The future tense is here void of temporal, aspectual, or modal meanings. This is something which we do not find in the modern standard languages, and it may have been part of a tradition of oral performance of stories which died out in the 20th century.

While most of the uses of the future tense described here, especially the textual ones, are not found in Romance languages, there are striking parallels to tense switches involving present tense in those languages (both from a past tense to present and from present to a past tense), as described by Fleischman (1990). First, in the lexical preferences, or the special role of verbs of beginning, verbs of motion, and combinations of motion and speech act (Fleischman 1990, 51). Second, maybe less surprising, in the occurrence of tense switches at peaks in a story, and their association with suddenness, unexpectedness. Third, in the fact that a tense form may combine several referential and textual meanings.

We may ask, then, why Baltic switches to future where Romance switches to present tense—or, as asked by Rosenberger (1852, 37): *Wie kommt der Lette*

Two further classes singled out by Fleischman (1990, 51), in turn, are associated with the present tense in Baltic as well as in Romance: verbs of speaking (especially 'says') and verbs of involuntary perception ('sees', 'hears').

hier zum Futurum? (How do Latvians arrive at the future tense here?). "We find it likely that the answer is to be found in general differences between the tense and aspect systems. Romance languages have a more differentiated system of past tenses, and the contrast between past and present tense is more pronounced than in Baltic. In Latvian and Lithuanian traditional folktales, in dialects and in spontaneous spoken varieties of the modern standard languages, present tense may function as an unmarked narrative tense, interchangeable with the past. A switch from past to present within a story has therefore no strong effect. The future tense, in contrast, is clearly different and unexpected in a narrative and can therefore be used for foregrounding and expressive purposes. Here it may be recalled that Ultan (1978, 88) acknowledged the possibility that Lithuanian belonged to his retrospective type (contrasting future to non-future), while most Indo-European languages are of the prospective type (contrasting past to non-past). However, standardization and the development of modern literary prose in the 19th and 20th century have made Lithuanian and Latvian more similar to western European languages in the use of future tense. The future tense in clearly narrative clauses which we find in the folktales is hardly encountered any more. On the other hand, modern written prose has developed new uses (in imagined scenarios and prolepsis) which are not typical for traditional spoken varieties, providing new answers to Delbrück's question about the possibility to tell a story in future tense.

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Rosenberger's attempt at an explanation will not be rendered here, as it is not connected to linguistic facts, but to ideas about the mindset of the Latvian storyteller as opposed to that of a German.

ABBREVIATIONS

1 — first person, 3 — third person, ACC — accusative, COLL — collective, CVB — converb, DAT — dative, DEF — definite, DEM — demonstrative, EMPH — emphatic pronoun, F — feminine, FUT — future, GEN — genitive, ILL — illative, INF — infinitive, INS — instrumental, IRR — irrealis, LOC — locative, M — masculine, NA — non-agreement form, NEG — negation, NOM — nominative, PA — active participle, PL — plural, PP — passive participle, PRS — present, PST — past, PTC — particle, PVB — preverb, REL — relative pronoun, RFL — reflexive, RPOSS — reflexive possessive pronoun, SG — singular, SUP — supine, SUPER — superlative, VOC — vocative

Sources

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BTB = Jono Basanavičiaus tautosakos biblioteka [Jonas Basanavičius Folklore Library]. Digitalized version at http://www.knygadvaris.lt/?id=16&lang=lt.

DLKT = Dabartinės lietuvių kalbos tekstynas [Corpus of Contemporary Lithuanian]. Available at http://tekstynas.vdu.lt/tekstynas

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LPT = *Latviešu pasakas un teikas*. Ed. P. Šmits, 1925–1937. Digitalized version at http://valoda.ailab.lv/folklora/pasakas/.

LVK2018 = Balanced corpus of modern Latvian. 10 million words. Available at http://www.korpuss.lv/.

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The perfective present in Lithuanian

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This article offers a picture of the Lithuanian perfective present, with particular emphasis on the treatment of habituality and genericity, the use of aspect forms in narrative text types, and peripheral constructionalised and often pragmatically specialised uses of perfective presents partly harking back to the actional differences underlying the aspect opposition in Baltic as well as in Slavonic. The introductory part of the article offers a general outline of the Lithuanian aspect system and briefly discusses the vexed question of the existence or non-existence of a grammatical category of aspect in Lithuanian. It is argued that, contrary to a widely held view, the Baltic languages have a grammatical category of aspect, though weakly grammaticalised.

Keywords: Lithuanian, Baltic, verbal aspect, perfectivity, aspectual class, viewpoint aspect, present tense, telicity, progressive, habituality, narrative present, prefixation

1. Introduction¹

Lithuanian has an aspectual system of the type usually associated with the Slavonic languages, based primarily (though not exclusively) on the perfectivising effect of verbal prefixes functioning as 'bounders' (Bybee & Dahl 1989, 85–89). While the existence of verbal aspect in the Slavonic languages is well established (their opposition between perfective and imperfective verbs has indeed long been regarded, misleadingly, as the paradigm example of verbal aspect), its existence in Lithuanian has often been called into question, starting from Safarewicz (1939) and most

¹ We wish to thank Peter Arkadiev, Wayles Browne and two external reviewers for their constructive comments, which have led to substantial improvements in our text. For the remaining shortcomings of the article we remain solely responsible. This research has received funding from the European Social Fund (project No. 09.3.3-LMT-K-712-01-0071) under grant agreement with the Research Council of Lithuania (LMTLT).

recently in Arkadiev (2011). In Section 2 we will discuss in greater detail the arguments that have been levelled against the recognition of aspect as a grammatical category in Baltic, and against the use of the terms 'imperfective' and 'perfective' with reference to the Baltic verb. In this section we will concentrate on what is essential in formulating the aims of this article. In our view there is no difference of principle between Slavonic and Baltic aspect: in both language families aspect rests on 'grammaticalised lexical classes' (Dahl 1985, 89) or, put differently, on the grammaticalisation of lexical aspect. What is different is the degree of grammaticalisation. In Slavonic, the aspects have developed into strict distributional classes, and the aspect of a verb can be established with the aid of a simple distributional test like the ability to combine with a phasal verb like 'begin' (only imperfective verbs have this ability) or the ability to derive certain inflectional forms (e.g., only imperfective verbs have a present active participle). This cannot be observed in Baltic, where, on the one hand, the distributional tests point to strong tendencies rather than strict rules; and, on the other hand, a perfective verb in Lithuanian or Latvian will have exactly the same paradigm as an imperfective one, even if some forms may be rare. Moreover, these languages have a large number of bi-aspectual verbs, which are a relative rarity in Slavonic. The main grounds for recognising a weakly grammaticalised aspectual opposition in Baltic is the inability of a considerable number of prefixed verbs to be used in progressive function, that is, in a situation where speech and reference time (or reference time only) are included in the temporal interval covered by the event described:

- (1) *Mes kaip tik su-organizuojame konferenciją.

 1PL.NOM right_now PFX-organise.PRS.1PL conference.ACC.SG
 Intended meaning: 'Right now we're organising a conference.'
- (2) *Netrukdykit man, aš dabar
 NEG.disturb.IMP.2PL 1SG.DAT 1SG.NOM now
 pa-skaitau.
 PFX-read.PRS.1SG
 Intended meaning: 'Don't disturb me, I am now doing some reading.'

The prefixes occurring on these two verbs have different actional characteristics: while *su*-could be called completive in the sense that it conveys the achievement of a natural boundary of the process, *pa*- is a delimitative

prefix conveying a certain arbitrarily singled-out duration quantum of an event conceived as an activity. The verbs illustrated in (1) and (2) could thus be said to differ in Aktionsart but they have a common grammatical feature that can be characterised as perfectivity.

While a progressive present cannot be derived from the verbs illustrated in (1) and (2), this does not mean they cannot derive a present at all, because not all presents are progressive (cf. Comrie 1985, 36–41). The verb used in (1) is used in a habitual present-tense form in (3):

(3) Kasmet su-organizuojame gebėjimus apie skill.ACC.PL every_year PFX-organise.PRS.1PL about 20 ugdančių jaunimui. projektu develop.prs.pa.gen.pl project.gen.pl youth.DAT.SG 'Every year we organise about 20 skill-improving projects for young people."

The perfective present has received a lot of attention lately, cf. Astrid de Wit's 2017 book on 'the paradox of the present perfective'. This notion of paradox, apparently inspired by Malchukov (2009), is somewhat misleading in that it suggests a clash between two incompatible categories—perfectivity and present tense. The conflict is basically between perfectivity and progressive meaning,³ but probably no language's present tense is exclusively progressive: presents may be habitual, generic, historical and so forth, see Smith (2003, 76). It is true that progressive forms tend to be expansive and they may gradually conquer the whole domain of the present tense, ousting the original non-progressive forms also from those types of use that are not progressive. In part of the Slavonic languages something comparable has occurred, though the Slavonic imperfective is unbounded but not inherently progressive. Because of their inherent boundedness perfectives are banned from the progressive function, which causes them to be ousted from what is probably the most salient or prototypical present-

² https://lvjc.lt/projektai/ (accessed 10 05 2021)

³ Here we will not be making a distinction between the notions of 'progressive' and 'continuous': what we have in mind is the inclusion of reference time in event time. 'Progressive' may also be defined as a subtype of 'continuous' (cf. "Progressiveness is the combination of continuousness with nonstativity", Comrie 1975, 12), but the distinction is not always observed, and is not relevant here.

tense function, after which the generalisation of imperfective forms can spread to other present-tense functions. This process has been almost complete in North Slavonic (East Slavonic, Polish), where the perfective present has basically become a perfective future. In the Baltic languages this process has been more restricted, but it has occurred, for instance, in the case of the performative present tense, which is not progressive as speech time exactly coincides with event time instead of being included in it; the non-progressive character of this type of use is reflected in the non-progressive form of the verb in English, cf. Comrie (1985, 37). The use of the imperfective present in performative function can be seen in (4):

```
Ekscelencija,
                                         sveikinu
(4) Jūsų
                   excellency.voc.sg
                                         congratulate.prs.1sG
   you.gen.pl
   (*pa-sveikinu)
                                Jus
                                            sulaukus
                                                             naujo
    PFV-congratulate.PRS.1SG
                                            be.granted.cvв
                                2PL.ACC
                                                             new.gen.sg.m
    paskyrimo
    appointment.gen.sg
    [—tapus Kauno arkivyskupu.]
    'Your Excellency, I congratulate you on your recent appointment
    [as Archbishop of Kaunas.]4
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In this, Lithuanian agrees with most of the Slavonic languages; an exception is Slovenian, which is known to have performative perfective presents:

(5) Slovenian (Greenberg 2006, 81)

Prisežem, da govorim resnico.

swear[PFV].PRS.1SG that speak[iPFV].PRS.1SG truth.ACC

'I swear I'm speaking the truth.'

From the point of view of the non-progressive forms, it is not important whether a new progressive form is introduced that ousts original presents from progressive and often also from (some or all) non-progressive functions (the case of English, Modern Eastern Armenian etc.), or whether the innovation consists in prefixed verbs developing perfective meaning and consequently being ousted from progressive (and possibly also non-progressive) present-tense functions (the case of Baltic and Slavonic). But while the broad lines of development are the same in both scenarios,

⁴ https://sc.bns.lt/view/item/185406 (accessed 10 05 2021)

there is much cross-linguistic variety in the details. On the one hand, the ousting of present-tense forms from progressive use may be a point of departure for further changes affecting more and more present-tense forms up to a point where the central meaning of such forms comes to lie in another domain of grammar, as in North Slavonic, where the perfective present has become a future, or in Modern Eastern Armenian, where the old non-progressive present has become a kind of subjunctive (Sayeed & Vaux 2017, 1155). On the other hand, the perfective or non-progressive forms may be conventionalised in various semantically or pragmatically specialised constructions that vary from one language to another.

In this article we will look at the perfective present in one individual language, attempting to get a reasonably complete picture of both the immediate and more far-reaching consequences of the perfectivisation of prefixed verbs and the concomitant rise of aspectual pairs in Lithuanian. We will look, first, at the non-progressive subtypes of the present tense (habitual, generic), and at the distribution of the aspects in these subtypes. Next, we will look at the functioning of imperfective and perfective presenttense forms in different types of context that are not directly affected by progressivity. For this purpose we will look at the use of aspect forms in two subtypes of narrative texts—stage directions and memoirs (for earlier work along the same lines, focusing, however, on past-tense forms, see Sawicki 2010). In the third part of the article we will look at a number of usage types of perfective presents that are historically connected with the grammaticalisation source of verbal aspect in Baltic and Slavonic. As Baltic and Slavonic aspect oppositions arise from the coexistence of paired verbs originally differentiated in terms of lexical aspect, they retain, in the case of accomplishment verbs, Aktionsart-related differences in volitionality between imperfective and perfective forms. This gives rise to a number of interesting patterns of usage that are not necessarily relevant to fundamental discussions about aspect semantics but afford interesting insights into the specific features of aspect systems arising from the grammaticalisation of lexical aspect.

The structure of the article follows from the purposes just formulated. First, we will briefly introduce the Lithuanian aspect system; next, we will discuss how aspect functions in the present-tense domain in habitual and generic predications; we will look at the functioning of the perfective present in different sorts of text; and finally, we will look at a number of

uses of perfective presents harking back to the original actional differences out of which the aspectual opposition has grown; these uses are often constructionalised in specific semantic and pragmatic functions that are peripheral to fundamental discussions on aspectual semantics.

2. The Lithuanian aspectual system

Verbal prefixes with a basically spatial meaning function as natural bounders telicising atelic verbs. In a number of languages this has led to the rise of an actionality-based, rather than aspecto-temporal,⁵ aspect system. The languages exhibiting this feature form a not quite contiguous area stretching from Eastern Europe to the Caucasus (cf. Arkadiev 2014, 2015).

The occurrence of telicising prefixes creates a precondition for the rise of an aspect system, but it is not in itself a sufficient condition for this. The opposition between a telic and an atelic verb is one of lexical aspect, which is a universal phenomenon (though the lexical aspect classes relevant for individual languages are not necessarily the same), but not of grammatical aspect. Moreover, telicising prefixes have the property of rendering a verb exclusively telic and non-susceptible of an atelic reading, but it is not the case that non-prefixed verbs cannot be telic. While it is true that even with an object capable of measuring out the event, a predicate like skaityti knyga 'read a book' can be construed as an activity, it can also be construed as an accomplishment, and in that case the function of the prefix in *perskaityti knygą* 'read a book' can no longer be called telicising, as the verb is already telic. The co-existence of the two verbs naturally tends to be exploited to mark differences of what since Smith (1991) has been known as viewpoint aspect, and these differences may be said to become grammaticalised when restrictions in use appear, as in the case of the ban on perfective prefixed verbs in progressive use, illustrated in (1) and (2). It has been argued (Sawicki 2000) that the impossibility of pro-

⁵ By 'aspecto-temporal' we mean an aspect system based on aspectually marked tense forms, like that of Romance. There is, in reality, no rigid line of division between the two types. In Classical Greek, for instance, the so-called 'present-tense' and 'aorist' stems also derive atemporal forms like infinitives and imperatives, which makes the Greek aspect system somewhat similar to that of Slavonic and Baltic, but the marking has become inflectional and therefore not dependent on actionality. In Homeric Greek, however, aspect was still to a much larger extent intertwined with actionality, cf. Napoli (2006).

gressive use may also be due to lexical aspect, and this is certainly true, but when within one broad aspectual class, that of accomplishments, one finds massively instantiated oppositions of alleged actional subclasses, as is the case in Baltic, the impression is that actional classes are being defined solely for the purpose of avoiding the notion of aspect.

Many authors have argued that the Baltic languages have no grammatical aspect, and that there is, in this respect, a difference of principle between Baltic and Slavonic. Most recently this case has been made by Arkadiev (2011); for a partial rebuttal see Holvoet (2014). Arkadiev claims, first, that "the ability of Lithuanian verbs of different types to combine with perfective or imperfective viewpoint or with both is reducible to the lexical semantics of verbs, more precisely, to their actional properties, most crucially, to the distinction between durative (State, Process, Multiplicative process) and punctual (Entry-into-a-State, Entry-into-a-Process, Quantum of a Multiplicative Process) actional meanings." While this is true, it is also true of the corresponding aspectual classes in Slavonic. Secondly, Arkadiev claims that simple verbs in Lithuanian are atelic, and prefixes are needed to make them punctual. This claim is based on a specific use of the term 'telic' that is not universal. In the literature on aspect, the notion of telicity is understood in two different ways, as pointed out already by Dahl (1981). For some, it refers to processes that have a natural endpoint beyond which they cannot be continued, as in Lithuanian skaityti knyga 'read a book'. On this understanding, there is no difference in telicity between perskaityti knyga 'read a book (PFV)' and the already telic skaityti knyga 'read a book (IPFV)'—unless we want to say that *perskaityti* is somehow 'more telic' than *skaityti*, but telicity as a gradable notion does not seem to make much sense. For others, the term 'telic' makes it refer to the actual reaching of the final boundary, so that skaityti knyga 'read a book (IPFV)' is atelic and the prefix makes it telic. It is not coincidental that Dahl characterises the two definitions of telicity referred to above as the 'Eastern' and the 'Western' one respectively. From a Baltic or Slavonic point of view, it is not quite clear what the difference between telicity and perfectivity could be on the latter understanding.

⁶ Discussions have mostly focused on Lithuanian, but the Latvian aspect system is broadly comparable to that of Lithuanian. A useful discussion with specific reference to Latvian can be found in Hauzenberga-Šturma (1979).

To circumvent this problem Arkadiev argues that *skaityti* and *perskaityti* refer to distinct subevents—the durative process leading up to a transition, and the transition itself, and that the difference is never neutralised, while Slavonic does neutralise it. In Russian and several other Slavonic languages this distinction is indeed neutralised under habituality. Compare, for instance, Russian example (6) with its Lithuanian counterpart:

- (6) Dvornik vsegda zapiraet / *zaprët
 caretaker.nom.sg always lock[ipfv].prs.3sg lock[pfv].prs.3sg
 vorota.
 gate[pl].acc
- (7) Sargas visada rakina / už-rakina caretaker.nom.sg always lock.prs.3 pfv-lock.prs.3 vartus.

 gate[pl].Acc

'The caretaker always locks the gate.'

In (6) the imperfective verb is used though it clearly does not refer to the durative process leading up to the transition, but includes the transition itself. This contrasts with the Lithuanian form *užrakina*, which encodes the habitual achievement of the transition. Arkadiev does not mention the fact that *rakina* is also possible in (7), which means that the neutralisation, though not obligatory as in Russian and certainly less frequent, is also possible. It should also be mentioned that a situation exactly parallel to that observed in Lithuanian exists in part of the Slavonic languages. Dickey (2000) regards the non-neutralisation as one of the most important features opposing West Slavonic aspect (Czech and Slovak, Sorbian, Slovenian) to the East Slavonic type (East Slavonic languages, Bulgarian and Macedonian), Polish and Bosnian-Croatian-Serbian occupying an intermediate position; example (8) is from Bosnian-Croatian-Serbian:

(8) Vratar uvijek zatvori / zatvara
porter.nom.sg always close[PFV].prs.3sg close.[IPFV].prs.3sg
vrata.
door[PL].ACC
'The porter always locks the door.'

The neutralisation mentioned by Arkadiev probably points to a more advanced stage in the process of grammaticalisation of aspect in the sense of a closer interaction between aspect and tense. In modern Russian, a present tense is imperfective, whether it is progressive or habitual; in the same way, the Russian imperfective past tense could be compared to the imperfect tense of languages like Romance or Greek, combining as it does the progressive and the habitual function. But a language need not combine these two functions in order to have grammatical aspect; a progressive vs non-progressive opposition is already aspectual. Arkadiev argues that in Lithuanian this opposition is wholly determined by lexical aspect, which, for telic verbs, requires the assumption that imperfective verbs (skaityti) and perfective verbs (perskaityti) denote different subevents. But these alleged subevents are apparently being introduced for no other purpose than to deny the grammatical status of the distinction between skaityti and perskaityti. If the difference were indeed between two subevents, there would be a tendency to use the verb denoting the preparatory phase in imperfective contexts (in terms of viewpoint aspect) and the one denoting the final phase in perfective contexts (also in terms of viewpoint aspect), but it would still be possible to coerce the verb denoting the final phase into progressive use, as can be observed with certain prefixed verbs in Lithuanian. Lithuanian verbs of motion with spatial prefixes by default assume a perfective reading, but can be coerced into progressive (imperfective) use:

(9) [Tai gal geriau atnešiu kavą, kai jūsų svečias atvyks?] jau at-eina. parodžiau 3.NOM.SG.M already PFX-come.PRS.3 point.PST.1SG ranka kita aikštės pusę. hand.ins.sg other.Acc.sg square.GEN.SG end.Acc.sg at '[Then perhaps I should bring your coffee when your guest arrives?] "There he's coming already", I pointed with my hand at the other end of the square.'7

The verb *at-eiti* 'come, arrive' can indeed be said to denote a subevent, the prefinal stage of a motion event towards the deictic centre. But this prefinal stage also has at least a minimal extension in time, and can thus, if the need arises, be extended (despite the verb's propensity for a punctual reading) to include reference time, so that progressive use is enabled. But verbs like *perskaityti* cannot be coerced into progressive use, which sug-

⁷ http://laiskailietuviams.lt/index.php/1951m-7-liepos/224-jis-buvo-geriausias-tevas

gests that the opposition between *skaityti* and *perskaityti*, whatever its original status, is now grammatical.

Another important fact is that the subevent account does not hold for delimitative verbs like *pa-skaityti* in (2). A certain temporal quantum of reading, conceived as an activity, can be referred to by means of both *skaityti* and *paskaityti*, but *skaityti* allows the inner perspective imposed by progressive use whereas *paskaityti* does not. Arkadiev is evidently aware of this as he concedes that delimitatives "probably have also a sort of lexicalised perfective viewpoint" (Arkadiev 2011, 82). But if there is such a thing as 'lexicalised perfective viewpoint', we could also ascribe it to telic perfectives like *perskaityti*, which are also unable of being coerced into progressive use. We suggest that all the verbs discussed here, also *ateiti* in (9), have a certain lexicalised perfective viewpoint, but by prohibiting the coercion of the type *paskaityti* and *perskaityti* into progressive use, the language has actually grammaticalised the perfective viewpoint, and the 'subevent' account can be dispensed with.

We do not mean to deny the relevance, in certain contexts, of the subevent reading of verbs like perskaityti. Such verbs are systematically ambiguous between a 'subevent' reading referring to a change of state (led up to by the incremental process denoted by the corresponding simple verb) and a 'complexive' reading referring to a complete bounded event. Which of the readings applies is ruled by pragmatics. The use of aspect forms relies to a large extent on implicatures to the effect that if an incremental process is realised it will normally lead up to the desired change of state, and that the change of state is normally preceded by an incremental process leading up to it. These implicatures are cancelled in specific contexts, especially in the presence of a negation, as it is possible for a volitional incremental process to be realised without producing the usual change of state, and it is possible for a change of state to occur accidentally, without the volitional incremental process normally leading up to it. The possibility of contrasting the two subevents is important for the functioning of aspect in the imperative under negation (see Bogusławski 1985). It can be seen in (10) and (11):

(10) Ne-trauk kištuko iš lizdo.

NEG-pull.IMP.2SG plug.GEN.SG from socket.GEN.SG

'Don't pull the plug from the socket.'

(11) Ne-iš-trauk kištuko iš lizdo.

NEG-PFX-pull.IMP.2SG plug.GEN.SG from socket.GEN.SG

'Don't (inadvertently) pull the plug from the socket.'

While (10) is an appeal not to apply the agency leading to the removal of the plug from the socket, (11) is an appeal to avoid a situation in which the plug could be removed from the socket, an undesirable change of state that could be the outcome of some agency not directed at the removal of the plug. Agency and change of state are clearly opposed here. In pragmatic terms, sentences like (10) are characterised as prohibitions and sentences like (11) as warnings, but the difference is in origin actional—it is one between subevents. It is also exploited in a number of constructions to be discussed in the final section of this article. It is not usually exploited, however, in the temporal forms of the verb. A sentence like (12) is ambiguous between a reading on which somebody applied agency with the end of pulling the plug, and one on which the pulling of the plug was unintentional:

(12) Kažkas iš-traukė kištuką iš somebody.NOM PFX-pull.PST:3 plug.ACC.SG from lizdo.
socket.GEN.SG 'Somebody (has) pulled the plug from the socket.'

One could imagine a speaker using the imperfective verb instead of the perfective in (12) in order to specify that conscious agency was involved, but this would normally be prohibited by the Gricean maxim of informativity, as noted already by Dahl (1974): if the intended outcome was achieved, the imperfective verb violates this maxim unless there is a good reason for using it; the reason will usually be that reference time is located within event time, that is, we have a progressive in the past. This, however, is already a matter of viewpoint aspect.

It is, at any rate, hard to agree with Arkadiev (2011, 82) when he claims that "the traditional classification of Lithuanian verbs into 'perfective', 'imperfective' and 'bi-aspectual' turns out to have no theoretical validity." It is true that the classification probably needs to be refined in the sense that prefixed motion verbs have the 'lexicalised perfective viewpoint' but

can be coerced into progressive use while a large body of prefixed verbs are simply bi-aspectual, that is, have no inherent aspectual profile.⁸

Arkadiev's observations are valuable in that they make us aware of an important methodological point, viz. that in investigating the grammatical properties associated with perfectivity and imperfectivity in Lithuanian one should be cautious about the use of verbs whose aspectual behaviour is indeed determined by their Aktionsart. These are mainly

- inceptive state verbs as opposed to state verbs, as in *supykti* 'get angry' as against *pykti* 'be angry';
- semelfactive verbs as opposed to state, activity and iterative verbs, as in *žvilgtelėti* 'cast a look' as against *žvelgti* 'look'.

These verbs are inherently perfective and have no imperfective counterparts. Nevertheless we will treat such lexical perfectives on a par with grammatical perfectives in Section 4, which deals with the narrative uses of aspectual forms. When dealing with textual functions, we must treat the text as a whole, without *ad-hoc* decisions as to which forms should be included. Basically, however, our conclusions concerning the functioning of aspect in Lithuanian, and particularly concerning the uses of the perfective present, will rest mainly on the evidence of aspect oppositions of the following two types:

• telic verbs, basically accomplishments but also verbs that are not naturally telic in the sense of having a natural endpoint but represent a certain quantum of an activity as an autonomous object, e.g., <code>sakyti</code> 'say': perfective <code>pa-sakyti</code>, where a certain quantum of speaking is conventionally conceived of as an utterance; similarly certain other verbs referring to social interaction, like <code>pa-prieštarauti</code> 'object, raise objections' etc.

The special status of prefixed motion verbs is a feature shared by Lithuanian and Latvian. In Latvian, however, these verbs cannot be coerced into progressive use; in this function, they are replaced with the corresponding simple verbs accompanied by local adverbs, e.g., $n\bar{a}k$ $iek\bar{s}\bar{a}$ 'is coming in' as against $ie-n\bar{a}k$ 'comes in' (cf. Endzelin 1923, 741–742). The fact that, in Lithuanian, the presents of motion verbs like ateiti can be coerced into progressive while those of verbs like perskaityti or paskaityti cannot might be associated with differences in informativeness. In the case of motion verbs the translocational change of state may be of many different types encoded by different prefixes, so that generalisation of the corresponding unprefixed verb in progressive function would lead to considerable information loss. Latvian, with its local adverbs, does not have this problem and therefore does not allow coercion.

• delimitative verbs of the type *pa-skaityti* 'spend a certain time reading' as against *skaityti* 'read'. Delimitative verbs are traditionally classified with the Aktionsarten of the Slavonic verb, but this characterisation is not quite felicitous, cf. Arkadiev (2015, 85-89, with literature). The point is that the singling out of a certain temporal quantum of a state or activity is the principal way to perfectivise an atelic verb and thus to integrate atelic verbs into a more or less grammaticalised aspect system based on viewpoint distinctions. What perfective forms in an aspecto-temporal system like that of the Romance languages do is also to cut out a temporal quantum of a state or activity: French il vécut dans le monde 'he led a worldly life' means 'he spent a considerable number of years of his life in a worldly fashion'. What sets delimitative verbs apart from telic perfectives is that they take temporal quantification instead of the quantification of an incremental theme as a means of measuring out an event; the two represent different dimensions of perfectivity (cf. Holvoet 1991).

More or less in conformity with the picture Lithuanian grammars draw of the status of prefixed verbs in Lithuanian, we will distinguish three types of situations:

- (a) the prefix perfectivises the verb, which blocks its use in progressive meaning:
 - (13) Senelė mezga / *nu-mezga kojines.
 granny.NOM knit.PRS.3 PFX-knit.PRS.3 sock.ACC.PL
 'Granny is knitting socks.'
- (b) the prefix changes lexical meaning and the verb is bi-aspectual; it can correspondingly be used in the progressive present tense:
 - (14) Kaip tik per-žiūriu savo senas užrašų right_now pfx-look.prs.1sg rpo old.acc.pl.f note.gen.pl knygutes.
 book.acc.pl
 'I'm just looking through my old notebooks.'
- (c) the prefix adds a spatial meaning and acts as a bounder, imposing a default perfective reading e.g. in the past, but the verb may be coerced into progressive function (cf. example 9 above):

(15) Štai jis jau at-eina. there 3.NOM.SG.M already PFX-come.PRS.3 'There he is coming this way already.'

We should add two things here. First, a small group of simple verbs is consistently bi-aspectual, e.g., duoti 'give', gauti 'get, receive', liepti 'order, bid', etc. Secondly, in a small group of verbs the prefix perfectivises the verb (which then cannot be used in a progressive present-tense form) but the basic simple verb remains bi-aspectual, so that, e.g., in the past tense simple and prefixed verb can be used interchangeably. This group comprises grįžti: su-grįžti 'return' (and its causative grąžinti: su-grąžinti 'return, give back'), dingti: pra-dingti 'disappear' and a few others.

- (16) a. Kaip tik grįžtu (*su-grįžtu) namo.

 precisely return.PRS.1SG PFX-return.PRS.1SG home

 'Right now I am on my way home.'
 - b. Jau grįžau / su-grįžau namo.
 already return.PST.1SG PFX-return.PST.1SG home
 'I'm back home already.'

We should add that the situation here outlined (and more or less corresponding to what is described in the Lithuanian grammars, cf. Ulvydas, ed., 1971, 25–46) is not stable. Bi-aspectual verbs like *peržiūrėti* in (14) increasingly face competition, in progressive use, from new imperfectives with the suffix *-inėti*. These are originally iterative (see Kozhanov 2021) but, in a development still frowned upon by prescriptive grammarians, are now extending to progressive function. Examples (17) and (18) show this competition. The originally iterative suffix *-inė-* is here glossed simply as imperfective:

(17) Šiuo metu kaip tik per-žiūriu namuose savo right now house.Loc.PL precisely PFX-look.PRS.1SG RPO sukauptus daiktus thing.ACC.PL accumulate.pst.pp.acc.pl.m [ir labai didelė jų dalis keliaus į šiukšlių konteinerius.]' 'In my house right now I am looking through the things I have piled up there [and a huge part of them will be going to waste skips.]9

https://www.lrytas.lt/pasaulis/rytai-vakarai/2015/12/27/news/keliaujantys-amatininkai-trejus-metus-klajoja-lyg-viduramziais-2699537/

(18) [Ot tai sutapimas,]

kaip tik per-žiūr-inėj-u internetines
precisely PFX-look-IPFV-PRS.1SG internet.ADJ.ACC.PL.F
parduotuves,
shop.ACC.PL
[kurios siūlo šio modelio ausines.]

'[Well that's a coincidence,] right now I'm looking through the internet shops [that offer this type of earphones.]"

3. The habitual, generic, and other characterising uses

As mentioned above, Russian has extended its imperfective present-tense forms to predications describing habitual events. This is, in a way, natural as habitual events said to apply to the present form a chain extending from the past into the future, and this chain is, when homogenised, durative in character, moreover naturally encompassing the moment of speaking. That is, we have here a natural extension of durative and, in a further development, progressive use. It is obviously from this point of view that Geniušienė (2020) says that perfective verbs are 'imperfectivised' in the habitual past and present. Though natural, this imperfectivisation is by no means automatic. Aspecto-temporal systems of the Romance type treat habituality as imperfective (cf. French *il rentrait/*rentra souvent tard* 'he often came home late'), whereas in the actionality-based Baltic and Slavonic aspectual systems a series of completed events is aspectually ambiguous because either the completion or the chain of events may be focused upon.

In that habituality does not only refer to repeated events but also attributes a property to their participants, habitual uses are similar to other types of sentences with a characterising function, that is attitudinal, potential, individual-level and generic (Bertinetto & Lenci 2012, 860). Among these, habituals and generics are most typical for the perfective present in Lithuanian (together with the narrative present, see Section 4), but other types can also be found. For a more thorough investigation we

https://www.varle.lt/ausines/sony-belaides-triuksma-slopinancios-ausines-wh-1000xm3b-9363180.html

turned to an internet-based corpus of Lithuanian (LithuanianWaC), from which we selected verbs that are not used in the progressive meaning in the present tense. (See Arkadiev 2011 on difficulties in establishing such verbs.) Our sample included several prefixed verbs (*pasiekti* 'reach', *pasirinkti* 'choose', *išmokti* 'learn' etc.), one underived telic verb (*rasti* 'find'), and several semelfactive verbs (*šyptelti* 'smile', *stabtelti* 'stop', *mirktelti* 'blink', *bakstelti* 'tap', *mostelti* 'wave' etc). For technical reasons, the latter is mostly represented by the 3rd person present tense in our sample; the first two groups are taken in all forms of the present.

3.1. Habitual and generic uses

The habitual and generic uses only differ in having particular or generic subjects, and are not always easily differentiated (see Carlson 2012, 830–831). A habitual example describing a person's habits is given in (19). A generic use in (20) assigns a whole class of persons a predisposition towards certain situations.

(19) [Zora man sakė, kad jis valgo tik juodą sužiedėjusią duoną, sudžiovintą saulėje.]

Jis	nusiperka		kepaliuką		duonos,
3.NOM.SG.M	PFV.RFL.buy.PR	S.3	loaf.DIM.A	CC.SG	bread.gen.sg
supjausto	ją	riekutė	mis	ir	džiovina.
PFV.cut.PRS.3	3.ACC.SG.F	slice.11	NS.PL	and	dry.prs.3
'[Zora told me that he only eats black stale bread, dried in the sun.]					
He buys a small loaf of bread, cuts it into slices and dries it.'					

(20) [Niekšiška teigti,]

kadligonispasirenkasavothatsick.person.nom.sgpfv.rfl.choose.prs.3rpoligq,sickness.acc.sg

See, for example, (21) which can be understood as referring to the historic Homer or to any person who is equal to the historic Homer in talent.

The prefixed verbs 'buys' and 'cuts into pieces', referring to the inherent endpoint of the event, are followed by the non-prefixed 'makes dry'. The latter only refers to the activity of drying and does not specify that the endpoint is reached, although we already know that the bread the person prepares eventually becomes dry from the previous sentence. It is possible to replace the non-prefixed *džiovina* with the prefixed *išdžiovina* to the effect that reaching the endpoint is stated explicitly.

[o skurdžius savo skurdą.]

'[It is base to claim] that a sick person chooses their sickness, [and a destitute one their poverty.]'

It is clear that the situation is supposed to occur every time when the stock of dried bread needs replenishing in (19) and when a person is acknowledged as ill or poor in (20). In other examples, the frequency with which a situation occurs is expressed with adverbs of frequency.

- Quandoque bonus dormitat Homerus ir kartais Homeras snūsteli also sometimes PN.NOM.SG doze.sml.prs.3 [(kas lietuviškai reikštų] ir gudri višta kartais and clever.nom.sg.f chicken.nom.sg sometimes dilgynes ibrenda). in nettle.ACC.PL PFX.walk.prs.3 '[Quandoque bonus dormitat Homerus]—Even Homer sometimes nods (which in Lithuanian means] 'even a clever chicken sometimes walks into nettles').'
- (22) [Na bet žinote vaikai <...> Nors ir kokie pavargę jie būtų,] visuomet randa labai svarbia 3.NOM.PL.M always find.prs.3 very important.Acc.sg.F priežastį dar nemiegoti. still NEG.sleep.INF reason.ACC.SG '[Well, you know these children <...> However tired they might be], they always find a very important reason for not going to bed.'

In other cases, rather than being characterised in terms of frequency, a typical situation is linked to particular circumstances, as in (23) where they are given in a dependent clause:

(23)	Kai	vienas	3	iš	mūsų	turi		
	when	one.N	OM.SG.M	from	1PL.GEN	n have.	.PRS.3	
	idėją	i	iškart	ja	pas	idalina		su
	idea.acc.s	SG a	at_once	3.INS.SG.F	PFX	.rfl.share	e.PRS.3	with
	kitais.		Po to	visi		kartu	iš	
	other.ins.	PL.M	then	all.nom.p	L.M	together	from	
	jos		sukuriam	e	dainą.			
	3.GEN.SG.F PFV.create.PRS.1PL		PRS.1PL	PL song.ACC.SG				
	'When on	e of us	has an ide	a, he imme	diately	shares it v	with the	others.
	Then we	create	a song fror	n it togeth	er.'			

Since the circumstances are themselves repetitive, the habitual use is also found in conditional and temporal clauses.

(24) [Žalgirio mūšis tapo kasmetine pramoga, kai inscenizuojamas mūšis, bet nacionalinės dramos nebeliko.]

