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BALTIC LINGUISTICS

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THEMATIC ISSUE

STUDIES IN THE VOICE DOMAIN IN BALTIC AND ITS NEIGHBOURS



Warsaw

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The voice domain in Baltic and its neighbours: Introduction

Axel Holvoet

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

Keywords: grammatical voice, passive, middle voice, causative, impersonal, reflexive, facilitative, antipassive, autobenefactive, Baltic, Slavonic, Fennic

1. The nature of the undertaking¹

The present volume contains eight studies in the domain of voice, concentrating on Baltic but occasionally extending in their coverage to the neighbouring Slavonic and Fennic languages. The subdomains represented are those of the passive, the middle and the causative.

This volume was preceded by a collection of articles entitled *Minor Grams in Baltic, Slavonic and Fennic,* which made up Vol. 10 of this journal. The contributions to that volume dealt with phenomena that are relevant to grammar but rarely make it to the grammars, except, perhaps, in the form of a footnote. These included, on the one hand, grammatical con-

¹ I wish to thank Nicole Nau, Birutė Spraunienė and Peter Arkadiev for their comments on this introduction. The research briefly presented here has received funding from the European Social Fund (project No. 09.3.3-LMT-K-712-01-0071) under grant agreement with the Research Council of Lithuania (LMTLT).

structions of limited scope and frequency, not quite fitting into the major grammatical correlations running through the whole verbal system, such as the Lithuanian progressive-proximative-avertive construction 'buvo + be-PPRA' (Arkadiev 2019) or the Latvian continuative construction runāt vienā runāšanā 'talk in one talking' (Nau 2019). On the other hand, they included constructional idioms on the borderline between grammar and the lexicon. No particular grammatical domain was singled out in that volume, as the common thread running through it was the character of the constructions dealt with, all eluding the traditional notion of grammatical category while for the most part being firmly grounded in the grammatical domains of tense, aspect or voice. The last-mentioned of these domains is represented by a study of the Latvian and Fennic agentive construction (Holvoet, Daugavet, Spraunienė and Laugalienė 2019), which could just as well have found a place in the present volume.

The present collection of articles continues, in an important sense, the line of research represented in the earlier volume. The contributions deal, this time, with one grammatical domain, that of voice; but the emphasis is on smaller-scope constructions within major categories, and on splitting rather than on lumping. In the domain of reflexive-marked constructions representing the domain of the middle voice, this was actually already the prevailing practice. What we here call middle-voice constructions, that is, constructions with a formerly reflexive marker that are not in any meaningful way semantically reflexive, is rarely treated as a unitary domain. Instead, 'anticausatives', 'reciprocals' and the like are usually dealt with as constructions in their own right. The very notion of 'middle voice' has become discredited in the eyes of many linguists as being vague or hybrid (cf. e.g., Mel'čuk 1993, 21–22). But categories traditionally viewed as much more homogeneous, like the passive, also turn out, on closer inspection, to allow of a convincing subdivision into a number of functionally differentiated constructions, as reflected already in the work of Geniušienė (2016). It is, of course, not difficult to formulate an invariant feature underlying all passives: the best candidate for that would be the demotion of the agent from the position of grammatical subject. But this invariant feature would hardly do justice to the functional variety we find among passive-marked (in the sense just characterised by this invariant) constructions. The main motivation for a passive construction may be foregrounding of the patient rather than backgrounding of the agent; patient-foregrounding passives can further be subdivided into those that just profile an event from the point of view of the patient (rather than taking the agent as a vantage point, as the active usually does), and those whose function is to characterise the patient (abstracting away from the agency producing it); and more subdivisions can be envisaged. Viewed in this way, the differences between the passive and the middle domain are perhaps not so enormous as might be suggested by current grammatical terminology.

The present volume is dedicated, then, to three subdomains within the broadly defined domain of voice: the passive, the middle and the causative. The work presented in the volume has profited, in many respects, from the insights gained from earlier research work carried out at Vilnius University between October 2012 and September 2015 in the framework of the project Valency, Argument Realisation and Grammatical Relations in Baltic.² The research results pertaining to the domain of voice and its relation to argument structure are presented in Holvoet & Nau, eds. (2015). Apart from an overview article on voice in Baltic (Nau & Holvoet 2015) this volume presents a number of studies on causatives, passives and middles in Lithuanian and Latvian. In many respects these studies were able to profit from grammatical research work carried out over almost a hundred years by Lithuanian and Latvian linguists, but they also took a broader typological view and, in a few cases, offered novel approaches inspired by theoretical frameworks such as Minimalism or Role and Reference Grammar. The authors contributing to the present volume are therefore certainly not treading in uncharted territory. The studies contained in it are, however, a further step forward in their consistent use of corpora (the internet corpora now available through Sketch Engine³ have been instrumental in this), its construction-based approach enabling a more fine-grained analysis, and the ever-increasing body of typological insights brought to bear on the data of the Baltic languages.

² This project was financed from the European Social Fund under grant agreement with the Research Council of Lithuania (project No. VP1-3.1-ŠMM-07-К-02-022).

³ https://www.sketchengine.eu

2. A note on voice

Our approach has been not to make any a-priori decisions as to what should, or should not, count as voice on the basis of argument structure, but to take the morphology traditionally associated with voice as our point of departure and to look without preconceived opinions at the constructions relying on this morphology for their formal marking. We fully embrace the now increasingly predominant construction-based view of grammar (Fillmore, Kay & O'Connor 1988, Hoffmann & Trousdale, eds. 2013, etc.), which is now paralleled by a construction-based approach to diachronic developments in grammar (Barðdal et al., 2015) and a constructional reformulation of grammaticalisation (Traugott & Trousdale 2013). The constructional view (like any other view, it should be added) allows both for a form-to-function and a function-to-form approach: one can either look at a group of constructions with comparable semantic-pragmatic functions, or at a group of constructions sharing common morphology (a common 'grammatical category'). Both approaches just outlined are represented in the present volume. The form-to-function approach can be found in Nicole Nau, Birutė Spraunienė and Vaiva Žeimantienė's study of the passive family, which explores, with the aid of corpus data, the constructions united by the common passive morphology. On the other hand, Axel Holvoet & Anna Daugavet's study of antipassive reflexives in Latvian, though also corpus-based, starts out from a clear idea of what can or cannot be viewed as an instantiation of the cross-linguistic concept of antipassive. In the case of reflexive-marked constructions, a consistent form-to-function approach would have been less practicable in view of the very wide functional field covered by reflexive markers.

A persistent question in the domain of voice has been that of grammatical voice as opposed to lexical valency-changing constructions, also formulated as a difference between 'meaning-preserving' and 'meaningchanging' alternations (Kroeger 2005, 270–282); for a recent discussion see Spencer (2013, 90–109). The discussion comprises, as an important aspect, argument structure, with many arguing that the defining feature of grammatical voice is valency change without changes in argument structure; this is the point of view of the St Petersburg school of typology as outlined in Kulikov (2011), while other definitions are non-restrictive in this respect, e.g. Zuñiga & Kittilä (2019, 4–5). But there is also the contrast

between lexically entrenched constructions and those that are freely created online. These questions are relevant especially in the middle domain, which is extremely heterogeneous. The passive domain seems to be safely on the inflectional side, whereas causatives show great variety, ranging from clearly derivational in Baltic to near-inflectional in Japanese ('morphosyntactic' rather than 'morpholexical' in Sadler & Spencer 1998, 228). If any conclusion can be said to emerge from the studies in the present volume, it would be that neat divisions do not seem to exist; even within the relatively small domain of antipassive reflexives-argument structures being equal-some subtypes appear to be clearly lexical in forming closed classes of lexical forms while others are freely produced online and so little entrenched that they do not make it into the dictionaries. With regard to the inflection-derivation divide, the middle voice is clearly split, and it is split in different ways with regard to different criteria, that of argument structure and that of the 'entrenched vs. online' distinction (cf. Holvoet, Grzybowska & Rembiałkowska 2015).

3. The articles in this volume

Three papers in this volume deal with the domain of the passive and the closely related impersonal. In their article "The passive family in Baltic", Nicole Nau, Birutė Spraunienė and Vaiva Žeimantienė decompose the Lithuanian and Latvian passive into a number of smaller voice constructions with varying formal and functional parameters but sharing the passive morphology. Apart from canonical passives, the authors single out a number of constructions differing along a finely differentiated set of parameters. Some passive constructions have a non-identified agent while in other cases the agent is definite and known (often coinciding with the speaker); some have definite, topicalised patients whereas others are characterised by indefinite, weakly referential patients; some have modal overtones whereas others have not, etc. For every construction that is singled out, a table of attribute values is given, specifying how it behaves with regard to agent defocusing, object promotion, telicity, expression or suppression of the agent, animacy of the main arguments, and information structure. This differentiated approach, focusing on function and taking into account a large number of variables, sheds a new light on several established notions in the domain of the passive. One of these

is that of 'impersonal passive', traditionally based on the transitivity or intransitivity of the verb. The authors find it to be of limited usefulness, as it obfuscates more important functional divisions. They replace it with the notion of 'subjectless or subject-weak passive'. 'Subject-weak passives' are passives with non-topical, indefinite and weakly individuated patients. An example of a subject-weak passive is seen in (1), where a formally personal passive is coordinated with two impersonal passives:

(1) Latvian (from Nau, Spraunienė & Žeimantienė, this volume) [Šī gada Annas tika pilnībā "iznestas uz Rucavas sievu pleciem."] Tika gan dziedāts. dancots. gan SING.PST.PPP.SG.M dance.pst.ppp.sg.m AUX.PST.3 ADD ADD gan Annas godinātas. celebrate.ppp.pl.F ADD Anna.nom.pl '[This year St Anna's day was completely "shouldered by the women of Rucava".]

There was singing, dancing, and celebration of Annas.'

Though the last of these coordinated constructions is formally not an impersonal passive, it obviously has a similar function as the impersonal ones: the patient is not topicalised, but neither is it in focus: here *godināt* Annas 'Ann-celebrating' is represented as an activity with a generic patient. Another interesting and hitherto unnoticed phenomenon pointed out in the article is what is here called the 'cumulative-retrospective construction'. It is used to sum up a person's past experience in a domain of activity and in this sense it is somewhat similar in function to the experiential perfect. In Latvian it can actually be classified with the passive perfect, but in Lithuanian there is hardly any functional overlap. The Lithuanian variety is often superficially similar to the passive-based evidential because of the combination of intransitive verbs with a genitival subject, but is nonetheless distinct from it functionally:

(2)	Lithuanian (CCLL, cited from Nau, Spraunienė & Žeimantienė, this volume)				
	Kiek	anuomet	mano	vaikščiota	
	how_much	at_the_time	1SG.POSS	walk.ppp.na	
	gatvėmis,	kiek	pamatyta,	kiek	
	street.INS.PL	how_much	see.ppp.na	how_much	
	nekantriai	ieškota!			
	impatiently	search_for.ppp.na			
	'How much I walked along the streets at the time, how much I saw,				
	how much I imp	patiently search	ed for things!'		

On balance, it seems that the distinctive features of the 'cumulative-retrospective construction' should be viewed in the context of passive rather than of perfect semantics. Nau, Spraunienė & Žeimantienė's article thus identifies several hitherto unnoticed passive constructions in Baltic and offers a fuller picture of the functional diversity of the passive domain in Baltic and in general.

Lindström, Nau, Spraunienė & Laugalienė's article "Impersonal constructions with personal reference. Referents of deleted actors in Baltic and Estonian" elaborates, from a slightly different point of view and in a broader areal context, on one subtype of the passive also mentioned in the previously discussed article (section 6.1.3), viz. the impersonal or subject-weak passive referring to a definite, contextually retrievable agent, often the speaker:

(3)	Latvian (from	(from Lindström, Nau, Spraunienė & Laugalienė, this volume)				
	Barselonā	un	Limasolā	ir	būts,	bet
	PLN.LOC	and	PLN.LOC	be.prs.3	be.ppp.na	but
	tajā	laikā	nez	ināj-u,	kas	
	dem.loc.sg	time.loc.sg neg.know.psт-1sg what.noм				М
	ir	skriešana.				
	be.prs.3	run.ACN.NOM.SG				
	'I have been [= impersonal passive] to Barcelona and Limassol, but at that				but at that	
	time I didn't know [= personal active] what running means.					

Such uses are at variance with the widespread conviction that the implicit agents (or quasi-agents) of impersonal constructions are mostly generic or vague. In the article, both Latvian and Lithuanian impersonal passives are investigated alongside functionally comparable constructions in Estonian. In Estonian, the counterpart of the Baltic subjectless passives with participles in *-t-* is a set of forms usually characterised as the impersonal. However, the Estonian impersonal shows a split in exponence: the simple tenses have affixal markers while the compound tenses consist of the auxiliary 'be' and a past participle; only the latter are examined in the article as they can be both formally and functionally compared to the Baltic constructions. On the functions of the Estonian impersonal in general cf., e.g., Torn-Leesik & Vihman (2010).

The authors find that the impersonal constructions utilised to refer to specific persons such as the speaker have an experiential flavour in that they sum up a person's past experiences of a certain type of activity or event. This 'experiential' meaning is related to that of the experiential perfect, but should not be confused with it: the perfect is experiential in the sense of indefinite location in time (hence the alternative term 'existential perfect'), whereas the 'personal subjectless' passive denotes the current relevance of accumulated experience. Another interesting finding is that where a language has several impersonal constructions, one of them tends to specialise in a specific reading; in Estonian, one of the varieties of the periphrastic impersonal, with the auxiliary *saama* 'get', has become specialised in the function of referring to a specific implicit subject. While the extension of the research to neighbouring Estonian is instructive in several respects, the authors refrain from claiming that the correspondences between Baltic and Estonian are areally determined; they seem to reflect more widespread tendencies.

