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		experiential	7
Lithuanian		subject-oriented resultative	6
Lichtanian		possessive resultative	1
		inferential	1
		'biographic'	1
Present Perfect prevails in both		experiential	7
Latvian and Lithuanian	12	possessive resultative	3
		subject-oriented resultative	2
Present Perfect only occasionally		experiential	2
offered in both Latvian and Lithuanian		reportative	2
Limuanian	6	subject-oriented resultative	1
		possessive resultative	1
Present Perfect occasionally of-		experiential	2
fered in Latvian but prevails in		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.'
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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	4	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 iau 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 yo	u open the wind	ow?'	

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 occasionall	y offered	d in Latv	ian, abse	nt from	Lithuani	an
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.

Latv	Š-ā	gad-a	jūnij-ā	es	te			
	DEM-GEN.SG.M	year-gen.sg	June-Loc.so	G 1SG	NOM here			
	bū-š-и	no-strādāj-is		trīsde	esmit			
	be-FUT-1SG	PVB-work-PST.P.	A.NOM.SG.M	thirty	y			
	gad-us.							
	year-ACC.PL							
Lith	Š-į	biržel-į	bū-si-u					
	DEM-ACC.SG.M	June-Acc.sg	be-ғит-	1SG				
	iš-dirb-ęs		čia trisa	dešimt	met-ų.			
	pvв-work-psт.i	PA.NOM.SG.M	here thir	ty	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
        be-fut-2sg finish-pst.pa.nom.sg.m
                                                            work-acc.sg
                                               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
                               entirely
                                                            work-acc.sg
                  2SG.NOM
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
                                     work-acc.sg
                  finish-FUT-2SG
```

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 you your wages when you finish 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	: If I G	ет my wages	tomo	rrow, I bu	y you	ı 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> .]				
	ʻIf I g	get my wages	tomo	rrow, [I'll	buy y	you a bee	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.N	at-PST.PA.NOM.SG.M	
	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 (t	ranslation)
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
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	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)

[Interesanti caur cik roku desmitiem tās klīdušas,]
jo gandrīz katr-a ir
because almost each-nom.sg.f be.prs.3

satecēj-us-i, sakus-us-i un atkal drip-pst.pa-nom.sg.f melt-pst.pa-nom.sg.f and again sacietēj-us-i.

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 be. 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-gen.sg.m 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 pasiek-us-i es-u

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 mety, skaudančių sąnarių ir nebelanksčios nugaros,

laik-a buv-o per t-a iau time-ACC.sG during DEM-ACC.SG already be-PST.3 stebėtinai išblizgin-us-i akmenin-es remarkably stone-ACC.PL.F

polish-PST.PA-NOM.SG.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 sudegin-us-i stal-a ir table-Acc.sg

and

burn-pst.pa-nom.sg.f

[visas mirtinas išėdas su derva židiny,]

visk-a pasmilki-us-i kadagi-ais fumigate-PST.PA-NOM.SG.F all-acc.sg juniper-INS.PL

[ir dar kažin kokiom kvapiom žolelėm, ir viskas buvo lyg anksčiau,

kaip niekur nieko <...>]

clean-PST.PA-NOM.SG.F

'[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.'

```
(106) Latvian (original)
```

```
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).

```
(107) Latvian (original)
```

```
[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	reiz-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-NOM.SG.F		along	mother-DA	г.sg	church-Loc.sg			
Lithuanian (tr	anslation)							
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-ė: 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 intuicii-a š-i kart-a

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%	o	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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