```
Jei Jogaila nukrenta nuo žirgo,
if PN.NOM.SG PFV.fall.PRS.3 from horse.GEN.SG
[nieko baisaus.]
```

'[The battle of Grunwald has become an annual festivity during which the battle is reenacted, but the national excitement has faded.] If Jogaila falls from his horse, [it is not a big deal.]'

(25) [Kurortinio sezono metu norintieji patekti į keltą be eilės visada sulaukia kitų keliauninkų pasipiktinimo. Ypač pasibaigus didžiosioms šventėms ar subjurus orams,]

kai	iš	Nidos	Nidos ir	
when	from	PLN.GEN.SG	PLN.GEN.SG and	
plūsteli		tūkstančiai	tūkstančiai	
pour.SML.PRS.3		thousand.No	thousand.NOM.PL	

'[In high season, those wanting to get onto the ferry jumping the queue never fail to provoke other travellers' anger. Especially after a big festival is over or the weather gets nasty], and thousands of cars pour out of Nida and Juodkrantė.'

3.1.1. Perfectives-only contexts

While imperfective present, too, can be used habitually in the types of contexts represented above, there are certain collocations, also found in Russian (Stojnova 2016), that are exclusively found with the perfective present.

In simple clauses, they involve the perfective present coordinated with *imti* 'take' which is known to favour bounded events (Nau *et al.* 2019, 260–262), but does not always have a habitual/generic meaning.

- (26) [Laimė—kaip kalėdinis žaisliukas]
 ima ir sudūžta <...>
 take.prs.3 and pfx.break.prs.3
 '[Happiness is like a Christmas bauble;] all of a sudden it breaks.'
- (27) [Jau mūsų protėviai suvokė, kad gyvenimas sudėtingas—ne viską ranka paliesi, ne viską plika akim išvysi, ir paliko paslaptingą mitų, pasakų pasaulį.]

iš žiūrėk. kurio. imair from which.gen.sg.m look.IMP.2SG take.prs.3 and koks kvšteli galva poke.sml.prs.3 head.acc.sg some.NOM.SG.M demon.nom.sg ir**šmurkšteli** malūno už. behind windmill.gen.sg and appear.SML.PRS.3 arba strvkteli kampo corner.GEN.SG or hop.sml.prs.3 into literatūros laukus field.ACC.PL literature.gen.sg

'[Our forefathers already knew that life is complicated. Not everything can be touched by hand or seen by eye. They left us a mysterious world of myths and fairy-tales] out of which a demon suddenly sticks out its head, then appears behind the corner of a windmill or hops into the fields of literature.'

In temporal clauses, the habitual use of the perfective present is introduced by *vos* in the meaning 'as soon as'. (On *vos* in the modal meaning see below.)

- (28) Vos suskamba pirmosios Šopeno
 as_soon_as PFV.sound.PRS.3 first.NOM.PL.F.DEF PN.GEN.SG
 kūrinio gaidos,
 piece.GEN.SG note.NOM.PL
 [salėje girdisi palaimingas pripažinimo atodūsis.]
 'As soon as the first tones of the Chopin piece sound, [a blissful sigh of appreciation is heard in the hall.]'
- (29) [<...> prisiuostę miesto oro, automobilių išmetamųjų dujų, co, anglies monoksido, smalkių <...>,] kaime kvėptelime vos countryside.Loc.sg as_soon_as inhale.SML.PRS.1PL pušyno oro svaigstame. pine_forest.gen.sg feel_dizzy.prs.1pl air.gen.sg '[After having inhaled our fill of city air, car exhaust fumes, co, carbon monoxide <...>], we feel dizzy as soon as we breathe the pine-infused air of the countryside.'

3.2. Other characterising uses

Attitudinals (John smokes cigars) and potentials (John speaks French) do not presume a repetition or even a single occurrence of events involving smoking cigars or speaking French as they only refer to the likelihood

of such events in case a person is given an opportunity to perform them. As these types of sentences assign a permanent property to a particular referent, they are similar to individual-level predicates (*Elina is Finnish*); see also Shluinsky (2009) on the cross-linguistic tendency to use identical marking for habituals, attidutinals, potentials, and individual-level predicates. All this is also true for certain uses of the Lithuanian perfective present, and it explains the perfective form in (30), which stands alongside an imperfective form in (31). Even if nobody reads the historical sources, they still retain the ability to convey certain information:

(30) Šaltiniai **te-pa-sako**,
source.NOM.PL only-PFV-say.PRS.3
[kad ji buvo nuskandinta.]
'The sources only say [that she was drowned.]'

(31) O ka istorijos šaltiniai sako but what.acc history.gen source.NOM.PL say.PRS.3 Mindaugo vaidmenį Lietuvos valstybės аріе about PN.GEN role.Acc.sg Lithuania.GEN state.gen.sg raidoie? development.Loc.sG 'But what do the sources say about Mindaugas' role in the formation of the Lithuanian state?'

Such uses are often concerned with messages contained in books and other media that can be 'frozen' or 'activated' when an opportunity presents itself. A particular message is then imagined as a permanent property of its author. This interpretation is also suggested by Smith (2003, 104, fn. 10) alongside an alternative explanation that compares sentences like Here the author creates an interesting metaphor with stage directions. This brings us to the issue of the praesens scaenicum which is discussed in the next section together with the praesens historicum.

(32) Platonas **suformuoja** objektyviojo
PN.NOM.SG PFV.form.PRS.3 objective.GEN.SG.M.DEF
idealizmo sistemą.
idealism.GEN.SG system.ACC.SG
'Plato creates the system of objective idealism.'

4. The perfective present in narrative texts

Although both the historical and the scenic present relate to sequences of events, they are believed to correspond to different text sorts. The historical present is used in narrative and the present of stage instructions expresses directions not dissimilar from those in cooking recipes, see Dickey (2000, 156) who follows Langacker (1991, 266), also see Wiemer (2021a,b). The data that we employed to analyse the Lithuanian scenic present might nevertheless show more similarities to a pure narrative, coming from the movie script *Purpuriniai dūmai* ("Purple Smoke") by Marius Ivaškevičius, itself loosely based on a short story by Felix Roziner. Our data on the historical present, on the other hand, are contaminated with habitual uses as we collected them from the autobiographical text by Irena Saulutė Valaitytė-Špakauskienė Manėme, kad plaukiame į Ameriką ("We thought we were sailing to America"). Memoirs are a genre that creates favourable conditions for fusing the *praesens historicum* with habitual and other characterising uses of the present tense. The present tense predominates throughout the book, but some passages are written in other tenses.

We took the first 200 constructions with present tense from the movie script (p. 3–11), and 200 present-tense constructions from a ten-page excerpt of the memoirs (p. 88–98). The stage directions are exclusively written in the third person of the present tense. In the memoirs, first-person singular and plural forms are typically used but third-person forms also occur. The absolute frequencies of perfective and imperfective verbs in each of the samples are given in Tables 1 and 2, with an additional differentiation of prefixed and non-prefixed verbs.

Table 1. Frequencies of perfective and imperfective verbs in the memoirs

	PFV	IPFV	sum
PFX	88	12	100
no PFX	22	78	100
sum	110	90	200

	PFV	IPFV	sum
PFX	130	О	130
no PFX	17	53	70
sum	147	53	200

Table 2. Frequencies of perfective and imperfective verbs in the movie script

While the absolute frequency of perfective verbs is higher in both samples, even without calculating the exact percentages, it is clearly seen from the numbers that the share of imperfective verbs is only slightly lower in the memoirs, but perfective verbs are almost three times more frequent than imperfective ones in the movie script. This fact confirms the view that treats the praesens scaenicum as a separate type from praesens historicum, see also Wiemer (2021b). A subjective evaluation of the praesens scaenicum by one of the present authors as easier to analyse with regard to perfective vs imperfective uses of the verbs is in accordance with Dickey (2000, 160), who makes a similar observation. This is also what prompts us to mainly use examples from the movie script, as we believe it to represent a more condensed version of tendencies that are also found in the text of the memoirs.

Not unexpectedly, most perfective verbs have prefixes, and most imperfective verbs are those without prefixes. Exceptions involve semelfactives (mostelti 'wave') and perfective uses of verbs like duoti 'give', on the one hand, and imperfective uses of verbs where the prefix changes the lexical meaning like apšviesti 'illuminate', on the other hand. The appearance of semelfactives is important as their use in both praesens scaenicum and praesens historicum in Russian is not normally found (Maslov 2004[1964], 413-414); see also Dickey (2000, 134-135 and 159).

If our figures for perfective and imperfective uses in Table 2 are correct, then the frequency of perfectives in the Lithuanian historical present exceeds the corresponding values for 'western' Slavonic languages discussed in Dickey (2000, 147-148) with references to Bondarko (1959), Stevanović (1967) and Stunová (1993), thus making Lithuanian a language where the perfective-imperfective contrast is maintained most consistently.¹³ The high concentration of perfective verbs in the historical present and the scenic present is in stark contrast to the progressive uses of their non-prefixed counterparts. Examples (33) and (34) illustrate the difference between ongoing events at the time of speech, independent of the speaker's will, and the sequence of events in a narrative, controlled by the author. The perfective is only possible in the second one.

(33) constructed example representing a real-life dialogue Ko jūs juokiatės?

why 2PL.NOM laugh.PRS.2PL.RFL

'Why are you laughing?'

(34) praesens scaenicum

```
Danka gudriai jį nu-žvelgia, ir PN.NOM.SG slyly 3.ACC.SG.M PFV-look_over.PRS.3 and abu sutartinai nu-si-juokia. <sup>14</sup> (MI 5) both.NOM in_unison PFV-RFL-laugh.PRS.3 'Danka slyly looks him over, and both laugh in unison.'
```

Nevertheless, the opposition is sometimes neutralised: see (35) from the memoirs, where the original imperfective verb *prašau* 'I ask' can be replaced with its perfective counterpart *paprašau* with no change in the meaning, as well as (36) from the movie script where the same relationship holds between the original imperfective *slepiasi* 'hides' and the perfective counterpart *pasislepia*.

(35) praesens historicum

[Pradedu verkti, atsivedu Tefkę,]

```
prašaupa-prašaususkaičiuotilikučiusask.prs.1sgcount.Infremains.ACC.PLirsurašytiaktą. (vš 90)andwrite.down.Infact.ACC.sg
```

¹³ The occurrence of perfective verbs in the *praesens scaenicum* in Czech is only acknowledged by Dickey (2000, 158) as 'frequent', which is not incompatible with our Lithuanian data. But see fresh data in Wiemer (2021b) with the ratio of perfective vs imperfective verbs in modern Czech similar to that of Lithuanian.

 $^{^{14}\,}$ A reviewer suggests that both *nusijuokia* in (34) and *pabarbena* in (42) can have an inchoative interpretation.

'[I start crying, bring Tefkė] and ask (them) to count the remains and draw up an act.'

(36) praesens scaenicum

[Joškė skubiai įlipa į vagoną, iš kurio ką tik išlipo,] ir slepia-si / pa-si-slepia po and hide.prs.3-rfl pfv-rfl-hide.prs.3 under suolais. (MI 8)

bench.INS.PL

'[Joškė quickly boards the railway carriage from which he has just alighted] and hides under the seats.'

In the present tense, both the perfective and the imperfective verbs may refer to an event in a chain of other events. Switching to the past tense would only leave us with the perfective version, as in (37), while the imperfective in (38) would refer to a background state.

(37) constructed

[Joškė skubiai įlipo į vagoną, iš kurio ką tik išlipo,]

ir pa-si-slėpė po suolais.

and pfv-rfl-hide.pst.3 under bench.ins.pl

'[Joškė quickly boarded the railway carriage from which he had just alighted] and hid under the seats.'

(38) constructed

[Joškė skubiai įlipo į vagoną, iš kurio ką tik išlipo,] ir slėpė-si po suolais, and hide.pst.3-rfl under bench.ins.pl [kol jie vaikščiojo aplink].

'[Joškė quickly boarded the railway carriage from which he had just alighted] and was hiding under the seats [while they were walking around].'

Factors determining the choice between imperfective and perfective verbs are easily captured with Fleischman's (1990, 23–24) distinction between 'visualising' and 'action' uses of historical present, although, as Fleischman herself states, it depends on the context whether visualising uses serve the purpose of backgrounding or foregrounding. Dickey's (2000, 151–154) interpretation of the Czech data as they are analysed by Stunová (1993) is carried out in the same spirit and can be straightforwardly applied to Lithuanian.

As in Czech, perfective verbs refer to quick, momentary actions, and imperfective verbs to actions that unfold more slowly. Sometimes the duration of an action is explicitly expressed by an accompanying adverb. This kind of information might relate to the camera's movements in the movie script, but the same picture also emerges from the memoirs. See the contrast between the perfective verb in *skubiai sulipame* 'we board in a hurry" and the imperfective verb in *ilgai vejamės* 'we chase for a long time'.

```
(39) praesens historicum
     Su-si-randa
                           rusiukus.
                                              katerio
                                                              igula,
     PFX-RFL-find.PRS.3
                           Russian, ACC, PL
                                              boat.gen.sg
                                                              crew.Acc.sg
                             skubiai
     su-si-taria,
                                           su-lipame,
     PFX-RFL-agree.PRS.3
                             hurriedly
                                           PFX-climb together.PRS.1PL
              ilgokai
                             vejamės
                             chase.prs.1pl.rfl
     and
              long time
                                                  DEM.ACC.SG
     karavana. (vš 97)
     caravan.Acc.sg
     'He finds the Russians from the boat crew, strikes a deal (with them),
```

In the movie script, the imperfective view of the situation from within directly translates into showing only a character's feet in motion and leaving the rest of the body behind the scenes.

we board in a hurry and chase that caravan for a long time.'

```
(40) praesens scaenicum

Kažkas iš lėto lipa vagono
someone.Nom.sG slowly climb.prs.3 carriage.Gen.sG
laipteliais.
step.Ins.pL
[Joškė mato tik kojas.] (MI 9)
'Someone slowly climbs the steps of the railway carriage.
[Joškė only sees his legs.]'
```

As one might expect, quick, momentary actions referred to by perfective verbs often correspond to foregrounded events that advance the plot. The delimitative prefix in *pa-barbena* 'knocks' turns what would otherwise be a piece of background information about the surroundings (like rain tapping on the window) into an event, signalling the arrival of a character.

¹⁵ The prefix su- in su-lipame 'we board' additionally expresses the centripetal character of the motion.

(41) ltTenTen14

 $U\tilde{z}$ lango lietus **barbena** i behind window.gen.sg rain.nom.sg tap.prs.3 in stiklq. glass.acc.sg 'Outside, the rain is tapping on the glass.'

(42) praesens scaenicum

Kažkas iš lauko pusės **pa-barbena** į someone.NOM from outside PFV-knock.PRS.3 in langą. (MI 4) window.ACC.SG 'Someone from the outside knocks on the window'

But imperfective verbs are also found with reference to plot-advancing events when they are shown in graphic detail, as in (43), creating the im-

(43) praesens scaenicum

mediacy effect analysed by Dickey (2000, 152).

Ŧoškė nustebes žvelgia į be.surprised.pst.pa.nom.sg.m look.prs.3 PN.NOM.SG at karininka. lėtai kyla laikydamasis hold.cvb.nom.sg.rfl officer.Acc.sg slowly rise.prs.3 sėdvnės turėklu. (MI 3) seat.GEN.SG armrest.GEN.PL 'Joškė looks at the officer in surprise and rises slowly, holding the armrests of the seat.'

Perfective and imperfective verbs are often coordinated so that an imperfective verb follows a perfective one in a construction also known not only from Czech, but also from Russian dialects (Bondarko 2005[1958], 501–502, 476), as in (44) as well as other examples in this section. Since the two verbs refer to two events in a chain, and may be followed by a third event, as in (44), both become perfective when such sentences are given in the past tense (45).

(44) praesens scaenicum

Pa-žvelgia_{pev} į buvusi tėvų savo PFV-look.PRS.3 at former.ACC.SG.M RPO parent.GEN.PL priešais irgreitu žingsniu nama house.Acc.sg in front and quick.INS.SG stride.INS.SG eina kiema. Pa-si-beldžia. (MI 10) i walk.prs.3 in yard.Acc.sg PFV-RFL-knock.PRS.3

'He looks at the house in front of him where his parents used to live and takes quick strides into the yard. He knocks.'

(45) constructed

Pa-žvelgė į buvusi tėvu savo PFV-look.PST.3 at former.ACC.SG.M RPO parent.GEN.PL žingsniu nama priešais irgreitu house.acc.sg in front stride.INS.SG and quick.ins.sg kiemą. **Pa-si-beldė**. (MI 10) nu-ėjo,,,, PFV-walk.PST.3 yard.Acc.sg PFV-RFL-knock.PST.3 in 'He looked at the house in front of him where his parents used to live and walked in quick strides into the yard. He knocked.'

To sum up: perfective and imperfective verbs in the *praesens historicum* and *praesens scaenicum* retain their association with differences in the internal temporal profile of the situation. Their use, however, does not directly correspond to the use of perfective and imperfective verbs in the past tense, as imperfective verbs can replace perfective verbs to refer to plot-advancing events. Such instances of neutralisation tend to gravitate towards positions inside a chain of successive events where the adjacent perfective verbs contribute to the bounded interpretation of occasional imperfective verbs.

5. Usage patterns originating in actional differences

While in the preceding sections we have concentrated on patterns of aspectual usage that follow from the rise of 'progressive-based' aspect (rooted, in the case of Baltic, in the impossibility of using prefixed bounded verbs in progressive function), and that are therefore essential to discussions on aspect in general, this section will deal with a number of more or less marginal and constructionalised patterns of use of perfective presents that originate in the actional differences historically underlying the aspect opposition in Baltic. These are differences relevant to the class of accomplishment predicates: accomplishments consist of a preparatory phase involving human agency directed at a change in state, and the change of state itself. The achievement of the change of state depends not only on human volition but is influenced by external factors. This creates a distinction between a volitional imperfective and a not specifically volitional perfective (there are often implicatures to the effect that

a change of state follows from agency, or that agency will normally lead to a change in state, but they may be cancelled).

5.1. Animacy shifts

The type of use referred to here involves verbs describing some kind of social interaction involving an agent and an experiencer (argument) or observer (non-argument). A mental impact is made on the experiencer-observer as a result of the subject's agency, but a comparable mental impact may be made without such agency. This will be the case when an inanimate subject takes the place of an animate one: inanimacy excludes agency, which may block the use of the imperfective form. Compare (47) as opposed to (46):

- (46) constructed

 Mokytojas aiškina teoremą.

 teacher.NOM.SG explain.PRS.3 theorem.ACC.SG

 'The teacher explains a theorem.'
- (47) ltTenTen14 žodis Ŧеі antras pa-aiškina, if second.Nom.sg.M word.nom.sg PFV-explain.PRS.3 pa-tikslina pirmaji. PFV-specify.PRS.3 first.ACC.SG.M.DEF [brūkšnelis nerašomas.] 'If the second word explains and specifies the first one, [the dash is not used.]'

It is not the case that the occurrence of an inanimate subject automatically blocks the imperfective form, because verbs normally taking animate subjects may be used metaphorically and then inherit the morphosyntactic behaviour associated with use with animate subjects. The factors ruling the distribution of aspect forms may be complex and partly lexicalised, as in the case of *slėpti* 'hide', which, with an inanimate subject, allows both aspects. The imperfective *slėpti* means 'secretly contain, betray', while *paslėpti* is 'hide from the observer's eye':

(48) ltTenTen14
[O ar kada pagalvojate]
kokius asmenybės bruožus slepia
what kind.ACC.PL.M personality.GEN.SG trait.ACC.PL hide.PRS.3

Jūsų turima rankinė?
you.gen.pl possess.prs.pp.nom.sg.f handbag.nom.sg
'[Do you sometimes pause over the question] what features of your
personality your handbag hides?'

(49) ltTenTen14

[Spintos namuose užima ypatingą vietą.]

pa-slepia daiktus, Fos 3.NOM.PL.F PFV-hide.PRS.3 all.ACC.PL.M thing.ACC.PL nereikia kuriu matyti kas dieną. NEG.be needed.PRS.3 day.Acc.sg REL.GEN.PL see.INF every '[Cupboards occupy a special position in a home.] They hide all the things you don't need to see every day.'

5.2. Irresultative uses

The volitionality distinctions between imperfective and perfective accomplishment verbs gain a particular relevance in the presence of a negation. As mentioned above, agency directed at bringing about a change of state does not always bring about this change of state because factors independent of human volition may be involved. If the change of state is actually achieved, the final stage consisting in this change of state can itself be extended into a time interval in which speech time can be included, yielding a progressive reading which is now reserved for the imperfective form; the perfective present tense is thereby effectively blocked in the case of positive polarity. In the case of negative polarity the situation is different. The failure of an incremental process to reach its expected completion can be stated for the present, without the possibility of its being reached in the future being precluded. This can be seen in (50):

(50) [Lietuvoje yra daug miestų ir miestelių, kurie daug labiau užsikonservavę tarybinėje praeityje.]

Tarkim, Kaunas, kuris dvidešimt say.IMP.1PL Kaunas.nom twenty REL.NOM.SG.M metų arena stato iryear.GEN.PL arena.ACC.SG build.prs.3 and ne-pa-stato. NEG-PFV-build.PRS.3

'[There are many towns and townlets in Lithuania that are much more stuck in their Soviet past.] Like, say, Kaunas, which has been building its arena for twenty years and cannot build it to the end."

As Anna Zaliznjak (2015, 316) points out, a perfective present like this refers to a state of non-occurrence, which is perfectly compatible with progressive semantics. Sentence (50) does not entail an epistemic claim that the arena will not be built in the end. Interestingly, the same lack of entailment holds for Russian, as can be seen from the following example. As in Russian the original perfective present has acquired a default future interpretation, we gloss the tense form of the perfective verb as non-past:

(51) Russian

Vostočnyj kosmodrom strojat-strojat,
eastern.ACC.SG.M spaceport.ACC.SG build.PRS.3PL-build.PRS.3PL
ne po-strojat.

NEG PFV-build.NPST.3PL

'They are building the Eastern Spaceport and cannot get it built."

The perfective form *postrojat* normally has future meaning, but note that (51) does not entail (52):

(52) Russian

Vostočnyj kosmodrom ne po-strojat.
eastern.Acc.sg.m spaceport.Acc.sg neg pfv-build.npst.3pl
'They won't build (to completion) the Eastern Spaceport.'

In (52) we could, in good conscience, gloss the form *po-strojat* as future. This epistemic judgement pertaining to the future would, of course, be rendered by a future rather than a perfective present in Lithuanian:

(53) constructed

Ne-pa-statys Rytų kosmodromo. NEG-PFV-build.FUT.3 Eastern spaceport.GEN.SG 'They won't build (to completion) the Eastern Spaceport.'

The contrast suggests that in sentence (51), with the dynamic modal interpretation, the form *po-strojat* should indeed be interpreted as a real

¹⁶ http://old.skrastas.lt/?d`ata=2008-08-18&rub=1065924817&id=1218814602

¹⁷ https://rusrand.ru/forecast/volodin-est-putin--est-rossiya-sulakshin-est-putin--net-rossii--I

present rather than a future, as this sentence makes a claim about the present rather than the future. The present reference of forms like these is reflected in the use of the perfective present in the Lithuanian counterparts. While the present-tense functions of the corresponding Russian forms can be seen as an anomaly against the background of their default future meaning, no anomaly is involved in Lithuanian.

The irresultative use of the negated perfective present is activated by certain syntactic contexts, notably in conjunction with the non-negated imperfective present as in (50). There is also a more strongly constructionalised variety where these two forms occur in prosodically close asyndetic juncture, as in (54):

(54) [Kūrybingos mamos internete pamatytas idėjas pavertė realybe:]
vaikai žaidžia ne-at-si-žaidžia.
children.NOM.PL play.PRS.3 NEG-PFX-RFL-play.PRS.3
'[Ideas from the internet turned into reality by creative mums]:
children play and cannot get enough of playing."8

This has a close parallel in Russian, and indeed we may wonder whether it is not simply a copy of the Russian constructional idiom. Cf.

(55) Deti igrajut ne na-igrajut-sja
children.NOM.PL play.PRS.3PL NEG PFX-play.3PL-RFL
vašimi igruškami,
2PL.POSS.INS.PL toy.INS.PL
[cena opravdyvaet kačestvo.]
'The children (like your toys so much that they) can't stop playing with them, [the price is worth the quality.]"9

5.3. The dynamic modal construction

When an incremental change is in process, the affirmation or negation of reaching the endpoint can be viewed as an epistemic judgement about the future, which is perhaps to some extent (alongside other factors) responsible for the shift of the perfective present to future meaning in Slavonic. But,

https://www.lrytas.lt/tevams/mamos/2021/07/10/news/kurybingos-mamos-internete-pamatytas-idejas-paverte-realybe-vaikai-zaidzia-neatsizaidzia-20006474/ (accessed 2021-07-10). The prefix at-, combined with reflexive marking, conveys the so-called saturative meaning, which can be rendered as 'get one's fill of (doing sth)'.

https://am.wildberries.ru/catalog/889070/otzyvy

as we have seen, the Lithuanian perfective present negates the completion of a process in the present: it refers to the state of non-achievement of a change of state. The reasons for this non-achievement can be construed in different ways, which is largely a matter of pragmatic inferences which can be conventionalised and constructionalised. One possible construal is that there are situational (participant-internal or participant-external) factors blocking the achievement of the change of state. This yields a dynamic modal interpretation pertaining to the present, which is rendered in other languages by a modal verb:

(56) [Ar pertraukė skersvėjis, ar kas—Andriui suspazmavo sprandą.]

Ne-pa-suka galvos, ne-pa-kelia

NEG-PFV-turn.PRS.3 head.GEN.SG NEG-PFV-lift.PRS.3

rankos.

hand.GEN.SG

'[Whether it was a draught or something else—Andrius has a spasm in his neck.] He can neither turn his head nor lift his arm.'20

Once a dynamic modal interpretation is imposed, the negative polarity requirement could, in principle, be abandoned, but the construction is nevertheless skewed towards negative polarity. Non-negated uses may involve approximate negators like *vos* 'hardly', as in (57), or particles indicating the upper end of a possibility scale, like *dar*, literally 'still':

- (57) Maratonus bėgęs vyras, kaip marathon.ACC.PL run.PST.PA.NOM.SG.M man.NOM.SG as dabar pats sako, vos nu-eina self.nom.sg.m say.PRS.3 now hardly PFV-go.PRS.3 15 metrų. 15 metre.GEN.PL 'The man, who used to run marathons, can now, as he himself says, hardly walk 15 metres.'
- (58) Šaukštą dar pa-keliu, bet pats spoon.ACC.SG still PFV-lift.PRS.1SG but self.NOM.SG.M maisto ne-pa-si-gaminu.
 food.GEN NEG-PFV-RFL-cook.PRS.1SG
 'I can somehow lift a spoon, but I cannot cook my own food.'

-

https://www.delfi.lt/sportas/kitos-sporto-sakos/gudziaus-treneris-griebiasi-uz-galvos-nebezinome-ka-daryti.d?id=76964173

5.4. The frustrated expectation construction

The term 'present of frustrated expectation' (*prezens naprasnogo ožidanija*) was coined by Andrej Zaliznjak (1990) to characterise a certain type of use of forms that are now described as perfective futures rather than perfective presents.

(59) Russian (RNC)

[Prošël uže mesjac posle jubileja,]

to write you about it.'

а	ja	vsë		nikak		
but	1SG.NOM	all_the	_time	in_no_way		
ne	na-pišu		vam	0	nëm.	
NEG	PFV-write.PRS	5.3SG	2PL.DAT	about	3.LOC.SG.N	
'[It has been a month since the anniversary,] but I still cannot get myself						

In fact the introduction of the 'present of frustrated expectation' in Russian aspectology was predated by the observation of a similar use of the Lithuanian perfective present in Buch (1959). It is illustrated in (60):

(60) [Po Rimo ir Nijolės išvažiavimo praėjo daug laiko,]
o aš vis ne-pa-rašau.
and 1sg.nom all_the_time neg-pfv-write.prs.1sg
[Buvo visokių rūpesčių.]

'[A lot of time has gone by since Rimas and Nijolė left,] but I still cannot get myself to write [to them]. [I've had all kinds of things to attend to.]' (Vytautas Kubilius, 2006, CCLL)

This construction is not one of the typical uses of perfective presents widely found across languages, like the habitual or historical perfective present. Among the South Slavonic languages at least Bosnian-Croatian-Serbian offers a parallel in the form of a perfective present introduced by *nikako da* 'no way that'; although the usualy function of *da* is that of a complementiser, we should probably interpret *nikako da* as an emphatic negation, and the whole as a simple-clause construction:²¹

(61) U nekoj sam gužvi in certain.Loc.sg.F be.PRS.1SG jam.Loc.sg

²¹ We are indebted to Wayles Browne for pointing out this parallel, as well as for the example and its translation.

```
nikako
                   da
                           na-pišem
                                                 рo
                                                        koju
and
       no way
                  that
                           PFV-write.prs.1sg
                                                        some.ACC.SG.F
                                                 DISTR
pametnu
                     reč.
sensible.Acc.sg.F
                     word.acc.sg
'I am in some kind of Zeitnot, and in no way can I write three or four
intelligent words.'
```

More historical research could shed more light on the relationship between types, but we would like to suggest that in order to explain the frustrated expectation use we should start out from one of the better established uses of the perfective present attested in all Baltic and Slavonic languages and explain the more restricted types as optional extensions induced by widening of the lexical input.

What suggests itself as a possible source construction is the irresultative use as illustrated in (50). The rise of an aspectual opposition between *statyti* and pastatyti enables the contrasting use of the progressive imperfective and the non-progressive perfective present. The negated perfective present expresses the fact that despite the actual occurrence of the run-up process the result is not being achieved in a period that can be covered by the present tense, but it does not preclude the possibility that this result will be achieved in the future. In a further extension the assumption of a run-up stage in process at speech time ceases to be a condition for the use of the perfective present and the whole building event is conceived as failing to be initiated over a long period during which its initiation is expected. Biasio (2019) views this perfective present of frustrated expectation as a pragmatic extension from the impossibilitive use, with a shift from 'be unable' to 'be unwilling'. But it seems equally possible to derive both constructions from a common source, an irresultative construction that is not specific about the reason for the non-achievement of the change of state; this may then, through pragmatic inferences, be construed as inability or unwillingness.

5.5. The reproach construction

Lithuanian has a pragmatically marked construction assuming the form of a 'why'-question (introduced by *kodėl* or *ko*) containing a negated perfective present, expressing reproach:

```
(62) [Brangusis, — tauškė ji, — už ką tu mane taip baisiai myli? Už ką?]

Kodėl tuomet ne-nu-perki man

why then NEG-PFV-buy.PRS.2SG 1SG.DAT
```

klipsų? Džinsų? clip.gen.pl jeans.gen.pl

'[My dear—she prattled—what do you love me for so terribly? What for?] And if so, why don't you buy me a pair of clip earrings? Or a pair of jeans?'

[CCLL, Jurgis Kunčinas, 1997]

The function of this construction as expressing reproach requires some comment. In English the *why don't you* construction is known to express a suggestion (Berglund 2008). Other languages areally closer to Lithuanian also have the suggestion function, see Bondarko (1971, 110–111) for Russian. This is also the case in Polish:

za-dzwonisz (63) *Czemu* nie do tej why PFV-call.2SG NEG to that.gen.sg.f szkołv nie s-pytasz, school.gen.sg and NEG PFV-ask.2SG [albo wyślij maila i dopytaj jak jest z kursami SOL]. 'Why don't you call that school and ask, [or else send them a mail and inquire about sqL courses.]"22

However, in Lithuanian our construction expresses reproach rather than polite suggestion. For the latter function, another construction is available, also with a 'why' word but with the negated past active converb instead of a present tense. It is illustrated in (64):

(64) [Rugsėjį atgimsta įvairūs teatrai,] kodėl tau ne-nu-ėjus teatra why NEG-PFV-go.CVB.PST theatre.acc to 2SG.DAT su savo geriausia drauge? with best.ins.sg.f friend[F].INS.SG '[In September all kinds of theatres come to life again,] why don't you go to the theatre with your best friend?"23

This construction has obviously arisen from a characteristically Lithuanian type of deliberative questions, the origin of which (as suggested by the use of a converb as main predicate form) should apparently be sought in

²² https://www.poloniainfo.se/forum/temat.php?temat=54875

 $^{^{23}\,}$ https://www.panele.lt/lt/po-mokslu/g-18171-grizimas-i-mokslus-5-lengvi-zingsniai-kaip-greiciau-isitraukti-i-juos

insubordination. The suggestion type in (64) and the reproach type in (62) are clearly related and they show alternative pragmatic specialisations of the 'why' construction that constitutes their common source. The same can be stated from a cross-linguistic point of view when we compare different why don't you constructions containing the perfective present. A construction analogous to the Lithuanian one exists in Latvian, but it is not as clearly specialised in the reproach function as the Lithuanian one is. The borderline between the two functions is probably not clear-cut, and when a reaction to an undesirable situation is involved the two may actually be indistinguishable.

(65) Latvian

Kapēc aptieku tu ne-aiz-ej uzwhv 2SG.NOM NEG-PFV-go.PRS.2SG to pharmacy.acc.sg antihistamīna un ne-pa-prasi kādu NEG-PFV-ask.PRS.2SG antihistamine.GEN and some.Acc.sg preparātu? preparation.Acc.sg

'Why don't you go to the pharmacist's and ask for an antihistamine preparation?'24

(66) [Es 14 gadu vecumā pēc kurpēm šītādu ņaudēšanu uztaisīju, —] татти. nu kāpēc tu man mum.ACC why 1SG.DAT PTC 2SG.NOM ne-no-pērc tās kurpes ... NEG-PFV-buy.PRS.2SG these.ACC.PL.F shoe.ACC.PL '[At age 14 I set up such a whining because of a pair of shoes:] Mum, but why don't you buy me these shoes?...25

Both pragmatic functions could thus be said to derive from that of *why* questions, but what should be discussed here is the use of the perfective present. We may assume that it is a constructional feature distinguishing the constructions involved from normal 'why' questions, which are information questions. The perfective aspect is significant because we find it in all the languages concerned. Reproach is an illocutionary effect naturally obtaining when instead of the non-volitional construal of the

²⁴ https://forums.dieviete.lv/forums/topic/161822-/?sort=desc&pnr=3#postid-1582700

http://attiecibas.jautajums.lv/1338568 (accessed 29 04 2021)

non-occurrence of an event discussed above and illustrated in the dynamic modal construction, a volitional construal is applied. The perfective verb then refers not only to the final stage and completion of a process (if it did, it would naturally be low in volitionality, as shown in pairs like (10) and (11) above), but to a holistic event including the initiation of a process. The non-occurrence of a course of action expected from a person then becomes the basis for constructional meanings like 'suggestion' and 'reproach'.

5.6. Imperatival uses of perfective presents

The 1st person plural of the perfective present is used in a function similar to that of the inclusive 1PL imperative, used to express an exhortation or suggestion. The present-tense form may be accompanied by the adverb *gal* 'maybe':

```
(67) Mielasis gal nu-einam antradienį dear.nom.sg.m.def maybe pfv-go.prs.1pl Tuesday.acc į šokių pamoką? to dance.gen.pl lesson.acc.sg 'Shall we go to the dance lesson on Tuesday, darling?'<sup>26</sup>
```

The 1PL imperative, when accompanied by the adverb *gal* 'maybe', appears to be basically similar both semantically and pragmatically:

```
(68) [Tai va, sutinku, siūlausi panešti krepšį,]

teiraujuosi, gal nu-eikim šįvakar

inquire.prs.1sG maybe pfv-go.IMp.1pl tonight

į šokius?

to dance.Acc.pl

'[So I meet her and I offer to carry her bag for her,] and I ask:

"Perhaps we could go dancing tonight?"'