A third article dealing with the passive domain in Baltic is Kirill Kozhanov and Peter Arkadiev's study "(Non-)agreement of passive participles in South-Eastern Lithuanian". In Vytautas Ambrazas' work on Lithuanian participles, agreeing and non-agreeing passives had been described as separate developments in the rise of the passive construction. The agreeing passive now characteristic of Standard Lithuanian was, in Ambrazas' view, based mainly on the passive constructions of Western Aukštaitian. Eastern Aukštaitian independently developed a non-agreeing passive that was closely related to the non-agreeing impersonal passive, and was basically resultative (leading, as a secondary development, to the rise of inferential meanings). It is illustrated in (4):

 (4) Lithuanian, South Aukštaitian (from Kozhanov and Arkadiev, this volume) *sklæ.p-as* pa-darí -t-a cellar-NOM.SG PVB-do-PST.PPP-NA 'the cellar is built'

On the basis of South-Eastern Aukštaitian texts from the TriMCo corpus,⁴ Kozhanov and Arkadiev conclude that the occurrence or absence of agreement in passives statistically correlates with (but is, importantly, not categorically determined by) morphosyntactic features (plural subjects often show non-agreement) as well as with word order (the participle more often does not show agreement with postverbal subjects). They find no

⁴ https://www.trimco.uni-mainz.de/trimco-dialectal-corpus/

correlation with the semantic type of passive. The discussion on the history of the Lithuanian passive is thereby reopened. Another important conclusion of the article is that the non-agreeing passive shows no areal links to similar developments in East Slavonic (Russian and Belarusian).

The middle domain is not represented in this volume by an overview article illustrating the extent and parameters of variety in the same way as Nau, Spraunienė & Žeimantienė's article does this for the passive; for a more comprehensive treatment of the middle domain in Baltic the reader may be referred to Holvoet (2020). Here the middle domain is represented by two studies focusing on antipassive and facilitative reflexives respectively. The intrinsic interest of these topics goes beyond matters of description of middle-voice grams in Baltic. Apart from what the empirical data of the Baltic languages can contribute to the typological study of the categories involved, the problems of definition and demarcation touched upon in these articles are in themselves cross-linguistically relevant.

Axel Holvoet and Anna Daugavet's article "Antipassive reflexive constructions in Latvian: A corpus-based analysis" focuses exclusively on one of the Baltic languages because in Latvian antipassive reflexives are much better represented than in Lithuanian and, for that matter, the neighbouring Slavonic languages. The cross-linguistic voice category of antipassive is now well established in the typological literature, and the discovery of reflexive-antipassive and reciprocal-antipassive polyfunctionality has naturally broadened the typological context of the study of reflexive-marked grams in Slavonic and Baltic. For Slavonic, the notion of antipassive reflexives appears in Say (2005) and Janic (2013) and for Baltic in Holvoet (2017). Holvoet and Daugavet's article is based on the Latvian internet corpus, an approach that has proved fruitful in view of the fact that some subtypes of antipassive reflexives are productive in the spoken language but not strongly entrenched, so that they can be captured only by using internet data, as these reflect an informal language register close to spoken language. This applies most of all to antipassives characterised by object suppression, here called deobjectives. They represent a particular type of object-oriented agency as a self-contained activity, often with the aim of conveying the irrelevance of the activity, the self-absorbedness of the agent etc.:

(5) Latvian Es gleznojo-s sesto gadu, paint.prs.1sg-refl sixth.ACC.SG.DEF 1SG.NOM year.ACC.SG bet tagad kaut kas sāk mainīties. but something.NOM begin.prs.3 now change.INF [Negribas vairs. Pati esmu pārsteigta.] 'I've been painting away happily for six years, but now something is getting different. [I don't feel like it any more. I'm surprised myself.]'5

Unlike Slavic and Lithuanian, Latvian has a large class of deaccusative antipassives (better known in the typological literature as oblique antipassives) focusing on ineffectual agency and incomplete affectedness of the object. This is illustrated in (6), where the transitive škirstit 'leaf' is intransitivised, with a prepositional phrase to encode the object, in order to convey the idea of chaotic, cursory perusal:

(6) Latvian

[Augusts brīdi domīgs nolūkojās aizgājējam pakaļ, tad] sāka šķirstītie-s pa papīriem. start.PST.3 leaf.INF-REFL about paper.DAT.PL '[For a while August gazed thoughtfully after the retreating man, then] started leafing about in his papers.'⁶

One of the ideas advanced in the article is that the domain of the antipassive reflexive is itself not quite homogeneous and that we can distinguish two closely related and yet subtly different constructions, one with implicit object and the other with oblique object (an idea also advanced recently in Vigus 2018). The difference is usually formulated as optional expression or non-expression of the patient, but this optionality might be misleading, and the expression or suppression of the patient might serve a specific construction-related purpose. The authors suggest that in the deaccusative construction the self-containedness of the agency is reinterpreted as incomplete affectedness of the patient.

While the article on the antipassive reflexive focuses on one language and is consistently corpus-based, the same authors' study "The facilitative

⁵ http://site-453017.mozfiles.com/files/453017/SIRDSPRIEKS3.pdf (accessed 28-11-2020)

⁶ https://newspapers.lib.sfu.ca/lat-27275/page-5 (accessed 28-11-2020)

middle in Baltic and Slavonic: An overview of its variation" is wider in coverage but thereby inevitably goes less in depth. What is here referred to as the facilitative middle is basically the same construction that figures in the literature on Western European languages, especially by authors of the formal persuasion, as 'the middle' *tout court*. This construction is widely held to be exclusively generic, with a consistently implicit agent. Its Baltic and Slavonic counterparts, however, are different: they are often but not consistently generic, and allow expression of the agent either in the dative or in a prepositional phrase. Compare:

(7) The latched gate handle locks/unlocks easily with one hand.⁷

(8)	Lithuanian (constructed)					
	Spyna	man	lengvai	at-si-rakino.		
	lock.nom.sg	1SG.DAT	easily	un-refl-fasten.pst.3		
	'I found it easy to unfasten the lock.'					

In order to explain this divergence, the authors hypothesise that the Baltic and Slavonic facilitatives could have had more than one source construction within the anticausative domain, one giving rise to the (predominantly) generic type also occurring in the Western European languages and the other yielding the non-volitional uses characteristic of Baltic and Slavic and absent from English, German etc., as shown in (9):

(9)	Latvian (from Holvoet & Daugavet, this volume)				
	[Tas kurš man rakstīja par to krūzīšu apdruku uzraksti man vēlreiz,]				
	man	nejauši	izdzēsā-s	tava	
	1SG.DAT vēstule	accidentally	delete.pst.3-refl	your.NOM.SG.F	
	letter.nom.sg				
	[un neuzspēju atcerēties tavu vārdu.]				
	'[Could the person who wrote me about printing on mugs please write				
	to me once more?] I accidentally deleted your message [and I can't re-				
	member your name.]				

This type is inherently perfective and episodic. The interaction between the different types, the predominantly generic and the inherently episodic ones, could have given rise to the situation now obtaining in the Baltic and

⁷ https://www.pinterest.com/pin/336573772134689958/ (accessed 28-11-2020)

Slavonic languages, with their robust episodic readings of the facilitative, and often with overt expression of the agent.

The third article on the middle domain is Vladimir Panov's study "Exploring the asymmetric coding of autobenefactive in Lithuanian and beyond". The Baltic languages (formerly both Lithuanian and Latvian, now only Lithuanian) often mark the fact that the agent is also the beneficiary of the agency by adding a reflexive affix:

(10) Lithuanian (CCLL)

Tėvai	pardavė	mūsų	namą	ir
parent.NOM.PL	sell.pst.3	our	house.acc.sg	and
nu-si-pirko	šį		butą,	
pvb-refl-buy.pst	.3 this.AC	C.SG.M	apartment.Acc.s	SG
[kai aš išvažiavau	ı į Lietuvą.]			
'My parante cold	our house and	bought thi	a anartmont Iwhon	I loft for

'My parents sold our house and bought this apartment [when I left for Lithuania.]'

This autobenefactive marking, however, correlates strongly with perfectivity, marked by the addition of a verbal prefix. Though not strictly confined to verbs perfectivised by prefixation (iterative contexts do not block the occurrence of the reflexive marking), the autobenefactive marking seems to be only weakly compatible with progressive meaning. The author argues that this asymmetry is not accidental, pointing to the parallel of Georgian, where the 'subjective version' (autobenefactive) marker *-i-* is, in some verbs, obligatory in perfective or non-progressive forms like the aorist:

- (11) Georgian (constructed)
 - a *saxl-s v-q'id-ul-ob* house-DAT 1SG.SUBJ-buy-тнем-тнем 'I am buying a house.'
 - b *saxl-i v-i-q'id-e* house-NOM 1SG.SUBJ-VERS-buy-AOR 'I bought a house.'

The regular addition of telicising prefixes to perfectivise a verbal stem in Georgian is well known (cf. Hewitt 1995, 153 ff., Tomelleri 2009). The author suggests that, like the preverbs of local origin, the autobenefactive semantic modification could also act as a bounder, introducing telicity and thereby developing an association with perfectivity.

Both formal and semantic aspects of the development of the middle voice in Baltic are discussed in "The rise of the affixal reflexive in Baltic and its consequences: Morphology, syntax and semantics" by Axel Holvoet, Gina Kavaliūnaitė and Paweł Brudzyński. The modern Baltic languages have a marker that is exclusively associated with middle-voice grams, viz. the historically reflexive affix -s(i)-, originally an unstressed (clitic) variant of the reflexive pronoun. The Old Lithuanian and Old Latvian texts reflect the final stage in the process of separation of the reflexive and middle domains—there are still some traces of the former status of the affixal reflexive marker as an enclitic, and in a number of cases it still has the original function of an unstressed variant of the reflexive pronoun, as in (12):

(12) Old Latvian (Senie, Glück's Old Testament, Gen. 16.5, cited from Holvoet et al., this volume)
nu redfah-s wiņņa gŗuhta
now see.PRS.3-REFL 3.NOM.SG.F pregnant.NOM.SG.F
effoti
be.PPRA.NOM.SG.F
'Now she sees herself (being) pregnant [...]'

The article gives an overview of the processes set in motion by the affixalisation of the reflexive marker. These were partly semantic, as the affixalisation caused the reflexive marker to lose one of its two functions, that of unstressed reflexive pronoun, and to become exclusively a middlevoice marker. But the consequences went beyond that: the affixalisation set in motion a series of morphosyntactic and syntactic changes as well. Two factors were in play here. First, in certain syntactic configurations (when the reflexive pronoun was controlled across clause boundaries) the disappearance of the reflexive pronoun from the syntax had to lead to a reorganisation in syntactic structure. On the other hand, the hesitation as to the host to which the affixalising reflexive clitic was to accrete led to interesting morphosyntactic patterns, as in (13) from Old Latvian, where a modal verb complemented by a reflexive verb itself assumes the reflexive marker: (13) Old Latvian (Senie, Manzel, Langgewünschte Postill i 152.13-14)
[Wings tick dauds töw dohß] ka tu warrehffee-β usturretee-β. that 2SG.NOM be.able.FUT.2SG-REFL sustain.INF-REFL '[He will give you so much] that you will be able to sustain yourself.'

Historically, this probably reflects a process of clitic climbing, which could also potentially lead to clitic duplication, but clitic duplication would not be stable as it would be countered by a tendency toward clitic haplology. However, once fossilised in the morphology as a result of affixalisation, the double reflexivisation was no longer accessible to syntactic rules. The morphosyntax thereby preserves a trace of the oscillations that occurred during the process of affixalisation, as the affixalising marker was in quest of a host. The article shows that the data of Baltic shed an interesting light on the process of affixalisation of clitics and its possible broader consequences.

The causative domain is represented in this volume by one single article dedicated to a small group of intensive causatives in Lithuanian. Causatives are clearly derivational in Baltic, and they do not show as much functional differentiation as passives and middles. But there is a certain degree of polyfunctionality in this domain as well, and the existence of causatives with non-causative meanings has already been discussed in the literature (most recently cf. Aikhenvald 2018). We have now two thorough studies of Lithuanian and Latvian causatives in general (see Arkadiev & Pakerys 2015 and Nau 2015 respectively) and a first study of the not strictly causative uses of causative morphology in Baltic (Holvoet 2015). In his article "Lithuanian intensive causatives and their history" Axel Holvoet identifies a small group of Lithuanian motion verbs whose reflexivised causatives have acquired an intensive function—an instance of the typologically well-attested causative-intensive polyfunctionality. What is interesting about the Lithuanian facts is the way this intensive function seems to have emerged. So, for instance, judėti 'move' (INTR) underlies a causative derivative jud-inti 'move' (TR), which can, in its turn, be intransitivised with a reflexive marker, yielding a secondary intransitive *jud-in-ti-s* 'move (INTR)'. Rather than being synonymous with the primary intransitive, the latter refers only to energetic motion requiring effort or external coercion, or to the onset of such motion. The following pair of examples illustrates the difference:

(14) Lithuanian

Planete	os	juda	ne	apl	ink	Žemę,
planet.	NOM.PL	move.prs.3	NEG	aro	und	Earth.Acc
kaip	manė	Ptolem	ėjas,	0	aplink	Saulę
as	think.ps	т.3 Ptolem	y.nom	but	around	Sun.ACC
'The planets don't move around the Earth, as Ptolemy thought, but						
around the Sun.'8						

(15) Lithuanian (Dalia Grinkevičiūtė, CCLL) [Girdžiu Krikštanienės balsą. Turbūt galima eiti.] Judinamė-s namo. move.CAUS.PRS.1PL-REFL home '[I hear Krikštanienė's voice. We can probably go now.] We get on our way home.'

It is precisely the coexistence of a primary and a secondary intransitive that seems to have induced the rise of intensive meaning in the reflexivised causative. In other semantic groups the reflexivised causative usually differs from the primary intransitive as a result of lexical specialisation of the causative: this can be seen in the triad *šilti* 'get warm' : *šildyti* 'warm (up), heat (a house etc.)' : *šildytis* 'warm oneself'. In the case of motion verbs there was evidently no sufficient basis for lexical differentiation along similar lines, and the coexistence of primary and secondary intransitives was put to use to express a new meaning—an instance of what is often referred to as exaptation.

4. The outlook

The contributions to this volume bring a number of new insights into the domain of voice in Baltic and in general, and also raise a number of new questions to which researchers will hopefully return in the near future. Let us mention just a few. The problem of impersonal passives, subject-weak passives and non-promoting passives (or impersonals) in Lithuanian, where boundaries between the syntactically defined types are fluid, seems to call for a reassessment of traditional classifications.

 $^{^{8}}$ http://www.fotonas.su.lt/studdarbai/astronomija/priedai/Planetos.html

In the domain of the middle there is the problem of the relationship between what is here described as the Baltic and Slavonic facilitative middle and what is simply called 'the middle' in the literature on Western European languages; there is an obvious disconnect between research traditions, and the combined evidence of Baltic and Slavonic, if brought to bear on discussions, could yield important insights. The problems of the marking asymmetry in Lithuanian autobenefactives, briefly outlined in this volume, is a feature deserving further research both in the domain of Baltic and Slavonic and from a cross-linguistic point of view. More examples could be added. It is to be hoped that the contributions to the present volume will stimulate further research and discussions. It should be added that increasing availability of corpora, including historical ones, is a precondition for a further deepening of our understanding of the voice domain in Baltic and its typological implications.

Abbreviations

ACC — accusative, ACN — action noun, ADD — additive (particle), AOR — aorist, AUX — auxiliary, CAUS — causative, DAT — dative, DEF — definite, F — feminine, FUT — future, GEN — genitive, INF — infinitive, INS — instrumental, INTR intransitive, LOC — locative, M — masculine, NA — non-agreeing form, NEG negation, NOM — nominative, PL — plural, PLN — place name, POSS — possessive, PPP — past passive participle, PPRA — present active participle, PRS — present, PST — past, PVB — preverb, REFL — reflexive, SG — singular, SUBJ — subject marker, THEM — thematic extension, TR — transitive, VERS — version vowel

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The Passive Family in Baltic

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Predicative constructions with passive participles in Latvian and Lithuanian exhibit great variation in form, meaning and function, ranging from pure passive to various temporal, aspectual and modal meanings. This paper uses a set of formal and functional parameters to distinguish and profile several types and subtypes of such constructions. These types are mutually related by family resemblance and constitute a 'Passive Family'. They include dynamic and stative passives, three types of resultatives, several types of subjectless (impersonal) passives, modal constructions expressing possibility or necessity, and evidential constructions. Based on a thorough study of corpus data, the paper not only adds new insights about constructions that were already known, but also presents construction types that have not been discussed in the literature on the Baltic passive before: the Lithuanian cumulative-retrospective construction and the Latvian cumulative-experiential subtype.

Keywords: passive, impersonal constructions, cumulative constructions, experiential perfect, evidential, Latvian, Lithuanian, Baltic

1. Introduction¹

What is called 'passive' across languages is often vastly different in structure and even in function. (Shibatani 2006, 264)

This paper surveys predicative constructions in contemporary Latvian and Lithuanian that contain a passive participle. Most of these constructions have traditionally been regarded as representing the category of passive. Our main idea is that these constructions form a kind of family:

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within the broad set of constructions with a passive participle as predicate, several types can be distinguished by formal and functional parameters, and these types are mutually related by family resemblance. The goal of this paper is to establish these parameters and the features that characterize construction types and subtypes. Taking up the given quote by Shibatani, we may state that even within one language and within one broadly defined formal type, the constructions called 'passive' are vastly heterogeneous. However, we also see what they have in common—not as necessary defining criteria, but by family resemblance. The paper will not account for *all* predicative uses of passive participles, but profile the most prominent types found in Latvian and Lithuanian, and discuss transitional areas between such types.

As our point of departure is a formal one, it is necessarily languagespecific. Latvian and Lithuanian are relatively closely related genetically, and the identification of common forms and grammatical categories is usually unproblematic. In addition, separate developments of the common heritage appear more clearly than when comparing more distantly related languages.

In particular, we consider constructions which

- i. contain a passive participle,
- ii. are used as the predicate of an independent clause
- iii. or as the predicate of a type of dependent clause which also uses simple finite verb forms.

Criterion (i) restricts the set of constructions morphologically. Passivelike functions of the reflexive marker are not taken into consideration. They belong to another family, that of the middle voice (Holvoet 2020). Verbs with such a marker are referred to as *reflexive verbs* in this paper and treated as a lexical class. In Lithuanian, they may also form passive participles, and for individual constructions membership to this lexical class may play a role, which will be pointed out when discussing the respective construction. Criterion (ii) rules out attributive, adverbial or discourse-marker uses of the participle, and criterion (iii) rules out converb clauses, but includes passive constructions in adverbial, complement and 'finite' relative clauses.

To establish types of constructions, we use a mix of bottom-up and top-down approaches. On the one hand, we start by gathering corpus examples that meet the above criteria, and analyse the features that distinguish them and may be used to establish groups. Parameters that distinguish types include the choice of auxiliary and participle, the number and coding of arguments, word order, semantic properties of the verb and of the actor, and others. On the other hand, we do not pretend to be ignorant of, but rather try to profit from well-established categories and distinctions such as stative vs. actional (dynamic) passive or personal vs. impersonal passive. However, these established categories are not taken for granted, but evidence for their usefulness and possible modification is searched for in the data.

In our study we used several corpora of contemporary Standard Latvian and Lithuanian (see Sources in the list of references). For particular purposes, we draw samples from one or more of these corpora; the details are explained in the respective section. However, two large samples of passive constructions in Lithuanian were used throughout the study for various purposes, and are therefore best explained here. They were drawn from LithuanianWaC v2, a corpus of internet texts available at https:// www.sketchengine.eu. The corpus contains more than 48 million words and is morphologically annotated. Using the query [tag="Vppnp......"] | [tag="Vppnppno"] | [tag="Vppnpsno"] a concordance of 1,340,272 t- and *m*-participles was compiled. Of these, 1500 random examples were downloaded and 'cleaned' from attributive uses and other irrelevant cases. In this way a first sample of 605 examples was obtained (hereinafter Sample 1). A control random sample of 684 examples was obtained by randomized shuffling of the initial concordance twice and again 'cleaning' the first 1500 lines of examples from irrelevant cases (hereinafter Sample 2). In our study, we use these two samples mostly for establishing the frequency of particular phenomena, and compare our findings to those of Emma Geniušienė (2006; 2016), whose work includes the most profound empirical investigation of the passive in Lithuanian.

In Section 2 we present the parameters that we use in characterizing (or 'profiling') types of constructions on the background of the general discussion of passives in the typological literature. Section 3 shows the Latvian construction with the auxiliary *tikt* 'become, get' and a past passive participle (*t*-participle) as a typical representative of a basic passive. Section 4 is devoted to the main constructions based on the present passive participle (*m*-participle) in Lithuanian and Latvian, while Section 5

discusses types of stative passives. In Section 6 we present the results of our study on what is often called 'impersonal passive' and what we capture under the heading 'subjectless and subject-weak passives'. In Section 7 we come to evidential constructions, with the Lithuanian Evidential probably the most 'estranged' member of the family (or already excluded from it). Each section contains profiles of the established types in form of summarizing tables. The concluding Section 8 summarizes our results in a more general way.

2. Passives in Baltic: basic types and parameters

2.1. Morphology

The passive in Baltic is a construction consisting of a passive participle and (potentially) an auxiliary. Variation concerns (i) the choice of participle, (ii) the choice of auxiliary, and (iii) agreement features.

The two passive participles in Baltic are the past passive or *t*-participle and the present passive or *m*-participle. In Latvian, only the *t*-participle is used in the passive (but see Section 4.3 for modal constructions with the *m*-participle). The main auxiliaries are $b\bar{u}t$ 'be' and tikt 'get (to); become'. The participle agrees with the subject in number and gender, while the auxiliary agrees in person (1, 3). If there is no subject triggering agreement, the default values third person, singular, masculine are used; in this paper, we will gloss an ending with default values as NA for 'non-agreeing' (2, 4) and reserve the gloss M.SG for instances of agreement. Nominative case is not glossed in the predicate of a passive construction.

(1) Latvian (LVK2018)

	Vain-a guilt(F)-NOM. 'Guilt has be		<i>ir</i> be.prs.3 n.'	pierādī prove-1	<i>-t-a.</i> PST.PP-SG	.F
(2)	Ir be.prs.3 'It has been p	<i>pierādī-t</i> prove-ря proven th	T.PP-NA	<i>ka</i> [] that		
(3)	Tikām AUX.PST.1PL ģimen-i. family-ACC.Se 'We were con	consi	uzskatī-t-i consider-PST.PP-PL. sidered a wealthy fam		<i>par</i> for	<i>turīg-u</i> wealthy-acc.sg

(4)	Tiek	uzskatī-t-s,	ka []
	AUX.PRS.3	consider-pst.pp-na	that
	'It is believed th	at []'	

The construction with the auxiliary *tikt* has become the main passive construction in Latvian (see Section 3).

In Lithuanian, both the present and the past passive participle are used in passive constructions, but there is only one auxiliary, $b\bar{u}ti$ 'be'. As in Latvian, a nominative subject triggers agreement, cf. (5, 6). In constructions without a nominative subject, a special ending is used with the participle (neuter, or non-agreement marking). Details on the use of this ending and examples are presented in Section 2.3.

(5) Lithuanian (ltTenTen14)

Heroin-as	yra	parduoda-m-as	maž-ais		
heroin(м)-NOM.SG	be.prs.3	sell-prs.pp-sg.m	small-INS.PL		
popieri-aus	pakeli-ais.				
paper-gen.sg	aper-gen.sg package-ins.pl				
'Heroin is (being) sold in small paper packages.'					

(6)	Beveik	vis-i	čempionat-o	biliet-ai		
	almost	all-nom.pl.m	championship-gen.sg	ticket-NOM.PL.M		
	yra	parduo-t-i.				
	be.prs.3	sell-pst.pp-pl.m	1			
•	'Almost all championship tickets have already been sold.'					

Verbs with a reflexive marker also have passive participles in Lithuanian. In verbs containing one or more prefixes, the reflexive marker precedes the verbal root, and passive is formed in the same way as with non-reflexive verbs, for example *pa-si-im-ti* (PVB-RFL-pick_up-INF) 'pick up', *m*-passive: *pa-si-im-a-m-as* (PVB-RFL-pick_up-PRS-PP-SG.M), *t*-passive: *pa-si-im-t-as* (PVB-RFL-pick_up-PST.PP-SG.M). In verbs without prefixes, the reflexive marker is at the end of a verb form and interacts with the ending. Here, only the non-agreement ending is possible for passive participles, for example *moky-ti-s* 'learn' (learn-INF-RFL), *m*-participle: *mok-o-m-a-si* (learn-PRS-PP-NA-RFL), *t*-participle: *moky-t-a-si* (learn-PST.PP-NA-RFL). In Latvian, a reflexive marker is always at the end of a verbal form, and reflexive verbs do not form passive participles.

2.2. Syntax: basic distinctions

In the linguistic literature, the passive voice or diathesis is defined by the realization of core arguments of a predicate with regard to grammatical relations (subject, direct object, oblique object) and to semantic roles (agent, patient), semantic macroroles (actor, undergoer), or generalized roles (A, P).² This realization is usually compared to that found in the (more basic, or unmarked) active voice. For definitions of the passive differing along these lines, but covering the same linguistic phenomena, see, for example, Van Valin (2001, 30); Siewierska (2013); Zúñiga & Kittilä (2019, 83). In our description, we will use the concept of semantic macroroles as explained in Van Valin (2001) and a traditional concept of subject, characterized by nominative marking and agreement. We will of course not change the terminology of works quoted.

In her work on the passive in Lithuanian, Emma Geniušienė (Geniušienė 2006; 2016)³ uses two parameters to distinguish four syntactic types of passive constructions: the presence or absence of a subject (subjectful vs. subjectless constructions) and the presence or absence of an oblique object expressing the agent (agented vs. agentless constructions). The same or similar parameters have figured prominently in discussions about the essence of the passive, the 'prototype' of a passive, and different types of passive constructions in language typology and theoretical linguistics. The simple classification presented in Table 1 is therefore a good point of departure not only for distinguishing constructions found in the Baltic languages, but also for a discussion of their status and characteristics in relation to cross-linguistic tendencies and their interpretation in the linguistic literature.

² The term LOGICAL SUBJECT used in traditional grammar may be understood as a semantic macrorole (actor).

³ We cite the English editions of Geniušienė's work. The content of Geniušienė (2016) appeared in Russian in the 1970s.

Туре	Undergoer (subject)	Actor (oblique)	Corresponding category or concept
i	+	+	subjectful agented passive (Geniušienė) CANONICAL PASSIVE (Siewierska & Bakker 2012)
ii	+	-	subjectful agentless passive (Geniušienė) BASIC PASSIVE (Keenan & Dryer 2007)
iii	-	-	subjectless agentless passive (Geniušienė) subjectless passive; impersonal passive (various authors)
iv	-	+	subjectless agented passive (Geniušienė) (no special name, treated together with iii)

Table 1. Types of passives according to the presence of undergoer and actor

While Latvian only has agentless passive constructions (Types ii and iii), Lithuanian has constructions of all four types; examples (7)–(10) illustrate Types i–iv, respectively.

(7) Lithuanian (ltTenTen14)

[Ne kiekvienas l	ietuvis [] žino, ka	ıd]	
šios	dainos	žodžiai	parašy-t-i
DEM.GEN.SG.F	song(f).gen.sg	word.nom.pl	PVB.write-PST.PP-PL.M
poeto	Algimanto	Baltakio.	
poet.gen.sg	PN.GEN	PN.GEN	
'[Not every Lith	uanian [] knows	s that] the word	s of this song were
written by the	poet Algimantas	Baltakis.'	