(Aivaras Veiknys, Metai 2016.3, https://www.zurnalasmetai.lt/?p=959)
```

Latvian has the same construction:

(69) Latvian

[Tad, kad esi aprunājies par laika apstākļiem vai kādiem citiem niekiem, vari savam interešu objektam uzjautāt:]

²⁶ https://jievaikai.lt/vaikas-moka-ir-gali-bet-nedaro-to-ka-daro-kiti-vaikai/

"Varbūt aiz-ejam iedzert kādu kafiju?"
maybe PFV-go.PRS.1PL drink.INF some.ACC.SG coffee.ACC.SG
'[Then, after some talk about the weather and other trifles, you can ask
the object of your interest:] Maybe we could go and have some coffee?"

27

Similar constructions seem to exist at least in some of the South Slavonic languages that have retained a perfective present that has not undergone a shift to future-tense value.²⁸

(70) Bosnian-Croatian-Serbian

Možda po-pijemo kafu?

maybe PFV-drink.PRS.1PL coffee.ACC.SG

Near-parallels can be found in Slavonic languages that show the shift to future tense meaning. Russian, in particular, regularly uses the 1PL form of the perfective future in the function of an inclusive 1PL imperative, as Russian does not have a special imperative form for the 1st person plural:

(71) Po-jdëm po-guljat'.

PFV-go.FUT.1PL DELIM-Walk.INF

'Let's go for a Walk.'

The situation in Polish, on the other hand, is similar to that of Lithuanian in that it does have a distinct form for the 1PL, but instead of this it may also use the 1PL of the perfective future to express a 'negotiable' suggestion:

(72) Polish (NKJP, Gazeta Wyborcza 1995-09-15)

[Dokąd tak pędzisz?]

Może pójdziemy razem na herbatę?

maybe go.fut.ipl together for tea.acc

'[Where are you hurrying to like that?] Maybe we could go and have tea together?'

While there seems to be no marked difference between the present-tense construction and that with the imperative, illustrated in (67) and (68) respectively, it is possible that the present tense is used as a strategy to avoid the directness of the imperative. But the function is quasi-imperatival anyway, and the use of aspect forms seems to echo that which we observe

²⁷ http://www.atputasbazes.lv/lv/blogi/ir_viedoklis/1864_kautribas_valgu_gusta/

²⁸ We are indebted to Wayles Browne for pointing out this Bosnian-Croatian-Serbian parallel.

in the imperative. The negative construction is imperfective, as is usually the case in the imperative:

(73) Gal n-einam *šiandien* paskaitas? to lecture.ACC.PL maybe NEG-go.PRS.1PL today Gal bara nu-einam? maybe to bar.Acc.sg PFV-go.PRS.1PL 'Maybe let's not go to class today? Maybe let's go to a bar?'29

Compare the corresponding imperatival constructions:

- (74) Nu-eik šiandien į paskaitas.

 PFV_go.IMP.2SG today to lecture.ACC.PL

 'Go to class today.'
- (75) N-eik šiandien į paskaitas.

 NEG-go.IMP.2SG today to lecture.ACC.PL

 'Don't go to class today.'

This parallelism in the distribution of aspects in the present tense and the imperative suggests that the perfective aspect in constructions like (67) is perhaps determined by the modal (directive) function of the forms in question. Imperatives belong to the domain of deontic (volition-based) modality, which operates on temporally non-anchored 'state-of-affairs' predications. The distribution of aspect forms in this type of predicates differs from that observed in temporal contexts (see Panov 2021). In a directive speech act, in the affirmative form, the focus is naturally on the achievement of the result rather than on the process leading up to it, hence the use of perfective forms.

6. In conclusion

In this article we have argued that Lithuanian (and, for that matter, Baltic in general) has an aspectual system comparable to, though less grammaticalised than, that of the Slavonic languages, with which it shares a process of grammaticalisation of lexical aspect classes. The Slavonic languages are, however, not homogeneous with regard to aspect, and Lithuanian (Baltic) sides with the Western Slavonic languages (in Stephen Dickey's classification) in failing

²⁹ http://www.anekdotai.biz/anekdotas-6954

to broadly generalise imperfectivity beyond its durative-progressive nucleus; this manifests itself in the free use of perfective verbs in habitual-generic contexts and in the narrative present. The generalisation of imperfectives in such contexts in Eastern Slavonic can be viewed as a more advanced stage in the process of grammaticalisation, resulting in ever stronger dominance of aspect in the temporal system. It is with (most of) Southern Slavonic that Baltic shares the retention of the perfective present as a present rather than future tense. Compared to Slavonic as a whole, Baltic verbal aspect has remained closer to its lexical roots: owing to the very limited extent of secondary imperfectivisation of perfective verbs, many Baltic verbs are biaspectual. Still, both Baltic and Slavonic have retained a number of usage types basically harking back to the pre-grammaticalisation stage of lexical aspect: many patterns in the use of aspect forms have their origin in the opposition between imperfective accomplishment verbs characterised by agency and their perfective counterparts denoting change-of-state events. This opposition is exploited mainly with negation and manifests itself in the imperative but also in a number of constructionalised peripheral uses described in Section 5 of the article. On a general note, we can conclude that Baltic verbal aspect, through its lesser degree of grammaticalisation, can shed an important light on Slavonic verbal aspect, and on the typology of bounder-based verbal aspect in general.

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ABBREVIATIONS

ACC — accusative, ADJ — adjective, CVB — converb, DAT — dative, DEF — definite, DELIM — delimitative, DEM — demonstrative, DIM — diminutive, DISTR — distributive, F — feminine, FUT — future, GEN — genitive, IMP — imperative, INF — infinitive, INS — instrumental, IPFV — imperfective, LOC — locative, M — masculine, N — neuter, NEG — negation, NOM — nominative, NPST — non-past, PA — active participle, PFV — perfective, PFX — prefix, PL — plural, PLN — place name, PN — personal name, PP — passive participle, PRS — present, PST — past, PTC — particle, REL — relative pronoun, RFL — reflexive, RPO — reflexive possessive, SG — singular, SML — semelfactive, VOC — vocative

Sources

LithuanianWaC_V2 = Lithuanian Web Corpus (48,650,918 words), at sketch. engine

ltTenTen14 = Lithuanian Web Corpus (778,151,979 words), at sketch.engine ccll = Corpus of the Contemporary Lithuanian Language at http://tekstynas.vdu.lt

NКJP = Narodowy Korpus Języka Polskiego at http://nkjp.pl

RNC = Russian National Corpus at https://ruscorpora.ru

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Untangling the functions of aspectual distinctions in the Lithuanian imperative against the background of Slavonic

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In general linguistics, the functions of the perfective and the imperfective aspect have been thoroughly investigated in the domain of realis, especially in the past tense. However, there are languages which exhibit this sort of contrast in other domains, for example, in the imperative. The functions of the aspectual grams in the imperative may differ significantly from those documented in the realis. In the present paper, I argue that this is the case in Lithuanian. I build on the studies of the aspectual contrast in the imperative documented for Russian and Slavonic in general. I test whether the functional contrasts found there exist in Lithuanian as well. The results of this pilot study suggest that with regard to the use of the aspectual grams in the imperative, Lithuanian converges to a large extent with the North-Eastern subgroup of Slavonic.

Keywords: imperative, aspect, Russian, Slavonic, Lithuanian

1. Introduction: aspect in the imperative in typology

The goal of this paper is to present and discuss a fragment of Lithuanian grammar which has not yet attracted linguists' attention: the use of perfective and imperfective forms in the imperative. An example in which two aspectual forms are contrasted is (1):

¹ I would like to express my gratitude to the members of the 'Baltic Verb' project for their valuable comments at various stages of this study, as well as to the anonymous reviewers. This research has received funding from the European Social Fund (project No. 09.33-LMT-K-712-01-0071) under grant agreement with the Research Council of Lithuania (LMTLT).

(1) a. Piešk dramblį.
draw.imp.2sg elephant.Acc.sg
b. Nupiešk dramblį.
pfx.draw.imp.2sg elephant.Acc.sg
'Draw an elephant.'2

The contrast between (1a) and (1b) cannot be easily rendered in an English translation. The most likely interpretation is the following one. In (a), the addressee is supposed to already be aware of the content of the request, e.g. the request is being repeated. In (b), by contrast, the request is framed as completely new to the addressee. This is signaled by the use of a prefixed (b) and a non-prefixed (a) form of the verb. This particular kind of contrast is subject to inquiry in the present paper.

Before I turn to the Lithuanian system, however, I will present the typological context of the problem, which will help us untangle some seemingly enigmatic issues crucial for understanding the Lithuanian data.

In typology, the studies of the domain of aspect have been mostly concerned with the domain of realis, and the past and present tenses in particular.³ The two most influential typological studies of aspect—Comrie (1976) and Dahl (1985), as well as the most recent handbook (Binnick 2012) do not discuss the aspectual distinctions beyond assertive speech acts and finite forms. Thus, prototypical aspectual oppositions studied in the typological literature are of the same type as in the following examples:

- (2) a. I read a book.b. I was reading a book.
- (3) Russian

a. Ja čital knigu.⁴
I.NOM read.m.sG[IPFV] book.ACC
'I was reading a book.'

² Examples with no source indication are elicited.

³ There is no universally accepted typological definition of the realis. The use of the terms realis, assertive, declarative, factive varies significantly across the literature. For definitions, see, e.g., Elliott (2000) or Matić and Nikolaeva (2014). I do not discuss this topic in the present paper. We can rely on a working definition: realis forms indicate what the speaker considers to be a known state of affairs.

⁴ The Leipzig glossing rules (https://www.eva.mpg.de/lingua/resources/glossing-rules.php) are used for all the examples of the present paper except Lithuanian. For Lithuanian, the Salos glossing rules are followed (Nau & Arkadiev 2015). I mark the morpheme boundaries explicitly only in the examples in which these are crucial to understanding the text of the paper.

b. Ja pročital knigu.

I.NOM read.M.SG[PFV] book.ACC

'I read a book.'

Both the English and the Russian sentences refer to events conceived by the speaker as having actually taken place in the past. Therefore, the properties of the event structure which are highlighted by the speaker through the use of specific aspectual forms—roughly, an ongoing process (the imperfective in Russian and the progressive in English) or a completed action (the perfective)—have their foundation in physical reality. Here, the meanings of aspectual grams are particularly transparent: they define a viewpoint on the temporal structure of real events. Beyond the realis domain, it is much less clear what the ideas of completeness or incompleteness—the core aspectual values of telic events—might refer to: technically, no situation beyond the realis can be completed because it has never actually taken place. Therefore, the criteria for choice of a perfective or an imperfective verb form beyond the realis, whenever such an option is at hand, are by no means straightforward. In fact, some languages, including those with a grammaticalized binary viewpoint aspectual opposition (perfective vs imperfective) are able to extend this distinction beyond the realis. For example, modern Greek employs aspectual oppositions in its imperative, subjunctive, and future tense forms (Mackridge 1985, 102-124).

In this paper, I focus on aspectual contrasts in the imperative. As Aikhenvald (2010, 125) puts it, "Imperatives are widely believed to be poor in aspectual distinctions compared to other clause types (...) imperatives tend to have fewer aspectual forms and distinctions than non-imperatives." To my knowledge, there are no large-scale sample-based typological studies of the use of aspect in the imperative, and the topic is remarkably underresearched. However, a pilot study (van der Auwera, Malchukov & Schalley 2009) sheds some light on the issue. The paper focuses on the perfective vs imperfective opposition in the imperative. There are a few logical possibilities for the interaction between the perfective vs imperfective opposition and the imperative: (1) the complete lack of aspectual marking in the imperative, (2) a full distinction between the two aspectual grams, (3) obligatorily perfective imperatives, (4) obligatorily imperfective imperatives. The authors demonstrate that all four possibilities are attested across languages. Type (1) is represented by Yucatec Maya, type (2)—by Russian and other Slavonic, type (3)—by Misantla Totonac, type (4)—by Egyptian Arabic and most of the rest of Semitic. Type (1) is also typical for Standard Average European, which can be illustrated by Italian examples:

(4) Italian

- a. comprai del vino buy.pst.pfv.isg prt.m wine.sg 'I bought wine'
- b. compravo il vino
 buy.IPF.1SG DEF.M wine.SG
 'I was buying wine'
- c. compra il vino!
 buy.IMP.2SG DEF.M wine.SG
 'buy wine.'

For the imperative, only the form as in (c) is possible, which is not marked for aspect. Van der Auwera, Malchukov & Schalley (2009) stress that no claims can be made as to the typological frequency of each of the types and, to my knowledge, the state of affairs has not improved since then.

Aikhenvald (2010) touches very briefly upon the topic of interaction between the imperative and the aspect. According to her, if an aspectual opposition is present in the imperative at all, the most typical one is that between *punctual* vs *continuative*, which can be illustrated by Mbabaram (Australia):

(5) Mbabaram

- a. nda-g
 shoot-IMP
 'shoot!'
- b. nda-ru-g shoot-CNT-IMP 'carry on shooting!' (Aikhenvald 2010, 47)

Importantly, in languages where imperfective and perfective forms in the imperative are possible, their functions may deviate significantly from those exhibited in the indicative. Such deviations and reinterpretations are particularly prominent in, although they are not restricted to, the Slavonic languages, which have been the main focus of the studies of aspectual distinctions in the imperative until now. Most existing in-depth studies of this topic are language-particular (Šatunovskij 2009; Padučeva 2010; Dickey 2020), some include the whole phylum, e.g. von Waldenfels (2012),

and Benacchio (2010; 2013) includes modern Greek beyond Slavonic for comparative purposes. Languages with 'Slavonic-style' aspectual systems such as Georgian and Ossetic, which exhibit aspectual contrasts in their imperative forms, have not been studied in this respect.⁵

In the present paper, I argue that an opposition between the perfective and the imperfective in the imperative can be postulated for Lithuanian as well. My goal is to present its preliminary characteristics, building upon the studies of the corresponding phenomenon in Slavonic languages, especially Russian. It is to be noted that this is a pilot study, which is far from being exhaustive. In Section 2, I provide an overview of the functions of the perfective and the imperfective imperatives in Russian and, more briefly, Slavonic in general. I then use the functions relevant for the Slavonic phylum-internal typology as comparative concepts and test them with Lithuanian (Section 3). In the Conclusion, I summarize the results and outline some future research prospects.

2. Russian and other Slavonic languages

In all Slavonic languages, each verb (with few exceptions) belongs to one of the two aspectual classes: the imperfective or the perfective. Aspectual forms are derived by means of lexical derivation rather than regular inflectional morphology: therefore, the aspectual value of each verbal form is an inherent lexical feature, not unlike the grammatical gender of nouns in many Indo-European or Afro-Asiatic languages. There are two main morphological techniques involved in the creation of aspectual forms. Prefixation—adding a preverb with a primary spatial function to an imperfective verb—typically results in creating a perfective form. The preverb may add an additional meaning component to the original verb or not. Conversely, adding a specific suffix to a perfective verb stem results in the creation of a new imperfective verb. This core strategy may be illustrated by the following Russian examples:

⁵ However, for Georgian, see some observations in Tomelleri & Gäumann (2015).

b. Ja za-pisal lekciju.

1SG PFX-write.PST.SG.M[PFV] lecture.ACC.SG

'I wrote down notes of the lecture.'

c. Ja za-pis-yva-l lekciju.

1SG PFX-write-IPFV-PST.SG.M[IPFV] lecture.ACC.SG

'I was writing down notes of the lecture.'

These are only tendencies: aspectual values are not predictable from the verbal form and are to be treated as inherent lexicon-bound features of verbs. Beyond that, the South Slavonic languages, Bulgarian and Macedonian in particular, exhibit a parallel system of European-type inflectional aspect in the domain of the past, which interacts with the derivational aspect in complex ways. Unlike the past-restricted inflectional aspect, the grammaticalized derivational aspectual opposition extends to the whole paradigm of a verb (with certain nuances, which I leave out here).

Crucially, all Slavonic languages exhibit the perfective *vs* imperfective opposition in the imperative. This is a well-studied topic. Here, I present a brief summary of the account of the use of aspect in the imperative in Russian by Padučeva (2010) and its extension to the whole Slavonic genus on the basis of Benacchio (2010; 2013; 2018) and von Waldenfels (2012). The studies mentioned here clearly show that the Slavonic languages beyond Russian may be described on the basis of the same principles and oppositions, despite relatively minor differences, which mostly concern the frequency and prominence of different form types, especially in the use of the imperfective imperative. I discuss these differences in the concluding part of this section.⁶

In Russian, the unmarked imperative forms are perfective with telic verbs and imperfective with atelic verbs. The perfective imperatives of telic verbs are used to express simple commands and requests to carry out

⁶ The amount of literature on aspect in the imperative in Slavonic languages, Russian in particular, is large, and presenting an exhaustive overview of it is not my goal here. The reason for choice of these mentioned works and not others is their clear typological orientation and the establishment of functional types which may be viewed as kinds of nodes in a semantic map. Recent studies otherwise quite interesting, such as Dickey (2020) or Šatunovskij (2009), which propose cognitive accounts of the Russian aspect in the imperative, are of little use here, as they can hardly serve as sources of information for a comparative cross-linguistic study.

an action, where the addressee is supposed to be unaware of the speaker's wish in advance. A typical example is:

```
(7) otkroj okno!
open.IMP.2SG[PFV] window.Acc.sG
'Open the window.'
```

Benacchio (2018) notes that for such uses, the speaker's focus on the concluding stage of the action may be postulated: after all, what matters in practice for the speaker is to make the addressee achieve a certain result or change of the state of affairs. By contrast, the imperfective form of the imperative is the only possibility with inherently atelic verbs:

```
(8) spi!
sleep.imp.2sg[ipfv]
'Sleep!'
```

The delimitative forms marked by the prefix *po*- are inherently perfective and compatible with both telic and atelic verbs, and they normally do not allow for suffixal imperfectivization as in (6c). The function of such forms is equal across the imperative and the rest of the forms:

```
(9) a. po-spi.

DELIM-sleep.IMP.2SG[PFV]

'Have a brief nap.'
```

```
b. ja po-spal paru časov.

I DELIM-sleep.PST.SG.M[PFV] couple.ACC.SG hour.GEN.PL
'I had a nap for a couple of hours.'
```

The complexity and the difficulties for a descriptivist, as well as the main differences between the Slavonic languages lie, however, in the domain of the imperfective imperative of telic verbs, the 'marked' member of the opposition. Here, purely aspectual, quasi-aspectual, as well as various pragmatic functions are attested.

First, a purely aspectual function—the habitual one—is at hand:

```
(10) otkryvaj okno každoje
open.IPFV.IMP.2SG window.ACC.SG every.ACC.SG.N
utro!
morning.ACC.SG
'Open the window every morning.'
```

The group of functions I called pseudo-aspectual consists of several relatively close functions. The Russian imperfective lack them outside the imperative domain, but their connection with the original aspectual function—durative/progressive—is transparent.

One such function is in fact closely related to the progressive meaning of the imperfective aspect, but exhibits additional pragmatic connotations. The imperfective imperative is used in Russian and other East Slavonic (to a lesser extent—outside this group) to mark the focus on the manner of the action rather than the action itself. Benacchio (2010; 2018; 2013) calls this use 'focus on the middle phase', but Gusev (2011) argues against this view, suggesting instead that the real focus is on the very fact that the action takes place rather than on any of its phases. A typical example from Russian is:

dver' (11) Otkrvvaite medlenno! ved' ona open.IMP.2PL[IPFV] door.Acc.sg slowly PTC she.NOM skripit, deti mogut child.NOM.PL creak.prs.3sG and can.PRS.3PL prosnut'sja. wake up.inf 'Open the door slowly! It creaks and the children may wake up.' (Benacchio 2013, 176)

Beyond East Slavonic, the imperfective is rarer and often incompatible with this function.

Another pseudo-aspectual function is *the continuative*, which is, according to Aikhenvald (2010, 126), widely attested for imperfective imperatives cross-linguistically:

(12) govorite, govorite!⁷
talk.imp.2pl[ipfv] talk.imp.2pl[ipfv]
'Keep talking' (Padučeva 2010, 67)

The imperfective imperative exhibits the function defined as 'focus on the initial phase' (Rus. *pristup k dejstviju*, lit. 'onset of the action'). By

In this example, the continuative function of the imperfective imperative is strengthened by a specific syntactic construction—the reduplicated verb—which bears the continuative function itself.

using an imperfective form, the speaker calls on the addressee to start performing the action:⁸

(13) govorite, ja vas slušaju. talk.IMP.2PL[IPFV] 1SG.NOM 2PL.ACC listen.PRS.1SG 'Please speak, I am listening.'

The next function of the imperfective imperative departs yet further from aspect. Nevertheless, it preserves a certain connection to the domain of temporal structure. The imperfective imperative may be used to form a command/request to immediately perform or start performing an action:

(14) govorite, kto vy takoj!
tell.imp.2pl[ipfv] who.nom 2pl.nom such.nom.sg.m
'Tell me immediately who you are!'

The latter function may be viewed as the connecting link between the pseudo-aspectual and non-aspectual ones. An important non-aspectual meaning component characteristic of the imperfective imperative in Russian is defined by Padučeva as 'action conditioned by the circumstances'. In this group of uses, the addressee is supposed to be aware, at least to some extent, of the action s/he is supposed to carry out in the given situation. Padučeva provides a highly eloquent example. The following sentence is pronounced by a mugger on the street; it is directed to the person he is attacking:

(15) vyverni karmany!
turn_inside_out.IMP.2SG[PFV] pockets.PL.ACC
čto ja govorju? vyvoračivaj!
what 1SG.NOM say.PRS.1SG turn_inside_out.IMP.2SG[IPFV]
'Turn your pockets inside out (PFV)! You hear me? Come on, do it (IPFV)!'
(Padučeva 2010, 72)

In this sentence, the mugger first expresses his order using a perfective form. The victim does not obey, so the mugger repeats his order in the imperfective supposing the victim to have heard the order when issued for the first time. In the next sentence, the speaker expects the addressee to take the baby and believes that the addressee shares her expectation:

⁸ However, see, Gusev (2011), where the existence of the 'focus on the initial phase' as a separate function is argued against. The author argues that all the examples in the literature ascribed to this function may be interpreted as marking a command presented as expected by the addressee.

(16) nu beri že u menja rebënka
PTC take.IMP.2SG[IPFV] PTC from 1SG.GEN baby.ACC.SG
'Come on, take the baby from me!' (Padučeva 2010, 72)

The meaning of an expected command is strengthened by two discourse particles—nu and $\check{z}e$. Both express the function of marking the proposition as uncontroversial (Panov 2020a).

The domain of expectedness develops a relatively sophisticated system of marking illocutionary functions such as permission or politeness degrees. The permissive function of the imperfective imperative implies that the addressee is already aware of the action s/he intends to carry out:

Regarding the expression of politeness, the situation in Russian, as well as in other Slavonic languages, is rather complex. It is treated in detail in Benacchio (2010; 2018). Both imperfective and perfective imperatives can function with different degrees of politeness. Building upon Brown and Levinson (1987) and Leech (1983), Benacchio (2010; 2018) argues that politeness is associated with the imperfective and the perfective indirectly. In fact, there are two strategies of expressing politeness: negative politeness and positive politeness. The former presupposes keeping an interpersonal distance with the addressee, and the latter shortens the distance. In Russian, the imperfective is associated with intimacy, whereas the perfective marks interpersonal distance (formality). Both intimacy and formality may be interpreted as polite or impolite depending on whether the addressee benefits from the action or not. For example, when it is cold outside, the speaker would use a positive politeness strategy inclining the addressee to dress warmly:

(18) odevajtes' poteplee.
dress.imp.2pl[ipfv] warmly.comp
'Dress up as warmly as possible.'

By contrast, a policeman is being rude by using a distance-shortening imperfective form:

(19) dokumenty pokazyvajte!
document.ACC.PL show.IMP.2PL[IPFV]
'Show your documents!'

In such a context, keeping formal distance by using the perfective form is interpreted by the addressee as less violating her/his personal boundaries, thus more polite.

Finally, the imperfective imperative is the default and dominating form in prohibitive contexts, e.g.:

```
(20) ne pej, kozlënočkom

NEG drink.IMP.2SG[IPFV] little_goat.INS.SG

staneš'.
become.FUT.2SG[PFV]

'Don't drink, otherwise you'll become a little goat.' (from a folktale)
```

However, a perfective prohibitive is also possible. It occurs with the specific function of warning, which is also addressed by linguists as *apprehensive* (Dobrushina 2006), whereby performing the action can be potentially harmful for the addressee. It usually occurs in a construction starting with *smotri* (lit. 'look', i.e. 'stay warned'):

```
(21) smotri ne podskol'znis'!
look.imp.2sG[ipfv] neg slip.imp.2sG[pfv]
'Be careful, don't slip!'
```

Bulygina and Smelëv (1999) argue that in addition, in this type of constructions, the action is depicted as being beyond the speaker's control. This component can be prominent to a larger or smaller extent.

Summing up, the Russian imperfective imperative marks a call for a (i) habitual action, (ii) focus on the manner/process (iii) single action with a focus on the initial phase, (iv) continuation of an action, (v) immediate action, (vi) action expected by the addressee, including permission (vii). It is also used to mark commands with positive politeness shortening the social distance between speech act participants (viii) and it is the default form in prohibitive contexts (ix). By contrast, the perfective imperative is (i-a) the default form in commands and requests when the focus is on the whole action, intended to be completed. It also marks negative politeness by stressing the interpersonal distance between the speaker and the addressee (ii-a) and is used in prohibitives denoting warnings (iii-a).

Other Slavonic languages exhibit a high degree of convergence with Russian with regard to the use of perfective and imperfective imperatives. Benacchio's (2010; 2018) qualitative research as well as Waldenfels' (2012) corpus-based quantitative study have demonstrated that the main

classification contexts established for Russian are valid for the whole of the Slavonic branch. Geographically, the main split within the Slavonic corresponds to Dickey's (2000) East-West split. In the case of imperative, the East Slavonic languages, which form a clear cluster and behave in almost exactly the same way, are remarkable in their extensive use of the imperfective imperative to express positive politeness (intimacy). Slovenian, Czech and Slovak are the most divergent from Russian, Ukrainian and Belarusian, exhibiting a relatively low degree of use of the imperfective imperative, whereas Polish and Bulgarian occupy an intermediate position closer to the East Slavonic cluster (von Waldenfels 2012, 150). Contexts in which the languages of the Western group do not allow imperfective forms are mostly permissives and politeness formulas such as 'Please come in', in which the East Slavonic prefers a positive (familiar) politeness strategy unacceptable in the Western group. Another context in which East Slavonic languages form a cluster and are opposed to the Western group (which converges with the non-Slavonic modern Greek in this respect) is the use of the imperfective when the focus is on the manner of the action.

It is to be kept in mind that the contexts of occurrence of the imperfective and the perfective imperative presented above do not reflect all the subtleties of their actual usage. Rather, these are substance-based functional comparative concepts (Haspelmath 2010) relevant for capturing differences between genealogically related and/or structurally close languages. In the next section, I apply the same comparative concepts to a non-Slavonic language—Lithuanian—which, however, exhibits a large extent of structural affinity with Slavonic. Previously, a similar procedure in accounting for the same domain was applied to Modern Greek (Benacchio 2013).

3. Lithuanian

I will now use the above sketch of the functioning of the perfective and imperfective imperatives in Russian and Slavonic and apply its principles to Lithuanian. My claim is that all the functional distinctions relevant to Slavonic turn out to play a role in Lithuanian as well.

Before I turn to the imperative, I must briefly present the problem of the perfective and the imperfective in Lithuanian in general. Although arguments have been expressed against accounting for Lithuanian aspect in terms of a perfective vs imperfective grammatical opposition (Arkadiev 2011), both the traditional description (Ambrazas 2006) and a paper in the current issue (Holvoet, Daugavet & Žeimantienė 2021) insist on its validity. In the latter work, the authors argue that not unlike the Slavonic languages, Baltic exhibits two grammaticalized lexical aspectual classes. What is different in Baltic in comparison to Slavonic is the degree of grammaticalization (higher in Slavonic), the number of biaspectual verbs (higher in Baltic), and the productivity of secondary imperfectivization (more productive in Slavonic). In Lithuanian, the main diagnostics for perfective vs imperfective verbs are progressive contexts—in the present, the past, and the future. Among the telic verbs, only the imperfective ones allow for progressive readings. The following examples consider the verb 'read' in transitive constructions, which may be considered canonical telic contexts.

(22) O dabar aš skaitau knygą.
and now I.NOM read.PRS.1SG[IPFV] book.SG.ACC
'And now, I am reading a book.' (LKT)

When perfective forms are marked as present, they are interpreted as either habitual or historical present:

- (23) Tik tq perskaitau, kq
 only that.ACC PFX.read.PRS.1PL[PFV] what.ACC
 būtinai reikia.
 necessary be_needed.PRS.3
 'I only read (entirely) what is compulsory.' (LKT)
- (24) Šios dienos aš laukiau dvidešimt this.gen.sg.f day.gen.sg I.NOM wait.pst.1sg twenty tiek laukimo metų. Irрo years.GEN.PL after waiting.GEN.SG and so_many metų aš perskaitau PFX.read.PRS.1SG[PFV] years.GEN.PL I.NOM this.acc.sg.m sakinį. sentence.Acc.sg 'I had waited for this day for twenty years, and after so many years of waiting I read this sentence'. (LKT)

Unlike in the present sense, in the past (and future) tenses, the perfective forms of telic verbs only allow for the interpretation of attaining a limit:

(25) Aš ją perskaičiau

I.NOM she.ACC.SG PFX.read.PST.1SG[PFV]

'I read it (a book)' / *'I was reading/finishing reading a book'/*'I read books regularly/repeatedly'

Therefore, in Lithuanian, unlike in Slavonic, there are no formal restrictions on the occurrence of the perfective and the imperfective within the verbal paradigm, but the use of the perfective in certain tense forms imposes restrictions on the semantic interpretation of these forms.

In the following, I will call 'imperfective' those forms which allow for a progressive reading in the simple (non-habitual) past tense, for example <code>piešti</code> 'be in the process of drawing', 'draw regularly/repeatedly'. I will call 'perfective' those forms which do not allow for progressive or habitual readings in the same tense forms, such as <code>nupiešti</code> 'draw (completely)'. The corresponding uses of the two forms can be illustrated by the following examples:

- (26) Teta, aš tave nupiešiau.
 aunt.voc.sg I.nom you.acc.sg pfx.draw.pst.1sg[pfv]
 'Aunt, I have drawn you.' (LKT)
- (27) Aš ilgai piešiau ir nupiešiau

 I.NOM long draw.PST.1SG[IPFV] and PFX.draw.1SG[PFV]

 namą.

 house.ACC.SG

 'After a long process of drawing, I drew a house.' (LKT)

Importantly, this definition is also applicable to inherently atelic verbs marked with the delimitative *pa*- preverb—a particular group within the system of aspect marking in Lithuanian. These can be uncontroversially classified as perfective:

(28) Aš pasėdėjau prie židinio
I.NOM PFX.Sit.PST.1SG by fireplace.GEN.SG
valandėlę
hour.DIM.ACC.SG
'I sat for about an hour in front of the fireplace.'

I call 'biaspectual' those verbs which are unable to receive progressive readings in the simple past tense but are able to have them in the present tense. The most prominent group of such verbs are, no doubt, the prefixed motion verbs. Consider the example:

- (29) Kai aš išėjau, pradėjo lyti. when I.NOM PFX.go_out.PST.1SG begin.PST.3 rain.INF 'When I went out, it started to rain.' / '*When I was going out, it started to rain.'
- (30) Aš išeinu iš Ekonomikos

 I.NOM PFX.go_out.PRS.1SG from economics

 komiteto narių.

 committee.GEN members.GEN.PL

 'I am leaving the economics committee.' (LKT)

In order to trigger a progressive reading in the past tense, such verbs require a special periphrastic participial construction (31a), which rarely occurs in colloquial speech. Alternatively, in colloquial use, a Slavonic-style secondary imperfectivization by means of the iterative suffix -inė-is involved (31b), which is viewed as unacceptable in the standard language.

(31) a. Kai aš buvau beišeinąs...
when I.NOM be.PST.1SG CNT.PFX.go.PRS.PA.NOM.SG.M
b. Kai aš išeidinėjau...
when I.NOM PFX.go.ITER.PST.1SG
'When I was going out...'

Some frequently used forms of this type are various prefixed derivations of the root *ei*- 'go, walk' such as *už-eiti* 'come over', *at-eiti* 'arrive, come', *pri-eiti* 'come close', the parallel forms of other motion verbs such as *važiuoti* 'move with a vehicle' or *bėgti* 'run', caused-motion verbs such as *padėti* 'put down', *įdėti* 'put in', *atnešti* 'bring', *išnešti* 'take away', or phase verbs *baigti* 'finish' or *pradėti* 'start'. In the present study, I largely leave biaspectual verbs out of consideration. In the imperative form of such verbs, the PFV-IPFV opposition is most often neutralized. Thus, there is only one way to say 'come in' in terms of the use of aspect:

(32) *Užeik.*PFX.go.IMP.2SG
'Come in.'

By contrast, verbs exhibiting clearly identifiable aspectual pairs exhibit a PFV-IPFV opposition in the imperative as well, as seen in (1), here repeated as (33):

http://www.vlkk.lt/konsultacijos/1159-priesagos-ineti-dineti

(33) a. Piešk dramblį.
draw.imp.2sG elephant.ACC.sG
'Start drawing an elephant.' [The hearer is already aware of the speaker's wish.]

b. Nupiešk dramblį.
 PFX.draw.IMP.2SG elephant.Acc.sG
 'Draw an elephant.'

In what follows, I will focus on cases such as (33). It is important to note that the 'perfective' and the 'imperfective' defined for Lithuanian within the present study are not necessarily to be understood as languageparticular structural (descriptive) categories. After all, the decision whether a certain category 'is there' or 'is not there' in a language is the arbitrary decision of a grammarian. In fact, we do not have enough evidence to ascribe a reality status (e.g. a cognitive one) to either 'comparative concepts' or 'descriptive categories' understood as in Haspelmath (2010). Van der Auwera and Sahoo (2015) argue that both are ultimately 'linguist-specific' and represent, first and foremost, convenient descriptive generalizations. Therefore, the structural status of the perfective and the imperfective within Lithuanian does not matter to us here. Here, the perfective and the imperfective are comparative concepts which apply cross-linguistically within the set of languages under investigation (and not beyond)—Slavonic and Lithuanian. The imperfective and the perfective aspects of Slavonic, albeit structurally different from those of Lithuanian, exhibit the same reading restrictions in the past tense (if one equates the Russian simple past with the Lithuanian simple past), see the Russian translations of the Lithuanian examples (26-27):

- (34) Tëtja, ja tebja narisoval.

 aunt.nom.sg I.nom you.Acc.sg pfx.draw.pst.sg.m[pfv]

 'Aunt, I have drawn you.'
- (35) Ja dolgo risoval i

 I.NOM long draw.PST.SG.M[IPFV] and narisoval dom.

 PFX.draw.PST.SG.M[PFV] house.ACC.SG

 'After a long process of drawing, I drew a house.'

I will argue that semantic restrictions on the interpretation of perfective and imperfective forms are also characteristic of the Lithuanian imperative. In the framework of this paper, I will restrict myself to a trivial task which, however, reveals quite a lot about the nature of the aspectual opposition of the Lithuanian imperative, namely, I will check whether the specific functions established previously for Russian and Slavonic are also contrasted in Lithuanian imperative forms. I will use the Roman numbers of the functions in Slavonic listed in the conclusion to the previous section.

As in Russian and Slavonic in general (i-a), the default form of the non-prohibitive imperative of telic verbs in Lithuanian, when the context is a request or a command with the focus on the final stage of the action or, as Gusev (2011) puts it, the action as a whole, is the perfective one. This is the unmarked form:

```
(36) Parašyk/*Rašyk man kai
PFX.write.IMP.2SG[PFV]/*write.IMP.2SG[IPFV] 1SG.DAT when
atskrisi.
PFX.fly.FUT.2SG
'Text me as soon as you land.'
```

By contrast, the prohibitive imperative (viii) is by default imperfective:

```
(37) Negerk šitų sulčių.

NEG.drink.IMP.2SG[IPFV] this.GEN.PL juice.GEN.PL

'Don't drink this juice.'
```

In the same manner as in Russian, warnings, especially those in which the action is presented as being beyond the subject's control (iii-a), allow for the use of perfective forms. Such forms are distinctively colloquial:

```
(38) Ramiau. Neišgerk visko.
quietly.comp Neg.pfx.drink.imp.2sg[pfv] all.gen
'Steady now. Don't drink all [the glass] [immediately].' (LКТ)
```

As in Slavonic, the imperfective forms in the positive imperative are the marked ones. Similarly, their uses may be classified as those related to the primary aspectual uses and those exhibiting only indirect connection to them. The Lithuanian imperfective imperative is used in habitual contexts (function i in Slavonic). Perfective forms are ungrammatical here:

```
(39) Rašyk /*parašyk man kasdien.
write.imp.2sG[ipfv] /*pfx.write.imp.2sG[pfv] isG.dat every_day
'Write/text me every day.'
```

When the speaker's attention is on the manner of an action rather than the action itself, the imperfective form is the default one, as in type (ii) of Slavonic. This use is especially prominent in colloquial language: (40) Skaityk garsiai.
read.IMP.2SG[IPFV] aloud
'Read aloud.' (LKT)

By contrast, a parallel perfective form (*perskaityk*) is perceived as more neutral, whereby the whole situation of reading something loudly is presented as new to the addressee.

Focus on the initial phase of the action (iii) or a call to start performing the action is also expressed by imperfective forms. In the following example, the deictic pronoun *tas* indicates that the addressee already is aware of the action s/he is expected to carry out, namely, eating the beans:

(41) Tu valgyk. Valgyk tas
you.nom eat.imp.2sg[ipfv] eat.imp.2sg[ipfv] this.acc.pl.f
pupeles!
bean.acc.pl
'You eat! Eat those beans.' (lkt)

By contrast, its simple perfective counterpart is used whenever the action is framed as unexpected and important as a whole:

(42) Viską paimk ir suvalgyk.

all.ACC.SG PFX.take.IMP.2SG[PFV] and PFX.eat.IMP.2SG[PFV]

'Take everything and eat it.' (LKT)

A delimitative perfective *pa*-form of the same verb is also widely used. As in the case of the simple perfective, the action is framed as new to the hearer. The use of this form normally correlates with the use of Genitive object, which indicates a partial affectedness of the object referent:

(43) Pavalgyk sriubos!

PFX.eat.IMP.2SG[PFV] soup.GEN.SG

'Have some soup!'

The Slavonic function iv of the imperfective—a call to continue an action—is expressed in Lithuanian through the imperfective imperative as well. This function can be additionally highlighted by repeating a verb:

(44) Rašyk, rašyk.
write.imp.2sg[ipfv] write.imp.2sg[ipfv].
'Continue writing your article, I don't need you now.' (lkt)

The meaning of a command to perform the action immediately (v) is equally present among the functions of the imperfective imperative:

(45) Greičiau valgyk!
quickly.comp eat.imp.2sg[ipfv]
'Eat faster [right now]!' (lkt)

Again, a delimitative perfective form (*pavalgyk*) would be appropriate in the case when the meal is not yet served and is not present in front of the addressee's face.

Functions lacking direct connection to the aspectual ones are also comparable to those of Slavonic. The function of a command or request expected by the addressee under the given circumstances (vi) is clearly the domain of the imperfective imperative. Imagine two persons planning to make a phone call to a third person to discuss some important issue, but before they call her, they have to agree between themselves about their common opinion regarding the issue. Once they come to an agreement, one of them says to the other:

(46) Dabar skambink jai!
now call.IMP.2SG[IPFV] she.DAT
'Go ahead, call her (on the phone)!'

In the situation just described, both the speaker and the addressee are aware of their common intention to call the third person, therefore, an imperfective form is used. If the suggestion to call her were a new idea, the imperfective would be unacceptable, simply rude, or would be interpretable as a call for immediate action. Rather, the perfective imperative would be used:

(47) Paskambink jai dabar.

PFX.call.IMP.2SG[PFV] she.DAT now

'Why don't you call her now?'

It is important to note that in (46), both the IPFV and the PFV are acceptable, the IPFV being the preferred one. In (47), by contrast, the IPFV is ungrammatical.

Consider also a parallel example from the corpus, in which the supposed awareness of the addressee of the content of the request is stressed by the discourse-marker-like use of the verb *sakau* 'I say':

(48) Sakau, va, imk šitu say.PRS.1SG here take.IMP.2SG this.INS.SG.M

numeriu skambink.
number.ins.sg call.imp.2sg[ipfv]
'Come on, call this number' (LKT)

Not surprisingly, the imperfective is used in the related permissive function (vii) as well, as in the following constructed dialogue:

'Will you be eating more of this bread?— No, no, feel free to take it.'

Finally, positive politeness, i.e., short interpersonal distance under the condition of the addressee benefiting from performing the action (viii) is normally marked by imperfective imperative forms. This function, however, is more difficult to observe in Lithuanian than in Slavonic. Most politeness contexts analyzed by Benacchio (2010; 2018) deal with discourse formulas such as 'come in' or 'please sit down', which contain motion verbs. The latter, however, are most often biaspectual in Lithuanian. Thus, the Lithuanian verbal form in similar contexts is often aspect-neutral:

(50) Prašau užeikite.
please come_in.imp.2pt[Biasp]
'Please come in.'

However, the verb 'sit down' does occur in two aspectual variants—sėsti(-s) [BIASP] and atsisėsti[PFV].¹⁰ The former form is used in the contexts of positive politeness rather than the latter. For instance, a visitor is likely to start feeling more comfortable if an official says:

(51) Prašau sėskite.

please sit.IMP.2PL[BIASP]

'Please feel free to sit down.'

¹⁰ For the use of the reflexive marker in perfective verbs in Lithuanian, see Panov (2020b).

By contrast, the form <code>atsiseskite[PFV]</code> sounds like an order, and the visitor is likely to become worried: by using it, the official stresses her/his power position. The contrast between <code>seskite</code> and <code>atsiseskite</code>, however, is quite subtle, and both forms can be perceived as polite or impolite depending on factors such as intonation or even extralinguistic factors, e.g. the speaker's facial expression.

The use of the perfective as the marker of negative politeness strategy, whenever stressing social distance is likely to be interpreted as non-violation of personal boundaries, may be seen from the following pair of examples:

```
(52) a. Rodykite teises!
show.imp.2pl[ipfv] license.Acc.pl
b. Parodykite teises.
pfx.show.imp.2pl[pfv] license.Acc.pl
'Show me your driver's license'
```

In a situation when a driver is stopped by the police after having violated traffic rules and ordered to show her driver license, (52a) is perceived as rude, if not humiliating, whereas the (52b) is neutral.

Finally, some remarks on atelic verbs are necessary. The atelic verbs of Lithuanian—states and processes—are inherently imperfective and lack uncontroversial perfective correlates. Therefore, the aspectual contrasts discussed for the telic verbs above are largely neutralized for atelic verbs. For instance, there is only one way to say 'sleep' or 'stay sitting':

```
(53) a. Miegok.
sleep.IMP.2SG[IPFV]
'Sleep.'
b. Sėdėk.
stay_seated.IMP.2SG[IPFV]
'Stay sitting.'
```

However, as mentioned earlier, these verbs are normally able to construct pa-delimitative (inherently perfective) forms. While the use of pa-limitatives, as the use of po-delimitatives in Russian, is little (if at all) different in the imperative and the indicative, in some cases the contrast between an atelic verb and its delimitative counterpart is able to have a politeness effect, where the delimitative form is interpreted as more friendly. In the situation of a visitor waiting in a queue in a state institution, the following utterances may be produced by the official:

(54) a. Laukite čia.

wait.IMP.2PL[IPFV] here

'Wait here.'

b. Palaukite čia.

PFX.wait.IMP.2PL[PFV] here

'Please wait here.'

Nevertheless, the original delimitative function is still present in (54b). The politeness effect might be perceived as a pragmatic context-driven extension of it. After all, the official automatically seems nicer if the time of expectation is framed as limited. By contrast, in (54a) the visitor is made to understand that it may take a long time.

Summing up, the Lithuanian perfective *vs* imperfective opposition is valid in the imperative. Moreover, the functions of both grams are very close if not identical to those previously established for the Eastern cluster of Slavonic languages. As in the case of the grammaticalization of a binary aspectual opposition in the past tense, however, Lithuanian, unlike Slavonic, exhibits a significant number of cases in which the opposition is neutralized.

4. Concluding remarks and prospects

In this paper, after overviewing the functions of the perfective and the imperfective imperative in Russian and Slavonic, I tested the contexts relevant for the function distinguishing the two imperative types on a non-Slavonic language—Lithuanian. The main result achieved is that not only the contexts relevant for the endogenetic typology of Slavonic are also relevant for Lithuanian, but it is also clear that Lithuanian patterns with the Eastern rather than Western cluster of Slavonic languages, if one accepts the conclusions of Benacchio (2010; 2013; 2018) and von Waldenfels (2012).

There is a chance that the perfective *vs* imperfective opposition in the Lithuanian imperative has its own relevant contexts which are not found in Slavonic. However, I estimate this chance as relatively low building on my own subjective everyday observations of Lithuanian speech. Also, one should keep in mind that the contexts established for Slavonic are based on cross-linguistic, although phylum-bound, and not language-particular data. At the same time, different Slavonic languages, albeit genealogically

related, are situated in different areal clusters, and language contact effects play a big role in defining the structural profile of each Slavonic language (Seržant 2021). Therefore, one can assume that the contexts established as relevant for Slavonic reflect at least a part of the universal cross-linguistic variation, and one should not underestimate the cross-linguistic relevance of the research on Slavonic. It should be stressed again, however, that as a typological topic, the perfective vs imperfective imperative opposition is almost terra incognita, and the only linguistic genus relatively well researched in this respect is the Slavonic languages. Last but not least, this is due to the lack of relevant descriptive data: the functional dimension of the aspectual opposition in the imperative is largely ignored in grammars of languages which exhibit such an opposition (e.g., Georgian).

The present piece of research is not the first one applying the relevant criteria designed for Slavonic to a language of another genus. As it turns out, Modern Greek, whose perfective vs imperfective opposition is morphologically quite different from that of Slavonic, exhibits usage patterns quite similar to those of the 'Western' cluster of Slavonic in its imperative forms (Benacchio 2013). This is not surprising given its geographical affinity to South Slavonic languages. It is also particularly revealing in comparison to its ancestral language—Ancient Greek—in which, contrary to Modern Greek, the imperfective imperative was the most frequently used unmarked form, and the functions of the perfective imperative remain partly obscure even to present-day researchers (Keersmaekers & Van Hal 2016).

On the other hand, Georgian—the only non-Slavonic language with 'Slavonic-type' aspect based on derivation involving spatial preverbs I have found relevant data on—exhibits the opposition between the perfective and the imperfective in the prohibitive. Semantically, it has much in common with the corresponding opposition in Russian and Lithuanian: the imperfective form marks a general prohibition, whereas the perfective form is more concrete in its function and serves to warn the addressee. The use of the perfective in Georgian, however, is more generalized than in Russian, and is classified by Tomelleri and Gäumann (2015) as a 'preventive'. It serves to prevent the addressee from performing any kind of action in the future, whereas the imperfective form implies an action already in progress or about to be performed:

(55) Georgian

- a. nu c'er

 PROH write[IPFV]

 'Don't write (now).'
- b. *nu* da-c'er

 PROH PFX-write[PFV]

 'Don't write (in the future).'

In this light, it must not appear surprising that the pattern of use of the imperfective and the perfective imperative in Lithuanian, wherever this opposition is at play, converges to a large extent with that of East Slavonic: long-term extensive language contact between the Lithuanian (as well as Baltic in general) and the East Slavonic idioms is well-established (Wiemer 2003; Wiemer, Seržant & Erker 2014). This situation is parallel to that described for Modern Greek.

This paper has included one more language—Lithuanian—in the typological research on the functions of the perfective and the imperfective in imperative forms. I have also presented new descriptive data which will be relevant for a future comprehensive grammar of Lithuanian. The investigation of this typological topic is only in its beginning, but currently available data on the patterns of Slavonic, Greek, Lithuanian and Georgian are a legitimate point of departure for future research. I also leave aside a larger circum-Baltic areal context. A parallel investigation of Latvian, Estonian and Finnish could be very revealing. In the case of Estonian and Finnish, the patterns found in the imperative are particularly interesting, as the core strategy of the grammatical marking of perfective vs imperfective opposition in these languages is formally quite different from that found in Baltic and Slavonic: it is realized through case marking alternations of the direct object. A possible convergence of the use of aspect in the imperative between structurally different Estonian and Finnish, on the one hand, and Baltic or Slavonic on the other could be a strong argument in favor of an areal nature of this feature.

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ABBREVIATIONS

ACC — accusative, BIASP — biaspectual, CNT — continuative, COMP — comparative, DAT — dative, DEF — definite, DELIM — delimitative, DIM — diminutive, F — feminine, FUT — future, GEN — genitive, IMP — imperative, INF — infinitive, INS — instrumental, IPF — imperfect, IPFV — imperfective, ITER — iterative, M — masculine, N — neuter, NEG — negation, NOM — nominative, PA — active participle, PFX — prefix, PFV — perfective, PL — plural, PROH — prohibitive, PRS — present, PRT — partitive, PST — past, PTC — particle, SG — singular, VOC — vocative

Sources

LKT = Lietuvių kalbos tekstynas (The Lithuanian corpus) http://tekstynas.vdu.lt/tekstynas/

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Pluractionality in Lithuanian: A tale of two suffixes

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The paper investigates the use of the two verbal suffixes $-in\dot{e}$ - and -dav- in Lithuanian. Both suffixes express pluractionality, but $-in\dot{e}$ - is derivational and tends to express plurality of sub-events within one situation (event-internal pluractionality), whereas -dav- is inflectional and designates plurality of situations (event-external pluractionality). The data show that, when the two suffixes are combined within the same verb form, -dav- always scopes over $-in\dot{e}$ -, thus, the combination of the two suffixes usually describes the repetition of different situations such as processes, progressive situations, punctual events, delimited processes etc. Most of the data used in the article come from the Web corpus of Lithuanian.

Keywords: pluractionality, habituality, iterativity, aspectuality, actionality, Lithuanian

1. Introduction¹

This paper addresses the issue of verbal pluractionality in Lithuanian expressed by the two suffixes -*inė*- and -*dav*-. Verbal pluractionality is understood as a range of quantitative aspectual meanings describing pluralities of events; see, e.g., Dressler (1968); Cusic (1981); Xrakovskij, ed. (1989; 1997); Šluinskij (2006); Mattiola (2019).

In Lithuanian, plurality of events can be expressed in various ways (Genjušene 1989; Geniušienė 1997): for instance, pluractionality can be embedded in the lexical meaning of the verb, cf. multiplicative verbs *moti* 'wave' or *belsti* 'knock' which presuppose multiple actions. Pluractional

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interpretation is also available to some tense forms (although with certain lexical restrictions, see more below), cf. (1–2) where the same present form of the verb *keltis* 'wake up, rise' allows both for a progressive interpretation, i.e. involving a single event, cf. (1), and a habitual one, i.e. repeated multiple events, cf. (2).

- (1) Kur Petr-as? J-is dar keli-a-si.

 where Petras-nom.sg 3-m.sg.nom still wake.up-prs.3-rfl²

 'Where is Petras? He is still waking up.'3
- (2) Petr-as dažnai keli-a-si anksti Petras-NOM.sg often wake.up-prs.3-rfl early 'Petras often wakes up early.'

The meaning of pluractionality can also be introduced to the semantics of the verb by suffixes, cf. *spirti* 'kick': *spardyti* 'kick (continuously)'; *rėkti* 'scream': *rėkauti* 'scream (continuously)'. Lithuanian has a number of such suffixes; however, this paper is only concerned with the derivational suffix *-inė*- (Jakaitienė 1972; Genjušene 1989; Geniušienė 1997), and the inflectional suffix *-dav*- (Roszko & Roszko 1997; 2000; 2006; Sakurai 2015), cf. (3–4) in which they combine with the verb *perjungti* 'switch':

- (3) Man-au daugeli-ui atsibod-e γra think-prs.1sg majority-DAT.SG be.prs.3 be.tired.of-pa.pst.na per-jung-inė-ti dain-as. mažin-ti gars-a PVB-switch-ITER-INF song-ACC.PL decrease-INF volume-Acc.sg veiksm-us... ar dary-ti kit-us panaši-us do-INF action-ACC.PL other-ACC.PL.M similar-ACC.PL.M 'I think most [people] are tired of changing songs, lowering the volume or doing other similar actions...'
- (4) ...ne-keist-a, iškart per-jung-dav-o jog NASA NEG-weird-NA that NASA immediately PVB-switch-HAB-PST.3 pokalbi-u dažn-i, tik vos conversation-GEN.PL frequency-Acc.sg just only

² Throughout the paper, all glosses are given according to the Salos glossing rules, cf. Nau, Arkadiev (2015). This also applies to the suffixes under discussion which are glossed as $ITER(ative) = -in\dot{e}$ - and HAB(itual) = -dav-.

³ In this par

 $^{^3}$ In this paper all cited examples, unless stated otherwise, come from the Lithuanian Web corpus (LithuanianWaC v2), available at the SketchEngine platform (https://www.sketchengine.eu/).

astronaut-ai Mėnul-yje k-ą nors astronaut-nom.pl Moon-loc.sg what-acc idef atras-dav-o. find-hab-pst.3

"...it is not weird that NASA would change the conversation frequency as soon as the astronauts would find something on the Moon."

The peculiarity of these two Lithuanian suffixes is not only that they can combine separately with the same lexeme adding potentially different meanings of pluractionality, as can be seen in (3–4), but that they can also co-appear within the same form, cf. (5):

(5) ...rumpel-i laiky-day-o kairi-aja rank-a, tiller-Acc.sg hold-нав-рsт.3 left-def.ins.sg.f hand-INS.SG dešini-aja vairuotoi-as and right-def.ins.sg.f driver-nom.sg per-jung-inė-dav-o stabdy-dav-o... pavar-as, PVB-switch-ITER-HAB-PST.3 stop-HAB-PST.3 gear-ACC.PL "...[the driver] would hold the tiller with the left hand and would switch gears with the right hand, would stop [it]...'

The contexts in which both suffixes co-appear in one verb form seem to be rather specific. If we have a look at the Corpus of contemporary Lithuanian (*Dabartinės lietuvių kalbos tekstynas*, http://tekstynas.vdu.lt/tekstynas/), which is subdivided into different genres, we see that the verbs with both suffixes are more frequent in fiction than in non-fiction or journal texts, and are extremely rare in administrative texts, cf. Table 1.

Table 1. Counts of verb forms with the combination of suffixes -inė- and -dav-

	Raw numbers	Corpus size	Normalized (ipm)
Fiction	870	15765554	55.18
Non-Fiction	323	19322341	16.72
Administrative texts	5	13625715	0.37
Journalism	1416	86497837	16.37
Spoken	13	447396	29.06

The exploration of the usage of these two suffixes and their combination is the main goal of this paper.

The study is based on the data from the Lithuanian web corpus (LithuanianWaC v2). The corpus is automatically annotated and consists of over 48 million words. When preparing the dataset for this study, firstly, three distinct samples were extracted: verb forms with i) the suffix -inė-, ii) the suffix -dav-, iii) combination of the suffixes -inė-dav-. When searching for the verb forms with the suffix -inė-, all verb forms containing a segment -inė- inside the verb form were searched. This yielded a very large sample of over 64 000 examples. A random sample of 1000 examples was automatically created and afterwards manually filtered: the lexeme minėti 'mention' and its derivations were excluded, as well as examples with the suffix -dav- which were analyzed in another sample. In the end, there was a sample of 603 examples. The verbs with the segment -dav- were selected the same way: this search yielded an even larger number of examples (almost 100 000). Again, a random sample of 1000 examples was automatically generated and then manually filtered. In the end, there was a sample of 815 examples. There were only 633 examples of verb forms with the segment -inėdav-, so all of them were included in the analysis. The filtered sample had 573 examples in it. This also means that the combination of both suffixes is not that rare but appears to be less frequent than either of the suffixes on their own.

All these examples were coded for: i) Lemma (what stems combine with these suffixes; prefixed⁴ and reflexive variants of the same root were treated as different lemmata); grammatical properties of the verb form such as ii) Person (1/2/3); iii) Number (singular/plural); iv) Reflexivity (yes/no); v) Negation (negated/positive); and the semantic feature of vi) Actionality (stative, processual, telic etc.; see below). The sample of the -inė-verbs was additionally coded for vii) Tense forms (present, past, future etc.). The following section contains the discussion of the results obtained.

2. Pluractional suffixes -inė- and -dav-: formation

Historically both affixes are iterative verbal suffixes and are attested in Old Lithuanian texts; for a more detailed overview of the historical

⁴ Verb forms with the prefixes *be-*, *te-* and *ne-* were not treated as distinct lemmata.

development of *-dav-* see Pakerys (2017). In the contemporary standard language, the suffix *-inė-* is usually described as derivational, whereas *-dav-* is viewed as forming a separate tense (hence its inflectional status). Both suffixes are also attested in Lithuanian dialects, however their distribution across dialects is uneven. The suffix *-inė-* is present in different Lithuanian dialects and is reported to be especially frequent in southeastern Lithuanian dialects, possibly under the influence of the Slavic imperfectivizing suffix *-iva-*. cf. Fraenkel (1936); Vidugiris (1961, 1998); Kardelis & Wiemer (2002; 2003, 64), Pakerys & Wiemer (2007); Kozhanov & Wiemer (2019). The suffix *-dav-*, on the other hand, is only attested in a part of the Lithuanian dialects, namely East and West Aukštaitian and the Žemaitian area bordering on them; cf. Zinkevičius (1966, 356); it is absent in the majority of Žemaitian dialects and is almost never used in South Aukštaitian dialects, cf. Kozhanov & Wiemer (2019, 23).

The first obvious difference between the two suffixes lies in their compatibility with different verb forms: the verbs with the suffix -inė- form full verbal paradigms (see Table 2), whereas the suffix -dav- is restricted to the past tense.

Table 2. Combinations of the suffix -inė- with different verb forms in the sample.

Category	Raw numbers	%
Present	176	18.6
Past	190	20
Future	32	3.4
Irrealis	11	1.2
Imperative	16	1.7
Infinitive	322	34
Active participles	86	9
Passive participle	79	8.3
Converb	35	3.7

2.1. Allomorphs

In standard Lithuanian, the suffix -inė- has two allomorphs -inė- and -dinė-, whose distribution in most cases is purely phonological. The allomorph -inė- combines with the roots ending with a consonant, cf. grįžti: grįžinėti 'return, come back', rašyti: rašinėti 'write', whereas -dinė- is attached to the roots with a final vowel, cf. apeiti 'go around, bypass': apeidinėti 'circumvent, get around', joti 'ride': jodinėti 'ride' etc. The allomorph -dinė- can also be attached to the roots ending in the consonants -l- and -s-, cf. pulti: puldinėti (but also puolinėti) 'attack', kelti: keldinėti 'lift', mesti: mesdinėti 'throw' etc.

The suffix -dav- has no allomorphs.

2.2. Source stem

In standard Lithuanian, the suffix -inė- is usually attached to the infinitival stem, but, as the corpus data show, occasionally it can also combine with the past stem. This is the case with some verbs whose infinitival stem ends with vowels, cf. $davinėti \leftarrow duoti$ (duoda, davė) 'give', $kliuvinėti \leftarrow kliūti$ (kliūva, kliuvo) 'touch; be caught in' etc.; and with the consonant -s, cf. $siuntinėti \leftarrow siųsti$ (siunčia, siuntė) 'send', $skundinėti \leftarrow skųsti$ (skundžia, skundė) 'complain', $spaudinėti \leftarrow spausti$ (spaudžia, spaudė) 'press; print' etc. Variation is attested with verbs that have the e/i (in the infinitival stem) ~ e (in the past stem) alternation: $nuiminėti \sim nuėminėti \leftarrow nuimti$ (nuima, nuėmė) 'take off', $apsverinėti \sim apsvėrinėti \leftarrow apsverti$ (apsveria, apsvėrė) 'cheat in weighing' etc.

The suffix -dav-, on the other hand, is always attached to the infinitive stem with no exceptions, cf. duoti (duoda, davė) 'give' \rightarrow duodavo 'used to give', siųsti 'send' \rightarrow siųsdavo 'used to send', eiti 'go' \rightarrow eidavo 'used to go', rašyti 'write' \rightarrow rašydavo 'used to write' etc.

2.3. Lexical restrictions

It has been suggested that the suffix -inė- "attaches freely to the stem of any verb" (Roszko & Roszko 2006, 165), but the corpus data do not support this claim: for instance, iteratives can hardly be derived from some statives like **norinėti ← norėti 'want', **galinėti ← galėti 'can, be able', and there is no way to derive iteratives with the suffix -inė- from verbs in

-uo- describing processes, cf. *dainuoti* 'sing', *studijuoti* 'study', *programuoti* 'code (in it)' etc. There seem to be no lexical restrictions on the use of the suffix -day-.

When it comes to the combination of these suffixes with different verb roots, the suffix -dav- demonstrates the highest productivity (it is combined with 490 lemmas in our sample of 815 examples), whereas the suffix -inė- and the combination of the two suffixes -inė-dav- appear with approximately the same number of different roots (146 lemmas in the sample of 603 examples, 157 lemmas in the sample of 573 examples respectively).

If we look at the lemmas with which the suffixes combine, it seems to be evident that the most frequent lexemes to which the suffix $-in\dot{e}$ - is attached are the same that appear with the combination of the two suffixes, whereas the suffix -dav- most commonly combines with other lexemes.

Table 3. Most common roots in the samples

-inė- (total 603)		-dav- (total 815)		-inė-dav- (total 573)	
Lexeme	Frequency	Lexeme	Frequency	Lexeme	Frequency
nagrinėti 'research, explore'	117 (19.4%)	būdav- 'be'	87 (10.7%)	važinėdav- 'used to drive'	67 (11.7%)
<i>tyrinėti</i> 'study, research'	37 (6.1%)	sakydav- 'say'	14 (1.7%)	klausinėdav- ʻused to ask'	33 (5.8%)
važinėti 'drive'	36 (6%)	galėdav- 'be able'	10 (1.2%)	pardavinėdav- 'used to sell'	32 (5.6%)
<i>išnagrinėti</i> 'investigate' (pf)	31 (5.1%)	gaudav- 'receive, get'	10 (1.2%)	atsakinėdav- 'used to answer'	15 (2.6%)
<i>pardavinėti</i> 'sell'	31 (5.1%)	ateidav- 'come'	7 (o.86%)	jodinėdav- ʻused to ride'	14 (2.4%)
<i>įrodinėti</i> 'convince, prove'	15 (2.5%)	pasiekdav- 'reach'	7 (0.86%)	pasirašinėdav- 'used to sign'	14 (2.4%)
aptarinėti 'discuss'	13 (2.2%)	praleisdav- 'spend'	7 (o.86%)	šokinėdav- 'used to jump'	14 (2.4%)
atsakinėti 'answer'	12 (2%)	reikėdav- 'need'	7 (o.86%)	atlikinėdav-	12 (2.1%)

Lexeme	Frequency	Lexeme	Frequency	Lexeme	Frequency
-inė- (total 60	93)	-dav- (total	815)	-inė-dav- (total	573)
panagrinėti 'study for a while'	10 (1.7%)	turėdav- 'have'	6 (0.74%)	nagrinėdav- 'used to study'	11 (1.9%)
<i>priiminėti</i> 'accept, receive'	10			vaikštinėdav- 'used to walk'	11 (1.9%)
šokinėti 'jump, dance'	10				

The table shows that the suffix -inė- tends to combine with certain lexemes more often than with others, whereas -dav- simply combines with the most frequent verbs in Lithuanian, namely būti 'be', galėti 'can, be able', turėti 'have', reikėti 'need', cf. (Utka 2009). Lexical compatibility of the verb forms with the two suffixes demonstrates that it is not just verb forms with two suffixes but rather the suffix -dav- is attached to the -inė-verbs.

Similar results come from the analysis of the hapaxes, i.e. the lexemes that appeared only once in the sample: the number of hapaxes in the -dav- sample is significantly higher than in the samples with the suffix -inė- both tokenwise and typewise. This tells us that the combinations with -inė- are more lexicalized than with -dav- and tend to appear more often with specific lexemes.

Table 4. Hapaxes in the samples

	-inė-	-dav-	-inė-dav-
tokens	75 of total 603 (12%)	372 of total 815 (46%)	83 of total 573 (15%)
types	75 of total 146 (51%)	372 of total 486 (77%)	83 of total 156 (53%)

The two suffixes do not show any significant difference in their distribution across verb forms of different person and number. Also, the parameters

⁵ Among the most frequent verbs is *važinėti* 'drive', which is the dominant verb with the suffix -*inė*- in Lithuanian dialects, cf. Kozhanov & Wiemer (2019).

of negation and reflexivity do not seem to reveal any non-trivial features. The last feature worth checking is the presence of a prefix, cf. Table 5.

Table 5. Prefixes in the samples by types

	-inė-	-dav-	-inė-dav-
ар-	13 (8.9%)	10 (2.1%)	12 (7.7%)
at-	16 (11%)	21 (4.3%)	16 (10.3%)
iš-	13 + 1 (9.6%)	34 (7%)	20 (12.8%)
į-	9 (6.2%)	24 (4.9%)	9 (5.8%)
nu-	9 (6.2%)	18 (3.7%)	6 (3.9%)
ра-	18 (12.3%)	72 (14.8%)	11 (7.1%)
par-	1 (0.7%)	2 (0.4%)	1 (0.6%)
per-	8 (5.5%)	7 (1.4%)	10 + 1 (7.1%)
pra-	3 (2.1%)	9 (1.9%)	6 (3.9%)
pri-	6 (4.1%)	18 (3.7%)	6 (3.9%)
su-	7 (4.8%)	43 (8.9%)	8 + 1 (5.8%)
už-	6 (4.1%)	16 (3.3%)	13 (8.3%)
be-	6 + 2 (5.5%)	2 (0.4%)	1 (0.6%)
te-	_	2 (0.4%)	1 (0.6%)
no prefix	36 (24.6%)	212 (43.6%)	37 (23.7%)
Total	146	486	156

The most interesting part of the data is that simplex (i.e. without prefix) forms (tokenwise) appear significantly more often in the -dav-formations, and that - $in\dot{e}$ - tends to combine with prefixed verbs more often. A putative explanation to this fact is given in the next section.

3. Pluractional suffixes -inė- and -dav-: semantics

3.1. Actionality and aspectuality

Pluractionality is closely related to the notions of actionality and aspectuality in general. The term actionality refers to the lexical-semantic

properties of the verb such as stativity vs. dynamicity, telicity vs. atelicity etc., whereas aspect or aspectuality is used as a broader term which also includes aspectual viewpoint (perfective vs. imperfective), cf., e.g., Arkadiev (2011; 2012). By finding out which elementary actional meanings are present in the verb's semantics under imperfective and perfective viewpoints, one can distinguish various actional classes; for more detailed information about the typology of actional meanings see Tatevosov (2002; 2005; 2016). The classification of actional classes of Lithuanian verbs was proposed by Arkadiev (2009; 2011; 2012).

Lithuanian demonstrates a peculiar system in which the aspectual interpretation of a verb depends on the type of verb form (different tenses, moods and non-finite forms) and the actional characteristics of the verb; see Table 6.

Table 6 . Aspectual	interpretations	available to	actional o	classes across
verb forms				

Actional class	Present	Past	Future	Irrealis	Infinitive	Imperative
Stative		imperfective and progressive				
Processual	imperfective and progressive					
Telic	imperfective progressive	perfec	tive			
Weak telic	imperfective progressive	imper	fective, p	ogressive	, and perfec	tive

Importantly, telic verbs can only have a perfective interpretation (with the exception of present conjugated verbs), cf. (6–7) with the processual verb *dirbti* 'work' and (8–9) with the telic verb *išdirbti* 'work through' (derived from the former with the prefix *iš*-):

- (6) Bank-ai dirb-a iki nuo 9:00 15:00 bank-NOM.PL work-prs.3 from till 9.00 15.00 nuo pirmadieni-o iki penktadieni-o... till from Monday-gen.sg Friday-gen.sg 'Banks are open (lit. work) from 9 am till 3 pm from Monday till Friday...'
- (7) Mano tėv-ai dirb-o teatr-e my father-NOM.PL work-PST.3 theatre-LOC.SG

buv-o muzikant-ai.be-PST.3 musician-NOM.PL'My parents worked in the theatre—they were musicians.'

(8) Per savait-ę j-ie iš-dirb-a
through week-ACC.SG 3-PL.NOM.M PVB-work-PRS.3
po 48 val.
for 48 hour
'They work 48 hours a week.'

(9) Šaki-uose Kudirk-a iš-dirb-o
Šakiai-LOC.PL Kudirka-NOM.SG PVB-work-PST.3

trej-us met-us.

three-ACC.PL year-ACC.PL
'In Šakiai Kudirka had worked for three years.'

In terms of actionality, the main function of the suffix -inė- in Lithuanian is to make a verb processual, cf. (10) where the same verb išdirbti combined with the suffix -inė- becomes processual and can have imperfective interpretation in the past form:

(10) *Tėv-uk-as* Vinc-as. pasak Vyt-o father-DIM-NOM.SG Vincas-Nom.sg according.to Vytas-gen.sg tik arkli-us 7akavoni-o. ne kaust-ė. Jakavonis-gen.sg NEG only horse-ACC.PL shoe-pst.3 od-as iš-dirb-inėj-o. bet ir nam-us skin-ACC.PL PVB-work-ITER-PST.3 but also house-ACC.PL stat-ė... build-pst.3

'Father Vincas, according, to Vytas Jakavonis, not only shoed horses and cured leather, but also built houses...'

This ability of the suffix -inė- to turn telic verbs into atelic, namely processual, does not mean it cannot combine with other actional classes of verbs, cf. (11) with the stative simplex verb sėdėti 'sit'.

stūm-ė laik-a. Šnekučiav-o-si. (11) *Taip* ir also this.way push-PST.3 time-Acc.sg chat-PST.3-RFL sėd-inėj-o, niek-o dor-a ne-veik-dam-i. nothing-gen decent-NA NEG-do-CVB-NOM.PL.M sit-ITER-PST.3 'That's how [they] killed time. [They] would chat, sit, doing nothing special.'

In the sample there are three stative verbs that combine with this suffix, namely $s\dot{e}din\dot{e}ti$ 'sit around', $tupin\dot{e}ti$ 'sit around' (describing a position in space, cf. also $gulin\dot{e}ti \leftarrow gul\dot{e}ti$ 'lie' which does not appear in the sample), $\check{z}i\bar{u}rin\dot{e}ti$ 'look around', all of which have an additional diminutive meaning with the connotation of insignificance of the action. As was mentioned before, it seems that lexical restrictions with stative verbs are especially prominent.

When attached to simplex processual verbs (24 lemmas in the sample), the suffix -inė- has a few semantic functions, for instance with verbs of motion, it usually adds the meaning of multidirectional movement, cf. (12) (other verbs of motion in the sample: čiuožinėti 'skate', slidinėti 'ski', vaikštinėti 'walk around'). Similarly to the situation with statives, when combined with processual verbs -inė- can have additional attenuative meaning, cf. skaitinėti 'read (a bit, not seriously)', rašinėti 'write (not seriously)', although it is difficult to predict with which verbs this meaning becomes prominent. Genjušene [= Geniušienė] (1989) singles out 'diminutive' as a distinct meaning of the suffix -inė-, even though it seems to be a 'by-product' of iterativity, i.e. the process is subdivided into shorter repeated actions. The interaction between diminution and iterativity in verbal semantics is attested cross-linguistically, cf. Audring et al. (2021). Finally, with some originally processual verbs, the addition of the suffix -inė- adds a specialized meaning that has nothing to do with iterativity, cf. the pair siūti 'sew' vs. siuvinėti 'embroider' (also discussed by Galnaitytė 1966, 153). In our sample, similar 'professional' verbs are kasinėti 'dig, excavate' (in contexts of archeological excavations) and drožinėti 'carve on wood'.

(12) Cel-ės apylink-ės mėgst-ant-iems Celle-GEN.SG surroundings-NOM.PL like-pa.prs-dat.pl.m iškylau-ti, plaukio-ti baidar-ėmis. iod-inė-ti ride-ITER-INF picnic-INF swim-inf canoe-INS.PL važ-inė=ti dvirači-ais tikr-as ar bicycle-INS.PL drive-iter-inf real-nom.sg.m roi-us. paradise-noм.sg 'For those who like to picnic, canoe, ride [horses] and ride bicycles, the surroundings of Celle are a true heaven.'

However, in the sample, the largest number of verbs to which the suffix -inė- is attached belong to the group of telic or weak telic verbs, cf.

- (13). As these verbs are often prefixed, the smaller percentage of simplex verbs the suffix -*inė* combines with (compared to -*dav*-) can be explained by the same aspectual function of the suffix -*inė*-.
 - (13) Daugel-i amži-u kin-u protėvi-ai many-Acc.sg Chinese-GEN.PL century-GEN.PL ancestor-NOM.PL per-dav-inėj-o š-į mokym-a PVB-give-ITER-PST.3SG this-ACC.SG.M teaching-Acc.sg iš kart-os kart-a... from generation-GEN.SG in generation-ACC.SG 'For many centuries the ancestors of the Chinese passed this teaching from one generation to another...'

Although most verbs with the suffix -*inė*- are atelic, the corpus data show that some verbs with this suffix can also be telic, cf. (14).

```
(14) Š-is
                        nuodugniai
                                                       iš-klaus-inėj-o
                                       j-į
     this-nom.sg.m
                        thoroughly
                                       3-M.SG.ACC
                                                      PVB-ask-ITER-PST.3
     ir
              ne-rad-o
                                 prieštaravim-ų
                                                             j-0
     and
              NEG-find-PST.3
                                 contradiction-GEN.PL
                                                             3-M.SG.GEN
     pasakojim-e.
     story-Loc.sg
     'This [bishop] interrogated him thoroughly and didn't find any con-
     tradictions in his story.'
```

This has to do with the ordering of derivations, cf. (10), where -inė- is added to the telic prefixed verb *išdirbti* 'work' and makes it processual, and (14), where the prefix *iš*- is added to the atelic verb *klausinėti* 'ask' and makes it telic. The difference in derivational order can be summarized in the following way:

```
dirbti (processual) \rightarrow i\check{s}dirbti (telic) \rightarrow i\check{s}dirbin\dot{e}ti (processual) klausti (weak telic) \rightarrow klausin\dot{e}ti (processual) \rightarrow i\check{s}klausin\dot{e}ti (telic)
```

In the sample, there are a few verbs derived with the suffix -inė- that can be further telicized by a prefix (especially often by iš-), namely: klausinėti (iš-) 'ask, interrogate', nagrinėti (iš-) 'study', važinėti (su-) 'drive', tyrinėti (iš-) 'study', siuvinėti (iš-) 'embroider' etc.

Iterative verbs with the suffix $-in\dot{e}$ - can be not only further telicized by verbal prefixation, but also delimited. The function of delimitation is expressed by the preverb pa-, cf. (Galnaitytė 1959; Arkadiev 2012, 66–67). In the sample, there were 13 examples of delimited iteratives:

(15)	Vien-ą	šeštadieni-o	vakar-ą,
	one-ACC.SG	Saturday-gen.sg	evening-ACC.sG
	j-is	pa-kviet-ė	j-uos
	3-M.SG.NOM	PVB-invite-PST.3	3-ACC.PL.M
	pa-jo-dinė-ti.		
	pvB-ride-ITER-	INF	

'One Saturday evening he invited them for a horse ride'

Unlike -inė-, the suffix -dav- does not affect the verb's actional characteristics. The suffix -dav- can be attached to essentially any verb of any actional class. There are no lexical restrictions.

Table 7 shows that, compared to the suffix -dav-, the suffix -inė- is attached more often to telic verbs and less often to other actional classes.

Table 7. Distribution	of	suffixes	over	actional	class	(by)	' type)	

Actional class	-inė-	-dav-	-inė-dav-
Stative	3 (2.3%)	29 (5.9%)	2 (1.3%)
Processual	24 (18.6%)	135 (27.7%)	24 (15.8%)
Telic	97 (75.2%)	291 (59.6%)	117 (77%)
Weak telic	5 (3.9%)	33 (6.8%)	9 (5.9%)
Total	129 (100%)	488 (100%)	152 (100%)
Delimitative	8	_	3
Perfective	8	_	2

3.2. Types of pluractionality

The suffix -inė- is usually referred to as 'iterative' (Dambriūnas 1960; Galnaitytė 1966, 148; Ambrazas 2006, 237), and the suffix -dav- is referred to either as 'habitual', cf. Arkadiev (2012); Sakurai (2015), or 'past frequentative' (Ambrazas 2006, 246; Roszko & Roszko 2006). Even though traditionally verbal forms with -dav- are treated as a separate tense (Lit. būtasis dažninis

336

⁶ Strictly speaking, this term is inadequate, as this form does not presuppose any kind of frequency of the events; see the distinction made between frequentative and raritive (Bertinetto & Lenci 2012, 853).

laikas), it has been noticed that the opposition between simple past and -dav- forms are of aspectual nature; cf. Holvoet, Pajėdienė (2004, 124).

The semantics of the two suffixes under analysis can be distinguished in terms of two main types of pluractionality: event-internal and event-external, cf. Cusic (1981); Xrakovskij (1989); Šluinskij (2006); Bertinetto & Lenci (2012). The event-internal (or in Xrakovskij's terms 'multiplicative') pluractionality refers to the situations when the event consists of more than one sub-event occurring in one and the same situation, cf. the following English sentence.

(16) Yesterday at 8 a.m. Peter knocked fiercely at the door

The event-external pluractionality, on the other hand, describes the same event being repeated in a number of different situations; cf. (17).

(17) In the summer Peter ran daily in the morning.

Following this distinction, I would argue that the suffix -inė- tends to express event-internal pluractionality, whereas -dav- operates within the realm of event-external pluractionality. This semantic difference between the two suffixes is supported by the following syntactic tests. Firstly, verbs with the suffix -(d)inė- can be used in contexts with a defined time period, whereas verbs with the suffix -dav- cannot, cf. constructed examples (18–19) with the verb važinėti 'drive': in (18) the form važinėjome can be replaced by važiuodavome, but in (19) where the event is limited by a defined period of time the formation with -dav- is impossible:

- (18) Kasdien važ-inėj-ome / važiuo-dav-ome į
 every.day drive-ITER-PST.1PL drive-HAB-PST.1PL to
 susitikim-us.
 meeting-ACC.PL
 'Every day we would go to the meetings.' (constructed)
- (19) Važ-inėj-au / *važiuo-dav-au aplink daugiau drive-ITER-PST.1SG drive-HAB-PST.1SG around more nei dvi valand-as than two hour-ACC.PL 'I was driving around for more than two hours' (constructed)

Secondly, only the verbs with -*dav*- can be used in 'when/if x..., then y...' sentences, whereas verbs derived with the suffix -*inė*- cannot, cf. (20) where the form *gaudavo* cannot be replaced by *gaudinėti*:

(20) Tailand-e karali-aus karalien-ės žmon-a Thailand-Loc.sg wife-nom.sg king-gen.sg queen-GEN.SG titul-a tik gau-dav-o tada. jei title-Acc.sg receive-HAB-PST.3 only then if bū-dav-o karali-u i-i gimin-ės. 3-F.SG.NOM be-HAB-PST.3 king-gen.pl relative-NOM.PL 'In Thailand the king's wife would receive the title of queen only when she was a relative of the king.'

This shows that the two suffixes operate on different levels: -inė- describes a repetition of events within one situation, whereas -dav- refers to repetition of similar situations.

The same difference between the two suffixes can also be observed in their combination with lexically multiplicative verbs: -inė- shows lexical restrictions, regularly combining only with the verb šokti 'jump': šokinėti 'jump around; jump multiple times', cf. (21).

(21) 7-is šok-inėj-o per bėgi-us, per jump-ITER-PST.3 rail-ACC.PL over 3-M.SG.NOM over kupst-us, paskui pa-si-leid-o per then PVB-RFL-let-PST.3 through bump-ACC.PL and plyn-a lauk-a. flat-Acc.sg field-Acc.sg 'He was jumping over the rails, the bumps, and then he broke into a run across the flat field'

However, this verb is not an iteration of a multiplicative process, whereas combinations with the suffix -dav- are, cf. (22) where forms with -dav- describe a repetition of punctual situations (užsirakindavau), states (stovėdavo) and multiplicative processes (belsdavo):

(22) Už-si-rakin-dav-au i-i PVB-RFL-lock-HAB-PST.1SG door-ACC.PL but 3-F.SG.NOM stovė-dav-o ir bels-dav-o... j-as 3-ACC.PL.F stand-нав-рsт.3 and in knock-нав-рут.3 'I would lock the door and she would stand and knock on it...'

The example (22) shows that sub-events within event-external pluractionality can have different aspectual interpretations, cf. Sakurai's (2015, 391) discussion of aspect in macro- and micro-situations in Lithuanian, which follows similar ideas with a typological background in Comrie (1976), cf. the discussion of 'nested aspects' on the Slavic data by Lindstedt (1984).

The repetition of events expressed by the suffix -inė- is closely related to the notion of distributivity, cf. (23), where plurality of events has to do with the distribution across plural direct objects, and (24), where the same subject repeats the same action with the same object across different locations expressed here by the prepositional phrase:

- (23) Man-au, kad j-is **ne-pa-si-raš-inėj-o**think-prs.1sG that 3-m.sg.nom neg-pvb-rfl-write-iter-pst.3sG
 joki-ų sutarči-ų.
 no-gen.pl contract-gen.pl
 'I think that he didn't sign any contracts.'
- (24) ...bet norėj-o-si kaž-k-o daugi-au: but IDEF-what-GEN a.lot-сомр want-PST.3-RFL prasm-ės savo būči-ai. nors meaning-GEN.SG existence-DAT.SG albeit own trump-am.. Iri-is j-a sau short-dat.sg.m self.DAT and 3-NOM.SG.M 3-ACC.SG.F suteik-ė: iš-siunt-inėj-o kūrin-į give-pst.3 PVB-send-ITER-PST.3SG work-acc.sg elektronini-u pašt-u į leidvkl-as. electronic-INS.SG.M publisher-ACC.PL mail-INS.SG in laikrašči-us. newspaper-ACC.PL

'but [he] wanted something more: sense for his existence, even just for a short while... And he gave it to himself: he sent the manuscript by e-mail to publishing houses, newspapers.'

The suffix -inė- can thus refer to repetition of completed events, as in (24), i.e. the manuscript was sent multiple times to plural publishing houses, or one incomplete event, cf. (25), where the process of recording took place in a defined period of time and consisted of multiple fragments of recording, but the whole process was not completed:

(25) Nuo 2003 iki L. Lopez į-raš-inėj-o 2005 from till L. Lopez PVB-write-ITER-PST.3SG 2003 2005 Disc katalog-a Indie Guitar ženkl-ui Disc catalogue-Acc.sg Indie Guitar brand-DAT.SG Grooveyard Records, isikūr-usi-am Niujork-e. Grooveyard Records be.based-pa.pst-dat.sg.m New-York-Loc.sg From 2003 till 2005 L. Lopez was recording Disc catalogue Indie Guitar for the label Grooveyard Records, based in New York.'

The verbs with the suffix -inė- whose main meaning is a durative process and has little to do with pluractionality were noticed by Galnaitytė (1966, 156). What she did not discuss is that they seem to be able to function entirely outside of the realm of pluractionality, describing progressive events (especially when derived from telic verbs), cf.

(26) Kai iš-rink-inėj-ome ir su-rink-inėj-ome PVB-collect-ITER-PST.1PL when and PVB-collect-ITER-PST.1PL automat-a "Kalašnikov", subėg-o daugyb-ė rifle-Acc.sg Kalashnikov run-PST.3 great.number-noм.sg aplink zuj-usi-u vaik-ų, j-iems child-gen.pl around scurry-pa.pst-gen.pl 3-DAT.PL.M tai smag-i atrakcij-a. this be-PST.3 fun-nom.sg.f entertainment-Nom.sg 'When we were disassembling and reassembling the Kalashnikov rifle, many children who were around ran [to us], for them it was an interesting entertainment'

It is noteworthy that -*inė*-verbs can have progressive aspectual interpretation in interval-bounded contexts:

(27) Ne-daug trūk-o, kad laimė-tume prieš NEG-a.lot lack-pst.3 that win-sbjv.1pl against turk-us iki mači-o pabaig-os Turk-ACC.PL till end-gen.sg game-GEN.SG lik-us šeši-oms minut-ėms remain-PA.PST.NA six-dat.pl.f minute-DAT.PL pra-loš-inėj-ome tik tr-imis task-ais. PVB-lose-ITER-PRS.1PL only three-ins point-INS.PL 'We were about to win against the Turks—when there were six minutes left till the end of the game, we were losing by only three points.'

Such usage of -inė-verbs is however considered by language purists to be 'incorrect', cf. Zavjalova (2013, 258). In our sample, which comes from the Internet and potentially can include more examples of non-standard Lithuanian, there are 13 instances which can be interpreted as progressive usage of -inė- verbs (around 2% of the sample).

When it comes to the other suffix -*dav*-, it seems to describe event-external pluractionality in all examples in the sample.

Despite these differences between the suffixes, there is a 'grey' area, namely 'repeated action in the past' where they do not make a clear dif-

ference, cf. (28) where a form with the suffix -dav- (įsiteikdavo) is used alongside verbs with the suffix -inė-:

(28) 7-i dirb-o ne-pa-varg-dam-a work-pst.3 NEG-PVB-get.tired-cVB-NOM.SG.F 3-F.SG.NOM pa-pirk-inėj-o sargybini-us, į-si-teik-dav-o PVB-buy-ITER-PST.3 guard-ACC.PL PVB-RFL-hand-HAB-PST.3 ap-gau-dinėj-o. j-iems, i-uos PVB-catch-ITER-PST.3 3-DAT.PL.M 3-ACC.PL.M 'She worked without rest—bribed the guards, ingratiated herself with them, tricked them.'

As was shown above, all verbs with the two suffixes -inė-dav- are derived from -inė-verbs with the suffix -dav-. In terms of semantics of these verbs, it means that -dav- describes repetition of several situations denoted by -inė-verbs. As was previously shown, the -inė-verbs can describe several types of situations, all of which can be iterated by the suffix -dav-: i) process, cf. (29); ii) progressive, cf. (30); iii) punctual, cf. (31); and iv) delimited situations, cf. (32).

- (29) Tuomet buv-o dešimt man met-u at.that.time be-pst.3 1.DAT.SG ten year-gen.pl ir. žinoma. aš smalsi-ai and of.course curouis-ADV 1SG.NOM ap-žiūr-inė-dav-au kiekvien-a gvvenim-e PVB-look-ITER-HAB-1SG.PST every-ACC.SG life-Loc.sg su-tik-t-a užsieniet-į. PVB-meet-PP.PST-ACC.SG foreigner-Acc.sg 'At that time I was ten years old and, of course, I would study with curiosity every foreign person I would meet.'
- (30) ...savo laik-u i-is net su with own time-INS.SG even 3-NOM.SG.M ši-ų laik-u ižγmγb-e — Triple н (ннн) celebrity-INS.SG Triple н (ннн) this-gen.pl time-GEN.PL kov-ė-si. kur-is tuo metu fight-pst.3-RFL which-nom.sg.f at.that.time into ring-a į-ei-dinė-dav-o skamb-ant ring-ACC.SG PVB-go-ITER-HAB-PST.3 sound-pa.prs.na Europ-os Sajung-os himn-ui:) anthem-DAT.SG Europe-gen.sg union-gen.sg

'...at some point he even fought with the celebrity of these times Triple н (ннн), who at the time would be entering the ring to the sounds of the EU anthem.'

- (31) [Tokius kaip Naglis] sovietini-ais laik-ais netyčia Soviet-INS.PL.M time-INS.PL accidentally su-važinė-dav-o sunkvežim-is arba i-ie PVB-drive-ITER-HAB-PST.3 truck-nom.sg 3-PL.NOM ding-dav-o rūsi-uose. KGB disappear-нав-рят.3 KGB basement-LOC.PL '[Such people as Naglis] in Soviet times would be accidentally run over by trucks or they would disappear in KGB basements.'
- (32) Laiks laiko vis pa-si-žiūrė-dav-au nuo time from time still PVB-RFL-look-HAB-PST.1SG skrydži-u kain-as. pa-si-skait-inė-dav-au into flight-gen.pl price-ACC.PL PVB-RFL-read-ITER-HAB-PST.1SG pasakojim-us. story-ACC.PL 'From time to time I would look at flight prices, would read stories for a while.'

4. Conclusions

Even though both suffixes -inė- and -dav- are employed to express the meaning of verbal pluractionality, the difference between them in standard Lithuanian is striking. The main aspects of this difference are summarized in Table 8.

Table 8. Differences between -inė- and -dav-

-inė-	-dav-
can be used with any tense and mood	only in the past tense
has two allomorphs -inė- and -dinė- whose distribution is phonologically predictable	no allomorphs
can be attached either to the infinitival or to the past stem	is always attached to the infinitival stem
shows lexical restrictions	can be attached to any lemma

-inė-	-dav-
some verbs are lexicalized	combines with any verb with no signs of lexicalization
changes actional characteristics of	does not affect actional
the verb (making them processual)	characteristics of the verb
verbs with the suffix - <i>inė</i> - can be further telicized or delimited by a prefix	no semantic modifications are possible over the formations with the suffix -dav-
tends to express event-internal pluractionality	expresses event-external pluractionality
has meanings outside of the realm of pluractionality	has strong connection with the semantics of pluractionality

These differences clearly confirm the derivational status of the suffix $-in\dot{e}$ - and the inflectional status of -dav-.

The combination of the two suffixes -(d)inė-dav- is frequent, although rarer than formations with just one suffix. When combined, the meaning of -dav- scopes over the meaning of -inė- and thus expresses repetition of different situations denoted by the -inė-verbs (processes, progressive situations, punctual events, delimited processes). Nevertheless, often the semantics of the two suffixes is not easily distinguished, especially when they denote repeated events in the past. This 'grey' area allows for interchangeability of the two suffixes or even coappearance of different forms within one sentence.

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ABBREVIATIONS

ACC — accusative, ADV — adverb, DAT — dative, DEF — definite, DIM — diminutive, F — feminine, GEN — genitive, HAB — habitual, IDEF — indefinite, INF — infinitive, INS — instrumental, ITER — iterative, LOC — locative, M — masculine, NA — non-agreeing form, NEG — negative, NOM — nominative, PA — active participle, PL — plural, PP — passive participle, PRS — present, PST — past, PVB — preverb, RFL — reflexive, SBJV — subjunctive, SG — singular.

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Irrealis in Baltic and Baltic Fennic

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This article is a study in the use of irrealis in complementation in the two Baltic languages, Lithuanian and Latvian, and in two Fennic languages, Estonian and Finnish. Four domains of complementation are singled out: propositional, desiderative, apprehensional and evaluative. All investigated languages show limited use of irrealis in the propositional domain (in identical conditions, viz. under main clause negation), as well as in the apprehensional and evaluative domains. The most important differences are observed in the state-of-affairs domain, in particular with desiderative predicates, where Lithuanian shows consistent irrealis marking whereas Finnish has mostly realis. Estonian and Latvian are intermediate. Estonian has a rather strong predominance of irrealis, but it might be recent; in Latvian realis and irrealis are about equally distributed, but this situation seems to differ from that in Old Latvian. In these two languages changes seem therefore to have been going on, and areal convergence might to some extent have been involved in this.

Keywords: mood, irrealis, complementation, state-of-affairs complements, propositional complements, desiderative verbs, apprehensional verbs, evaluative predicates, Baltic, Fennic, Lithuanian, Latvian, Estonian, Finnish

1. Introduction¹

The term 'irrealis' figuring in the title of this article will here be used not to refer to a conceptual category of irrealis but as a cover term for

¹ We wish to thank the readers and reviewers whose constructive comments have led to substantial improvements in our text. For the remaining shortcomings of the article we remain solely responsible. This research has received funding from the European Social Fund (project No. 09.33-LMT-K-712-01-0071) under grant agreement with the Research Council of Lithuania (LMTLT).

such marked moods as 'subjunctive', 'conditional' or 'optative'—terms that have no precise content and mostly reflect just differences in grammatical tradition. The Baltic mood has, in the literature in Western European languages, variously been referred to as subjunctive, optative and conditional. According to the native traditions, the Latvian instantiation of irrealis is an optative ($v\bar{e}l\bar{e}juma~izteiksme$) whereas its Lithuanian counterpart tariamoji~nuosaka, created by Jablonskis, is the 'mood of the imaginary'. In the Finnish and Estonian tradition, the corresponding mood is called conditional.

The introduction of the notion of 'irrealis', originally used in the literature on the indigenous languages of Austronesia, North America etc., into the typological literature (reflected in Givón 1994, Palmer 1999, 2001, Elliott 2000 et al.) has given occasion to seminal discussions with wider implications for grammatical semantics. The question is whether behind the variously named category of form there is a conceptual prototype of 'irreality'. This prototype could be defined as formulated by Mithun (1999), cited by Palmer (2001, 1): "The realis portrays situations as actualised, as having occurred or actually occurring, knowable through direct perception. The irrealis portrays situations as purely within the realm of thought, knowable only through imagination". This idea is not universally accepted. The notion of a unifying irrealis meaning is explicitly rejected by Joan Bybee (1998), who argues that the distribution of irrealis forms is but the sum of a number of grammaticalisation processes, different in every individual language and therefore not predictable on the basis of a putative general meaning. We can certainly identify a crosslinguistically recurrent set of irrealis usage types of which the irrealis uses in individual languages can be said to be subsets. However, the possibility of formulating such a set of usage types does not necessarily entail that there is a common concept of irreality behind it: it might be the diachronic mechanisms and grammaticalisation paths that show cross-linguistic similarity. The notional category of irrealis (based, as Bybee argues, on the Jakobsonian notion of Gesamtbedeutung) is thus, perhaps, epiphenomenal. Apart from these discussions, however, 'irrealis' is a convenient cover term for the variously designated moods of the different grammatical traditions (van der Auwera & Schalley 2004).

The present article is a study in irrealis use in the Circum-Baltic area. Baltic and Fennic are known to have intensively interacted in the past

and to share a number of non-trivial morphosyntactic features. Within this contact area Latvian and Estonian constitute a particularly intensive convergence zone (cf. Stolz 1991). We will look at both differences and common tendencies, in what we intend as a study in variation in the irrealis domain as well as in areal interactions in this domain. We look at the contexts where the use of irrealis mood could be a part of complementation strategy (complementising mood, see Holvoet 2020) and is thus to some degree grammaticalised, and try to differentiate this use from other reasons why the irrealis mood is used in complement clauses. Another question we want to answer is what kinds of irrealis functions are represented in the languages under investigation.

The structure of the article is as follows. Section 2 gives an overview of the typical functions of irrealis in complementation, which will serve as a basis for the arrangement of the material in the article. Section 3, somewhat heterogeneous in content, presents background notions that will be referred to in the detailed accounts of mood in Baltic and Fennic: it characterises the Baltic and Fennic moods, draws attention to specific irrealis-like uses of realis present-tense forms, and defines the notion of complementising mood, i. e. mood forms specifically used as a strategy for encoding type of complement. Sections 4 and 5 deal in detail with the data of Baltic and Fennic, while section 6 contains some concluding remarks.

2. Irrealis functions

In Holvoet (2020) the idea is advanced that the spread of irrealis forms beyond their grammaticalisation sources and the concomitant semantic bleaching involves two major lower-level generalisations, according to the type of irrealis context. Though the distinction is not restricted to complementation, it is practical to use the classification that has been proposed for clausal complements. Terminology varies, but the notions that look likely to impose themselves are those of propositions and states-of-affairs. As Kehayov and Boye formulate it, "propositions evoke concepts construed as having a (situational) referent, whereas S[tates]o[f] A[ffairs] evoke concepts not construed as having a referent" (Kehayov & Boye 2016, 812). These two types could be illustrated with the following examples: (1) contains a verb of epistemic stance, whose complement is truth-valued; (2) contains a desiderative verb, whose object is a potential

event of which one does not know whether it has occurred or will occur, so that the complement is not truth-valued.

- (1) John thinks the house is too big for him.
- (2) Mary wishes that we should go to Paris.

The use of the irrealis cannot have quite the same function in these two different complement types. In the case of a propositional complement, irrealis occurs in a number of languages to reflect differences in the assessment of the reality status of an event. E.g., in Italian it may encode lack of certainty, as shown by the difference between the realis with 'be convinced' and the irrealis with 'think, believe':

(3)	Italian							
	Sono	convinto		che	hanno		mangiato	loro
	be.prs.1sg	convin	ced	that	have.pr	RS.3PL	eat.pp	they
	la	torta	che	era		in	frigo!	
	DEF.F.SG	cake	that	be.11	PF.3SG	in	fridge	
	'I am convi	nced it's	they w	ho ate t	he cake	that wa	as in the fridg	e!"

(4)	Credo		che	abbiano	fatto	zero
	believe.prs.1sg		that	have.irr.3PL	make.pp z	
	tiri	in	porta	ne-l	primo	tempo.
	shot.PL	in	gate	in-DEF.M.SG	first	time
	'I believe they scored zero goals in the first halftime.'3					

Uncertainty is intermediate between the affirmation and negation of p, that is, the characterisation of p as real or unreal, so that we may characterise irrealis uses as in (4) as reflecting a gradable evaluation of the reality status of propositions, even though the reality-irreality distinction might be thought of as binary. Such an evaluation hardly seems to apply to complements as illustrated in (2). They could, in principle, be thought of as unreal by definition, as the object of an act of volition is not guaranteed to be realised. But such an account would be difficult to substantiate. In Latvian, for instance, with a verb like 'want' both realis and irrealis may be used:

 $^{^2}$ https://learnamo.com/quando-non-usare-congiuntivo-quando-usare-indicativo/ accessed ${\tt 2021\text{-}06\text{-}14}$

³ https://www.fcinter1908.it/ultimora/lukaku-fatto-dovevo/ accessed 2021-06-14

(5) Latvian (constructed) lai Es gribu. tu to zini. T want.prs.1sg that this.acc know.prs.2sG you (6) Es lai zinātu. gribu. tuto I want.prs.1sg that vou this.acc know.irr 'I want you to know this.'

It is conceivable that the irrealis in (6) expresses weaker expectations as to the realisation of the wish. Such expectations are hard to measure, but in order to see whether differences in reality status are involved we will have to look at whether there are differences related to the complement-taking lexeme, the presence or absence of negation etc.

In Holvoet (2020) it is argued that the function of irrealis in the state-of-affairs domain is to reflect lack of temporal and situational anchoring. Again, this does not follow from a comparison of pairs of sentences like (5) and (6): it is not the case that the realis in (5) reflects location in time whereas (6) reflects its absence. What is argued in Holvoet (2020) is that the validity of the 'unanchoring irrealis' hypothesis is supported by extensions from the state-of-affairs domain to the propositional domain. These extensions involve constructions with evaluative (commentative) predicates like 'it is a pity that', 'it is fitting that', 'it is strange that' etc. In Romance languages, such predicates regularly combine with irrealis:

(7) Italian
E' strano che lei lo chieda ...
is strange that you it ask.IRR.2SG
'It is strange you should be asking me this.'

This irrealis use is echoed by the use of the English modal verb *should* in corresponding English constructions, as illustrated in the translation of (7). This use of *should*, whose meaning is originally deontic, suggests that the modal marking with evaluative predicates is carried over from state-of-affairs complements. While the deontic meaning of *should* is lost, what is retained is the suspension of temporal and situational anchoring characteristic of the state-of-affairs type of complementation to which deontic (desiderative) complementation belongs. What the evaluative predicate does is extract an event from its situational setting in order to evaluate it on its intrinsic properties, as an event type. If an event has occurred, it is impossible to characterise it as unlikely (in epistemic terms),

but it is still possible to characterise it as *intrinsically unlikely* (cf. *Harry Truman's unlikely victory in the 1948 election*, referring to a victory that actually took place). It is also possible to characterise an event that has actually occurred as *intrinsically undesirable*. A distinguishing property of evaluative predicates is that they express an evaluation of an event independent of whether it actually took place or not. This independence of actual occurrence or non-occurrence may be marked by the use of an irrealis form because one of the functions of irrealis is to lift an event out of its temporal and situational setting and, so to speak, hold it up for inspection. While this unanchoring function of irrealis is well represented in the Romance languages⁴ (and, in another form, by unanchoring *should* in English), in other languages it is rather marginal (cf. Holvoet, forthcoming, for Slavonic). In this article we will treat the evaluative domain as a distinct type of irrealis use.

While the evaluative predicates just discussed basically belong to the propositional domain but show an irrealis function carried over from the state-of-affairs domain, there is also a domain of intersection between the propositional and the state-of-affairs domain, viz. 'apprehensional modality' (Lichtenberk 1995), comprising the expression of fear. Fear consists in the belief that something may happen (propositional) and the wish for it not to happen (state-of-affairs). Verbs of fear often have complements of both types, as illustrated from Lithuanian in (8) and (9):

- (8) Lithuanian

 Bijau, kad gali atsitikti kas nors
 fear.prs.1sG that may.prs.3 happen.inf something.nom
 baisaus.
 terrible.gen.sg
- (9) Bijau, kad ne-atsitiktų kas nors
 fear.PRS.1SG that NEG-happen.IRR.3 something.NOM
 baisaus.
 terrible.GEN.SG
 'I'm afraid something terrible might happen.'

⁴ Lunn (1989) connects this use with the predominantly factive readings imposed by evaluative higher predicates. According to her, the irrealis encodes what is not-assertable; non-assertability may result from irreality but also from being presupposed (in the case of factive predicates). In the account proposed in Holvoet (2020), irrealis is used in its unanchoring function in spite of, rather than because of, the factive reading of the complement clause.

Here the difference between the two types of apprehensional complements is reflected in mood, but it is really one of complement type—propositional as against state-of-affairs.

The above discussion of irrealis functions will provide a basis for the classification of irrealis uses to be investigated in the present article. It will be a quadripartition into

- (i) the propositional domain,
- (ii) the desiderative domain,
- (iii) the apprehensional domain, and
- (iv) the evaluative domain.

3. Background, important notions and data sources

3.1. The instantiations of irrealis in Baltic and Fennic

The Baltic instantiation of the irrealis is a category that has been variously referred to, in the literature written in languages other than Lithuanian and Latvian, as subjunctive (Ambrazas, ed., 2006, 258–261, *passim*, Nau 1998, 34–35) optative (Schleicher 1856, 228–229, Stang 1958 etc.) and conditional (Otrębski 1956, 230–233, Bielenstein 1864, 158–160, Endzelin 1923, 691–697 etc.).

The Baltic conditional is based, historically, on the supine in -tum, but this derivational base is expanded with endings historically continuing inflectional forms of the auxiliary 'be' (Brugmann 1916, 872). As Stang (1958/1970) has shown, there is evidence that this auxiliary originally combined with an active past participle rather than the supine. We also have reason to believe that the form of the auxiliary contained in the conditional was a preterite (see Smoczyński 1999), so that we can hypothesise that the original function of the combination of 'be' and the active past participle was that of a pluperfect. As pluperfects are often used in counterfactive function, we may surmise that the historically attested Baltic irrealis has two grammaticalisation sources: one was a pluperfect used in counterfactive function, the other was the supine, originally expressing purpose of motion, and subsequently purpose in general, and hence providing a means of encoding the complement of desiderative and deontic predicates. As the personal forms of the auxiliary fused with the supine affix into a series of affixal personal endings, a new compound anteriority form of the conditional was created, consisting of the conditional of 'be' and a past active participle. The conditional is now used in both protasis and apodosis of counterfactive conditional sentences; in adverbial clauses of purpose and unreal comparison; and in main clauses expressing unreal wishes.

The Fennic instantiation of the irrealis is the conditional mood. In both languages, the main function of the conditional is to express irrealis in a wide range of constructions (Metslang 1999, EKG 1993, 34–35, VISK: §1592–1596). In Finnish and other northern Fennic varieties it has a suffix -isi- (luk-isi-n 'I would read'); in Estonian and Livonian, it takes the form -ksi (Estonian: loe-ksi-n 'I would read'). The origin of the conditional has been a matter of discussion: it has been related to a frequentative suffix -ise- past tense forms (in Finnish), which in addition to frequentative and durative meaning started to express intended action in the future; a parallel development could have taken place in Estonian (Lehtinen 1983). However, there are also alternative accounts of the historical development of the conditional marker, e.g. a diminutive marker + past tense marker -i- (Lehtinen 1983, Laakso 2001). Conditional past tenses in both languages include the auxiliary 'be', which is marked for conditional (Finnish olisi-n luke-nut, Estonian ole-ksi-n luke-nud 'I would have read'). In South Estonian Võro and Seto varieties a conditional present tense marker based on a past participle is also used (maq län-nüq 'I would go').

The Fennic conditional can be used both in main clauses and subordinated clauses. Its meaning in both languages has been described as comprising the so-called 'frame interpretation' (the 'if-then' relation) and the 'intentional' interpretation (Kauppinen 1998, Metslang 1999). Typical usage contexts in Estonian include several subordinated clause types (condition, concession, purpose, comparison, complement clauses of verbs of perception, 'without'-clauses), and some main clauses (optative clauses, deliberative questions, and reported commands) (Metslang, Sepper 2010). Estonian also uses the conditional as a way of expressing politeness, mostly as a mitigator of requests and questions; it is similar in this to Finnish, Lithuanian, Russian and some other languages (Pajusalu et al. 2017).

3.2. Realis in the state-of-affairs domain

When we compare the use of mood form with desiderative predicates in Lithuanian and Latvian, we see a difference: in Lithuanian the irrealis is obligatorily used while in Latvian the realis is possible:

(10) Lithuanian Noriu. kad žinotum that want.prs.1sg know.irr.2sg (11) Latvian Gribu lai tu zini zinātu. want.prs.1sg that know.prs.2sg you TRR 'I want you to know.'

But a realis in the state-of-affairs domain is not exactly the same as in the propositional domain. In the propositional domain, realis distinguishes tense: I think she lives / lived / will live in Paris. In the state-of-affairs domain a verb form does not have independent time reference: a typical temporal value is one of posteriority or simultaneity with the main predication (as in she wanted me to come). There is thus normally no tense variation in state-of-affairs complements. In case of realis marking for a state-of-affairs complement it is therefore common to have a default tense form, which will normally be the present tense.

Such rigid presents (i.e. presents not subject to tense variation) in state-of-affairs predications may develop into subjunctives, e.g., it has been established in Indo-European scholarship that the Greek and Indo-Iranian subjunctive is in origin a thematic present ousted from its primary function (Kuryłowicz 1964, 137–140), and a similar development has taken place in the transition from Classical to Modern Armenian (Sayeed & Vaux 2017, 1155). Even without such a new subjunctive of presential origin becoming formally emancipated from its grammaticalisation source, such presents may be characterised in the literature as quasi-subjunctives, e.g. the present tense with the complementiser da in Bulgarian-Macedonian is often referred to as the 'da-subjunctive', cf., e.g., Topolinjska 2012). But of course, a subjunctive-like present tense is still realis, not irrealis, as long as a dedicated irrealis stands alongside it.

3.3. Complementising mood

In certain cases the use of irrealis forms is so regular within a certain domain of complementation that it can be considered part of a complementation strategy; we will refer to this as complementising mood. This was already illustrated for Lithuanian in example (10) above. Here the use of realis would be impossible:

(12) Lithuanian

*Noriu, kad žinai. want.prs.1sg that know.prs.2sg

In other cases the use of irrealis is not obligatory but still in a way characteristic of the given domain of complementation. So, for example, in the propositional domain higher negation can induce irrealis use:

(13) Lithuanian

Nemanau, kad tu žinai / žinotum.

NEG.think.PRS.1SG that you know.PRS.2SG know.IRR.2SG 'I don't think you know.'

As this is observed in a particular subtype of propositional complementation, it can also be considered complementising mood.

However, there are also instances where the use of irrealis in a complement clause has nothing to do with complementation as such. Consider:

(14) Lithuanian

[Ką darytum negyvenamoje saloje?]

Manau, kad išgyvenčiau. think.prs.1sG that survive.1rr.1sG

'[What would you do on a desert island?] I think I would survive.'

Here the irrealis is not connected with the complementation type, but with an implicit conditional context: '[If I found myself on a desert island] I would survive'. This kind of irrealis will basically not interest us in this article, but it is clear that there will be instances where it is difficult to decide whether we are dealing with complementising irrealis or complement-internal irrealis.

3.4. Data

In the next sections, we will take a closer look at the domains where complementising mood seems to occur in Baltic and Finnic languages, and by using both quantitative and qualitative analysis, we give an overview of the use of irrealis marking in each language.

Our data was obtained from TenTen-series Web-corpora that are collected from the Internet and thus include, in addition to media texts, more informal texts from blogs, internet fora etc. For Latvian the corpus lvTenTen14 was used, for Finnish, Finnish Web 2014 (fiTenTen). For Estonian we used the more recent Estonian National Corpus 2019, which is fully comparable to the TenTen series. Since the TenTen-series Lithuanian corpus is not morphologically annotated, another Lithuanian Web corpus, known as LithuanianWaC, was used.

Each of the four domains in the classification of irrealis uses is represented by a pair of verbs in each of the four languages (Table 1).

Table 1. Predicates included in the analysis in Latvian, Lithuanian, Estonian and Finnish.

			I				
	Baltic		Fennic				
	Latvian	Lithuanian	Estonian	Finnish			
propositional							
'believe'	ticēt	tikėti	uskuma	uskoa			
'guess, be of the opinion'	uzskatīt	manyti	arvama	arvata			
desiderative							
'want'	gribēt	norėti	tahtma	haluta			
'wish'	vēlēties	pageidauti	soovima	toivoa			
apprehensional							
'fear'	baidīties	bijoti	kartma	pelätä			
'worry'	satraukties	nerimauti	muretsema	huolehtia			
evaluative							
'(it is) strange'	dīvaini	keista	imelik (olema)	(olla) outoa			
'(it is) sad/a pity'	žēl	gaila	kurb (olema)	(olla) surullista			

We look at the clausal complements of each verb and try to find out to what extent irrealis marking is used in each domain, what motivates the use of irrealis marking in these domains, and how well the complementation mood is grammaticalised in the languages under discussion. Since Baltic and Fennic languages have more than one complementiser, we also have to take into account the complementisers and their semantics.

In the following sections, we first take a closer look at the use of irrealis and realis in the Baltic languages (Section 4), and then in Fennic (Section 5). We look at each domain separately in order to explain the extent and motivation for realis or irrealis marking in this particular domain. A final comparison of the languages under scrutiny can be found in Section 6.

4. The Baltic languages

4.1. Complementisers

While it is possible to have different complementisers combining with propositional (in the broader sense) and state-of-affairs predicates, the modern Baltic languages use this possibility to a limited extent. In Latvian, the complementiser ka 'that', dominating three of the four domains, appears only marginally in the desiderative domain whereas lai is widely used, see (5) and (6) above. The Latvian complementisers ka and lai correspond to a single basic complementiser kad in Lithuanian (Holvoet 2016, 227–230). In some varieties of Old Lithuanian, kad was associated with the desiderative domain and contrasted with another complementiser, jog, used in the propositional domain. The modern language, however, retains jog as a stylistic variant of kad irrespective of its function (Holvoet 2010, 76–79).

None of the complementisers mentioned above specifically requires the use of the conditional in the complement clause. Nevertheless, the use of the conditional is obligatory with similative complementisers like $it \, k\bar{a}$ 'as if', as well as the Latvian complementiser kaut, found with desiderative predicates. We did not include these cases in the analysis of the data.

4.2. Corpus data

The corpus search included a complement-taking predicate together with a typical complementiser so as to avoid other complement types. Since negation is a prefix in the Baltic languages, a separate search was carried out for affirmative and negative versions of the same verbs, with the notable exception of 'strange' and 'pity' which normally receive negation on an accompanying verb ('be' or 'seem'). For each predicate, a random sample of 300 was manually analysed so as to exclude non-finite verbs and ill-formed sentences. The final datasets are presented in Table 2 (Latvian) and Table 3 (Lithuanian).

Table 2. Predicates and complementisers in the Latvian data

Туре	Predicate	Translation	No of occ. in the sample	Complementisers
	ticēt	believe	258	
Propositional	neticēt	neg-believe	293	
	uzskatīt	think, believe	264	ka 'that'
	neuzskatīt	NEG-think, NEG-believe	291	
	gribēt	want	273	ka 'that' (7) lai 'that' (266)
Desiderative	negribēt	neg-want	288	ka 'that' (59) lai 'that' (229)
	vēlēties	wish	280	ka 'that' (5) lai 'that' (275)
	nēvēlēties	neg-wish	286	ka 'that' (26) lai 'that' (260)
	baidīties	fear	259	ka 'that' (258) lai 'that' (1)
Apprehensional	nebaidīties	neg-fear	251	ka 'that' (251) lai 'that' (0)
	satraukties	worry	223	ka 'that' (221) lai 'that' (2)
	nesatraukties	neg-worry	88	ka 'that' (88) lai 'that' (0)
Evaluative	dīvaini	(it's) strange	281	ka 'that' (226) ja 'if' (55)
	žēl	(it's) a pity	279	ka 'that' (271) ja 'if' (8)
Total			3614	

Table 3. Predicates and complementisers in the Lithuanian data

Туре	Predicate	Translation	No of occ. in the sample	Complementisers
Propositional	tikėti	believe	153	kad 'that' (135) jog 'that' (18)
	netikėti	neg-believe	275	kad 'that' (259) jog 'that' (16)
	manyti	guess	220	kad 'that' (196) jog 'that' (24)
	nemanyti	NEG-guess	288	kad 'that' (267) jog 'that' (21)
Desiderative	norėti	want	256	kad 'that' (245) jog 'that' (11)
	nenorėti	NEG-want	282	kad 'that' (272) jog 'that' (10)
	pageidauti	wish	161	kad 'that' (154) jog 'that' (7)
	nepageidauti	neg-wish	10	kad 'that' (10) jog 'that' (0)
Apprehensional	bijoti	fear	228	kad 'that' (218) jog 'that' (10)
	nebijoti	neg-fear	78	kad 'that' (68) jog 'that' (10)
	nerimauti	worry	90	kad 'that' (85) jog 'that' (5)
	nenerimauti ⁵	NEG-worry	o	
Evaluative	keista	(it's) strange	288	kad 'that' (241) jog 'that' (18) jei 'if' (21) jeigu 'if' (8)
	gaila	(it's) a pity	293	kad 'that' (273) jog 'that' (14) jei 'if' (4) jeigu 'if' (2)
Total			2622	

 $^{^5\,}$ No instances of nenerimauti were found in the corpus, which might be explained by the fact that the verb etymologically already contains the negation ne-.

The percentage of irrealis in each of the four domains, as depicted in Table 4, does not specifically refer to the use of irrealis in complementation but rather reflects all irrealis occurrences irrespective of their function. A more detailed analysis will be provided in the following sections where each of the four domains is discussed separately. Nevertheless, one cannot fail to notice the higher share of the irrealis marking in the desiderative domain in both Latvian and Lithuanian (about 50% and 100% respectively), even considering the substantial difference between the exact percentages in the two languages. In comparison, the share of the irrealis marking in the other three domains never exceeds 15%.

Table 4. The use of irrealis marking depending on the domain in Baltic

language	propositional	desiderative	apprehensional	evaluative
Latvian	15.2%	51.7%	15.5%	8.2%
	(168/1106)	(583/1127)	(127/821)	(46/560)
Lithuanian	12.1%	100%	14.9%	4.6%
	(113/936)	(707/707)	(59/396)	(27/581)

4.3. The propositional domain

In both Baltic languages, the use of irrealis in propositional complement clauses is infrequent, the indicative being the most common choice.

(15) Latvian uzskata. ka Viņš ieguvēji šeit 3.SG.NOM.M think.prs.3 that winner.NOM.PL here ir visi. be.prs.3 all.nom.pl.m 'He thinks that everybody here are winners.'

(16) Latvian

Cilvēki	netic,		ka	viņu
human.nom.pl	neg.believ	e.prs.3	that	3.GEN.PL
rēķini	būs	mazāki,		māju
bill.nom.pl	be.FUT.3	smaller.NO	M.PL.M	house.Acc.sg
nosiltinot.				

insulate.cvB

'The people don't think that their bills are going to be smaller if they insulate their house.'

Irrealis marking, when found, is usually unrelated to complementation. The dependent clause then refers to a hypothetical situation, often introduced by various modal expressions.

(17) Latvian

Atsevišķu	parti	iu	pārstāvji	
separate.GEN.PL	party	GEN.PL	represent	ative.nom.pl
uzskata,	ka	vislabāk	būtu	premjera
think.prs.3	that	best	be.irr	prime.minister.gen.sg
amatu	uztice	ēt	bezpartejisk	cam,
position.Acc.sg	entru	st.inf	non_partis	an.DAT.SG.M
sabiedrības	uztici	bu	baudošam	
society.gen.sg	trust.	ACC.SG	enjoy.prs.p.	A.DAT.SG.M
cilvēkam.				
person.DAT.SG				

'Representatives of certain parties think that it would be best to entrust the prime-minister's position to an independent person who has society's trust.'

(18) Latvian

Komisija,		ņemot vērā	šī	likumprojekta
commission.No	OM.SG	considering	DEM.GEN.SG	bill.gen.sg