 Šie
 žodžiai
 parašy-t-i
 maždaug

 DEM.NOM.PL.M
 Word(M).NOM.PL
 PVB.write-PST.PP-PL.M
 around

 XIX
 amžiaus
 viduryje.

 19th
 century.GEN.SG
 middle.LOC.SG

 'These words were written around the middle of the 19th century.'

- (9) Ne karta kalbė-t-a rašy-t-a ir apie talk-pst.pp-na about not once write-pst.pp-NA and vidurio vyrų amžiaus krize. man.GEN.PL age.GEN.SG middle.gen.sg crisis.ACC.SG 'Men's midlife crisis has been written and talked about more than once.' (literally: "it has been written and talked about men's midlife crisis")
- (10) žvelgė į vietas. kur kadaise look.pst.3 in where place.ACC.PL once vaikščio-t-a poeto Jono walk-pst.pp-na poet.gen.sg PN.GEN.SG Aleksandravičiaus-Aisčio. PN.GEN.SG 'he looked at the places where the poet Jonas Aleksandravičius-Aistis

once walked' (literally: 'where it was walked by the poet')

Siewierska & Bakker (2012) use the term AGENTIVE PASSIVE for passive constructions which contain a subject and allow the addition of an agent phrase. They argue that this type is to be considered as the CANONICAL PASSIVE under the canonical approach to typology, because it fulfills two crucial criteria: (i) the agent phrase distinguishes the passive from other voice constructions such as inverse or anticausative (Siewierska & Bakker 2012, 153), and (ii), as they show in their paper, the (potential) presence of such a phrase correlates with at least some other features crucial for the passive. Though frequency is not a criterion of canonicity in this approach, the authors point out that among 264 languages of their sample, 65% had agentive passives and 35% only agentless ones (ibid., 159). The percentage differs widely across large geographic areas, with Europe showing the highest proportion of languages with an agentive passive. On this background we may state that Lithuanian has a canonical passive, which is typical for a European language, while Latvian belongs to the minority of European languages which do not have this type. Latvian however has an agentive construction which superficially resembles an agented passive, with a genitive that originates in, and is still largely bound to, a noun phrase (see Section 5; Holvoet 2001a and Holvoet et al. 2019 for details). The Lithuanian agent phrase has developed from the same source and 'absorbed' the agentive construction (Holvoet et al. 2019, 226). In addition, mostly in older Latvian an agent phrase with the preposition no 'from' is found, which was identified as a calque from German and consequently banned from the standard variety. It may however still occasionally be found, and it is possible that language planning has blocked a process in which it would have become a genuine Latvian means of expressing an agent with the passive. We know from other European languages that agented passives are more frequent in written than in spoken language, and written language is much more influenced by language planning (which in Latvia during most of the 20th century included strict editing of anything that was published).

Siewierska & Bakker's concept of the canonical passive is based on the possibility to express the actor as an oblique phrase, not on the actual presence of such an agent phrase in texts (this is a difference to Geniušiene's work). For the latter they use the term EXPLICIT AGENTIVE, as opposed to IMPLICIT AGENTIVE constructions. The proportion of EXPLICIT AGENTIVE passives varies widely across languages that have canonical passives, as well as across constructions and registers within one language. For example, based on corpus studies of the passive in three Mainland Scandinavian languages, Laanemets (2012) shows for each language differences between spoken and written discourse as well as between the synthetic s-passive and the periphrastic passive with the auxiliary 'become'. The lowest proportion of agent phrases was found with the s-passive in spoken Danish (0.6%), the highest proportion with the periphrastic passive in written Swedish (19.4%) (Laanemets 2012, 126). For Lithuanian, we do not have such detailed data, but we suppose that the overall frequency of agent phrases in passive constructions may be lower than in the Scandinavian languages and English. Geniušienė, who worked with a sample of passive constructions from written (mostly fictional) Lithuanian texts, gives figures for different functional types of passive. With the actional passive, 16.7% of subjectful passive constructions with transitive verbs had an agent phrase (259 of 1552, figures derived from Table 2 in Geniušienė 2006, 40). In her complete sample of 5730 passive constructions, only 6.5% had an agent phrase (Geniušienė 2016, 146)—the difference being mostly due to the large number of statal passives in the sample, which do not allow an agent phrase (see Section 5). In any case, it is clear that when considering tokens of constructions in actual discourse, the majority in both Latvian and Lithuanian belongs to Type ii.

Keenan & Dryer (2007, 328–329) define the basic passive by the following features: (i) the construction does not contain an agent phrase, (ii) the main verb expresses an action, (iii) it is monotransitive, and (iv) the verbal arguments which are affected by the passive diathesis have the semantic roles of agent and patient. According to the authors, the basic passive so defined is found in all languages that have a passive and may be the only passive construction in a language. Thus, the existence of the basic passive in a language is the prerequisite for the occurrence of other, non-basic types. Non-basic passives which may additionally occur in a language include those with an agent phrase, passives on intransitive or ditransitive verbs, and passives with subjects other than patients (Keenan & Dryer 2007, 342–352).

The concept of basic passive is more specific than our Type i. Keenan & Dryer's criteria (ii), (iii) and (iv) cited above draw attention to several factors that distinguish variants of passives with a subject (Type ii as well as Type i).

The question of possible semantic roles of arguments affected by the passive diathesis is related to case marking. In Latvian, only arguments that receive accusative marking in the active voice can be promoted to a nominative subject in the passive, while dative, locative or prepositional arguments retain their marking. The semantic role of an accusative-marked argument seems to be of little importance for its promotion to subject: while it most often is patient or theme, also experiencers occur, for example, with verbs such as (ie)intereset 'interest', iepriecinat 'make happy', (sa)dusmot 'make angry'. In Lithuanian, arguments of verbs governing the genitive (such as laukti 'wait for', ieškoti 'look for', geisti 'desire', bijoti 'fear') may also become nominative subjects in the passive. These verbs are considered transitive in grammars of Lithuanian (Ambrazas et al. 2006, 223; 278). In addition, dative objects of some verbs (semantically recipients) may be promoted to subject, or alternatively retain dative marking, and the same holds for the locative argument of the verb gyventi 'live, reside' (Ambrazas et al. 2006, 278-279). For more details on oblique passivization in Lithuanian see Anderson (2015).

We will discuss more aspects of the subject of passive constructions in Section 2.3.

Passives without a subject (our Types iii and iv) are most often treated under the name IMPERSONAL PASSIVE; the opposite PERSONAL PASSIVE is less often found as a label for Geniušiene's 'subjectful' constructions (Type i and ii). As 'impersonal' is used in names of a large variety of constructions (cf. Malchukov & Siewierska 2011), some authors avoid the term and prefer SUBJECTLESS PASSIVE (for example, Blevins 2003, who argues for a strict distinction between a subjectless passive and an impersonal—not passive—construction). Type iii is well attested in both Latvian and Lithuanian, although it is clearly less frequent than Type ii. In Geniušienë's sample of 2,464 actional passive clauses, 33% were subjectless agentless and 52.2% subjectful agentless passives (Geniušienë 2006, 40, table 2). Most intransitive verbs can form a passive of Type iii, including verbs with a non-agentive, non-volitional subject such as 'fall', 'be ill'. There are however two general restrictions, one semantic and one formal: only verbs which may have a human subject in the active, and only verbs which have a nominative subject in the active can be passivized.

While subjectless passives are found in many languages, it is less common for them to include an agent phrase (our Type iv), as in the Lithuanian example (10). Indeed, this construction seems to be at odds with the functions usually ascribed to the passive: if the actor is known and present in the sentence, and nothing else is promoted to subject, why use a passive construction? Geniušienė (2016, 46–47) argues that this type is motivated stylistically, being more expressive than a corresponding active. On the one hand, as with agentless subjectless passives, the emphasis is laid on the action expressed by the verb, while the actor is demoted. On the other hand, this actor expressed by a genitive phrase functions as a pragmatic link with the previous context.

The frequency of Type iv relative to Type iii is slightly lower than that of Type i relative to Type ii. According to the data given in Geniušienë's table for actional passives, about 10% (91 of 911) of subjectless passives in her sample had an agent phrase, compared to 16.7% of passives with a subject, as mentioned above (derived from Geniušienë 2006, 40).⁴ This figure corresponds to our observations. For example, among 83 occurrences of a passive construction of the Lithuanian verb *vaikščioti* 'walk' with the past passive participle in the corpus ltTenTen14, 11 had an agent phrase (13.3%). Additionally, 18 constructions with an agent phrase were identified as evidential (see Section 7.1 for the Lithuanian Evidential). In our opinion it is important to distinguish between passive and evidential, as

⁴ Later in the same chapter, Geniušienė gives the much lower figure of 16 clauses of the subjectless agented type (Geniušienė 2006, 46)—maybe a mistake?

Geniušienė does in the cited article. In her earlier work she had treated these constructions together and derived the conclusion that "the oblique agent is especially common with intransitive verbs" (Geniušienė 2016, 146).

While for language typology and theoretical linguistics, the difference between canonical and non-canonical, basic and non-basic, or impersonal and personal passives is doubtlessly of importance, the types distinguished in Table 1 do not constitute bundles of formal and functional features that would make them separate members of the Passive Family in Baltic. On the one hand, these types are more broadly defined, and on the other hand, some features cut across the types (see Section 2.5 for our list of features).

2.3. Subjects in passive constructions

So far, we have used the term subject to refer to arguments with nominative marking that trigger agreement with the predicate. In this section we will discuss which other arguments could be regarded as subjects in a passive construction. Put otherwise: should all constructions without a nominative subject be regarded as subjectless passives?

In Lithuanian, there is a small group of pronouns which do have nominative case, but no gender or number, and therefore do not trigger agreement (*kas* 'what, who', *niekas* 'nothing, nobody', *viskas* 'everything, everybody', *keletas* 'some, a few, several'). The participle in constructions with such a pronoun takes the non-agreement (neuter) ending.

(11) Lithuanian (DLKT)

Kas	žadė-t- a ,	turi	būti	
what.nom	promise-pst.pp-na	must.prs.3	be.inf	
padary-t-a.				
pvb.do-pst.pp-na				
'What was promised has to be done.'				

(12) Lithuanian (DLKT)

Dar-o-m- a	viska	ls,	kad	degalai
do-prs-pp-na	every	thing.NOM	that	fuel.nom.pl
nepatektų	į	Ventos		upę.
NEG.flow.irr	in	Venta.GEI	v.sg	river.ACC.SG
'Everything is b	eing dor	ne in order to	prever	nt the fuel from flowing
into the river Ve	nta.'			

(13)	Lithuanian (DLKT)		
	Pakvies-t- a	keletas	vaikų.
	invite-pst.pp-na	some.nom	child.gen.pl
	'Several children hav	e been invited.'	

Ambrazas *et al.* (2006, 238) consider the pronouns in (11) and (12) and the phrase in (13) subjects of personal passive constructions. They possess one subject property—the nominative case.

Corresponding pronouns in Latvian (*kas* 'what, who', *nekas* 'nothing') can be interpreted as having masculine gender and thus triggering agreement. However, as a masculine singular ending is also used in situations of non-agreement, there is no formal difference.

There are also other occasions where in Lithuanian the neuter form of the passive participle co-occurs with an NP in the nominative: when the subject is a collection of items (14), or when two alternatives are confronted (15):

(14) Lithuanian (DLKT)

Kas-a-m-a	anglys,	geležies	rūda
mine-prs-pp-na	coal.nom.pl	iron.GEN.SG	ore.NOM.SG
ir gipsas			
and gypsu	m.NOM.SG		
'Coal, iron-ore an	d gypsum is bei	ng mined.'	

(15) Lithuanian (DLKT)

Akcentuoj-a-m-a ne vadovu elgesys, kaip emphasize-prs-pp-NA leader.gen.pl behaviour.NOM NEG as teigia Sztompka, bet skirtingu institucijų, different.GEN.PL say.prs3 but institution.GEN.PL ΡN *ypač* mažesniuju, bendradarbiavimas especially small.comp.gen.pl.f.def cooperation.NOM 'Emphasis is not laid upon the leaders' behaviour, as suggested by Sztompka, but on cooperation between different institutions, especially the smaller ones'

We would argue that the nominative NPS in examples (14–15) are subjects of personal passive constructions. The object has been promoted to subject since it occurs in the nominative case. Thus, agreement is not a necessary criterion for subjects in Lithuanian passive constructions.

It is generally assumed (cf. Ambrazas *et al.* 2006, 280) that partitive objects of transitive verbs are not promoted to subject in the passive, and passives with partitive genitives as in (16b) are regarded as subjectless, in contrast to those with a definite nominative subject (16c). The difference in word order seen in (16b) and (16c) is a strong trend, but in certain contexts, definite nominative subjects may also follow the verb (16d).

(16a)	nupirkau	knygų/knygas
	pvb.buy.pst.1.sg	book.gen.pl/book.acc.pl
	'I have bought (some)	books/the books.'
		-

- (16b) *nupirk-t-a knygų* PVB.buy-PST.PP-NA book.GEN.PL 'some books have been bought'
- (16c) knygos nupirk-t-os book(F).NOM.PL PVB.buy-PST.PP-PL.F 'the books have been bought'
- (16d) *nupirk-t-os knygos* pvb.buy-pst.pp-pl.f book(f).nom.pl 'books have been bought'

What is the syntactic function of the partitive genitive in (16a) and (16b)? Holvoet and Semeniene (2004, 25) argue that in partitive objects the genitive case is a semantic case which is 'laid upon' the structural case, namely the accusative. That is, in partitive objects of transitive verbs the accusative marking of the object is present but not visible because of the semantic case which overshadows it and conveys additional meaningthat of indefinite quantity. Consequently, both partitive and accusative objects in (16a) are considered transitive objects. What happens when a transitive clause with a partitive object is passivized? Shall we assume that a partitive object (as all transitive objects) is promoted to subject and acquires nominative case marking which is again overshadowed by the genitive case? Or shall we say that partitive objects, due to the lack of canonical marking, are not promoted to subject in the passive? Both interpretations seem plausible. Other criteria for subjecthood, such as the possibility to bind reflexive pronouns, are not always applicable (cf. Sprauniene et al. 2015). Authentic examples are rare, and constructed examples get divergent acceptability judgements by native speakers. Thus, the syntactic function of partitive NPs in passive clauses is not clear and sentences like (16b) are syntactically ambiguous between subjectful and subjectless passives (cf. Geniušienė 2016, 144).

Latvian is different: it clearly prefers canonical subjects in both voices. It also prefers agreement. Quantifiers such as *daudz* 'a lot of', *maz* 'few', *pāris* 'a couple', *cik* 'how many, how much' may govern a genitive, but they may also be combined with a nominative. The nominative is generally used when the noun is additionally modified by adjectives, and we get a canonical subject. Compare the Latvian and the Lithuanian versions of a sentence from the parallel corpus LiLa in (17), (18).

(17) Latvian (LiLa)

Cik skaist-i neparast-i gan un how.much PTC nice-NOM.PL.M and unusual-NOM.PL.M stāst-**i** uzrakstī-t-**i**. ir PVB.write-PST.PP-NOM.PL.M story-nom.pl be.prs.3 [mizojot kartupeļus, lasot mellenes, ravējot, ejot vienkārši no punkta A uz punktu в.] 'How many nice and unusual stories have been written [while peeling

potatoes, picking blueberries, weeding, or simply going from point A to point B.]'

(18) Lithuanian (LiLa)

Kiek	žavi- ų	ir	ypating- ų
how.much	nice-gen.pl	and	unusual-gen.pl
apsakym- ų	parašy-t- a		
story-gen.pl	pvb.write-i	PST.PP-NA	
[skutant bulves,	renkant mėlynes	s, ravint,	paprasčiausiai einant iš taško
А i taška в].			

'How many nice and unusual stories have been written [while peeling potatoes, picking blueberries, weeding, or simply going from point A to point B.]'

When a quantifier is used with a genitive singular in Latvian, the participle usually has the default ending masculine singular. However, with a noun phrase in the genitive plural, the participle in a passive construction most often shows agreement in number and gender. This can be seen in (19): the noun $s\bar{u}dz\bar{t}ba$ 'complaint' is feminine and appears in the clause in genitive plural. The passive participle is marked for feminine and plural in agreement with this noun, but has nominative marking as required by the construction.

(19)	Latvian					
	Ļoti	daudz	sūdzīb-	u	tika	
	very	much	complai	nt(f)-gen.pl	AUX.	PST.3
	iesnieg-t- c	ıs	LR	Izglītības		ministrijā,
	lodge-рsт	.PP-NOM.PL.F	LR	education.gen.s	G	ministry.LOC.SG
	par	to,	ka			
	about	DEM.ACC.SG	that			
	'Very mai	ny complaints	s were lo	dged at the Latvi	an M	linistry of Edu-
	cation abo	out []'				

Thus, in both languages we find arguments that have only one of two morphological subject features (nominative or agreement), as well as arguments which have neither. To the latter category we may add complement clauses and infinitives. Such verbal arguments may express the theme, for example, of verbs of saying or planning. They have the same syntactic function as nominalizations, which trigger agreement. Compare (20) with an infinitive and (21) with a noun.

(20) Latvian	(LVK2018)

Pirmajā	posmā	ir	plāno-t-s
first.loc.sg.def	stage.LOC.SG	be.prs.3	plan-pst.pp-nA
rekonstruē-t	esošās		ēkas
reconstruct-INF	existing.ACC.PI	L.F.DEF	building.ACC.PL
'In the first stage i t	t is planned to re	econstruct t	he existing buildings.'

(21)	Tiek	plāno-t-a	ēkas	vienstāva
	AUX.PRS.3	plan-pst.pp-sg.f	building.gen.sg	one-storey
	daļas	jumta	rekonstrukcija	
	part.gen.sg	roof.gen.sg	reconstruction(F).NC	M.SG
	'The reconstr	uction of the roof of t	the one-storey part of	the building
	is being planı	ned.'		

Instead of, or in addition to, categorizing passive constructions according to the presence vs. absence of a subject, it is useful to distinguish constructions according to transitivity. Verbs such as Latvian *plānot* 'plan', which allow both verbal complements and nominal, accusative-marked, direct objects, are transitive. All examples given above with a quantified genitive noun phrase likewise contained transitive verbs. In all these instances the 'doubtful' subject (lacking one or both morphological characteristics of subjects) alternates with a canonical subject. A bit different is the case of Lithuanian verbs with a lexical genitive complement which does not alternate with an accusative. As mentioned above, these verbs are also considered transitive in grammars of Lithuanian.

We are not aware of a difference, with respect to the passive, between monotransitive and ditransitive verbs in Latvian or Lithuanian. Therefore, we propose to distinguish only between transitive and intransitive verbs. Intransitive verbs may be further classified according to the number and the forms of their arguments. In Baltic, not all intransitive verbs have a nominative subject (in the active). Those that don't, seem to defy passivization, while monovalent verbs with a nominative subject in their argument structure are often found in subjectless passives. We may establish the following correspondences between case frames and the syntactic types of Table 1 above:

- (22) (a) Verbs with a nominative subject and an accusative object in their argument structure form passives of Type ii (and i in Lithuanian).
 - (b) Verbs with a nominative subject in their argument structure form passives of Type iii (and iv in Lithuanian).

Note that (22b) includes transitive as well as intransitive verbs and says nothing about other arguments that may be present in the construction.

Additional parameters for categorizing Baltic passive constructions with a subject are word order and definiteness. We have already seen (for example, in (16b) vs. (16c) above) that indefinite subjects usually follow the verb, while definite subjects precede it. We have found that passives with indefinite nominative subjects are used in construction types which are typical for subjectless passives. An example is the cumulative construction (Section 6.3) and other listings of activities.

2.4. Actionality and aspect

One of the defining features of the basic passive according to Keenan & Dryer (2007) was that the verb expresses an action. They formulate the following cross-linguistic generalization:

G-2.2: If a language has passives of stative verbs (eg. *lack, have,* etc.) then it has passives of verbs denoting events. (Keenan & Dryer 2007, 331)

The Baltic languages comply with this generalization. Passives of stative verbs may be less common in Latvian, but this is probably a side

effect of other restrictions (no passive without a nominative subject in the argument structure, no passive with certain experiencer verbs, no passive of reflexive verbs).

Two further generalizations by Keenan & Dryer (2007) are interesting for a comparison of Latvian and Lithuanian:

G-3: Languages with basic passives commonly have more than one formally distinct passive construction. (Keenan & Dryer 2007, 340)

G-5: If a language has two or more basic passives they are likely to differ semantically with respect to the aspect ranges they cover. (Keenan & Dryer 2007, 340)

In correspondence with Keenan & Dryer's G-3 we find two different morphological types of passive in both languages: In Latvian, the difference is in the choice of auxiliary ($b\bar{u}t$ 'be' vs. *tikt* 'get, become'), in Lithuanian in the choice of participle (*t*-participle vs. *m*-participle); see Section 2.1 above. Corresponding to G-5, these constructions indeed differ with respect to aspect, if 'aspect' is understood in a broad sense, but they do so in a different way.

In Latvian, the two constructions are divided with respect to actionality: the passive with *tikt* is mainly used for an actional, dynamic passive, while the passive with $b\bar{u}t$ is used in stative passive constructions. In line with this, the two constructions are associated with particular aspectual classes of verbs, such that the actional passive is found more often with atelic verbs and the stative passive as a resultative with telic verbs (see Section 5), but this is no absolute rule: both construction types are used with a broad range of verbs.

In Lithuanian, *m*-passives are always dynamic (actional) regardless of the actionality class of the input verb while *t*-passives, which may also be formed of different verbs in terms of aspect and actionality, can be both dynamic and stative (see Section 5 for details). Lithuanian may thus be a better illustration for Keenan & Dryer's generalizations.

A congruence between the Lithuanian *m*-passive and the Latvian passive with *tikt* is most often found in the present tense, when describing an activity or process going on at reference time, or a situation occurring habitually, see (23a, b). Examples from the parallel corpus LiLa:5

(23a) Latvian			
Ostā	tiek	krāso-t-i	kuģi.
harbour.loc.sg	AUX.PRS.3	paint-рรт.рр-рг.м	ship.nom.pl
(23b) Lithuanian			
Uoste	daž-o-m-i	laivai.	
harbour.loc.sg	paint-prs-pp-	-pl.m ship.nom.pl	
'Ships are (being)	painted in the	harbour.'	

In the past tense, on the other hand, aspect and the actionality of the verb play an important role for the choice of passive construction in Lithuanian, but not in Latvian. Lithuanian uses the *m*-passive in the past mostly for atelic processes and activities, while with telic verbs the *t*-participle is preferred. As Holvoet (2001b, 165) observed, this leads to a homonymy of stative and dynamic passive in Lithuanian, where Latvian makes this distinction by the choice of auxiliary. The choice between the two morphological constructions in the past tense in each language is triggered also by other factors, so that it is difficult to establish general rules for when Latvian *tikt* + *t*-participle. Some tendencies will be shown in Sections below dealing with individual types of construction.

In both languages, the dynamic passive is younger than the stative passive. Its development can be traced in written documents from the 16th century and later (see Ambrazas 1990, 191–192 for the spread of the dynamic passive in Lithuanian, and Veidemane 2002, 419–422 for Latvian; a summary is given in Nau & Holvoet 2015, 10).

2.5. Parameters that distinguish members of the Passive Family

The individual morphological, syntactic, and semantic divisions reviewed in the above sections are not sufficient on their own to establish different types of constructions. Rather, such types arise as clusters of several such features. Features mentioned in the above discussions mostly concerned the form of construction. They are listed in Table 2:

⁵ Here and further on, examples given in both Latvian and Lithuanian from the parallel corpus LiLa are translated only once into English if they are semantically fully equivalent.

Parameter	Value
Participle	<i>t</i> - (PST.PP) or <i>m</i> - (PRS.PP)
Agreement	number and gender vs. none/default; agreement in case other than nominative
Auxiliary	'be', 'become/get', other, no auxiliary
Agent phrase	present vs. absent; possible vs. impossible
Subject	canonical subject (nominative, agreement), other subject, no subject
Argument structure	transitive vs. intransitive verb; promoted vs. non-promoted arguments
Semantic role (subject)	patient, theme, other
Definiteness (subject)	subject definite, specific, non-specific; individuated, non-individuated
Word order	position of the subject: preceding or following the verb; position of the verb relative to other arguments and adjuncts

Table 2. Formal parameters that distinguish passive constructions

In Section 2.4 we turned to semantic features of the construction (actional vs. stative passive) as well as the verbs (for example, telic, atelic). Another important facet may be semantic features of the demoted actor—for example, it is cross-linguistically common that impersonal passives imply a human (generic) actor (Frajzyngier 1982). As we expand our investigation to constructions that are not purely passive, another parameter is the main meaning or function of the construction, which may belong to the temporal, modal, or evidential sphere. Finally, the overall frequency of a construction may be of importance, as well as its connection to specific registers, though it is often impossible to give reliable numbers for the occurrence of a certain construction in corpora.

Parameter	Value or question
Actionality	actional (dynamic) versus stative passive
Aspectuality (verbs)	Is the construction used only or mostly with verbs of certain classes, such as telic vs. atelic verbs; pro- cess vs. state; Vendler's classes; other?
Features of the demoted actor	Is the construction restricted to situations where the underlying actor has one or more of the following characteristics: human, definite, specific, indefinite, plural, maybe other? If there is no restriction, are there preferences? Does the construction imply such characteristics of the actor?
Meaning of the construction	'pure passive' vs. expression of temporal, aspectual, modal or evidential meanings, such as: resultative, habitual, experiential, deontic modality, indirect evidentiality, reportative
Frequency	frequent, well attested, rare
Registers	Is the construction (more) typical for certain registers?

Table 3. Parameters of meaning, function and usage

In the following sections we will describe several types of constructions that can be distinguished by these parameters.

3. A typical basic passive: Latvian constructions with *tikt* and *t*-participle

The construction with the auxiliary *tikt* and a *t*-participle is highly grammaticalized and frequent in contemporary Latvian. This is astonishing, as it seems to be a rather young construction, having gained ground only in the 19th century and spread during the 20th century. The lexical meanings of *tikt* include 'get to' and 'become'; for an overview of meanings of this verb and constructions in which it is used see Daugavet & Holvoet (2019, 113–120).

In Old Written Latvian we find a passive construction with the auxiliary *tapt* or, less often, $k l \bar{u} t$, both meaning 'become'. This construction largely reflects the German passive with the auxiliary werden 'become'. As the authors of Old Written Latvian were native speakers of German and the construction is (almost) not found in folk songs, it is probable that it arose as a calque. This passive construction was most frequent in the Bible translations of 1689 and 1739 (Veidemane 2002, 416). Veidemane gives figures for the occurrence of the construction in 20,000-word samples of the two Bible translations and two texts from the beginning of the 19th century, which sum up to 563 occurrences in 80,000 words, thus 7037.5 per million. In the second half of the 19th century, the auxiliary tikt starts to appear as a competitor to *tapt*. At the same time, the frequency of the construction (with all three auxiliaries together) drops drastically: in four samples of texts written by native speakers of Latvian in the second half of the 19th century, Veidemane found 172 tokens in 80,000 words, thus 2150 per million (Veidemane 2002, 416). In the course of the 20th century, tikt becomes the only regular auxiliary for dynamic passives, while *tapt* is now archaic and found only in fiction as a stylistically marked variant. With the change of auxiliary, the passive with 'become' has become a genuine Latvian construction, and its frequency seems to be still on the rise.

Endzelin (1923, 764), whose grammar reflects the situation at the beginning of the 20th century, states that the construction with the auxiliary $b\bar{u}t$ 'be' is more common as a passive than the one with an auxiliary 'become'. One hundred years later, the situation is reversed. In the balanced corpus LVK2018, the combination of $b\bar{u}t$ and an immediately following past passive participle has a frequency of 1811.1 per million, and this combination is not always a passive construction. However, the combination of *tikt* and an immediately following past passive participle has a frequency of 3056.9 per million (37567 tokens), and it is likely that almost all instances of this combination represent the passive with *tikt*. In a random sample of 500 tokens of *tikt* PST.PP drawn from LVK2018, all observations represented the passive construction.