nelielo		арјоти,	uzskatīja,	ka
NEG.big.Acc.sg	.DEF	volume.Acc.sg	think.pst.3	that
to	varētu	izskatīt	arī	divos
DEM.ACC.SG	can.irr	consider.1N1	also	two.loc
lasījumos.				
reading.LOC.PL				

'The commission concluded that, in view of the modest length of the bill, it could be considered in just two readings.'

Most clear instances of complementising mood are associated with clauses that refer to an actual situation in the present or past but receive irrealis marking due to the proposition being negated. In case of past time reference, a compound form of irrealis is used.

(19) Latvian

[Baznīca Sv. Rakstus uzskata par nemaldīgiem,]						
taču	tā	neuzskata,	ka	kaut vai		
but	DEM.NOM.SG.F	NEG.consider.PRS.3	that	even		
viens	no	pastāvošajiem				

from exist.prs.pa.dat.pl.m.def one.NOM.SG.M rokrakstiem būtu pilnīgi brīvs manuscript.DAT.PL be.irr completely free.NOM.SG.M no klūdām. from error.DAT.PL '[The Church considers the Scripture to be infallible] but she does not think that even a single one of the existing manuscripts is completely devoid of errors.'

(20) Latvian

Viņš neuzskata. ka būtu NEG.consider.prs.3 that be.irr 3.NOM.SG.M paveicis kādu varondarbu, some.ACC.SG perform.pst.pa.nom.sg heroic deed.Acc.sg [jo tie visi taču ir viņa bērni.] 'He does not think that he did anything heroic [because all of them are his children.]'

In all such cases the appearance of irrealis is made possible by the negation in the main clause, although negation does not preclude the use of indicative. In fact, indicative examples are much more frequent, cf.

(21) Latvian

Es neuzskatu. ka šie NEG.consider.prs.1sG that 1.SG.NOM DEM.NOM.PL.M standarti ir pārāk augsti. standard.NOM.PL be.prs.3 too high.nom.pl.m 'I do not think that these standards are too high.'

(22) Latvian

ka **Vispirms** gribētu norādīt. first_of_all point_out.INF that want.irr komisija neuzskata, ka viņa NEG.consider.prs.3 commission.NOM.SG that 3.NOM.SG.F visā pilnībā ir izpildījusi to fully be.prs.3 carry.out.PST.PA.NOM.SG.F DEM.ACC.SG uzdevumu, task.acc.sg

[ko Saeima tai uzdeva] <...>

'First of all, we would like to point out that the commission does not think that it has fully completed the task [assigned to it by Saeima (Latvian parliament)].' The complementising function of irrealis is, nevertheless, common enough to provide a noticeable difference in the frequencies of irrealis marking in dependent clauses after affirmative and negative uses of the main verb, see Table 5 and 6. In both Latvian and Lithuanian, the affirmative uses only combine with non-complementising instances of irrealis, while the negative uses show a higher frequency of irrealis in dependent clauses due to the complementising function. By Pearson's chi-squared test, the distribution of realis and irrealis forms is significantly different in affirmative and negative clauses both in Latvian and Lithuanian. The gap is wider in Latvian, therefore we could assume the complementising function of irrealis is more developed in Latvian.

Table 5. Use of conditional in the propositional domain in Latvian, depending on polarity of the main predicate $(\chi_2(N=1106, df=1) = 79.98, p < 0.001)$

main clause polarity	irrealis	realis	total
affirmative	26 (5%)	496 (95%)	522
negative	142 (24%)	442 (76%)	584
total	168 (15%)	938 (85%)	1106

Table 6. Use of conditional in propositional domain in Lithuanian, depending on polarity of the main predicate ($\chi_2(N=936, df=1) = 12.179, p < 0.001$)

main clause polarity	irrealis	realis	total
affirmative	28 (8%)	345 (92%)	373
negative	85 (15%)	478 (85%)	563
total	113 (12%)	823 (88%)	936

The precise number of examples with the complementising mood is, however, difficult to establish because of a high share of ambiguous cases. These are mostly represented by modal expressions in which, rather than negating a situation itself, its possibility or necessity is being denied. If this is done with respect to a hypothetical situation, the use of irrealis can be independent of complementation. One can only speak about com-

plementing mood when it is clear from the context that the dependent clause conveys an actual situation rather than a hypothetical one. For example, the situation in (23) that the speaker describes as 'being proud of one's supposed condition' is assigned to the addressee:

(23)	Latvian					
	Es	nudien	neuzskatu,	ka	tev	
	1SG.NOM	PTC	NEG.think.prs.1sg	that	2SG.DAT	
	ar	savu	slimību	būtu	jālepojas <>	
	with	RPO.ACC.SG	illness.Acc.sg	be.irr	DEB.be_proud	
	'Honestly, I don't think that you should be proud of your condition.'					

Placing all modal expressions in a separate group, the distribution of complementising vs. non-complementising uses of irrealis can be captured with the following numbers. The share of non-complementising uses in relation to the total number of examples is not affected by the polarity of the main clause. The increase in the irrealis forms under negative polarity in the main clause thus correlates with an increase in complementising uses of irrealis. Also, it correlates with the increase in the number of modal expressions in the irrealis form, which might indirectly point to the complementising function of irrealis also in examples with modal expressions.

Table 7. Use of irrealis as a complementising mood in the propositional domain in Latvian

		irrealis			
	1.1	non-modal		realis	total
main clause polarity	modal	compl	ncompl		
affirmative	19 (4%)	o (o%)	7 (1%)	496	522
negative	80 (14%)	52 (9%)	8 (1%)	442	584

Table 8. Use of irrealis as a complementising mood in the propositional domain in Lithuanian

		irrealis				
. 1 1 1	1.1	non-modal		realis	total	
main clause polarity	modal	compl	ncompl			
affirmative	15 (4%)	o (o%)	13 (3%)	350	373	
negative	46 (8%)	20 (4%)	19 (3%)	478	563	

4.4. The desiderative domain

The corpus data confirms the grammaticalisation of irrealis with desiderative predicates in Lithuanian where it is used in 100% of examples with desiderative predicates (see Table 9).

(24) Lithuanian

[is ieško kontakto su artimaisiais,]

Lyto realte hen		,]		
nori,	kad	jį	kalbintų	ir
want.prs.3	that	3.ACC.SG.M	address.1RR.3	and
imtų	ant	rankų.		
take.irr.3	on	arm.gen.pl		

'[He searches for contact with relatives;] he wants them to talk to him and to take him into their arms.'

Table 9. Use of irrealis in desiderative domain in Lithuanian, depending on polarity of the main verb

main clause polarity	irrealis	realis	total
affirmative	417	0	417
negative	290	О	290
total	707	0	707

In Lithuanian irrealis is clearly a complementation marker, i.e., it marks the complement as desiderative while the complementiser *kad* 'that' is shared with other types of complements, compare *sakė*, *kad atvažiuos* '(s) he said (s)he would come' but *sakė*, *kad palaukčiau* '(s)he told me to wait'.

In Latvian, on the contrary, realis appears at least as frequently as irrealis, although the numbers in Table 10 are, to a certain extent, a product

of pooling together two verbs that show opposite tendencies. On the one hand, *gribēt* 'want' is only found with irrealis in 40% of all examples, and *vēlēties* 'wish' in 60%.

(25) Latvian lai Es vienkārši gribēju, that simply want.pst.1sg 1SG.NOM tas viss beidzas all.nom.sg.m end.prs.3.RFL DEM.NOM.SG.M 'I simply wanted that all this would end.'

(26)	Latvian						
	Vēlējos,	lai	skolas	telpas	būtu		
	wish.pst.1sg	that	school.gen.sg	room.NOM.PL	be.irr		
	mājīgas	ar	mazu	skaitu			
	cosy.nom.pl.f	with	small.acc.sg	number.Acc.sg			
	skolnieku.						
	schoolchild.gen.pl						
	'T: -1 1 41	1 1			11		

'I wished the school premises to be comfortable, with a small number of schoolchildren.'

Table 10. Use of irrealis in the desiderative domain in Latvian, depending on polarity of the main predicate $(\chi_2(N=1129, df=1) = 0.6171, p = 0.4321)$

main clause polarity	irrealis	realis (PRS)	total
affirmative	280 (50%)	275 (50%)	555
negative	303 (53%)	271 (47%)	574
total	583 (52%)	546 (48%)	1129

It is seen from Table 10 that the irrealis marking has roughly equal chances to appear with affirmative and negative versions of the predicate (the differences in the distribution are insignificant also statistically, as can be seen from Table 10). Another parameter that might correlate with the choice between the irrealis and realis marking is the mood of the main predicate itself, but the data does not confirm this either.

As mentioned above, negation does not seem to have any influence on the use of irrealis in the dependent clause. But negation correlates with the choice between the two competitive complementisers, lai, which is specifically associated with the desiderative domain, and ka, also found with propositional clauses. The complementiser lai dominates the data

irrespectively of the main clause polarity; it is also found in the examples above. The use of ka is only marginal, but it increases from 2% to 15% when the main predicate is negated. The differences in the distribution of ka and lai in affirmative and negative clauses are significant also statistically (see Table 11, χ 2(N = 1129, df=1) = 55.318, p < 0.001).

(27) Latvian Bet viņš gribēja, ka vinam but want.pst.3 that 3.NOM.SG.M 3.DAT.SG.M eiu līdz. along go.PRS.1SG 'But he wanted that I go with him.'

8)	Latvian					
	Es	negribēju,		ka	viņi	
	1SG.NOM	NEG.want.i	PST.1SG	that	3.NOM.PL.M	
	zina,	ka	esam		tuvu.	
	know.prs.3	that	be.prs.1P	L	near	
	'I didn't war	nt them to k	rnow that y	we we	ere near	

Table 11. Use of complementisers in desiderative domain in Latvian, depending on polarity of the main verb

main clause polarity	ka	lai	total
affirmative	13 (2%)	542 (98%)	555
negative	85 (15%)	489 (85%)	574
total	98 (9%)	1031 (91%)	1129

The use of the Latvian ka is also sensitive to mood as it is concentrated in dependent clauses containing realis, that is, present tense forms, although the negation on the main clause increases the chances for ka to be also found with irrealis as in (29). Still, even the higher number of ka, found with realis under the negated main predicate (60 instances), only makes up 22% of all examples in the group (271), with lai taking the rest.

(29)	Latvian					
	Mēs	negribam,		ka	jums	patiktu
	1PL.NOM	NEG.want.pr	S.1PL	that	2PL.DAT	please.irr
	mūsu	māksla	un	mēs	paši.	
	our	art.nom.sg	and	1PL.NOM	ı self.n	OM.PL.M

'We do not want you to like either our art or ourselves. (Literally: we do not want that our art or ourselves would please you.)'

Here it is probably useful to dig into history. A look at 17th-century texts shows the situation was different, more like that in Lithuanian. In Old Latvian texts like Mancelius' $Langgew\"{u}nschte\ Postill\ (1654)}$ and Glück's Bible translation (1685, 1689), this complementiser use of lai has not yet established itself; here we find exclusively ka, usually with the irrealis form of the verb, in a construction closely resembling that of Lithuanian, but sometimes also with realis:

(30) Old Latvian (Glück's OT, Gen. 42.25) Un Jahseps pawehleja/ ka Maifi winnu and PN.NOM.SG order.pst.3 that sack.nom.pl 3.GEN.PL ar Labbibu pilditi fill.pst.pp.nom.pl.m with grain.Acc.sg and Nauda ikkatram fawâ winno each.DAT.SG 3.GEN.PL money.NOM RPO.LOC.SG Maifâ atdohta taptu sack.loc.pl return.pst.pp.nom.sg.f become.irr 'Then Joseph commanded to fill their sacks with corn, and to restore every man's money into his sack [...].'

(31) Old Latvian (Glück's NT, Mt 27.64) **Tapehz** pawehli/ ka tas order.IMP.2SG therefore that DEF.NOM.SG.M Kaps ftipri tohp apfargahts/ tightly become.prs.3 grave.Nom.sg guard.pp.nom.sg.m lihdf trefchai Deenai... until third.dat.sg.f day.dat.sg 'Command therefore that the sepulchre be made sure [lit. be tightly guarded] until the third day ...'

Latvian *lai* originated as a hortative marker, a function it still performs in the hortative construction *lai* atnāk 'let her/him/them come', often described in Latvian grammars as the third-person imperative. This *lai* goes back to an older form *laid*, the imperative of *laist* 'let', and is thus a counterpart to a Russian construction like *pust'* pridet 'let her/him come', or to English constructions with *let*. Subsequently this hortative marker assumed other functions as well, most importantly that of a complementiser with desiderative verbs.

4.5. The apprehensional domain in Baltic

The apprehensional domain has been described as intermediate between the propositional and the state-of-affairs domains (cf. Lichtenberk 1995, though the terms used there are different). Fear consists in an epistemic judgement that something may occur (propositional) and the wish that this event should not occur (desiderative). In Baltic, the propositional strategy occurs with an expletive negation. In Baltic, apprehensional predicates are overwhelmingly treated as propositional, especially in Latvian. Negation makes the appearance of the desiderative strategy even less likely (Table 12). However, the difference is statistically insignificant (p = 0.06792, Fisher test). The 16% of desiderative examples in Lithuanian become o% when the negation is added to the main verb (statistically significant difference, p < 0.001, Fisher test, see Table 13).

Table 12. Use of the propositional vs desiderative strategy in the apprehensional domain in Latvian, depending on polarity of the main predicate

main clause polarity	desiderative	propositional	total
affirmative	20 (4%)	462 (96%)	482
negative	6 (2%)	333 (98%)	339
total	26 (3%)	795 (97%)	821

⁶ The sample does not contain sentences where the complement clause, introduced by either *ka* or *lai*, conveys result or purpose, as in the following examples:

Viena no māsām tik ļoti satraucās, ka visu laiku runāja, runāja un runāja.

^{&#}x27;One of sisters was worried so much that she kept speaking all the time.'

Trešdiena Banijai bija brīva, tādēļ nepārtraukti satraucos, lai tikai, klīstot pa Rīgas ielām, sadzirdētu, kad zvanīs no veikala par preci, bet ... nezvanīja.

^{&#}x27;Banny had a day off on Wednesday, that's why I was constantly worried so that, while walking around Riga, we could hear when they would call from the store about the order, but they never called.'

Table 13. Use of the propositional vs desiderative strategy in the apprehensional domain in Lithuanian, depending on polarity of the main predicate

main clause polarity	desiderative	propositional	total
affirmative	52 (16%)	266 (84%)	318
negative	o (o%)	78 (100%)	78
total	52 (13%)	344 (87%)	396

The propositional strategy

We will turn to the propositional strategy first. As in the propositional domain proper, the complement clause contains a realis (future or present) form in most examples in both Latvian and Lithuanian.

(32) Latvian

Baidos,	ka	darba	vietā	mani
fear.prs.1sg	that	work.gen.sg	place.Loc.sg	1SG.ACC
nesapratīs,		nosodīs,	varbūt	pat
NEG.understa	nd.fut.3	condemn.ғит.з	maybe	even
$bar{u}s$	kādas	represijas	: .	
be.FUT.3	some.nom.i	PL.F repressio	n.NOM.PL	
'I'm afraid th	at they wor	n't understand me	e at my workp	lace, that
they will disa	approve and	d maybe even son	ne repressive 1	measures will
be taken agai	nst me.'			

The irrealis marking is rare in Latvian but its share increases from 12% to 20% when the main predicate is negated, see Table 16, which is another feature in common with the propositional domain proper. The difference in distribution of realis and irrealis marking in affirmative and negative main clauses is also statistically significant $\chi_2(N=795, df=1) = 0.125, p = 0.001463$). Lithuanian does not show this tendency, as the percentage of irrealis marking is very small or, in case of negative main clause polarity, non-existent (Table 17).

(33) Latvian Nebaidies, ka mūsu Dievam trūktu NEG.fear.PRS.2.RFL that our god.dat.sg lack.irr padoma, advice.gen.sg

[kādas miesas mums dot pie augšāmcelšanās!]

'Don't be afraid that our God should be at a loss [about what kind of bodies to give us after resurrection!]'

Table 14. Use of irrealis in the apprehensional domain in Latvian (propositional strategy)

main clause polarity	irrealis	realis	total
affirmative	56 (12%)	406 (88%)	462
negative	68 (20%)	265 (80%)	333
total	124 (16%)	671 (84%)	795

Table 15. Use of irrealis in the apprehensional domain in Lithuanian (propositional strategy)

main clause polarity	irrealis	realis	total
affirmative	7 (3%)	259 (97%)	266
negative	o (o%)	78 (100%)	78
total	7 (2%)	337 (98%)	344

It is, however, interesting that, independently of the main clause polarity, more than 90% of all instances of irrealis in Latvian are found with modal expressions. For comparison, the share of modal expressions with realis marking is between 20 and 30%. Consequently, as mentioned in Section 4.3 above, such examples containing modal expressions cannot be unambiguously identified as complementising or non-complementising uses of irrealis. No such connection between modality and irrealis marking is found in Lithuanian, though.

With the share of modal verbs being not so radically different in both languages (see Table 18, 19), a similar meaning in Lithuanian is more likely to be conveyed by a modal expression with a realis marking.

(34)	Latviai	1				
	Tiesliet	и	minist	rija	ir	satraukusies,
	justice.	GEN.PL	minist	try.nom	be.prs.3	WOTTY.PST.PA.NOM.SG.F.RFL
	ka	banku		un	administr	atoru
	that	bank.g	EN.PL	and	administi	rator.gen.pl

spēcīgais lobijs šādas lobby.nom.sg such.ACC.PL.F strong.NOM.SG.M.DEF izmainas varētu arī panākt. change.ACC.PL be able.IRR also achieve.INF 'The Ministry of Justice is worried that the strong banking and administration lobby could be able to achieve such changes.'

(35) Lithuanian

Vyriausybė labiausiai nerimauja, kad government.NOM.SG most of all worry.prs.3 that savaitgalį gali isisiautėti protestuojantys weekend.acc.sg go wild.inf protesting.NOM.PL.M can.PRS.3 studentai

student.NOM.PL

'Most of all, the government is worried that the protesting students could go wild in the weekend.'

Table 16. Use of modal verbs with irrealis marking in the apprehensional domain in Latvian (propositional strategy)

main clause polarity	modal	non-modal	total
affirmative	51 (91%)	5 (9%)	56
negative	66 (97%)	2 (3%)	68
total	117 (94%)	7 (6%)	124

Table 17. Use of modal verbs with irrealis marking in the apprehensional domain in Lithuanian (propositional strategy)

main clause polarity	modal	non-modal	total
affirmative	1	6	7
negative	О	О	О

Table 18. Use of modal expressions in combination with (ir)realis in the apprehensional domain in Latvian (propositional strategy)

main clause polarity	modal	non-modal	total
affirmative	136 (29%)	326 (71%)	462
negative	115 (35%)	218 (65%)	333

Table 19. Use of modal expressions in combination with (ir)realis in the apprehensional domain in Lithuanian (propositional strategy)

main clause polarity	modal	non-modal	total
affirmative	70 (26%)	196 (74%)	266
negative	14 (18%)	64 (82%)	78

Apart from the examples that combine irrealis with modality, there are but few instances of irrealis left in Latvian, and a similar number of non-modal irrealis examples is also found in Lithuanian. In both languages, these are mostly non-complementising uses as irrealis marking refers to a hypothetical situation, as in (36) below.

(36) Lithuanian

[Jei reiktų teisti pagal dabar galiojančius kodeksus,]

bijau,	kad	neužtektume	kalėjimų		
fear.prs.1sg	that	NEG.have.enough.irr.1pl	prison.GEN.PL		
'[If one had to decide cases according to the codes that are now					
valid,] I fear that we would run out of prisons'					

The state-of-affairs strategy

As one might expect, the desiderative pattern universally yields irrealis marking in Lithuanian, but in Latvian the data is split up between irrealis and realis (present), the irrealis being quite rare, and realis the norm. The realis is represented by present tense forms when the main clause polarity is affirmative. However, under negative main clause polarity, the future tense also occurs.

(37) Lithuanian, irrealis

Mes	bijome,	kad	tai	nepasikartotų.
1PL.NOM	fear.prs.1pL	that	this.na	NEG.repeat.irr
'We are afr	aid that this m	ight hapr	en again.'	

(38) Latvian, irrealis

Daži satraucās, lai tik
some.NOM.PL worry.PST.3.RFL that only
neizgāztos <...>
NEG.fail.IRR.RFL

'Some people were worried that they might fail.'

(39) Latvian, realis (present)

[Puisis ir ļoti emocionāls,]

tāpēc baidos. ka vinš aiz fear.prs.1sg therefore that 3.NOM.SG.M out of bēdām kaut ko neizdara. grief[pl].dat something.Acc NEG.do.PRS.3

'[The lad is very emotional,] that's why I fear that he might do something stupid out of despair.'

(40) Latvian, realis (future)

<>	es		šim		pajautāju	.,	vai
	1SG.NOM		DEM.DAT.S	G.M	ask.pst.18	SG	if
	viņš		nebaidā	s,	ka	tā	
	3.NOM.SG	.M	neg.fea	r.PRS.3	that	DE	M.NOM.SG.F
	meitene		vēlāk	nesāks	;	attie	cības
	girl.nom.	.SG	later	NEG.sta	art.FUT.3	relat	ionship.acc.pl
	ar	kādu		no	viņa		
	with	some	ACC.SG	from	3.GEI	N.SG.M	
	dēliem?						
	son.DAT.I	PL					

'I asked him if he was not afraid that this girl would eventually start a relationship with one of his sons.'

Table 20. Use of irrealis in the apprehensional domain in Latvian (desiderative strategy)

main clause polarity	irrealis	realis	total
affirmative	2 (10%)	18	20
negative	1 (17%)	5	6

Table 21. Use of irrealis in the apprehensional domain in Lithuanian (desiderative strategy)

main clause polarity	irrealis	realis	total
affirmative	52 (100%)	0	52
negative	o (o%)	О	0

In theory, Latvian has two desiderative complementisers, *ka* and *lai*, with the latter dominating in the desiderative domain proper. With apprehensional predicates, however, *ka* is common while *lai* only appears in single examples with both realis, as in (41) and irrealis, as in (38) above.

(41) Tad arī loti satraucos. also then very WOTTY.PST.1SG.RFL lai tik nepiedzimst stipri par that only NEG.be.born.prs.3 strong.ADV too ātru. quick.acc.sg

[jo bērniņš taču vēl mazs.]

'At the time I also worried a lot that it might be born way too quickly [because the baby is still small.]'

While negation is a constant property of the desiderative strategy in the apprehensional domain, an additional optional feature is the particle *tik(ai)* 'only', usually found in Latvian but sometimes also in Lithuanian, as below.

(42) Bijau. kad иž tik savo mintis fear.prs.1sg that for RPO idea.ACC.PL only nebūčiau ekskomunikuotas. NEG.be.IRR.1SG excommunicate.PST.PP.NOM.SG.M 'I fear that I might be excommunicated for my ideas.'

4.6. The evaluative domain

The unanchoring use of the irrealis in evaluating contexts is weakly developed in Baltic. The regular irrealis use observed with evaluative predicates like 'a pity', 'fitting', 'strange' etc. in Romance has no counterpart. For many evaluative predicates the default interpretation of the embedded predication is factive, and this factive value imposes realis use:

(43) Lithuanian

Keista, kad iis paviešino strange.NA that make_public.pst.3 3.NOM.SG.M nebaigta dainos versiją unfinished.Acc.sg song.GEN.SG version.Acc.sg juodraštį. raw draft.Acc.sg

'It's strange that he should have made public an unfinished version of the song—a raw draft."

⁷ https://www.lrytas.lt/zmones/muzika/2017/12/15/news/dar-vienas-sel-skandalas-prodiuserisatskleide-keista-istorija-3902241/

Occasionally, however, we find the irrealis even though the factive interpretation of the embedded predication is not excluded. The contexts where we find it are, however, vague between a factive and non-factive reading:

(44) Lithuanian

[Na galbūt ir perspektyvus šis jaunuolis,] tik keista kad iis būtų only strange.NA that 3.NOM.SG.M be.irr pirmasis švedas žaidžiantis first.nom.sg.m.def Swede.nom.sg play.prs.pa.nom.sg.m NBAlygoje, NBA league.Loc.sg [maniau, kad nors vienas koks pasiklydęs ten rungtyniauja...]⁸ '[Well, he seems to be a promising young man,] but it's strange he should be the first Swede playing in the NBA league, [I thought there should be at least some stray one playing there...]

Independently of whether x is actually the first Swede to play in the NBA league, in view of the a priori likelihood of there having been at least one Swede playing in the NBA league, this fact would have been strange in itself in any circumstances. It is not clear whether the actual fact of x being the first Swede in the NBA league is being evaluated, or rather such an event considered as a possibility.

The corpus data confirms that evaluating contexts normally contain realis forms in both Baltic languages, main clause polarity showing no influence on the results.⁹

When found, irrealis has a non-factive interpretation in the overwhelming majority of examples. They are mainly associated with the complementiser 'if', but 'that' is also found in couple of instances, cf. the following two examples.

https://www.krepsinis.net/naujiena/i-nba-duris-beldziasi-svedu-krepsinio-talentas-jjerebko/75649 (accessed 2021-06-20, diacritics added)

⁹ As mentioned above, no separate search was conducted for negative versions of the predicates because they are usually negated by means of separate words. For instance, Lithuanian keista '(it is) strange' can be combined with a negated version of the auxiliary (nebūtų keista 'it would not be strange') or, more often, with a pronoun nieko, as in nieko keista 'there is nothing strange'. Thus, the difference in the number of affirmative and negative examples reflect their frequencies in the corpus. While in Lithuanian (but not Latvian) negation can also be attached to the predicate itself (nekeista), an additional search revealed very few such instances in the corpus, all of them containing realis in the dependent clause.

(45) Laikam jau būtu dīvaini. ja es probably if PTC be.irr strange.ADV 1SG.NOM nebūtu savu sniegumu NEG.be.IRR with RPO.ACC.SG achievement.Acc.sg apmierināts. satisfied.nom.sg 'It would probably be strange if I were not satisfied with my achievement.'

(46) Būtu dīvaini, ka auto vadītājs be.irr strange.ADV that car driver.nom.sg apgalvotu, iā. nepaskatījos otrreiz. NEG.look.pst.1sg claim.ırr second.time yes

NEG.notice.PST.1SG

nepamanīju.

'It would be strange that the car driver would claim that, yes, I didn't look the second time, I didn't notice (it).'

Table 22. Use of complementisers with irrealis in the evaluative domain in Latvian

mail clause polarity	ja 'if'	ka 'that'	total
affirmative	41 (90%)	3	44
negative	2 (100%)	0	2

Table 23. Use of complementisers with irrealis in the evaluative domain in Lithuanian

main clause polarity	jei(gu) 'if'	kad / jog 'that'	total
affirmative	21 (90%)	2	23
negative	4 (100%)	О	4

A factive interpretation of the irrealis is only found with a couple of instances of 'it is strange' in Latvian and Lithuanian, always introduced by the complementiser 'that'. It is interesting that the Latvian irrealis form belongs to a modal verb.

(47) *Dīvaini*, ka lietām vajadzētu būt need.irr that thing.dat.pl be.inf strange.ADV vienam ģints nosaukumam. one.DAT.SG.M species.GEN.SG name.DAT.SG 'It is strange that things should have one species name.'

(48) Na, tiesa pasakius, daugiau negu well truth.Acc.sg say.PST.CVB more than keista, kad lvgio strange.NA that this.gen.sg.m level.gen.sg klaidintu skaitytojus. žmogus taip mislead.IRR.3 reader.ACC.PL human.noм.sg thus 'Well, to tell the truth, it is more than strange that a person of this level should mislead readers in such a way.'

Table 24. Use of irrealis as a complementising mood in the evaluative domain in Latvian

main clause polarity	compl	ncompl	total
affirmative	1 (2%)	43	44
negative	o (o%)	2	2

Table 25. Use of irrealis as a complementising mood in the evaluative domain in Lithuanian

main clause polarity	compl	ncompl	total
affirmative	2 (9%)	21	23
negative	0 (0%)	4	4

4.7. Conclusions on the Baltic data

Not all instances of irrealis marking, shown in Table 4, have a complementising function. The 100% complementising use of irrealis is found in the desiderative domain, as well as in desiderative-type examples in the apprehensional domain. While it would be convenient to give percentages of complementising use for each of the four domains, the exact numbers are impossible to obtain due to ambiguity of examples containing modal expressions. Non-ambiguous instances of complementising use, however, boil down to less than 10% of all irrealis examples of the propositional predicates, and seem to be less than 1% in the propositional variety of the apprehension predicates, and with the evaluative predicates. Overall, Latvian and Lithuanian look very similar, although a closer look reveals certain differences. The most important one, namely, the use of realis alongside irrealis in desiderative contexts in Latvian, but

not in Lithuanian, was already known from previous research (Holvoet 2010). Another difference brought to light by our analysis is that irrealis marking in Latvian is often found on modal expressions. The contrast with Lithuanian is most clearly seen in the propositional-type predicates within the apprehensional domain where Lithuanian mostly has modal expressions with realis marking, but few instances of irrealis show no propensity for modals.

5. The Fennic languages

In this section we take a closer look at Estonian and Finnish data. In these languages the irrealis is represented by the mood traditionally known as conditional. In spite of its name it is not restricted to conditional clauses. When it comes to complementation, the use of the conditional is better known with desiderative verbs (Metslang 1999), whereas not much is known about other potential domains of irrealis in complementation. However, Kehayov (2017, 314–322) has claimed that in Finnic languages the use of irrealis is related to states-of-affairs more widely, not only in complementation.

5.1. Complementisers

The Fennic languages Estonian and Finnish have several complementiser types that show differences in use. The most general complementisers, Estonian et and Finnish että 'that', are semantically neutral; the truth value of the complement propositions depends on the semantics of the matrix verb (Kehayov 2016, 453). Question markers can also function as complementisers, as in (49); both polar question markers (kas in Estonian, -ko/-kö in Finnish) and wh-question markers are in use (Kehayov 2016, 454). The third type includes temporal and conditional conjunctions (kui 'when, if' in Estonian, kun 'when' in Finnish) that can be used as complementisers especially with evaluative predicates (Kehayov 2016, 455), see ex. (50). In Finnish, in some restricted contexts the conditional adverbialiser jos 'if' can be used as a complementiser; however, it is rare (Kehayov 2016, 455). There are also similative complementisers in both languages that obligatorily trigger the use of irrealis, such as justkui, kui, justnagu, nagu, and otsekui 'as if; like; allegedly' in Estonian and aivan kuin, ihan kuin, ikään kuin, and kuin in Finnish (Kehayov 2016, 456–457), see (51) and (52):

- (49) Estonian (Kehayov 2016, 454)

 Jaan küsis, [kas Mari tuleb].

 Jaan ask.pst.3sg Q Mari come.prs.3sg

 'Iaan asked if Mari was coming'
- (50) Estonian (Kehayov 2016, 455) On $\lceil kui \rceil$ kurb. inimene juured oma be.prs.3sG if/when sad person self root.pl kaotab]. lose.prs.3sG 'It is sad when/if a person loses their roots.'
- (51) Estonian (Kehayov 2016, 456)

 On kuulda justkui uluks hunt.
 be.PRS.3SG hear.INF as.if howl.IRR.3SG wolf 'It sounds as if a wolf is howling.'
- (52) Finnish (Kehayov 2016, 457) Välillä hän puhuu ikään kuin tämä sometimes s/he speak.prs.3sg as.if this koti olisi hänen vanhempiensa home be.irr.3sg s/he.gen parents.PL.GEN.3POSS koti. home

'Sometimes s/he talks as if this home were her/his parents' home.'

Thus only together with similative complementisers is the use of irrealis marking in the complement clause obligatory; with other complementisers the use of the conditional is optional and a matter of variation.

5.2. Data

The Estonian data were taken from the Estonian National Corpus 2019 (a web corpus, comparable to other TenTen corpora), which is available on SketchEngine. The search was conducted by the complement-taking predicate and following complementiser, which means that other complement types (e.g., infinitival clauses, see Kehayov 2016) were not included. Random samples of 300 occurrences of each verb + complement clause were analysed manually. Only finite complement-taking verbs are included in the study (however, for 'be sad', 'be strange' omission of the copula 'be' is also included). The final dataset is represented in Table 25.

Table 26. Predicates and complementisers in the Estonian data.

Туре	Predicate	Translation	No of occ. in the sample	Complementisers
Propositional	uskuma	believe	253	et 'that'
•	arvama	guess	236	et 'that'
Desiderative	tahtma	want	245	et 'that'
Desiderative	soovima	wish	257	et 'that'
	kartma	fear	191	et 'that'
Apprehensional	muretsema	worry	161	et (107), kui 'when, if' (14), kas 'whether' (30), et + kas ~ et ega 'that + ques- tion particle' (10)
Evaluative	imelik (olema)	(it's) strange	180	et 'that' (156) kui 'when, if' (24)
Evaluative	kurb (olema)	(it's) sad	173	et 'that' (123), kui 'when, if' (50)
Total			1696	

For Finnish data the search was conducted in a similar way from the Finnish Web 2014 (fiTenTen). The only difference was that when searching for Finnish complement clauses the comma between the main verb and complement clause was not taken into account (this is a feature of the standard language). Therefore the Finnish data may be more informal than those of Estonian. However, there is no reason to expect that conditional in the complement clause is somehow related to more or less formal use of language.

Table 27. Predicates and complementisers in the Finnish data

Туре	Predicate	Translation	No of occ. in the sample	Complementisers
Propositional	uskoa	believe	231	että 'that'
	arvata	guess	173	että 'that'
Desiderative	haluta	want	260	että 'that'
	toivoa	wish	227	että 'that'
Apprehensional	pelätä	fear	213	että 'that'
Apprenensionar	huolehtia	worry	204	että 'that'
Evaluative	(olla) outoa	(it's) strange	237	että 'that' (145) kun 'when, if' (92)
	(olla) surullista	(it's) sad	228	että 'that' (165), kun 'when, if' (63)
Total			1773	

A general overview of the use of irrealis in different domains in Estonian and Finnish is presented in Table 27. We can see that Estonian uses notably more irrealis marking in complements belonging to desiderative verbs than Finnish. Differences in other domains are less important. However, it is interesting to see that in the propositional domain Finnish uses more irrealis marking than Estonian. In general, we can speak about irrealis as a complementising mood only in relation to desideratives, especially in Estonian; in other domains it is not grammaticalised to the same extent.

Table 28. The use of irrealis (conditional) in Finnish and Estonian data

language	propositional	desiderative	apprehensional	evaluative
Estonian	13.7% 67/489	90.6% 455/502	7.7% 27/352	6.8%
Finnish	20.5% 83/404	30.4% 148/487	7.9% 33/417	2.4% 11/465

5.3. The propositional domain

In the propositional domain typically realis marking of the complement clause occurs, referring to a situational referent and thus having high reality status. In this domain, the irrealis marking may reflect differences in the assessment of the reality status of an event.

5.3.1. Estonian

With the verbs *uskuma* 'believe' and *arvama* 'guess' irrealis marking is relatively infrequent in Estonian data: only 13.7% of uses in our sample had the verb of a complement clause in the conditional. Only the general complementiser can be used with these verbs in both languages: *et* 'that' in Estonian and *että* 'that' in Finnish.

Typically with propositional clausal complements realis marking of the complement clause is used, as in (53). 30 occurrences (6%) in our sample had simple past tense forms in the complement clause. Past tense in the complement clause anchors the situation to the past and its reality status is high, as in (53). However, realis is used also in cases when the propositional complement has a present or future reference and thus the realisation of the event can be doubtful (54–55). Especially in (55) the main verb *uskuma* 'believe' is negated and the complement clause expresses an event whose reality status is low, but still realis mood is used. However, in both clauses irrealis would also be possible, indicating that the realisation of the potential event is uncertain.

- (53) Ma arvan, et duubleid **oli**I guess.prs.1sG that double.pl.prt be.pst.3

 kokku kümme.

 total ten

 'I think there were ten doubles in total.'
- (54) Usun, et kõik töötud
 believe.prs.1sG that all unemployed.pl.nom
 rõõmustavad selle üle.
 rejoice.prs.3pl this.GEN over
 'I believe that all the unemployed will be happy about it.'
- (55) Öösalu ei usu, et teenus Öösalu neg believe.conneg that service.NOM rahva hulgas väga suurt people.GEN among very big.prt

populaarsust **kogub**.

popularity.PRT gain.PRS.3SG
'Öösalu does not believe that the service will gain a lot of popularity among people.'

When looking at the cases when irrealis marking occurs, it appears that irrealis expresses increased hypotheticality of the realisation of the event of the propositional complement, as in (56). Here the use of irrealis could be related to implicit conditionality: half of us all could do normal doggerel verses if we only tried (becomes clear from the following sentence). This is therefore not an instance of complementising mood.

vähemalt pooled (56) Usun. meist believe.prs.1sG that at least half.pl 1PL.ELA suudaksid teha normaalseid vemmalvärsse. can.irr.3PL do.INF normal.pl.prt doggerel verse.pl.prt [Ainult tuleb korraks maha istuda.]

'I believe that at least half of us would be able to do normal doggerel verses.

[You just have to sit down for a while.]'

Another important factor that seems to explain the irrealis marking of the propositional complement is related to an (implicit) wish that the event expressed in the complement clause might come true. This meaning is evident in (57), where the first clause that is coordinated with the complement-taking verb *usun* 'I believe' occurs in the conditional and expresses a desired situation (it is evident from the first use of the irrealis *tahaks* (want-IRR) 'I wish, I would like to'). Such examples are thus semantically related to the use of complement marking in the state-of-affairs domain (desiderative verbs). The irrealis marking in the complement clause also reflects the speaker's uncertainty about the potential realisation of the event described in this clause; this interpretation is supported by the use of a modal verb in the conditional (*peaks = pidama* 'must' + conditional, *tuleks = tulema* 'must' + conditional). Such uses can also be found in sentences with future reference, as in (58).

"Tahaks seal finaali (57)iõuda ja usun, want.irr there final.ILL reach.INF and believe.prs.1sG koha et sinna 21,0 peaks that 21.0 must.irr there place.GEN

tagama," rääkis saarlane. guarantee.sup tell.pst.3sG islander "I would like to reach the final there and I believe that 21.0 should secure a place there," said the islander.'

(58) Ühed arvavad. et poliitilistel põhjustel one.pL think.prs.3pl that political.PL.ADE reason.PL.ADE tuleks baltlastele siiski shanss anda. come.irr Balt.pl.All however chance give.INF 'Some believe that for political reasons, the Baltics should be given a chance.'

Most clear instances of complementising mood are associated with clauses that refer to an actual situation in the present or past but receive an irrealis marking due to the proposition being negated (59). In the scope of negation, the complement clause contained irrealis marking in 34% of occurrences, while with affirmative epistemic verbs only 10%. Thus, there is a slight tendency towards irrealis marking of the complement clause depending on polarity; this difference is also statistically significant (see Table 28): $\chi_2(N=489, df=1) = 31.117$, p < 0.001.

(59) /.../ kuid aktsiisitõus ma et but T believe.conneg that excise.increase NEG seda eriti mõjutaks particularly this.prt affect.irr 'But I do not believe that excise increase would particularly affect it'

Table 29. Use of irrealis in propositional domain in Estonian, depending on polarity of the main verb

main clause polarity	irrealis	realis	total
affirmative	41 (10%)	371 (90%)	412
negative	26 (33.8%)	51 (66.2%)	77
total	67 (13.7%)	422 (86.3%)	489

Hence, in the propositional domain the use of conditional mood seems to be related to the assessment of the reality status of an event. Implicit conditionality makes the irrealis marking obligatory. Also the desirability of the realisation of an event may have an effect on the use of conditional

marking. The most obvious instances of complementising mood are related to negative main clauses ('I don't believe'). In the big picture, however, irrealis marking of the complement is rare.

5.3.2. Finnish

We can observe similar tendencies also in Finnish. Interestingly, Finnish has, in addition to the conditional, a series of forms referred to as potential mood, expressing epistemic likelihood of the realisation of the event expressed by the complement clause. Its meaning is defined as potentiality in the future (VISK §1507). This mood can thus be compared to a modal verb like English *may*. Since potential is used rarely in Finnish, it is not a surprise that it occurred only once in our sample (60).

(60) Sen=hän voimme myöskin että he arvata this=PTC also can.PRS.1PL guess.INF that thev tietänevät kanssa io mitkä muutokset what.pl know.pot.3pl too already change.pl tarvitaan Ruotsin lippu saadaan jotta need.pas that Swedish.gen flag get.PAS liehumaan ahteriin. flv.inf2.ill stern.ILL

'We can also guess that they already know what changes are needed to make the Swedish flag fly in the stern.'

Compared to Estonian, Finnish uses irrealis marking in the propositional domain more frequently (20.5%; in Estonian 13.7%). Nevertheless, realis marking is still the dominant pattern.

Irrealis is used most commonly in contexts where the proposition expressed by the complement clause has future reading and therefore its realisation is not certain for the speaker. This is clearly an instance of non-complementising mood.

uskon (61)₹a että ihmiset kävisivät paljon and believe.prs.1sG that much man.pL go.IRR.3PL mieluummin lähikaupoissa lyhyen matkan rather close shop.pl.ine short.GEN distance.GEN päässä.

head.INE

'And I think people would much rather go to convenience stores a short distance away.'

However, the irrealis marking is used also in past contexts. In Estonian in such contexts typically realis was used since the actual result was already known to the speaker. The corresponding examples of Finnish (62–63), however, have negation in the main clause and irrealis in the complement clause—i.e. in a context where the use of irrealis was most probable also in other languages in our sample. As can be seen in Table 29, in Finnish the negation in the main clause increases the use of conditional in the complement clause, and this difference is also statistically significant: $\chi_2(N=404, df=1) = 11.862$, p < 0.001.

(62)	e) En usko		onut että		hän	lähtisi,
	NEG.1SG	believe.pst.pa		that	he/she	go.IRR.3SG
	olisin=han		voinut		olla	hänen
	be.irr.isg=p	тс	be_able.1	PST.PA	be.inf	s/he.GEN
	isänsä	sänsä		ikäni		puolesta.
	father.poss.3	3	own.gen	age.pos	SS.1SG	by
	ʻI didn't thir	nk he	would leav	e, after a	ll, I could h	ave been his father
	by my own	age.'				

(63)	Se	oli	vähän	vahi	nko,	en		arvannut
	it	be.pst.3sg	a_bit	pity		NEG.1S	G	think.pst.pa
	että	ulkona	olisi		yhtäki	kiä	niin	
	that	outside	be.irr.	3SG	sudde	nly	so	
	paljor	ı pakkasta.						
	much	frost.prt						

^{&#}x27;It was a bit of a pity, I didn't guess there was suddenly so much frost outside.'

Table 30. Use of irrealis in the propositional domain in Finnish, depending on polarity of the main verb.

main clause polarity	irrealis	realis	total
affirmative	38 (15.1%)	213 (84.9%)	251
negative	45 (29.4%)	108 (70.6%)	153
total	83 (20.5%)	321 (79.5%)	404

Thus we can conclude that both in Estonian and in Finnish, realis marking predominates in the propositional domain. Irrealis marking can be related to (implicit) hypotheticality, that is, it is non-complementising

irrealis. Irrealis as a complementising mood appears especially in negative contexts (with negative main clauses), similarly to Baltic languages.

5.4. The desiderative domain

Desiderative verbs represent the state-of-affairs domain, where complement clauses provide information about potential events of which one does not know whether they will occur, so that the complement is not truth-valued. Irrealis reflects the unanchoring function (suspension of situational and temporal location).

5.4.1. Estonian

In Estonian, irrealis marking of the complement of desiderative verbs dominates (91%, example 64). In addition to the verbs analysed here (tahtma 'want', soovima 'wish'), irrealis is used with verbs like käskima 'order', paluma 'ask', nõudma 'request, demand' (65), ette panema 'propose, suggest', soovitama 'recommend', lootma 'hope', ootama 'wait', etc. (Metslang 1999, 118). According to Metslang, the Finnish counterparts of these verbs also tend to use irrealis marking of complements (ibid.).

- (64) Ma tahan, et sa teaksid.

 I want.prs.1sg that you know.irr.2sg 'I want you to know.'
- (65) Aadu valaks nõuab. et Ats Aadu demand.prs.3sG that Ats poor.IRR.3SG talle kiirelt 100 grammi. he/she.ALL quickly 100 gram.PRT 'Aadu demands that Ats pour 100 grams [of vodka] for him quickly.'

When we look at our data, interestingly, we find that realis is used especially if the verb of the complement clause is in the impersonal voice (66). The distribution of irrealis and realis mood is significantly different in active and impersonal (passive) clauses, see Table 30 (χ 2(N=502, df=1) = 52.88, p < 0.001).

(66) Tahan, et seda seadust hakatakse