In another random sample of 250 observations of the word form *tika* (third person past tense of *tikt*), 235 (94%) were examples of the passive construction—this is remarkable, given that the verb *tikt* has several other functions. Furthermore, in 229 of these 235 examples the participle immediately followed the auxiliary (*tika* PST.PP), in only one instance it

preceded it (PST.PP *tika*), and in 5 instances the two words were separated by an adverb (*tika* ADV PST.PP). This shows a very high cohesiveness of the construction *tikt* PST.PP and may be another reason why constructions with an agent phrase in the genitive or with the preposition *no* are so rare: these elements would split the two parts of the periphrastic verb form. In the largest Latvian corpus lvTenTen14, 18 occurrences of an agent phrase with no 'of, from' in the position between the auxiliary tikt and the past passive participle were found (0.03 per million). More than half (N = 10) came from a religious context, which mirrors the language of the earlier Bible translations and is a special register (viss tiek no Dieva dots 'everything is given by God'; Jēzus tika no Sātana kārdināts 'Jesus was tempted by Satan'). Some tokens came from sources where it was not clear whether the authors were native speakers of Latvian. However, a few remaining observations show that a passive of Type i is possible in contemporary Latvian, though extremely rare. Example (24) comes from a speech of a Latvian native speaker (who also was known as the author of poems and song texts) in parliament.

(24) Latvian (lvTenTen14)

Ja	nu	beidzot	šāds	pagaidu	likums	
if	now	finally	such.nom.sg.м	interim	law.nom.sg	
tiek		no	Saeimas	atcel-t-s,		
AUX.PRS	5.3	from	Saeima.gen.sg	abolish-ps:	Г.PP-SG.M	
[tad ceļ	as visa	lažādākie n	evēlami sarežģījumi i j	privātās ties	ībās,	
i valsts	dzīvē	vispārīgi.]				
'If now such an interim law is finally repealed by the Saeima,						
[all kinds of unwanted complications arise both in private rights						
and in t	he sta	te's life in g	general.]'			

Similarly rare and mostly found in religious texts are agent phrases in the genitive without preposition (*Jēzus tika Jāņa kristīts* 'Jesus was baptized by John', *tika velna kārdināts* 'was tempted by the devil'). In the overwhelming majority of uses, there is no agent phrase in a passive construction with the auxiliary *tikt*. The deleted actor is typically human, though non-human actors are possible with transitive verbs. In the basic passive, the deleted actor is most often indefinite, an individual or group of persons unknown or not specified.

The corpus LVK2018 allows the comparison of usage across registers. The results for the sample of 500 instances of *tikt* PST.PP are as may be

expected for a European passive in written language: it is relatively more frequent in academic prose and press texts and (much) less frequent in fiction.

Register	N	%	% of register in the corpus
PRESS	334	66.8	57.42
FICTION	25	5.0	20.64
ACADEMIC	87	17.4	10.05
LAW	31	6.2	7.47
PARLIAMENT	15	3.0	2.20
OTHER	8	1.6	2.15
	500	100%	100%

 Table 4. Latvian passive with tikt across registers

The overwhelming majority of examples are in third person. Of the other persons, only first person singular is found 4 times (1 in present and 3 in past tense). The construction is used most often with the auxiliary in simple tense forms (present > past > future).

Form	absolute	%
PRS	219	43.8
PST	173	34.6
FUT	68	13.6
PST.PA	11	2.2
IRR	10	2.0
EVI	2	0.4
INF	17	3.4
all	500	100

Table 5. Tense and mood forms of tikt in the sample

The lexical verbs found in this construction belong to various classes. Both telic and atelic verbs are used.

The great majority of constructions in the sample contains a nominative subject (473 of $500 = 94.6\%)^6$ and thus corresponds to the basic passive (Type ii). Most of the constructions without a nominative subject contain a clause or infinitive instead. As argued above, these should also be counted as subjectful passives. The sample contains no example of a passive from an intransitive verb, which shows that these are relatively rare with *tikt*, though they do exist (see Section 6).

The nominative subject appears before the verb in 266 clauses and follows the verb in 207 clauses, which shows the flexibility of Latvian word order and its importance for information structure. In examples where the subject follows the verb, there is often another argument or an adverbial of place or time preceding the verb, expressed by a noun phrase in the locative or dative or by a prepositional phrase. Example (25) shows a preverbal subject that is the topic; it also shows the contrast between the construction with $b\bar{u}t$ 'be' with perfect or resultative meaning (see Section 5.1) and the passive with *tikt* in past and present tense with habitual meaning.

(25) Latvian (LVK2018)

Šī		metode		ir	aprakstī-t-a
DEM.NOM.S	G.F	method.noм	.SG	be.prs.3	describe-pst.pp-sg.f
jau	sen.	Τā		regulāri	tika
already	long	DEM.NOM	.SG.F	regularly	AUX.PST.3
lieto-t-a		agrāk	un	dažviet	tiek
use-PST.PP	-SG.F	earlier	and	some.plac	e AUX.PRS.3
izmanto-t	-a	joprojām.			
use-PST.PP	-SG.F	still.			

'This method **has been described** for a long time. It **was** regularly **applied** in earlier times and **is** still **used** in some places.'

When the subject follows the verb, it is usually not the topic but belongs to the rheme. An idiomatic English translation most often will use the active voice and the word order differs (26), or the topic element has to be made the subject of a passive construction (27).

⁶ This includes two instances where first person singular is expressed by agreement marking only.

(26)	Latvian (Lv	к2018)		
	Tieši	tāpēc	Alfonam	tiek
	exactly	therefore	Alfons.dat.sg	AUX.PRS.3
	meklē-t-s		draugs.	
	search-pst.	.PP-SG.M	friend.nom.sg	
	'That is wh	y they are l	ooking for a friend for	Alfons.' ('Alfons' is topic)

(27) Latvian (LVK2018) Vinam tika veik-t-a

Viņamtikaveik-t-aoperācija.3.SG.DAT.MAUX.PST.3carry_out-PST.PP-SG.Foperation.NOM.SG'He was operated on.' (literally: 'to him an operation was carried out';'he' is topic)

With a subject that is not a topic, and is indefinite and not individuated, as in (28), the construction is similar to an impersonal passive. We call such subjects 'weak'. With weak subjects and in subjectless passives, the deleted actor is most typically either generic, as in (28), or a known individual (see Section 6).

(28) Latvian (LVK2018)

[Vasara sākas ar vairums pļavu augu uzziedēšanu.] Tiek pļau-t-s siens. AUX.PRS.3 mow-PST.PP-SG.M hay(M).NOM.SG '[Summer begins with the blossoming of the majority of grassland plants.] Hay is made / People make hay.'

The undergoer of a transitive verb may also be deleted, resulting in a passive construction of Type iii, as in (29). The participle takes the non-agreement ending.

(29) Latvian (LVK2018)
 [Tā vietā, lai tiktu risināti šie emocionālie jautājumi,]
 tiek ēs-t-s.
 AUX.PRS.3 eat-PST.PP-NA
 '[Instead of solving these emotional questions] people eat.'

For passive constructions with intransitive verbs and the auxiliary *tikt* see Section 6.

The characteristic features of the typical (basic) passive with *tikt* are summarized in Table 6.

Feature	Value
Participle	PST.PP
Auxiliary	<i>tikt</i> 'become/get'
Subject	> 90% nominative subject
Agent	not expressed; some rare examples with agent phrase in genitive or prepositional phrase (stylistically marked)
Meaning	mostly dynamic passive
Verbs (transitivity)	transitive; more rarely intransitive
Verbs (semantic)	all kinds
Actor	mostly human, mostly indefinite, unspecific
Frequency	high; probably the most frequent passive construc- tion in Latvian
Word order	sv and vs about equal
Register	all; slightly preferred in press and academic prose; relatively disfavoured in fiction

 Table 6. Profile of the Latvian passive with tikt + PST.PP

4. Constructions with the *m*-participle in Lithuanian and Latvian

4.1. Pure passives in Lithuanian: m- vs. t-passive

While passive constructions with an auxiliary 'become' are found only in Latvian, the regular use of the *m*-participle in pure passive constructions is a Lithuanian innovation (see Ambrazas 1990, 191–192 for a short history). In this section we give a short insight of its contemporary use, compared to the passive with the *t*-participle. Unless otherwise stated, all examples in this section are from the corpus LithuanianWaC v2, from which we draw Sample 1 and Sample 2 for closer inspection and quantitative analyses, as explained in the Introduction. Though the *m*-passive is mostly used by imperfective predicates (in 78% of the instances according to Geniušienė 2016, 139), it may be formed from verbs of all aspectual classes. As was mentioned before, *m*-passives are always dynamic (actional). While the *t*-participle entails anteriority, the *m*-participle either expresses 'simultaneity or lack of discrete location in time' (Wiemer 2006b, 276). *m*-passives are predominantly used in the present tense. Our analysis of *m*-passives without auxiliary showed that in the absolute majority of cases a present tense auxiliary can be inserted. In the table below we give figures from Geniušienė (2016) and from our Sample 1 (for details about data selection and method see Introduction).

	Geniušienė (201	Sample 1	
Tense	Transitive verbs	Non-transitive verbs	(LithuanianWaC v2)
No auxiliary	_	_	71%
Present	70%	83%	11.2%
Past simple	23%	12%	13.5%
Past frequentative	2%	3%	0.7%
Future	5%	2%	3.6%
Total	100% (1,160)	100% (301)	100% (303)

Table 7. m-passives and the category of tense in Lithuanian

As the absence of the auxiliary with an *m*-passive mostly equals its use in the present tense, the ratio of present tense uses amount to more than 80% of all examples in our sample. Geniušiene's study showed similar results: with transitive and non-transitive verbs the reported incidence of *m*-passives in present tense is 70% and 83% respectively.

With respect to tense (especially present and past), the *m*-passive differs clearly from the *t*-passive, as can be seen when comparing Table 7 with Table 8.

⁷ Geniušienė gives no figures for the ratio of passives with omitted auxiliary in her data. It is therefore unclear whether all cases of omitted auxiliary were automatically counted as present tense uses or whether they were assigned to respective tense forms according to the meaning.

	Geniušienė (201	- Sample 1		
Tense	Transitive verbs	Non-transitive verbs	(LithuanianWaC v2)	
No auxiliary	_	_	43.8%	
Present	59%	67%	9.1%	
Past simple	37%	31%	40.7%	
Future	3%	2%	6.4%	
Total	100% ⁸ (3,580)	100% (289)	100% (219)	

Table 8. t-passives and the category of tense in Lithuanian

In present tense the *m*-passive is used in a habitual-generic sense (30) or in order to describe an ongoing activity or process (31). In the latter case it often has the meaning of progressive aspect.

Dažnai	naudoj-a-m-	as vie	enas		kabelis,	
often	use-prs-pp-sg	.m on	e.nom.s	G.M	cable(м)	.NOM.SG
prie	kurio	prijun	g-t-i		visi	
to	which.gen.sg	conne	ct-pst.pi	P-PL.M	all.nc	OM.PL.M
kompiute	riai.					
computer	r(m).nom.pl					
'Often or	ie cable is used	l which all	comput	ers are	connecte	d to.'
kai	verki-a-nt-is		ar	kitaip	,	savo
when	cry-prs-pa-no	DM.SG.M	or	other	wise	RPOSS
poreikius	reiški-a-n	at-is		vaika	S	yra
need.Acc	.pl express-p	RS-PA-NON	A.SG.M	child(m).nom.s	G be.prs.3
tėvų	igno	oruoj-a-m	-as,	stabo	d-o-m-as	
parent.GE	EN.PL igno	re-prs-pp-	SG.M	stop-prs-pp-sg.m		
ar	netgi bau	dži-a-m-o	as			
or	even pun	ish-prs-pp	-SG.M			
'when a c	child who is cry	ing or othe	erwise e	xpressi	ng its nee	ds is (cons-
tantly) b	eing ignored, s	stopped of	r even p	unishe	d by its p	oarents'
	often prie to kompiute 'Often on kai when poreikius need.ACC tėvų parent.GE ar or 'when a co	often use-PRS-PP-SG prie kurio to which.GEN.SG kompiuteriai. computer(M).NOM.PL 'Often one cable is used kai verki-a-nt-is when cry-PRS-PA-NC poreikius reiški-a-m need.ACC.PL express-P tėvų igno parent.GEN.PL igno ar netgi bau or even pun 'when a child who is cry	oftenuse-PRS-PP-SG.Mon $prie$ $kurio$ $prijun$ towhich.GEN.SGconner $kompiuteriai.$ $computer(M).NOM.PL$ 'Often one cable is used which all'Often one cable is used which all kai $verki-a-nt-is$ when $cry-PRS-PA-NOM.SG.M$ $poreikius$ $reiški-a-nt-is$ need.ACC.PLexpress-PRS-PA-NOM $tevy$ $tevy$ ignoruoj-a-mparent.GEN.PLignore-PRS-PP- ar $netgi$ $baudži-a-m-c$ orevenpunish-PRS-PP'when a child who is crying or other	oftenuse-PRS-PP-SG.Mone.NOM.Spriekurioprijung-t-itowhich.GEN.SGconnect-PST.PSkompiuteriai.computer(M).NOM.PL'Often one cable is used which all computkaiverki-a-nt-isarwhencry-PRS-PA-NOM.SG.Morporeikiusreiški-a-nt-isneed.ACC.PLexpress-PRS-PA-NOM.SG.Mtėvųignoruoj-a-m-as,parent.GEN.PLignore-PRS-PP-SG.Marnetgibaudži-a-m-asorevenpunish-PRS-PP-SG.M'when a child who is crying or otherwise end	oftenuse-PRS-PP-SG.MONE.NOM.SG.Mpriekurioprijung-t-itowhich.GEN.SGconnect-PST.PP-PL.Mkompiuteriai.computeriai.computer(M).NOM.PL'Often one cable is used which all computers are'Mainverki-a-nt-isarkaiverki-a-nt-isarkaireiški-a-nt-isvaikaneed.ACC.PLexpress-PRS-PA-NOM.SG.Motherporeikiusreiški-a-nt-isvaikaneed.ACC.PLexpress-PRS-PA-NOM.SG.Mchild(tévųignoruoj-a-m-as,stabeparent.GEN.PLignore-PRS-PP-SG.Mstop-ararnetgibaudži-a-m-asororevenpunish-PRS-PP-SG.M'when a child who is crying or otherwise expression	oftenuse-PRS-PP-SG.Mone.NOM.SG.Mcable(M)priekurioprijung-t-ivisitowhich.GEN.SGconnect-PST.PP-PL.Mall.NCkompiuteriai.computer(M).NOM.PL'Often one cable is used which all computers are connected'Often one cable is used which all computers are connectedkaiverki-a-nt-isarwhencry-PRS-PA-NOM.SG.Morotherwiseporeikiusreiški-a-nt-isneed.ACC.PLexpress-PRS-PA-NOM.SG.Mchild(M).NOM.Stévųignoruoj-a-m-as,stabd-o-m-asparent.GEN.PLignore-PRS-PP-SG.Mstop-PRS-PP-SG.M

⁸ Actually, the figures in the column of Transitive verbs sum up to 101%, so there must be a mistake in Geniušienė 2016, 141, table 5.8.