want.prs.isg that this.prt law.prt start.imps.prs
täitma.
enforce.sup
'I want this law to be enforced.'

Table 31. Distr	ibution of irreali	s and realis	marking ir	ı active and
impersonal (pa	ssive) clauses.			

voice in the complement clause	irrealis	realis	total
active	427 (93.6%)	29 (6.5%)	456
impersonal (passive)	28 (60.9%)	18 (39.1%)	46
total	455 (90.6%)	47 (9.4%)	502

A possible explanation for this unexpected difference between active and impersonal (passive) voice can be sought in the phonological similarity between impersonal mood forms: in the present indicative tense the impersonal form has the ending *-takse* (*haka-takse* 'start-IMPS.PRS'), while in the present conditional it has the ending *-taks* (*haka-ta-ks* 'start-IMPS-IRR'). It is possible that because of the phonological similarity the two forms are mixed up in this context. From this, however, we can infer that the grammaticalisation of the conditional in complement clauses is a relatively late development in Estonian. This can be true, since there are also other exceptions to the use of irrealis in complement clauses, see example (67).

In (67), the use of realis seems to be related to the assessment of the event as a fact (an unwanted, but actual situation), which makes the complement akin to those of the propositional type. Thus, in the desiderative domain as well, the use of irrealis is not fully grammaticalised (as it seems to be in Lithuanian) and we can find functionally motivated instances of realis marking.

(67)			põhimure		oli	allergia,
			en main_com	main_concern		allergy
			tahtnud,	et	hotellitoas	
			want.pst.pa	that	hotel_room.ine	
			ad.			
	be.prs.3 carpet.pl					
	'The ma	in conce	ern of the Norw	the Norwegians was allergies		ey did not
	want carpets in the hotel room.'					

Note that in (67) the main verb is negated. Negation in the main clause is a context where realis is used more often than expected (see Table 31); the difference in the distribution of conditional and indicative in complements belonging to affirmative and negative desiderative verbs is also

statistically significant: $\chi_2(N=502, df=1) = 13.818, p < 0.001$. This tendency is opposite to the propositional domain, where negation increased the use of irrealis marking.

Table 32. Distribution of irrealis and realis marking in complements of desiderative verbs depending on polarity

main clause polarity	irrealis	realis	total
affirmative	381 (92.9%)	29 (7.1%)	410
negative	74 (80.4%)	18 (19.6%)	92
total	455 (90.6%)	47 (9.4%)	502

In example (67), the complement clause expresses a realis event and thus is rather a propositional complement. However, the indicative occurs also in cases which belong to the state-of-affairs domain and irrealis marking would be expected, as in (68). It is possible that here realis is used deliberately for presenting the situation as a fact rather than just a desired situation. Such examples show that there is still some variation in the state-of-affairs domain and the irrealis marking is not fully grammaticalised.

(68) Me Eesti riik töötab soovime. et work.prs.3sg we wish.prs.1pl that Estonian state tõhusalt. ettevõtteid lihtne pidada on efficiently enterprise.PL.PRT be.prs.3sG easy maintain.INF arendada maksud ei ja ning meie and develop.INF and 1PL.GEN tax.pt. not suurene.

increase.conneg

'We want the Estonian state to work efficiently, companies to be easy to maintain and develop, and our taxes not to increase.'

The variation in irrealis use with desideratives and the fact that its use is much more limited in the close cognate language Finnish (see Section 5.4.2) indicate that the conditional has grammaticalised as a complementising mood in this context relatively recently in Estonian. This development in the desiderative domain could be related to the expression of desirability more widely, since this is a typical context for irrealis marking in Estonian, as seen in (69) (Metslang 1999, 109).

(69) Läheks ta koju!
go.IRR.3SG he/she home.ILL
'Would that he went home!'

Semantically and formally, complements of desiderative verbs are also close to adverbial clauses marking purpose, as shown in (70), which overwhelmingly use conditional (in finite clauses) and a general complementiser *et* (Metslang 1999, 111, EKG 1993, 310). Also in the purpose clauses the subordinated clause includes implicit wish and future reference, compare (70) and (71) (Erelt 2017b, 724). Kauppinen (1998) and later Metslang (1999) have described desiderativity, purpose and a few other related meanings as central meanings in the use of the Finnish and Estonian conditional, representing an intentional interpretation, or states-of-affairs more widely (Kehayov 2017, 314-322).

- (70) (purpose clause, Erelt 2017b, 724) łuku saaks õpib selleks, et ta Iuku learn.prs.3sG this.TR that he become.irr.3sg targemaks. smart.comp.tr 'Juku is learning in order to become smarter.'
- (71) (complement clause, Erelt 2017b, 724)

 Juku tahab, et ta saaks

 **Juku want.prs.3sg that he become.irr.3sg

 **targemaks.*

 **smart.comp.tr*

 **Juku wants to become smarter.*

The use of conditional dominates also in some special communicative clause types with optative meaning which have been described as conventionalised unsubordinated complement clauses (Erelt 2017a, 163):

To sum up, irrealis is well established in state-of-affairs complement clauses, occurring in 91% of instances in our sample. In this context, it typically

expresses a desired state or event, and that relates it to other clause types which also use irrealis in order to express wish or purpose. Some variation in irrealis marking, however, indicates that the generalisation of irrealis in the complements of desiderative verbs was a late development rather than an inherited feature of the Fennic languages.

5.4.2. Finnish

In Finnish, the use of irrealis in the desiderative domain is less grammaticalised than in the other languages under scrutiny. In our sample the conditional marking was used only in 30.4% of complement clauses with the verbs *haluta* 'want', illustrated in (73), and *toivoa* 'wish':

Quantitatively we can observe that irrealis occurs in the complement clause if the main clause is already marked with irrealis (Table 32); this difference in distribution is also statistically significant: $\chi_2(N=487, df=1) = 69.717$, p < 0.001.

Table 33. Distribution of realis and irrealis in the complements of desiderative verbs depending on the mood of the matrix verb

main clause mood	irrealis	realis	total
irrealis	58 (68.2%)	27 (31.8%)	85
realis	90 (22.4%)	312 (77.6%)	402
total	148 (30.4%)	339 (69.6%)	487

A typical example of such usage is given in (74). Interestingly, in such clauses irrealis mood in the main clause seems to be motivated by the so-called intentional interpretation (Kauppinen 1998, Metslang 1999), which consists in desirability, purpose etc. being already marked grammatically in the main clause:

(74) Mä haluaisin että olis jo perjantai! I want.irr.isg that be.irr.gsg already Friday 'I wish it was already Friday!'

In (73) and (74), the desired event or state is directed towards the present or future, but it can also be directed toward the past, as in (75). Here as well, both main and complement clause have irrealis; the conditional in the complement clause has a counterfactual reading.

(75) Toivoisin että itselläni olisi ollut wish.irr.isg that self.ADE.1POSS be.irr.3sg be.pst.pa mahdollisuus tällaiseen matematiikan oppimiseen opportunity such.ILL maths.GEN learning.ILL kouluvuosinani. school year.pl.ess.1poss 'I wish I'd had the opportunity to learn maths in this way in my school years.'

The most common pattern in this domain, however, is the use of realis in the complement clause, even if the clause refers to a desired future situation and its realisation is unclear, as in (76). In this situation, Estonian almost always uses irrealis.

(76) Haluan että he saavat jotain
want.prs.isG that they get.prs.3pl something.prt
ravintoa, /.../
nourishment.prt
'I want them to get some nourishment /.../'

Thus we can conclude that in Finnish irrealis is considerably less grammaticalised in the desiderative domain than in Estonian. It is used most typically if the main clause also has irrealis marking, thus strengthening the desiderative meaning.

5.5. The apprehensional domain

As noted above, the apprehensional domain can be viewed as intermediate between the propositional and the state-of-affairs domains, since verbs of fear express an epistemic judgement that something may occur (propositional) and the wish that this event should not occur (desiderative).

5.5.1 Estonian

In Estonian, in the apprehensional domain the use of irrealis marking is low, occurring in 8% of occurrences with the verbs *muretsema* 'worry' and *kartma* 'be afraid of'. These verbs may take different complementisers: *kartma* takes the general complementiser *et* 'that', *muretsema* uses also other complementisers in addition to *et*, such as *kui* 'when, if', the question particle *kas* 'whether', and their combinations *et kas* ~ *et ega*.

With verbs of fear, question markers as complementisers are specialised in the state-of-affairs domain, indicating that the realisation of the event expressed by the complement clause is desired but its actual realisation is in doubt (77). As can be seen from (77), in this case the verb of the complement clause is in the realis form.

(77) Muretsen, kas ta praeguse seadusega worry.PRS.1SG whether he/she/it current.GEN law.com sobitub?

fit.PRS.3SG

'I'm worried whether it fits with the current law.'

The complementiser kui 'if, when' lends the complement clause an additional conditional interpretation since the same marker has both temporal and conditional meaning; it is not always clear whether the embedded clause should be interpreted as a complement clause or rather as a conditional clause (in the latter case the main clause does not have any complements). kui is easily replaceable with the general complementiser et without crucial differences in meaning. Also, in complement clauses introduced by kui, realis marking almost always occurs; the use of conditional is rare and occurs independently from complementation. In our sample, kui was used only with the verb muretsema 'worry', as in (78).

(78) Ärge värv muretsege, kui νõi pilt when color NEG.IMP.2PL worry.IMP.2PL picture or täpselt sobi teile еi exactly NEG suit.conneg 2SG.ALL [—saate seda järgmises toimingus muuta.] 'Don't worry if the color or image doesn't suit you exactly— [you can change it in the next step.]'

The complementiser *et* 'that' is used with complement clauses having both propositional (79) and SoA values (80).

(79) Kardan, et **anti** psühhotroopseid fear.PRS.1SG that give.IMPS.PST psychotropic.PL.PRT aineid.
substance.PL.PRT
'I'm afraid psychotropic substances were given.'

(8o) Te ei pea muretsema, vou NEG must worry.sup Teie mobiilseade kannataks ülelaadimise et suffer.IRR mobile device overloading.GEN that your all. under 'You don't have to worry that your mobile device will suffer from overloading.'

With the verb *kartma* 'fear' often the negation co-occurs with the conditional in the complement clause, expressing unwanted hypothetical events; such uses belong rather to the state-of-affairs domain.

(81) Kardan. et. sel põhjusel see lahendus solution fear.prs.1sg that this this.ADE reason.ADE еi täidaks oma eesmärki. fulfil.irr NEG own purpose.PRT

'I'm afraid that for this reason this solution would not fulfil its purpose'

In a past-time context as well, the conditional is used for marking undesirable states of affairs, as in (82). In this example, nothing is said about the actual realisation of the potential event expressed by the complement clause. Such examples, however, were rare in our data.

(82) Kümme aastat tagasi spetsialistid muretsesid. ten specialist.pl worry.pst.3pl vear.prt ago et meeste uisutamine ei muutuks that man.PL.GEN skating change.irr NEG ainult hüppamiseks. iust jumping.TR 'Ten years ago, experts worried that men's skating would become just jumping.'

Note that there is a difference between (81) and (82): in (81), the conditional can easily be replaced with the indicative (*ei täida* 'does not fulfil'), without any changes in the meaning of the proposition. In (82), the indicative in the complement clause would completely change its meaning, as can be

seen from (82'): in (82), the specialists didn't want men's figure skating to become just jumping; in (82'), on the contrary, they wanted it (but were worried that it might not happen).

(82') Kümme spetsialistid aastat tagasi muretsesid, ten vear.prt ago specialist.PL worry.pst.3pl et. meeste uisutamine ei muutu that man.PL.GEN skating NEG change.conneg ainult hüppamiseks. iust jumping.TR 'Ten years ago, experts worried that men's skating would not become just jumping.'

5.5.2. Finnish

In the Finnish data as well, the use of irrealis in the apprehensional domain is infrequent: only 8% of occurrences in our sample have conditional marking in the complement clause. The verbs *huolehtia* 'worry' and *pelätä* 'fear' have a slightly different distribution: irrealis is used more often with the verb *pelätä*, as in (83) and (84). In (83), the complement clause has future reference; in (84), the main clause has past time reference. In both examples the complement clause expresses an event that may occur and the wish that this event should not occur. In (83) the use of irrealis can be explained with the hypotheticality of the event ('if I'd try it, it would be lifeless'), so it would be an instance of non-complementising mood. The conditional marking in (84) suggests an interpretation on which the event expressed in the complement clause did not materialise. The same applies to (85). Thus, irrealis marking can be related to increased hypotheticality of the event or imply that the unwanted situation was not realised.

(83)	Se	on	vielä		kokematta,		mutta
	this	be.prs.3sg	yet		experience.in	IF2.ABE	but
	vähän	pelkään		että	tulos	olisi	
	a_little	fear.prs.1sG		that	result	be.irr.3sc	}
	hengetön	•					
	soulless						
	'It is yet	to be checked,	but I	am a	little afraid tl	hat the resu	lt would
	be lifeles	ss.'					

(84) Lucius tunsi voivansa pahoin ja Lucius feel.pst.3sg feel.prs.pa.3poss badly and pelkäsi että oksentaisi. fear.pst.3sg that vomit.irr.3sg 'Lucius felt sick and was afraid he would vomit.'

(85) [Lääkäreillä ei ollut selitystä silmieni valonherkkyydelle, ei edes omalla isälläni]

joka pelkäsi että näköni **ei kehittyisi** who fear.pst.3sg that vision.1sg neg develop.irr.3sg normaalisti.

normally

'[The doctors had no explanation for the light sensitivity of my eyes, not even my own father,] who was afraid that my vision would not develop normally.'

To conclude, in the apprehensional domain both Estonian and Finnish have a similar low rate of irrealis marking (about 8%). In both languages its use can to some extent be related to undesired, hypothetical or unrealised events, but the use of conditional is not obligatory either in the state-of-affairs domain or in the propositional domain. In both languages there was a slight difference in the use of conditional according to the verbal lexeme used, but in opposite directions: in Estonian 'worry' took slightly more irrealis complements, whereas in Finnish they were more frequent with 'fear'.

5.6. The evaluative domain

5.6.1. Estonian

In our sample, there are two evaluative predicates, both of them including a copula *olema* 'be': *kurb* (*olema*) '(be) sad' and *imelik* (*olema*) 'be strange'. The irrealis marking of the complement clause is rare with evaluative verbs: the conditional was found in 6.8% of occurrences. Similarly to the Baltic languages, with evaluative predicates the default interpretation of the embedded predication is factive and it assumes realis marking (as in 86).

'It is very strange that (s)he reacted that way.'

Most typically the complements of evaluative verbs refer to past or ongoing events. Even if they have future reference, the complement clause has realis marking and presents the described event as a fact, i.e. as belonging to the propositional domain (87).

The conditional marking of the complement is used mostly in cases where the main clause is also marked with irrealis, thus creating a kind of 'irrealis frame'. All such cases have the complementiser *kui* if, when', as seen in (88). Thus the high degree of hypotheticality is marked already in the main clause, making the whole sentence irreal or non-factive, which is supported by the use of the complementiser.

However, sometimes even in such cases realis marking in the complement clause occurs, as in (89). In this example, the complement clause expresses an actual situation and the main clause gives an assessment of the persistence of the situation over time.

Examples as in (88) or (89) can also be interpreted as conditional clauses that use the adverbialiser kui in the sense of 'if' and provides the condition for the main clause. The border between the two is vague: on the

one hand the embedded clause behaves as a complement (answering to the question 'What is strange?'); on the other *kui* cannot be replaced with the general complementiser *et* without other changes in the sentence.

Thus the distribution of realis and irrealis marking in the complement clause depends on the mood in the main clause, and on the complementiser. We can see that irrealis in the main clause increases the likelihood of use of irrealis in the clausal complement (Table 33; the differences in the distribution in Table 33 is statistically significant), and the same holds for the complementiser kui (Table 34). 22 occurrences of irrealis in the complement clauses combined both factors: irrealis in the main clause and the complementiser kui.

Table 34. Distribution of conditional and indicative marking depending on the main clause mood (p < 0.001, Fisher test)

mood in main clause	irrealis	realis	total
irrealis	22 (81.5%)	5 (18.5%)	27
realis	o (o%)	90 (100%)	90
ellipsis of 'be'	2 (0.9%)	234 (99.1%)	236
total	24 (6.8%)	329 (93.2%)	353

Table 35. Distribution of the conditional and indicative depending on the complementiser (p < 0.001, Fisher test)

complementiser	irrealis	realis	total
et 'that'	o (o%)	279 (100%)	279
kui 'if, when'	24 (32.4%)	50 (67.6%)	74
total	24 (6.8%)	329 (93.2%)	353

Thus we can conclude that in the evaluative domain the irrealis is used for expressing highly hypothetical situations, especially if the main verb has irrealis marking and the complementiser *kui* 'when, if' is used. Such cases, however, can sometimes be interpreted as conditional clauses. Normally the complement of the evaluative verb is presented as factive, i. e. reflecting a real event, and it is marked with realis.

5.6.2. Finnish

In Finnish the use of irrealis marking in the evaluative domain is even lower than in Estonian: only 2.4% of evaluative verbs in our sample took a complement clause marked with irrealis. There is a difference between the two predicates in our sample: only *(olla) outoa '(be)* strange' takes an irrealis complement in (90); there are no such uses in our sample with the predicate *(olla) surullista '(be)* sad'. In (90), similar to the Estonian example (88), the main clause is already marked with irrealis, marking the proposition as highly hypothetical.

(90) Fa olisi Itä-Pasilan outoa että Itä-Pasila.GEN and that be.irr.3sG strange.PRT korkea laidalla seisoisi vksinään kovin edge.ADE stand.irr.3sG alone very high torni. tower

'And it would be strange that a very tall tower would stand alone on the edge of Itä-Pasila.'

In Finnish as well, another complementiser, *kun* 'when', is used; however, in Finnish it seems to have temporal connotations. Temporal interpretation of the complementiser supports the interpretation of the event described by the complement clause as a fact, as in (91).

(91) Outoa kun iää еi edes sula. when/if ice melt.conneg strange.PRT NEG even vaikka lämmintä=kin ulkona. onoutside although be.prs.3sG warm.prt=ptc 'Strange that the ice doesn't even melt, even if it's warm outside.'

Note that we did not include to the study the examples with the adverbialiser *jos* 'if', which is typically used as a conditional clause marker and only exceptionally may serve as a complementiser (Kehayov 2016, 455). The use of *jos* with evaluative verbs is relatively common, however, such usages are closer to conditional clauses than to complement clauses, consider (92). Such uses are hence similar to Estonian examples that are interpretable as conditional clauses, compare example (88) above. Thus the reason why the irrealis marking in the evaluative domain is less frequent in Finnish data than in Estonian data can be related to our decisions in

this study: in Finnish we excluded conditional marker *jos* 'if', but did not do the same with Estonian data because Estonian *kui* has both temporal and conditional readings. The vague area between complement clauses and conditional clauses in the evaluative domain is, however, present in both languages.

(92) Olisi surullista, jos toiminta **loppuisi**be.IRR.3SG strange.PRT if activity cease.IRR
kokonaan.
altogether
'It would be sad if the activity ceased altogether.'

5.7. Conclusion on the Fennic data

We can conclude that the irrealis in Estonian is most grammaticalised in the desiderative domain, as is the case in the Baltic languages. In this domain, it is related to modality of volition, which is the most common context for irrealis marking in Estonian. However, there is a crucial difference between Estonian and Finnish: irrealis is almost obligatory in Estonian (it occurs in 91% of instances), whereas in Finnish it is used only in 30% of instances. Moreover, in Estonian exceptions to the use of irrealis in the desiderative domain are mostly related to phonological similarity of indicative and conditional forms of the impersonal voice, and may thus represent a petrification of older uses, while in Finnish the indicative is the most common marking of the complement clause. This gives us reason to infer that the use of irrealis in the complement clause is rather a late development than an inherited feature of Fennic languages, and can probably be related to language contact.

Complementising mood is surprisingly relatively well established also in the propositional domain, especially in Finnish (irrealis marking in 20.5% of occurrences in this domain, compared to Estonian 13.7%). In this domain the use of conditional mood seems to be related to the assessment of the reality status of an event. Irrealis as a complementising mood appears especially in negative contexts (with negative main clauses), similar to Baltic languages. In this domain Finnish also uses another, although infrequent mood—the potential mood.

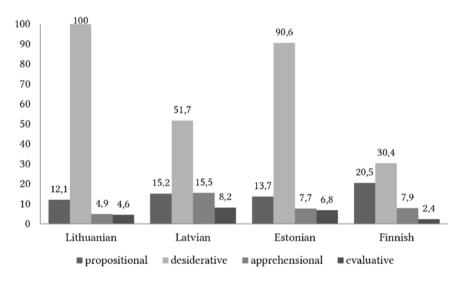
In other domains conditional is used relatively rarely and it is related to high hypotheticality, which can be (co)marked with the choice of complementiser and with modal particles and verbs (which were not analysed here). In the apprehensional domain both Estonian and Finnish have a similar low rate of irrealis marking (about 8%), and in both languages its use can be related to undesired, hypothetical or unrealised events.

In the evaluative domain the irrealis is used for expressing highly hypothetical situations, especially if the main verb already has irrealis marking and the complementiser Estonian *kui* or Finnish *jos* 'when, if' is used. Such cases are often interpretable as conditional clauses. Normally the complement of the evaluative verb is presented as a factive, real event and is marked with realis.

6. A comparison of the languages under investigation

A comparison of the results for all four languages is given in Figure 1.

Figure 1. Irrealis use in four domains of complementation in the languages under scrutiny



When we compare the results, one thing clearly stands out: complementising mood is most strongly developed in the desiderative domain, a subdomain of the state-of-affairs domain. Even here, however, the differences between the individual languages are striking: Lithuanian and Estonian show a high rate of irrealis use in this domain (100% and 90.6%), while in

Latvian and Finnish, the use of irrealis is much lower (51.7% and 30.4%, respectively). It is possible, however, that the preponderance of the irrealis in Estonian is a relatively young development, and the same might be the case for the spread of realis (presumably along with the rise of the new complementiser *lai*) in Latvian. Lithuanian on the one hand and Finnish on the other could thus perhaps be used as points of reference in evaluating the situation in Latvian and Estonian, which could be viewed as a zone of more intensive areal convergence. Its characteristic feature is that irrealis is optionally used as a complementation strategy but evaluation of reality status (expectations of realisation) is also a factor.

In the propositional domain, all languages show a tendency towards increased irrealis marking in negative clauses. This complementation strategy, also well known from Slavic and Romance, seems to consist in the content of the complement clause being represented as unreal. Being driven by main-clause negation, this is an instance of complementising mood.

In the apprehensional domain Baltic and Fennic differ in that Baltic has two complementation strategies, a propositional and a state-of-affairs strategy, the latter containing an expletive negation, so that the two are clearly opposed. They are not so clearly opposed in Fennic, where the expletive negation does not occur (or is represented only with some sporadic examples). Even in Baltic, however, it is mainly Lithuanian that keeps the two strategies apart, with the state-of-affairs strategy involving expletive negation and obligatory irrealis use (this strategy, it should be noted, is not frequent). In Latvian the situation is more differentiated, with the expletive negation preserved but with a lot of variation with regard the selection of complementisers, and the use of tense and mood forms. Both in Latvian and in Fennic irrealis use in the apprehensional domain seems to have become associated with the evaluation of reality status, and it competes with the use of modal verbs.

In the evaluative domain, the use of irrealis is largely restricted to constructions involving a conditional strategy (of the type *it would be strange if...*), or, more rarely, just an irrealis frame (with an irrealis form in the main clause but without the conditional *if*). In all cases what is involved is the marking of nonfactivity. The languages involved thus do not yield clear evidence for the unanchoring functioning of irrealis in evaluative contexts.

We can identify several tasks for future research. Irrealis use in the desiderative domain shows a certain instability in Latvian and Estonian, and historical changes seem to have occurred that may point to areal convergence. These historical developments should be investigated. We should also try to get a better understanding of the factors determining the choice of mood in the two languages. More diachronic research in the domain of apprehensional complementation would also be useful. It is clear from a comparison with Lithuanian that the Latvian system of apprehensional complementation has undergone changes partly consonant with those in the desiderative domain, and the possible areal links should not be neglected.

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ABBREVIATIONS

ABE — abessive, ACC — accusative, ADE — adessive, ADV — adverb, ALL — allative, COM — comitative, COMP — comparative, CONNEG — connegative, CVB — converb, DAT — dative, DEB — debitive, DEF — definite, DEM — demonstrative, ELA — elative, ESS — essive, F — feminine, FUT — future, GEN — genitive, ILL — illative, IMP — imperative, IMPS — impersonal, INE — inessive, INF — infinitive, IPF — imperfect, IRR — irrealis, LOC — locative, M — masculine, NA — non-agreeing, NEG — negation, NOM — nominative, PA — active participle, PAS — passive, PL — plural, POSS — possessive, POT — potential, PP — passive participle, PRS — present, PRT — partitive, PST — past, PTC — particle, Q — question marker, RFL — reflexive, RPO — reflexive possessive, SG — singular, SUP — supine, TR — translative

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The Lithuanian mirative present and its history

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Abstract

The article deals with a Lithuanian mirative construction based on the present active participle with the continuative and progressive prefix be-. In Lithuanian grammar it has been described as a tense form or (more recently) as a member of the evidential system, but it is here dealt with as a construction in its own right. On the basis of a corpus search the authors attempt to define the place of the mirative present among constructions containing the present active participle with the prefix be-, as well as its formal and functional properties and lexical input. In the diachronic section of the article it is suggested that the rise of the construction under discussion could have been, at least partly, the outcome of a distinct path of grammaticalisation (involving a post-nominal participial modifier in a presentative construction), different from that of both the progressiveproximative tense forms containing the participle with be- and the evidential forms based on participles. This, however, was not necessarily the only source of the construction: the pragmatic and emotive overtones developed by present progressives have probably also contributed to it. Mirativity has hitherto been known as one of the cluster of meanings characteristic of the Lithuanian evidential, but the analysis carried out in the article suggests that Lithuanian also has mirativity as a category in its own right, distinct from evidentiality.

 $\textbf{Keywords:} \ \text{Lithuanian, mirativity, evidentiality, progressive, presentative construction}$

1. Introduction¹

In this article we will discuss a Lithuanian mirative construction in which the main sentential predicate is expressed by a present active participle with the prefix be-. This prefix will here be glossed as continuative, as

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this is one of its main functions, though the function of *be*- in the forms we will be discussing here can be considered construction-specific. The construction is illustrated in (1):

(1) Žiūriu ir negaliu patikėt – look.prs.1sg NEG.be able.prs.1sg believe.INF and ant neštuvu on stretcher[PL].GEN be-gulis mano CNT-lie.PPRA.NOM.SG.M that.nom.sg.m my hendrakeleivis travel.companion.nom.sg [nors vos jį atpažinau.] 'I look and cannot believe [my eyes]—it's that travel companion of mine who is lying on the stretcher, [though I barely recognise him.]' (Gasparas Aleksa, 2001, CCLL)

Lithuanian grammar has more than one form containing, as their main constituent part, the present active participle with the prefix be-, but in the remaining instances this participle occurs with the auxiliary $b\bar{u}ti$ 'be'. The most prominent among these forms is the past-tense variety, which has been dealt with as a construction in its own right by Arkadiev (2011, 2019; for an earlier study see Sližienė 1961). Its function is predominantly avertive, that is, it usually denotes an event that was about to occur at some point in the past but failed to occur due to external circumstances, a change of mind on the part of the agent etc. (the term is taken from Kuteva 1998). In addition to the avertive function, however, this construction may also have progressive and proximative uses. The avertive use is illustrated in (2):

(2) Buvau be-si-pilanti sau trečią
be.PST.1SG CNT-RFL-pour.PPRA.NOM.SG.F self.DAT third.ACC.SG
taurę šampano,
glass.ACC.SG champagne.GEN
[kai staiga Zuzana suriko vairuotojui stabtelėti.]
'I was about to pour myself a third glass of champagne, [when suddenly Zuzana shouted ordering the driver to stop.]'
(cited from Arkadiev 2019)

The form in (2) belongs to the aspecto-temporal domain, and in the earlier grammatical tradition of Lithuanian the mirative construction in (1) had

also been associated with it as part of a putative system of 'inceptive' tenses (for details see below, Section 2). In virtue of its mirative function the type in (1) is, however, more closely related to the evidential system, which, in Lithuanian, is also based on participles (on the use of participles in evidential function cf., among others, Ambrazas 1979, 188–218 and the discussion in Arkadiev, Holvoet & Wiemer 2015, 27, 30–31, with literature). It is with the evidential system that the constructions at hand are classified in more recent Lithuanian grammars, which appears justified in view of the broadly accepted connection of mirativity with evidentiality. In this article, however, we will describe this mirative present as a construction in its own right, and we will furthermore argue that it might be at least partly different in origin both from the past-tense construction illustrated in (2) and from the evidential constructions based on present active participles.

The structure of the article is as follows. First, in Section 2, we will discuss the grammatical context of the construction at hand by outlining the history of the treatment of this construction in the tradition of Lithuanian grammar. Next, in Section 3, we will give a brief overview of the other functions of the present active participle with *be-*. In Section 4 we will present the results of a search in the corpora of contemporary Lithuanian, the aim of which was to clarify the relationship of the constructions under discussion to other forms based on the active participle with the prefix *be-* in the contemporary language. Section 5 deals with diachrony.

2. The mirative present in Lithuanian grammars

The treatment of the form interesting us here in Lithuanian grammar has undergone several changes in the course of time. Apparently the first mention of it can be found in Baranauskas' Lithuanian grammar, published anonymously in Tilsit (East Prussia) due to the Lithuanian press ban then in force in Russia (Baranauskas 1896, 80). Baranauskas keeps the constructions illustrated in (1) and (2) apart, describing the past-tense forms as *praėjęs pradėtas laikas* 'past inceptive tense' whereas present-tense forms as in (1) are classified with the oblique mood or evidential (called

² Neither Schleicher (1856) nor Kurschat (1876) mention the constructions discussed here.

girtaikis in Baranauskas' highly individual terminology). In Jablonskis' 1901 grammar a similar distinction is made, but the past-tense forms are now called pereitas mėgintasis laikas 'past conative tense' or praeteritum de conatu (1901, 31), while present-tense forms as in (1) are still classified with what we would now call the evidential; Jablonskis uses the term nestačioji kalba or oblique mood (Jablonskis 1901, 77). But in his 1919 grammar Jablonskis introduces a system of 'inceptive tenses' (pradėtiniai *laikai*), apparently meant to consolidate the functionally disparate forms based on the present active participle with the prefix be- into one system. The common denominator was thus identified as tense, which appeared logical as the language also had a system of anterior tenses (perfect, pluperfect and future perfect) consisting of a form of the auxiliary 'be' and a participle; Jablonskis therefore opted for defining a second system of compound tense forms. As Nijolė Sližienė, the author of the relevant chapter of the Academy Grammar (Ulvydas, ed., 1971, 147–148) points out, the term 'inceptive' was probably inspired by the conative character (or, as we would now say, avertive character) of the past-tense forms referring to an event that was initiated but not brought to a conclusion. As mentioned above, Baranauskas had used his term pradėtas laikas 'inceptive tense' for the preterite only. Jablonskis himself explains in his 1919 grammar that the forms thus characterised refer to an action that was begun and is still in course, bringing the notion closer to that of a progressive tense.

In more recent grammars of Lithuanian the description is changed once again. The volume on morphology in the Lithuanian Academy Grammar (Ulvydas, ed., 1971, 145–148) retains the notion of a system of inceptive tenses, but excludes the present-tense forms as illustrated in (1) from this system, leaving only past-tense forms as in (2), as well as future and conditional forms, as members of the inceptive paradigm. This is done on the grounds that the inceptive forms are conceived as a system of compound verb forms containing the auxiliary 'be', whereas there is no evidence that the form in (1) contains a zero form of an auxiliary. The present-tense form interesting us here is thus transferred again to the evidential system. The 1994 one-volume grammar of Lithuanian (Ambrazas, ed., 1994, 349–350) repeats the description contained in the Academy Grammar: a system of inceptive tenses is retained, but without present tense. In the 1997 Englishlanguage grammar of Lithuanian (Ambrazas, ed., 1997, 250–251, 321–323) the description is basically the same, but the term 'continuative tenses'

is introduced, while 'inceptive' would have been an exact equivalent of the Lithuanian term *pradėtinis*. The choice of this term (rather than the more obvious term 'continuous tenses', known from English grammar) is perhaps motivated by the fact that the prefix *be*- can have, when combined with finite verb forms, a continuative function, that is, it can encode the continuation of a state of affairs in spite of the expectation that it could have been discontinued. This function of the prefix *be*- is attested in the older language:

(3) AB Swiete dar juk be-kruttu. 1SG.NOM world.ine.sg still PTC CNT-move.PRS.1SG ir grießna Kuna dar певоји. and sinful.Acc.sg body.Acc.sg still carry.PRS.1SG Mertikaitis 1825, 312.6

'I am still walking this earth, and carrying about my sinful body.'

Nowadays *be*- occurs in this function only when combined with *te*- (which, by itself, has the restrictive meaning 'just, only') as shown in (4); *be*- alone is still used with the negation *ne*- as well as in other negative polarity contexts, as seen in (5):

- (4) Tačiau nemažai imoniu iki šiol until vet many business.GEN.PL now tebe-dirba minimaliu pajėgumu. CNT-work.prs.3 minimal.INS.SG.M capacity.INS.SG 'Yet many businesses are still working at minimal capacity even now.' (CCLL, from Kauno diena)
- (5) Dabar toie gatvėje, kurioje turėjo that.Loc.sg.F REL.LOC.SG.F now street. LOC.SG have.pst.3 buta, Klara ne-be-gyvena. iau **NEG-CNT-live.PRS.3** flat.acc.sg PN.NOM already 'Nowadays Klara no longer lives in the street where she used to have a flat.' (CCLL, from Valstiečių laikraštis)

Apart from this, *be*- is also used as an approximate negator (for this notion cf. Huddleston & Pullum, eds., 2002, 815–821) more or less corresponding to English *hardly* or *barely*:

(6) Pasirašau, bet sunkiai be-tikiu, sign.prs.1sG but difficult.ADV APNEG-believe.prs.1sG kad šitokiom priemonėm ką nors that such.ins.pl.f means.ins.pl anything.acc pakeisi.

change.FUT.2SG

'I'm signing [sc. the petition] but I can hardly believe you can change anything by such means.'3

In combination with participles, and also in the compound verb forms containing participles, the function of *be*-could be called progressive rather than continuative, but for the sake of uniformity we will here consistently gloss *be*- as continuative (similarly Arkadiev 2011, 2019). The progressive function is illustrated in a converbal construction in (7):

be-kalbant. Komisare, (7) Jam ponas chief.constable.voc.sg 3.DAT.SG.M CNT-speak.cvB Mr.nom.sg Sokratas sėdėjo nejudėdamas vietoje [...] savo PN NOM sit.PST.3 NEG.move.CVB RPO place.Loc.sg 'While he was talking, Mr. Chief Constable, Socrates was sitting motionless in his place.' (Andrius Jakučiūnas, 1999, CCLL)

The conclusion reached in the more recent grammars of Lithuanian is thus that there is indeed a system of inceptive or continuative tenses, but the present-tense variety illustrated in (1) does not belong to it, being part of the evidential system instead. Though in this article we will be concentrating on the mirative construction as in (1), we should mention here that the corpus search which we have carried out, and the results of which will be discussed in Section 4, presents a slightly different picture. First of all, modern Lithuanian texts actually do attest, though only marginally, the existence of present-tense forms with non-zero forms of the auxiliary 'be'. They are clearly progressive rather than mirative in meaning:

(8) [Taip vertinant mūsų dabartinę būklę,]
galima sakyti, kad esam
possible.N say.INF that be.PRS.1PL
be-prarandą sąmonę.
CNT-lose.PPRA.NOM.SG.PL consciousness.ACC
'[When thus assessing our present situation] we can say

'[When thus assessing our present situation,] we can say we are on our way towards losing our consciousness.' (Romualdas Ozolas, 2002, CCLL)

³ https://www.peticijos.lt/visos/76886/giruliu-misko-iskirtimui-ne/signed/163/

In what we are here referring to as the mirative present, in contrast, the present-tense auxiliary never occurs:

(9) *Ant neštuvų yra be-gulįs
on stretcher[PL].GEN be.PRS.3 CNT-lie.PPRA.NOM.SG.M
mano bendrakeleivis.
my travel.companion.NOM.SG
Intended meaning: as in (1)

The corpus search also yielded a number of instances of future and conditional continuative forms, but their frequency is not noticeably higher than that of present-tense forms as in (8); in fact, all three types of forms mentioned here are marginal, whereas the progressive-proximative-avertive past-tense and the mirative present are well represented and seem to be well-established constructions, of which the remaining varieties appear to be occasional extensions. Attempts at squeezing the forms based on the present active participle with *be*- into a neat paradigm are therefore not quite convincing.

What is clear is that the mirative present as illustrated in (1) stands apart from all the other forms both by its mirative meaning and by its form (it never contains an auxiliary). The relationship of the forms under discussion to the evidential system is, however, not as obvious as might be supposed. It is a fact that the Lithuanian evidential, traditionally known as the oblique mood, is characterised by a cluster of three functions—reportive, inferential and mirative (cf. Ambrazas, ed., 1994, 311–312, Ambrazas, ed., 1997, 263–266). Evidentiality is marked in Lithuanian (as in Latvian) by the use of participles instead of finite verb forms. It is therefore tempting to integrate the mirative present into the evidential system, as is actually practised in the grammars. But there is a difficulty with this as the mirative form consisting of the present active participle obligatorily preceded by the prefix be-would stand alongside a similar participial form without this prefix, and displaying the usual array of evidential meanings, that is, reportive, inferential and mirative. In the following example it has the reportive function, additionally marked by the lexical evidentiality marker esq, which, however, is not obligatory:

(10) Rankraštis esą jau seniai
manuscript.nom.sg evid already for_a_long_time
gulįs leidykloje,
lie.ppra.nom.sg.m publishing_house.loc.sg

[gautos dvi viena kitai prieštaraujančios recenzijos.]
'The manuscript has reportedly been lying at the publisher's for a long time, [and two mutually contradictory reviews have come in.]' (Albertas Zalatorius, 1997, CCLL)

The assumption that the construction we are dealing with here is a kind of specialised extension of the evidential construction exemplified in (10), with addition of the prefix *be*- and restriction of the meaning to mirativity, is not obvious. Since DeLancey (1997) it has been widely accepted that mirativity can also appear as a category in its own right, even though mirative meanings often originate as extensions of evidential meanings (Aikhenvald 2004, 195–215, Aikhenvald 2012). In view of its specifically mirative function and the obligatory presence of the suffix *be*-, it is possible that the construction under discussion here has a different grammaticalisation source, and this is actually what we will explore in Section 4. Before presenting the corpus data we will give a brief overview of the other functions the participle with *be*- can have in modern Lithuanian.

3. Other functions of the present participle with be-

In order to provide a broader context for the participial forms with the prefix *be*- discussed here, we will briefly mention the main alternative types of use of these participles in modern Lithuanian (as we will see, they are already represented in Old Lithuanian). This brief overview is, however, not exhaustive. The present active participle with the prefix *be*- can occur:

- (a) as head of an adnominal participial construction, now usually, though not always, in prenominal position:
 - be-baigianti (11) Vidurine mokykla middle.Acc.sg.F school.acc.sg CNT-finish.PPRA.NOM.SG.F mergina išgarsėjo Vietname. become_famous.psr.3 all.loc.sg.m Vietnam.loc.sg girl.nom.sg [pernai laimėjusi komunistinės valdžios "reabilituotą" grožio konkursą.] 'The girl, who is now finishing secondary school, became famous all over Vietnam [when last year she won a beauty contest 'rehabilitated' by the communist rulers.]' (Amerikos lietuvis 2003, CCLL)

(b) as head of the complement of a verb of perception or acquisition of knowledge, if the subjects of matrix and complement clause are coreferential and the event described in the complement clause is interpreted as simultaneous with the act of perception:

```
(12) Staiga
                 susivokiau
                                                                    tiesiai
                 realise.pst.1sG
                                    CNT-stand.PPRA.NOM.SG.M
     suddenly
                                                                    right
     prieš
                    iau
                                pažįstamą
                                                    afiša.
     in front_of
                    already
                                familiar.Acc.sg
                                                   poster.Acc.sg
     'Suddenly I realised I was standing right in front of the already
     familiar poster.'
     (Jaroslavas Melnikas, 2004, CCLL)
```

(c) as head of a participial phrase functioning as a predicative complement with the verbs *likti* and *pasilikti* 'remain':

```
(13) [Priblokštas taikaus jo elgesio ir kalbos,]

Arvydas liko be-sėdįs

PN.NOM remain.PST.3 CNT-sit.PPRA.NOM.SG.M

po ąžuolu [...]

under oak.INS.SG
[su nauja mįsle prieš akis.]

'[Nonplussed by his conciliatory behaviour and words,] Arvydas remained sitting under the oak, [faced with a new riddle.]'

(Jurgis Buitkus, 2008, CCLL)
```

In our corpus search, these constructions have been eliminated, and we have concentrated on those where the participle performed a predicative function with or without the auxiliary 'be'. Functionally, however, there is perhaps no rigid line of division between the two domains. Present participles in the participial complements of the raising verb *pasirodyti* 'turn out' very often have the prefix *be*- (though it is not strictly required here), apparently to convey a nuance of unexpectedness. On the other hand, *pasirodo* 'as it turns out' is often used parenthetically, followed by what we can then identify as the mirative present dealt with in this article. In working with the corpus material we have discarded examples where punctuation clearly pointed to a complementation construction, as in (14), whereas those where *pasirodo/pasirode* was followed by a comma or occurred between commas, as in (15), were counted as instances of the mirative present.

(14) [Kamerai atsitraukus,]

gyvūnas **pasirodo b-esąs**

animal.nom.sg turn_out.prs.3 cnt-be.ppra.nom.sg.m

Reksas

Rex.nom

[- žalias dinozauras iš "Žaislų istorijos"].

'[When the camera moves away,] the animal turns out to be Rex, [the green dinosaur from *Toy Story*.]'

(Kauno diena, date unknown, Corpus)

(15) Tolminkiemio muziejus, pasirodo,
PLN.GEN museum.NOM.SG turn_out.PRS.3

b-esąs rentabili įstaiga.

CNT-be.PPRA.NOM.SG.M profitable.NOM.SG.F institution.NOM.SG

'The Tolminkiemis museum is, as it turns out, a profitable institution.'

(CCLL, Kauno diena 1997)

4. The corpus data

In this section we discuss the results of a search in the Corpus of the Contemporary Lithuanian Language (CCLL) and the morphologically annotated subcorpus at http://corpus.vdu.lt. All nominative forms of present active participles with the prefix be- were collected and subsequently manually filtered, eliminating adnominal participial constructions, reportive constructions where be- is used as an approximate negator, and constructions with verbs like 'remain'. This was done in order to ensure that only constructions with the participle in predicative position were left. After checking for repetitions, homonymous forms not relevant to our topic etc., the remaining forms were classified according to absence or presence of the auxiliary 'be', and, in those cases where the auxiliary occurred, according to its grammatical form.

The corpus data reveal, first of all, that the mirative present is much less frequent than the progressive-proximative-avertive past-tense construction. The corpora yielded 1056 constructions with the past-tense form of the auxiliary and only 269 instances of the mirative present. We furthermore found 9 instances of forms with the present-tense auxiliary *yra*. This type, illustrated in (8) above, has none of the characteristics of the mirative present and appears to be purely progressive. It seems therefore

that this rare extension⁴ of the progressive-proximative construction can be formally and functionally clearly set apart from the mirative present.

The corpus furthermore contained 12 combinations with the future auxiliary bus ($b\bar{u}siu...$) and 10 with the conditional $b\bar{u}tu$ ($b\bar{u}\check{c}iau...$). The conditional uses, illustrated in (16), are, again, progressive, like the present-tense variety illustrated in (8):

(16) Gerai, kad Būtum senas. good.ADV that old.nom.sg.m be.conp.2sG 2SG.NOM mergaičiukę paskui ta chit of a girl.Acc.sG after that.acc.sg.f be-lakstas . . .

CNT-run.PPRA.NOM.SG.M

'It's a good thing you're old, [otherwise] you would be running after that chit of a girl.' (Juozas Aputis, 2004, CCLL)

The future tense uses do not form a functionally homogeneous group, as already noted in the Academy Grammar (Ulvydas, ed., 1971, 147). While most of the 12 instances found in the corpora express likelihood, two of them have real future reference. An example of this is (17):

(17) Kai darba jau bus when work.acc.sg already be.FUT.3 be-baigia arnet pabaigę, CNT-finish.ppra.nom.pl.m finish.ppa.nom.pl.m even or [kai jau, vieną akį primerkę, žiūrės į tą savo kūrinį, tik kyšt iš vieno žodžio klaida.]

'When they will already be completing their work, or will even have completed it, [when, screwing up one eye, they will be looking at their achievement, a mistake will suddenly peek out from behind some word.]' (Henrikas Algis Čigriejus, 1995, CCLL)

This use seems purely progressive-proximative. The uses referring to the present are somewhat different from the typical use of the mirative present, which is to express astonishment at some actually observed event. When the event referred to is in the sphere of conjecture, properly

⁴ We use the term 'extension' because there is no apparent continuity with similar constructions sporadically attested in Old Lithuanian (see Section 5). The Academy Grammar, for instance, does not acknowledge their existence.

mirative meaning in the sense just formulated does not apply. The meaning is rather inferential here, with possibly a mirative element in that an inferred new insight may be accompanied by a feeling of surprise. This inferential-mirative use can clearly be set apart from the progressive type in that it can be applied to verbs that are not eligible for use in a progressive construction, like *norėti* 'want' in (18):

```
[Nelyja, gražu, jau po pusiaudienio.]
Tai
        iie
                         bus
                                     be-nori
then
         3.NOM.PL.M
                        be.FUT2
                                     CNT-want.PPRA.NOM.PL.M
                   pasiklausyti
pasidairyti,
                                     smagiu
look about.inf
                   listen INF
                                     merry.GEN.PL
vieversiu.
skylark.gen.pl
'[It's not raining, the weather's fine, it's already past noon.] So they
probably want to have a look about and listen for a while to the merry
```

skylarks.'

(Juozas Kralikauskas, 2002, CCLL)

The small numbers of instances with present-tense and future-tense forms suggest there is no need to set up the kind of tense paradigm Jablonskis envisaged in introducing the system of 'inceptive' tenses. There are two basic constructions: the past-tense progressive-proximative-avertive, and the mirative present, and there are occasional extensions into other parts of the TAME domain, linked to both constructions singled out here by common features either along the progressivity or along the mirativity dimension.

The mirative present is thus basically a present in the sense that in its basic use it refers to an unusual or unexpected event observed at the moment of speaking. This does not mean it can refer only to events in the present. As pointed out in the preceding paragraph, it does not naturally extend to the future because it expresses astonishment at an actually observed event. But it can refer, in a narrative text, to an event located in the past; it will then occur in the vicinity of past-tense forms. In (19) the opening sentence contains the mirative present but the distal demonstrative *tas* 'that' locates it in the past; the past tense then surfaces in the follow-up sentence. In (20) the subordinate clause is in the past tense while the main clause contains the mirative present:

- (19) Priešais be-einas pats CNT-walk.ppra.nom.sg.m opposite very.nom.sg.m didžiausias laiko poetas. greatest.NOM.SG.M that.gen.sg.m time.gen.sg poet.Nom.sg Fis buvo nusiteikęs gerai well disposed.nom.sg.m 3.NOM.SG.M be.pst.3 'And behold the greatest poet of those days was approaching from the other side. He was in a good mood [...].' (Juozas Aputis, 2004, CCLL)
- (20) Kai mudvi palypėjom laiptais, dėdė climb.pst.1pl When stairs.INS.PL uncle.nom.sg 1DU.NOM.F **Tonas** iau be-laukias. CNT-wait.PPRA.NOM.SG.M John.nom already [is duris atidarė...] 'When the two of us mounted the stairs, Uncle John was already waiting. [He opened the door...]' (Jonas Ruzgys, 2001, CCLL)

The identification of the mirative present-tense construction is facilitated by the presence of attention-directing and presentative verbal forms such as $\check{z}i\bar{u}r\dot{e}k$ 'look' (and the shortened form of the same meaning $\check{z}i\bar{u}$), $\check{s}tai$, antai '(look) there, behold', ogi (va) 'well if it isn't ...' and the like; the construction also naturally occurs in the vicinity of verbs of perception like $\check{z}i\bar{u}riu$ 'I look', $\check{z}i\bar{u}ri$ 'you look' etc.:

- (21) Tiedu atsisuko: ogi tarpdury DEM.NOM.DU.M turn around.pst.3 PTC doorway.Loc.sg be-stovinti Kotryna Girininku... suCNT-stand.ppra.nom.sg.f PN.NOM with forester.ins.sg 'The two of them turned around: well if it wasn't Kotryna standing in the open doorway together with the forester...' (Jurgis Kunčinas, 2004, CCLL)
- (22) Žiūriu ant kelmo be-sėdįs
 look.prs.1sG on tree_trunk.gen.sG CNT-sit.ppra.nom.sg.m
 Otonas.

 pn.nom
 'I look and there is Otto sitting on a tree-trunk.'
 (Gasparas Aleksa, 2001, CCLL)

As far as the lexical input is concerned, the corpus data show no clear preferences or restrictions. The only regularity that can be observed is a consistent restriction to imperfective verbs. It does not seem likely that this could be explained by the aspectual properties of the continuative prefix *be*-: though in its original function *be*- entails durativity, it does not necessarily do so in every construction of which it is part (in the avertive past-tense construction it combines with perfective verbs, cf. Arkadiev 2019, 80–81). We could rather say that this feature is connected with the prototypical use of the mirative present, which refers to the fact of a certain state of affairs being discovered by a participant and causing surprise, the state of affairs being at least minimally preexistent with regard to the act of discovery. But the aspectual properties of the participle itself must have been a factor in the rise of this prototypical constructional meaning.

With regard to aspectual class, a striking feature of the mirative present is the prominent position of stative verbs like $b\bar{u}ti$ 'be' and $tur\dot{e}ti$ 'have', which are barred from occurrence in the progressive-proximative-avertive past-tense construction. 'Be' occurs both as a copula and as an existential verb:

- (23) [Apstulbęs griebėsi už ausų —] b-esančios ir iš tikrųjų jos and indeed CNT-be-PPRA.NOM.PL.F 3.NOM.PL.F uolekties ilgumo puse length.GEN over half.acc.sg ell.gen.sg '[Bewildered he grabbed himself by the ears] and indeed they turned out to be more than half an ell in length.' (Alfonsas Tekorius, translation of Hauff's fairy tales, Corpus)
- (24) Nubėgom parduotuvę, ten run.PST.1PL shop.acc.sg and there pigaus vynelio b-esa, cheap.gen.sg wine.gen.sg CNT-be.PPRA.NOM.SG.N natūralaus. tokiuose buteliuose. natural.gen.sg.m such.loc.pl.m bottle.LOC.PL 'We ran to the shop and it turned out they had cheap wine there, natural wine in these bottles.' (Vakarinės naujienos 1996, CCLL)

Posture verbs like *stand*, *sit*, *lie* are naturally also frequent:

(25) Po kurio laiko žiūrim after time.GEN.SG look.prs.1pl some.GEN.SG.M prie mano trobikės be-stovi. CNT-stand.PPRA.NOM.PL.M next to my cottage.GEN.SG 'A bit later we look up and behold—we are standing close to my cottage.' (Juozas Erlickas, Corpus)

5. Diachrony

16th-century Lithuanian texts show clear examples of the past-tense variety illustrated in (2), with an apparently progressive function:

(26)	Kaip	dabar	taip	buwo		be-kalbas, cnт-speak.ppra.nom.sg.м	
	as	now	so	be.pst.3	,	CNT-speak.PPRA.NOM.SG.M	
	ataio		nekurie	i	nůg	etaeiminos	
	come.ps	т.3	some.nom.	PL.M	of	household.gen.sg	
	Wiriauf	io .	Ifkalos []				
	elder.ge	N.SG	school.gen	.SG			
	'While he yet spake, there came from the ruler of the synagogue's					ne ruler of the synagogue's	
	house certain' Luther: da er noch also redet / kamen etliche vom Gesinde des Obers						
	der schule						
	Έτι αὐτοῦ λαλοῦντος ἔρχονται ἀπὸ τοῦ ἀρχισυναγώγου						
	(Bretke, Mk 5.35)						

The Lithuanian Academy Grammar (Ulvydas, ed., 1971, 148) points out that Old Lithuanian texts also contain attestations of a similar construction with a present active participle without the prefix *be*-; they cite an example from Daukša's 1599 Postil (rendering Polish *był chrzcżacy*):

(27)	Szitie	dáikta	i	ftôios	Bethanioy			
	DEM.NOM.	PL.м thing.	NOM.PL	happen.РSТ.3	Bethania.ıne			
	v3 Iordôno /		kur	Iônas				
	across	Jordan.gen	where	John.noм				
	bů kríkßtiig							
	be.PST.3	baptise.ppra.nom.sg.m						
	'These things happened in Bethania, across the Jordan, where John							
	was bapti	sing.' (DP 21.	35)					

But there seem to be no attestations of the mirative present-tense construction. Apparently the first text in which we find attestations of the mirative present is Chyliński's Bible translation, of which the Old Testament was partly printed in 1660 and the New Testament is extant in the manuscript. In contrast to Bretke's text, Chyliński's translation contains no convincing attestations of the past-tense progressive. There are several instances of *be*-PPRA with the past-tense form *buvo*, but all of them render Greek constructions in which a participle is adjoined to a construction with existential or local 'be':

(28) Bet ghis buwo uzpakaliy eldyos but be.pst.3 rear.INE.SG ship.gen.sg 3.NOM.SG.M be-miegans priegalwia, anio12 CNT-sleep.PPRA.NOM.SG.M pillow.gen.sg they on and prÿkiełe ghi [...] awake.pst.3 3.ACC.SG.M καὶ ἦν αὐτὸς ἐπὶ τῇ πρύμνῃ ἐπὶ τὸ προσκεφάλαιον καθεύδων· καὶ διεγείρουσιν αὐτὸν 'And he was in the hinder part of the ship, asleep on a pillow: and they awake him [...]' Chyl NT, Mk 4.38

Examples similar to (26) from Bretke, where the compound form of Lithuanian has no basis in the Greek or German texts, cannot be found. Still, Bretke's evidence shows that the past-tense progressive existed in the language, though in Chyliński's case an external stimulus in the form of an analogous Greek construction was apparently needed to prompt its use. On the other hand, three examples of mirative presents more or less exactly corresponding to the contemporary forms are attested in Chyliński's text. We will discuss them all.

(29) [Ó Anjełas WIESZPATIES pasirode jam liepfnoy ugnies ifz widuries kiałmo: ir dabojos,]

ó sztey kiałmas **be-degąs** and behold bush.nom.sg **CNT-burn.ppra.nom.sg.m** ugniy

fire.INE.SG

Hebr. wəhinnê hassənê bö'er ba'eš

Sept. καὶ ὁρῷ ὅτι ὁ βάτος καίεται πυρί,

Vulg. et videbat quod rubus arderet

Dutch StV ende siet de braem-bosch brandde in 't vyer

Polish Danzig Bible á oto kierz gorzał ogniem

'[And the angel of the LORD appeared unto him in a flame of fire out of the midst of a bush: and he looked,] and, behold, the bush burned with fire.' (Chyl ot, Exod. 3.2)

(30) [Atejau priepolu, and kałna Gilboa,]

ószteySaulbe-gulinsandandbeholdSaulCNT-lie.PPRA.NOM.SG.Monrahotynessawospear.GEN.SGRPO

Hebr. wəhinnê šā'ûl niš'ān 'al-hănîtô

Sept. καὶ ἰδοὺ Σαοὺλ ἐπεστήρικτο ἐπὶ τὸ δόρυ αὐτοῦ

Vulg. et Saul incumbebat super hastam suam

Dutch StV ende siet Saul leende op sijne spiesse

Polish Danzig Bible á oto Saul tkwiał ná włoczni swojey

'[As I happened by chance upon mount Gilboa,] behold, Saul leaned upon his spear.'

(Chyl ot, 2 Sam. 1.6)

These examples contain the presentative particle *štai*, rendering the Hebrew *hinnê* and corresponding to the English Biblical *lo* (for the notion of presentative particle see Petit 2010). This particle is followed by a noun phrase followed by the present active participle. This participle could therefore be interpreted as a postnominal modifier, but the translators, starting with the Septuagint, use finite verb forms, a perfectly natural strategy considering that the Hebrew active participle is frequently used as a present tense. The Dutch translators, whom Chyliński followed closely, are no exceptions.⁵

In one case, the participle is separated from the noun by a comma; the Dutch text has, in this case, not a finite form but a participle in the function of postnominal modifier, in accordance with the rendering of the Septuagint, which has ἀρυόμενος 'roaring':

(31) [Teypo nuejo Simfon fu tewu fawo, ir motyna fawo, Thimnathoń: ó kad atajo iki wino-darźams,]

sztey ten jaunas lawas, behold there young.nom.sg.m lion.nom.sg

⁵ Chyliński, who began translating the Bible into Lithuanian in the Netherlands and finished it in London, used the Dutch Calvinist Bible translation known as the *Statenvertaling* (the translation commissioned by the Estates General of the Netherlands, here abbreviated as StV) as his main translation source. The *Statenvertaling* is known for adhering closely to the original Hebrew, Aramaic and Greek texts.

be-rekiqs priesz ghi
CNT-roar.PPRA.NOM.SG.M against 3.ACC.SG.M

Hebrew: wəhinnê kəpîr 'ărāyôt šō'ēg liqrā'tô

Sept. καὶ ἰδοὺ σκύμνος λέοντος ώρυόμενος εἰς συνάντησιν αὐτοῦ·

Vulg. apparuit catulus leonis saevus rugiens et occurrit ei

Dutch StV: siet daer, een jonge leeuw brullende hem tegemoete

Polish Danzig Bible: oto Lew młody rycżący zábieżał mu

'[Then went Samson down, and his father and his mother, to Timnath, and came to the vineyards of Timnath:] and, behold, a young lion roared against him.'

(Chyl от, Judg. 14.5)

This does not reflect a difference in the Hebrew text; it is merely a question of interpretation on the part of the translators. It is possible that the Dutch translators had a look at the Septuagint here and therefore decided to use a participle in apposition to the noun. The Authorised Version has a past tense form as in the earlier examples.

This brings us to one more type of use of the present active participle prefixed with *be*-, occurring in context similar to those illustrated above, viz. preceded by the presentative *sztey*, but with a posture verb like 'lie' or 'stand'.

(32) [Teypo atajo Dowidas ir Abifai źmoniump naktiy,]

fztey Saul gulejo be-miegąs
 and behold Saul lie.PST.3 CNT-sleep.PPRA.NOM.SG.M
 tabore

wagon fort.ine

Hebrew: wəhinnê šā'ûl šōkēb yāšēn bamma'gāl

Sept. καὶ ἰδοὺ Σαοὺλ καθεύδων ὕπνῳ ἐν λαμπήνῃ

Dutch StV ...ende siet / Saul lach te slapen in den wagen-burch

Polish Danzig Bible á oto Saul leżąc spał w oboźie

[So David and Abishai came to the people by night:] and, behold,

Saul lay sleeping within the trench.'

(Chyl OT 1 Sam. 26.7)

The use of the present active participle with *be*- in this example is not specifically connected with the mirative context suggested by the presentative particle. It is characteristic of verbs expressing stability of posture or position, such as *likti* 'remain, stay' (it renders Dutch *liggen* 'lie', which has no correspondence in the Hebrew original), and it is obviously the same type of use that is observed in (13) above and is used with posture verbs in Chyliński as well:

(33) Kodel atlikey be-fedyns terp
why stay.Pst.2sg Cnt-sit.Ppra.nom.sg.m between
dwieju kaniukfzcziu [...]?
two.gen sheepfold.gen.pl
Dutch StV Waerom bleeft ghy fitten tuffchen de ftallingen
'Why abodest thou among the sheepfolds?'
(Chyl ot, Judg. 5.16)

Most uses of the present active participle in Chyliński are postnominal, and the nouns to which they are adjoined are not in presentative constructions:

(34) Ir buwo regietas nog and see.PPP.NOM.SG.M be.pst.3 from 3.GEN.SG.M Wießpaties, be-stowins Aniełas ро angel.nom.sg Lord.gen.sg CNT-stand.ppra.nom.sg.m on deßinev Altoriaus [...] right.DAT.SG altar.gen.sg Chyl NT, Lk 1.11 ὤφθη δὲ αὐτῷ ἄγγελος Κυρίου ἑστὼς ἐκ δεξιῶν τοῦ θυσιαστηρίου τοῦ θυμιάματος. 'And there appeared unto him an angel of the Lord standing on the right side of the altar [of incense].'

The syntax of the participle is basically the same as in (31) here, the difference being that in (30) the noun is in a presentative construction. The Hebrew original has a sentential construction that is introduced by the presentative *hinnê* and contains an active participle in predicative function (this is mentioned by Gesenius-Kautzsch 1909, 374 as one of the contexts in which the active participle often occurs in the function of a present tense), but *hinnê* can also be understood as just introducing the noun, to which the participial phrase is added as a postnominal modifier. This gave the translators two possibilities of rendering (29), (30) and (31). The interesting thing about Chyliński's renderings is that though he certainly had the Dutch translation before his eyes, and possibly looked at other authoritative translations as well, he basically chose the same constructions, identical but for the comma, for (29), (30) and (31). The varieties in (29) and (30), which render finite forms of the Dutch (and Greek) text, are indisputable instances of the mirative present as we find it in modern Lithuanian, the main difference being the presence of the presentative particle in Chyliński's text. Their similarity to (31) is striking and hardly coincidental. Considering that the active participle with *be*- is elsewhere used postnominally, it is tempting to assume that a structure as in (31), with the participle postnominally modifying a noun used in a presentative construction, could have, to a certain extent, provided the basis for the structure in (29) and (30). The Lithuanian particle *štai*, like its counterparts in Hebrew and many other languages, could and still can have two types of linguistic units in its focus: noun phrases and sentences. These varieties are illustrated, for Chyliński's language, by (35) and (36) respectively:

- (35) Sztey ugnis, ir małkos,
 behold fire.Nom.sg and firewood[PL].Nom
 [bet kame ira awinelis and degamos-afieros?]

 'Behold the fire and the wood: [but where is the lamb for a burnt offering?]'

 (Chyl ot Gen. 22.7)
- (36) [Nudejo tada Noach woką Karoblies, ir dabojoś,]

 a sztey źiame iździuwo.

 and behold earth.nom.sg dry_up.pst.3

 '[And Noah removed the covering of the ark, and looked,] and, behold, the face of the ground was dry.'

 (Chyl or Gen. 8.14)

These Biblical constructions reflect, of course, original Hebrew constructions with the presentative particle *hinnê*, but the presentative particle itself was evidently as fully alive in the spoken language as it is now. The twofold syntactic use still exists in the contemporary language, as can be seen from the following examples;

- (37) Oštai mano šeima: broliai and family.nom.sg brother.NOM.PL PRES my ir seserys. and sister.NOM.PL 'And here is my family—my brothers and sisters.' (Viktoras Katilius, 1996, CCLL)
- (38) Ir štai iis keliauja į jubiliejų travel.prs.3 celebration.Acc.sg and to PRES 3.NOM.SG.M saulėtoje Baisogaloje. sunny.LOC.SG.F PLN.LOC.SG 'And here he is on his way to a celebration in sunny Baisogala.' (Jurgis Kunčinas, 2003, CCLL)

The mirative present might have arisen due to a presentative construction with a postmodified noun phrase in its focus being reanalysed as a presentative construction with a sentence in its focus. In the course of this reanalysis, the participle, which had originally encoded a postnominal modifier, came to function as the main sentential predicate. What adds plausibility to this explanation is that it accounts for the consistent absence of the auxiliary 'be' in the mirative construction: in the presentative construction it was absent because the participle was originally a postnominal modifier, not a main clause predicate.

But presentative constructions like that in (31) were probably not the only source for the mirative present. In Old Lithuanian, the present active participle occurred in a range of constructions: as a postnominal modifier, as illustrated in (34); in combination with posture verbs and certain other state verbs like 'remain', as illustrated in (33); and in combination with 'be' as a progressive form. The constructions with the present participle as a postnominal modifier had a variety in which the noun occurred in a presentative construction, and this variety apparently played a certain part in the rise of the mirative construction as a result of the syntactic shift referred to above. But all these constructions must have somehow interacted. Particularly relevant here is the relationship between past-tense and present-tense varieties. Could the mirative overtones characteristic of the present-tense variety originally have occurred in the past tense as well? A few instances seem to suggest this. One is (32) above, but there the participle occurs with *gulėti*, so it does not really belong to our construction. Another has the verb *buwo*, and the mirative reading is, again, suggested by the presentative *sztey*, admittedly occurring not immediately before the construction buwo + be-PPRA, but in the preceding verbless clause.

(39)	[]r dabojaus, ó sztej balta debesis,]					
	ó	and	debesies		buwo	
	and on		cloud.gen.sg		be.PST.3	
	be-sedins			ligus		Sunuj
	CNT-sit	.PPRA.N	OM.SG.M	alike.noм.sg.м		Son.dat.pl

⁶ A reviewer points out further examples of the involvement of presentative particles in various processes of reanalysis, such as that of Latin *ecce* in the rise of demonstrative pronouns in Romance, cf. Italian *cotale* 'such, of that kind' < *eccu(m) talis*.

zmogaus.

human.gen.sg

'And I looked, and behold a white cloud, and upon the cloud one sat like unto the Son of man.'

Cf. ende op de wolcke was een geseten des menschen Sone gelijck, (Greek: καὶ ἐπὶ τὴν νεφέλην καθήμενος ὅμοιος υἰῷ ἀνθρώπου) (Chyl nt, Revelation 14.14)

This is what we could call a mirative context, though it is, so to speak, 'displaced mirativity': miratives normally presuppose a short time distance between the act of knowledge acquisition and the speech act (as emphasised by Rett & Murray 2013), and they are not readily compatible with past tense except in the case of an indirect information source (as pointed out by DeLancey 2001). Narratives, however, are different: the effect of surprise may be shifted to the past as a narrative device, and this is done in this example by the presentative particle. But this sztey ultimately copies Hebrew hinnê, and in the living languages the mirative source contexts with štai were probably basically present-tense. So the conclusion from these few examples should probably be that the preconditions for the rise of our mirative construction were found in past-tense constructions as well, but it was in the present tense that they were grammaticalised because of the inherent features of mirativity as such.

On the other hand, alongside past-tense progressive constructions of the type buvo + be-PPRA, Old Lithuanian had analogous present-tense forms, comparable to (8) above:

(40) Saka ghiems ſи dzauxmu didzu tell.prs.3 with 3.DAT.PL.M joy.INS.SG great.INS.SG.M / Iog eſt be-gulis edzofu that CNT-lie.PPRA.NOM.SG.M manger[PL].INE be.prs.3 Kudikis pilns wargu. babe.nom.sg full.nom.sg.m sorrow.gen.pl 'He tells them with great joy that a babe full of sorrow is lying in a manger.' Mažvydas, G I C7v(193),11

Alongside the variety with overt present tense auxiliary as in (40), there is also a variety without auxiliary:

(41) Amßina Tewa funelis / Edʒofu
eternal.gen.sg.m father.gen.sg son.nom.sg manger[pl].ine
nu be-gulis.
now CNT-lie.ppra.nom.sg.m
'The little son of the eternal Father is now lying in a manger.'
Mažvydas, G I C1v(181), 5⁷

Compared with (40), (41) looks like a mere variety of the same progressive construction with deletion of the auxiliary. Non-expression of the present-tense 3rd person auxiliary is a feature frequently attested in other circumstances as well, e.g. in the modern language the auxiliary of the perfect is frequently omitted in the 3rd person. We may assume, then, that 16th-century Lithuanian as instantiated in Mažvydas still had progressive forms in the present tense alongside the past-tense forms still existing in modern Lithuanian (it is not clear whether the occasional forms with overt auxiliary in modern Lithuanian are a direct continuation of the Old Lithuanian forms). This present progressive may also have played a role in the rise of the mirative present. It has been pointed out in the literature that progressives, and present progressives in particular, are often not purely progressive in aspectual terms, but may carry pragmatic and emotive overtones. Comrie (1976, 37–38) notes the use of the English progressive beyond its proper functional domain to express annoyance (She is always buying more vegetables than they can possibly eat), and he cites the use of the Icelandic progressive (derived from verbs that do not normally occur in the progressive) to express surprise or disgust. De Wit, Petré & Brisard (2020) invoke the notion of 'extravagance' to characterise the use of a progressive form in contexts where it is not motivated in terms of aspect with the aim of drawing the hearer's attention to the non-canonical character of the situation that is being referred to. Güldemann (2003) notes the use of progressive forms to mark predication focus (i. e., the focusing of the predicate itself rather than one of its arguments) in Bantu, which points to a link between progressive and saliency of the verbal predicate, a feature that can be viewed as related to mirativity.

Presentative constructions and the emotive overtones of the progressive could thus have worked together to produce what is now the mirative pre-

⁷ Here the Lithuanian text diverges from Luther's German original, which has *Des ewigen Vaters einig kind / itzt man in der krippen find* (Michelini 2000, 243); the form used here is clearly a present progressive.

sent. The contribution of the presentative construction provides a natural explanation for the absence of the auxiliary 'be' in our construction, as there was obviously no auxiliary in the postnominal participial construction involved in this diachronic path. The frequent use of mirative presents derived from stative verbs like $b\bar{u}ti$ 'be' and $tur\dot{e}ti$ 'have', which are barred from occurrence in the progressive-proximative-avertive past-tense construction, is consistent both with the hypothesis of a presentative source in which the participle was originally postnominal, and with the emotive and pragmatic overtones of progressives occurring beyond their proper domain of use. Because of the scarcity of texts and the fragmentary character of the diachronic evidence it is impossible to give an accurate reconstruction of the process of its rise, but future research might bring more clarity.

6. In conclusion

In this article we have argued that the Lithuanian construction consisting in predicative use of a present active participle with the prefix be- and without the auxiliary 'be' is a mirative construction in its own right, distinct both from the progressive-proximative (and, in the past tense, avertive) compound verb forms with the same participial form and the auxiliary 'be' and from the evidential system based on participles. It is also suggested, on the basis of diachronic data, that this construction may have its own distinct grammaticalisation source, viz. constructions with post-nominal participle in a presentative construction, though the mirative overtones that have been noted to accompany the use of progressives may also have been a factor contributing to its rise. The Lithuanian mirative present thus appears to be one more example showing that mirativity is, in principle, a sui generis type of linguistic marking rather than an extension of evidentiality, even though the two domains of marking overlap. It is also one more instance of a specifically mirative construction in Lithuanian alongside the mirative imperative discussed in Holvoet (2018).

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ABBREVIATIONS

ACC — accusative, ADV — adverb, APNEG — approximate negator, CNT — continuative, CVB — converb, DAT — dative, DEM — demonstrative, DU — dual, EVID — evidential marker, F — feminine, FUT — future, GEN — genitive, INE — inessive, INF — infinitive, INS — instrumental, LOC — locative, M — masculine, N — neuter, NEG — negation, NOM — nominative, PL — plural, PLN — place name, PN — personal name, PPA — past active participle, PPP — past passive participle, PPRA — present active participle, PRES — presentative particle, PRS — present, PST — past, PTC — particle, REL — relative pronoun, RFL — reflexive, RPO — reflexive possessive, SG — singular, VOC — vocative

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