The *m*-passive is often used in various procedural texts (legal documents, rules, instructions, descriptions of how a method works, how things are (being) done etc. (see also 4.3.1).

(32) [Murray'aus metodo esmė tokia:]
iš pradžių įraš-o-m-as 15 minučių
first record-PRS-PP-SG.M 15 minute.GEN.PL
trukmės sutuoktinių pokalbis.
duration.GEN.SG spouse.GEN.PL talk(M).NOM.SG
'[The essence of Murray's method is the following:] first a 15 minutes'
talk of a couple is recorded.'

Geniušienė & Nedjalkov (1988, 369–370) call the present passive participle 'imperfective'. Indeed, when a perfective verb is used in the present passive participle form, it gets an imperfective (habitual) reading (see ex. (32), and ex. (33) with past tense auxiliary).

(33)	Buvo	užpuldin	ėj-a-m-i	vi	ietiniai
	be.pst.3	attack-prs	-PP-PL.M	na	ative.nom.pl.m
	indėnai,		kurie		buvo
	American(м)	.NOM.PL	who.nom	A.PL.M	be.pst.3
	išstumi-a-n	ımi-a-m-i		gimtųjı	ų
	push_out-pr	S-PP-PL.M	from	native.	GEN.PL.F.DEF
	žemių.				
	land.GEN.PL				
	'Native Ame	ricans were	(constant	ly) being	g attacked, they were being
	pushed out	of their nat	ive lands.'		

In (33) the first *m*-passive is formed from a verb with the iterative suffix *-inė*- which imperfectivizes the prefixed base verb *užpulti* 'attack'. The second passive predicate does not have such a suffix, but because it is used in the present passive participle form it also gets an imperfective reading, implying that the pushing out of Native Americans from their lands was a gradual process consisting of many recurrent events. Geniušienė (2016, 42) says that when a past tense auxiliary is used with a present passive participle of a perfective verb, it expresses 'an iterative mode of action'.

Analyzing the data we noticed that in texts describing historical facts in a chronological order *m*-passives (with covert present tense auxiliary) are sometimes used instead of *t*-passives (with covert past tense auxiliary). This use has an affinity to historic or narrative present, cf. (34). (34) Petras čižikas gimė 1944 m. mažažemio valstiečio šeimoje. <...> 1971 m. įstojo į Vilniaus valstybinio universiteto teisės fakultetą. Apkaltintas (PST.PP) šmeižikiškos literatūros, t.y. "LKB Kronikos Nr. 3" dauginimu, 1973 m. suimamas (PRS.PP), pripažįstamas (PRS.PP) nepakaltinamu ir patalpinamas (PRS.PP) į Černiachovskio spec. psichiatrinę ligoninę. Ten iškalėjęs 4 metus, perkeliamas (PRS.PP) į N. Vilnios respublikinę psichiatrinę ligoninę. 1977 m. pripažintas (PST.PP) sveiku.

'Petras Čižikas was born in 1944 in a family of a smallholder. <...> In 1971 he entered the Faculty of Law of Vilnius State University. Accused of spreading slanderous literature, that is "The Chronicle of the Lithuanian Catholic Church No. 3", in 1973 **he is arrested**, **declared** unsound of mind and **placed** in Černiachovskis' psychiatric hospital. After for 4 years of imprisonment, he **is moved** to the psychiatric hospital of Naujoji Vilnia. In 1977 he **was declared** healthy.'

All the highlighted *m*-passive predicates are formed from perfective verbs, and *t*-passives with past tense auxiliaries could have been used instead. The use of *m*-passives in such contexts seems to create a dramatic effect as if the events unfolded before the eyes of the reader.

m-passives with overt oblique agents are quite rare: according to Geniušienė (2016, 147) they constitute only 3% out of 1,540 passive constructions (with *t*-passives, the incidence of overt agents is 7.9%). Another important generalization is that with *m*-passives the referent of the agent (either overt or covert) is mostly generic or indefinite non-specific, while *t*-passives are predominantly used with specific (known or unknown) agents (Geniušienė 2016, 147, 276; cf. also Lindström *et al.* 2020, this volume).

As shown in Table 8 above, with *t*-passives the auxiliary is less often omitted than with *m*-participles (43.8% vs. 71% in our Sample 1). Interestingly, in about half of the cases with omitted auxiliary, a past tense auxiliary can be inserted. Typically, these are cases where the sentence contains an explicit past-tense reference (an adverb, a temporal subordinate clause etc.). All such *t*-passives are dynamic (actional), cf. (35).

(35) Lithuanian

Taivane	spartėjo	demokr	ratėjimo
Taiwan.LOC	accelerate.ps	бт.3 democi	atization.GEN.SG
procesas.	1996 m.	pirmą	kartą
process.nom.sg	in_1996	first.acc.sg.м	time(м).ACC.SG
tiesiogiai	išrink-t-as	prezidentas	5.
directly	elect-pst.pp-sg.n	n president(M	и).nom.sg

'In Taiwan the process of democratization accelerated. In 1996 the president was directly elected for the first time.'

We looked through all the examples of omitted auxiliary with a *t*-passive in Sample 1 (see Table 8) and tried to distribute them either to present or past tense uses according to the meaning and context. The result was the following distribution of different tense forms: present tense 27.8%, past tense 56.2% and future tense 6.4%. About 9.6% of the examples were ambiguous between present and past tense reference (36).

1 1	T 1.1 1
(36)	Lithuanian
(J-)	

Mergina	teigė,	kad	anksčiau	niekada
girl.noм.sg	claim.pst.3	that	earlier	never
ginklo	nemačiusi,		nežinojo,	kad
weapon.gen	I.SG NEG.See.PST.	PA.NOM.SG.F	NEG.know.	рsт.3 that
jisai	užtaisy-t-as	ir n	et nesupr	ato,
it.nom.sg	load-pst.pp-sg.м	and e	ven NEG.un	derstand.pst.3
kaip	viskas	įvyko.		
how	everything.NOM	happen.	PST.3	
'The girl cla	imed that she had	never seen	the weapon b	efore, that she
didn't know	v that it was load	ed and that	she didn't eve	en understand

how everything happened.'

In (36) both forms of the auxiliary would be possible: *kad jis yra/buvo užtaisytas* 'that it is/was loaded'. As can be seen from Table 8, Geniušienë's figures show that the incidence of present-tense uses with *t*-passives is higher than of past-tense uses, but this may be due to the fact that all cases with omitted auxiliary were automatically counted as present-tense uses, as it is generally assumed that the passive auxiliary can only be omitted in present tense⁹ (cf. Geniušienė 2006, 30, Wiemer 2006b, 276). In our study we found that the auxiliary with a *t*-participle was rather often omitted in a past-tense context where it would be incorrect to assume omission of a present-tense auxiliary.

Lastly, we would like to comment on the overall frequency of passives based on the present and past passive participles. Previous research showed that predicates with *t*-participle and *m*-participle differ in frequency, ac-

⁹ Cf. also Geniušienė's statement: "In the past and future tenses the omission of the auxiliary verb is possible only with the second and subsequent predicates in a chain of verbs, where the auxiliary of the first verb is understood to be shared with the other verbs" (2016, 143).

counting for 72.6% and 27.4% of passive forms respectively (Geniušienė 2006, 30). These figures are based on data collected mainly from fiction texts. However, in our Sample 1, the ratio of *t*- and *m*-participles was 44% and 56% respectively, and in Sample 2, which served as a control sample, it was similar: 48.2% of *t*-participles and 51.8% of *m*-participles. The difference between Geniušienė's and our results indicates that the frequency of *m*- and *t*-passives may vary considerably in texts depending on the register.

4.2. Subject impersonals in Lithuanian

The literature on the Lithuanian passive mentions the possibility of forming impersonal passives of transitive verbs with retained accusative objects (Ambrazas *et al.* 2006, 661; Geniušienė 2006, 38, Geniušienė 2016, 121). Examples of *m*-participles in the non-agreement form are usually given to illustrate this construction, cf. (37).

(27)	Lithuanian	(cited from	Spraunienė	et al	2015 240)
(37)	Littiuaman	(chicu nom	opraument	<i>ci ui</i> .	2015, 340)

·		` `		0 0 1 /
	Į	Lietuvą	daugiausia	vež-a-m-a
	to	Lithuania.ACC	mostly	ship-prs-pp-na
	itin	mažos	tūrio	masės,
	very	little.gen.sg.f	volume.gen.sg	weight.gen.sg
	susispa	udžiančią	stiklo	vatą.
	compre	ssible.Acc.sg.f	glass.gen.sg	wool.acc.sg
	'Mostly	[,] compressible gla	ss wool (Acc) of v	very low volumetric weight
	is ship	ped to Lithuania.'		

Ambrazas (2006, 661) observes that such non-agreeing passives do not contain an agentive genitive. Geniušienė (2006, 45) says that she has found several attestations of such constructions in her corpus but that they are used very rarely. According to Geniušienė (2016, 121) the functional motivation for using such agentless subjectless passives of transitive verbs with non-promoted objects is 'to lend prominence to the action or the genericity of the agent'. Consequently, they exhibit the following formal and semantic features: the passive predicate is used in present tense, the non-promoted object occurs postverbally and a generic agent is implied (*ibid.*, 123). Wiemer (following Plungian) treats such constructions as 'subject impersonals' characterized by 'syntactic suppression' rather than demotion of the highest-ranking argument (Wiemer, forthcoming). A similar distinction between passive and impersonal voices is presented in Blevins (2003). Although Wiemer admits that "[i]n Lithuanian, subject impersonal and impersonal passive are practically indistinguishable" (Wiemer, forthcoming), cases with retained accusative objects like (37) could be regarded as subject impersonals *par excellence*. In a small corpus investigation¹⁰ we found that accusative objects are more likely to appear with one verb class, namely, unprefixed reflexive verbs. Passive forms of unprefixed reflexive forms are peculiar in that they can only be used in the non-agreement form—the agreeing passive is blocked by the word-final reflexive suffix. With some of these verbs the accusative seems to freely alternate with the nominative, cf. (38, 39).

(38) Lithuanian (ltTenTen14) *Taigi mezgasi diskusija*, so develop.PRS.3.RFL discussion.NOM.SG *aiškin-a-m-a-si santyki-ai*. clarify-PRS-PP-NA-RFL relation-NOM.PL 'So a discussion develops, relations are being clarified.'

(39) Lithuanian (DLKT)

/	(/			
	Dabar	šūviais	daugiausia	
	nowadays	shot.ins.pl	mostly	
	aiškin-a-m-a-si	turtinius	santy	vki- us .
	clarify-prs-pp-na-rfi	. proprietary.A	.cc.pl relati	on-ACC.PL
	'Nowadays people dea	al with proprietary	v relations with t	he help of shots.'
	(a closer translation v	with a passive cor	nstruction would	d be: 'Nowadays
	proprietary relation	ns are mostly bei	ng dealt with	by shots.')

In (40) the same passive form of the reflexive verb *rinktis* 'choose (for oneself)' is used twice, first with a promoted nominative subject, the second time with a non-promoted accusative object:

(40)	Lithua	anian (ltTenTen14)				
	Kuo	toliau,	tuo	labiau		
	the	further_away	the	more		
	yra	renk-a-m-	-a-si		aukštųjų	
	be.prs	.3 choose-pre	S-PP-NA-RI	FL	high.GEN.PL.F.D	EF
	techno	ologijų	specialy	b- ė	ir	mažiau
	techno	ology(f).gen.pl	speciali	ty-nom.	sg and	less

¹⁰ In the corpus.vdu.lt, a search for non-agreement passive forms of reflexive verbs was performed, CQL Vgpp--npnn-y-p, total number of results 42170, the first 8000 were looked through. Several examples with accusative objects were found, e.g. with *aiškintis* 'clarify', *rinktis* 'choose (for oneself)'. In order to get more examples, a search for passive forms of the two reflexive verbs, *aiškintis* and *rinktis* was performed in ltTenTen14.

renk-a-m-a-si	įprast- as	bendrosios
choose-prs-pp-na-r	RFL USUAl-ACC.PL.F	general.gen.sg.f.def
klinikinės	praktikos	specialyb- es .
clinical.GEN.SG	practise.gen.sg	speciality(F)-ACC.PL
'The further away th	he more one is inclin e	ed to choose a high techno-
logy speciality (NO	м) rather than to choo	se the usual general clinical
practice specialiti	es (ACC).'	

In order to get a clearer picture of the frequency of subject impersonals with non-prefixed reflexives, an investigation of the passive forms of the verbs *rinktis* 'choose (for oneself)' and *aiškintis* 'clarify' in the corpus ltTenTen14 was carried out. The results are presented in Table 9.

Table 9. Frequency of subject impersonals with accusative objects

verbal lexeme	rinktis 'choose'	aiškintis 'clarify'
Passives with nominative subjects	51.9% (276)	94.9% (186)
Passives with accusative objects	48.1 % (256)	5.1% (11)
Total	100% (532)	100% (197)

As evident from Table 9, subject impersonals with accusative objects from non-prefixed reflexives are by no means rare: they are well attested in the corpus data. However, their frequency with the two verbs is remarkably different: with *rinktis* 'choose (for oneself)' the accusative marking is nearly as frequent as the nominative, while with *aiškintis* 'clarify' the nominative marking prevails. We noticed also that the accusative objects can also be preverbal (topical), as in (41).

(41) Lithuanian (ltTenTen14)

Šią	įdomią			laiptų		rūš- į	
this.Acc.sg.F	interesti	ng.Acc.sg.f		stairs.gen.p	L	kind-Acc.so	G
renk-a-m-a-s	si	tais		atvejais		kuomet	
choose-prs-pr	P-NA-RFL	this.INS.PL.	М	case.INS.PL		when	
reikia	taupyti	erdvę.					
need.prs.3	save.INF	space.ACC.	SG				
····	.1.1.0.	1		1	1 .		,

This interesting kind of stairs is chosen when one needs to save space.

Our small investigation suggests that subject impersonals are spreading within the domain of reflexive verbs. More research is required though in

order to determine which factors govern the distribution of accusative vs. nominative in such constructions. Nevertheless, the data we have found is sufficient to include subject impersonal into the passive family of Lithuanian. The profile of this construction is given in Table 10.

Feature	Value
Participle	PRS.PP (occasionally PST.PP)
Auxiliary	'be', optional
Subject	non-promoted direct object alternates with nominative subject
Agent	not expressed
Meaning	present habitual
Verbs	transitive; mostly reflexives ¹¹
Tense	present
Actor	generic
Frequency	varies depending on the verbal lexeme
Word order	various
Register	media, academic etc.

Table 10. Profile of the Lithuanian Subject Impersonal

4.3. Generic and modal constructions with the *m*-participle

In both Latvian and Lithuanian, constructions with the m-participle may have a modal meaning, which may be more or less strongly associated with either possibility or necessity. In Lithuanian, this type is not clearly distinguishable from other predicative uses of the m-participle,

¹¹ More research is required in order to determine the lexical input of the subject impersonal.

and modal meanings seem to arise largely as implicatures in contexts favouring an interpretation of necessity or possibility. In Latvian, on the other hand, this type of construction is the only passive construction with the *m*-participle, and it is linked more closely to non-predicative uses of this participle than to other members of the passive family.

4.3.1. Lithuanian: from generic to modal

The type of construction which we consider in this section is characterized by the following features in Lithuanian:

- it contains the *m*-participle;
- it is found with both transitive and intransitive verbs, including reflexive verbs;
- the rules for agreement are the same as with the basic passive;
- the participle is used either alone or with a form of the auxiliary *būti* 'be';
- an agent phrase is not possible;
- the deleted actor has to be human;
- the meaning ranges from general statements about what people (tend to) do through vague modal meanings to interpretations as explicitly expressing necessity or possibility.

For a quantitative analysis we used our two samples from the corpus Lithuanian WaC v2. Sample 1 contains 339 clauses with an *m*-participle as predicate, and 38 (11.2%) observations represent the modal passive. In Sample 2 with 354 *m*-passives, 29 instances of the modal construction were identified (8.2%). These figures give only a rough idea about the frequency of the construction, because it was not always possible to determine the construction type of a particular construct.

The construction is used in statements about the observed behaviour of people in general, as in (42). It is neutral with respect to speaker inclusion.

(42) Lithuanian (DLKT)

Visdažniauat-si-skait-o-m-aPTCoften.COMPPVB-RFL-pay-PRS-PP-NAkreditokortelėmis.credit.GEN.SGcard.INS.PL'More and more often people pay with credit cards.'

The modal meaning that arises may be necessity (43) or possibility (44).

- (43) Lithuanian (DLKT) Likviduoj-a-nt banką, pirmiausia bank.Acc.sg first liquidate-prs-cvb at-si-skait-o-m-a su banko indėlininkais bank.gen.sg PVB-RFL-pay-PRS-PP-NA with depositors.INS.PL 'When liquidating a bank, the bank depositors are (to be) paid first.'
- (44) Lithuanian (DLKT)

Ap-si-kreči-a-m-a		per	maistą,
pvb-rfl-infect-prs-	PP-NA	through	food.acc.sg
vandenį,	neplautas		rankas.
water.Acc.sg	unwashed.	ACC.PL	hands.ACC.PL
'One may get infe	cted throug	h food, wat	er, unwashed hands.'

Note that the verb *apsikresti* 'get infected' can only be used in an *m*-passive with the possibility meaning. The necessity meaning is blocked due to the fact that the verb denotes an involuntary action.

To a large degree, it is the extralinguistic context that determines the modal interpretation of a construction with the *m*-participle. An important factor that triggers the necessity reading is register, more specifically the register-specific communicative function of the text. If (43) is part of a regulation about liquidating banks, it will be understood as a directive. We find the meaning of necessity therefore most often in registers such as laws and regulations (cf. Vladarskienė 2004, 71), and various kinds of instructions. The clearer the 'instructing' intention of the text is, and the greater the number of details given, the clearer the meaning of necessity appears to be. Examples (45) and (46) can hardly be understood as neutral descriptions of behaviour. Adverbial phrases specifying the manner or length or frequency of carrying out the action contribute to the modal (necessity) interpretation.

(45) Lithuanian (DLKT)

Korta	pild-o-m-a	tiksliai	ir
card.noм.sg	fill_in-prs-pp-sg.f	accurately	and
įskaitomai	spausdintinėmis	raidėmis.	
legibly	block.ins.pl	letters.ins.pl	
'The card is (to	be) filled in accurately	and legibly in blo	ock letters.'

(46) Lithuanian (DLKT)

Vonioje iš-būn-a-m-a	20–25 min.	kas trečią dieną,
-----------------------------	------------	-------------------

bath.LOC.SGPVB-be-PRS-PP-NA20-25 min.every_third_daygyd-o-m-a-si2-3 mėnesius.treat-PRS-PP-NA-RFL2-3 month.ACC.PL'You have to stay 20-25 min. in the bath every three days, and the treatment has to last 2-3 months.'

Two more specialized registers where the use of the *m*-participle for giving instructions seems to be highly conventionalized are sport instructions (47) and cooking recipes (48).

(47) Lithuanian (DLKT)

A	t-si-gul-a-m-a	a	nt nug	aros.	Kojos
Р	pvb-rfl-lie_down-prs-pp-nA		n back	k.GEN.SG	leg(f).nom.pl
S	su-lenk-t-os		kelius		
Р	pvb-bend-pst.pp-nom.pl.f		r knee.A	ACC.PL	
9	o laipsnių.				
9	o degrees.gen.p	L			
"1	You have to lie dow	n on vour ba	ck The legs	s are bent o	over the knees

'You have to lie down on your back. The legs are bent over the knees at a 90-degree angle.' (= 'Lie down on your back.')

(48) Lithuanian (DLKT)

Pa-sūd-o-m-a,	į-beri-a-m-a	pipirų	ir
рvb-salt-prs-pp-na	pvb-pour-prs-pp-na	pepper.gen.pl	and
verd-a-m-a	5 min. Su-ded-a-m-os	5	
cook-prs-pp-na	5 min. рvв-put_in-prs	-PP-PL.F	
midij-os	už-dary-t-omis	kriauklelėmis	
mussel(f)-nom.pl	pvb-close-pst.pp-ins.pl.f	shell(F).INS.PL	
ir lėtai	už-verd-a-m-a.		
and slowly	pvb-boil-prs-pp-na		

'Add salt, pour pepper in, and cook for 5 minutes. Put in the mussels with closed shells and slowly bring to a boil.'

The necessity meaning of *m*-passives in directives ('what you have to do') arises from the habitual-generic meaning ('what people usually do') which these forms often have in the present tense. A conceptual link between habitual and potential may give rise to a meaning of possibility: what is usually done can be done (49).

(49)	Bruknės	lapų	arbata	vartoj-a-m-a
	cow_berry.gen.sg	leaf.gen.pl	tea(F).NOM.SG	use-PRS-PP-SG.F
	serg-a-nt	cukralige.		
	be_ill-prs-cvb	diabetes.1NS		
	'Cow-berry leaf tea	i is used to treat di	abetes.' Implies: '	can be used'

In addition, there may be lexical cues that trigger a possibility reading. Here to mention are adverbs which indicate the feasibility of an action such as *greitai* 'quickly', *lengvai* 'easily', *sunkiai* 'with difficulty'.

(50) Lithuanian (DLKT)

Toks	namas	yra	labai	greitai
such.nom.sg.м	house(м).nom.s	G be-prs.3	very	quickly
pa-stat-o-m-as	ir ir	pasižymi		
рvв-build-prs-p	P-SG.M and	be_characteri	zed.prs.3	
geromis	šiluminėmis	savybėmis.		
good.ins.pl	thermal.INS.PL	property.INS.F	L	
'Such a house is	s (= can be) built v	very quickly ar	nd has good	d thermal
properties.'				

(51) Lithuanian (DLKT)

Tiesa,	šis	lobis	buv-o	
true	DEM.NOM.SG.M	treasure(м).nom.sg	be-pst.3	
lengvai	rand-a-m-as.			
easily	find-prs-pp-sg.M	I		
'True, this treasure was easy to find .' = 'could be easily found'				

Finally, particular lexical groups of verbs may be specialized for a particular modal meaning. The *m*-participles of verbs of perception are always understood in the meaning of possibility; their translation equivalents in English are adjectives such as *visible, audible.* Examples of such verbs are (*pa*)*matyti* 'see', *regėti* 'see', *pastebėti* 'notice', *išvysti* 'see', *girdėti* 'hear', *jausti* 'feel', *nujausti* 'anticipate', *įžvelgti* 'perceive', *suprasti* 'understand', *suvokti* 'realize', *užuosti* 'smell'. See examples (52) and (53).

(52) Lithuanian (DLKT) Žodis **buv-o**

Zouis	<i>0uv</i> -0	<i>VUS</i>	g11u-1-111-us.
word(м).nom.sg	be-pst.3	barely	hear-prs-pp-sg.m
'The word was bare	ely audible .'		

......

aird_i_m_as

(53) Lithuanian (DLKT)

Jupiteris	beveik	visą	nc	ıktį	bus
PN.NOM	almost	all.Acc.	sg ni	ght.Acc.sG	be.FUT.3
mat-o-m-as		Dvynių	žvaigždyr	ie.	
see-prs-pp-se	G.M	PN.GEN	constellat	ion.loc.sg	
'Jupiter will be visible in the constellation of Gemini almost all night.'					

It has to be noted that *m*-passives with adverbs describing feasibility of an action and *m*-passives derived from verbs of perception clearly fall

apart from the rest of the modal uses of *m*-participles in that they are used with an auxiliary, while in the rest of the modal passives the auxiliary is normally omitted (and only a present tense auxiliary may be used). If a past tense auxiliary were used in such examples as (43), the modal meaning would be lost, and the sentence would only have a modality-neutral meaning (i.e. refer to a past event). However, the use of a past tense auxiliary in (51) or (52) by no means cancels the modal meaning.

4.3.2. Latvian: two modal constructions

As stated above, Latvian constructions with an *m*-participle as the predicate are always modal, though the modal meaning may be vague. This specialization may be connected to the grammaticalization of another construction as a pure passive: the auxiliary *tikt* in combination with the past passive participle (see Section 3). The construction with *tikt* is also used in generic-habitual clauses where Lithuanian uses the *m*-participle (54).

(54)	Latvian (lvTenTen14)					
	Šī		tēja		tiek	lietota
	DEM.NO	M.SG.F	tee.no	M.SG	AUX.PRS.3	use.PST.PP.SG.F
	lai	nomāktu		apetīti.		
	to suppress.irr		appetite.	te.Acc.sg		
	'This tea is used to suppress appetite.'					

More typical in this function is the use of a third person active form (55).

(55)	Latvian (lvTenTen14)			
	visplašāk	pelašķu	tēju	lieto
	most_widely	yarrow.gen.pl	tea.Acc.sg	use.prs.3
	pret	saaukstēšanos		
	against cold.Acc.sg			
	'Yarrow tea is most widely used to treat a cold.'			

Examples (54) and (55) are neutral descriptions of habitual behaviour. A construction with the *m*-participle, though seemingly similar, always contains deontic modality, either possibility (56) or necessity (57).

(56)	Latvian (LVK2018)				
	Patlaban «Android»		ir	lietoj-am-a	
	currently	Android	be.prs.3	use-prs.pp-sg.f	
	tikai	mobilajos	tālruņ	ruņos.	
	only	mobile.loc.pl.м	ос.рг.м telephone.loc.pl		
	'At presen	t Android can be	used only in	n mobile phones.'	

(57)	Latvian (lvTenTen14)					
	Kardamons	lietoj-am-s	ļoti	mazos		
	cardamom.nom.sg	use-prs.pp-sg.M	very	small.loc.pl		
	daudzumos.					
	quantity.loc.pl					
	'Cardamom has to be used in very small doses.'					

At least from a synchronic point of view, in Latvian the modal meanings of the participle cannot be linked to a generic base meaning, but are conventionalized (grammaticalized). This conventionalization is also described in reference grammars of Latvian (MLLVG I, 645).

While in both languages we note the meanings of necessity and possibility, the contexts in which these meanings most typically arise only partially overlap. In Latvian, the impact of functional characteristics of registers may be smaller than in Lithuanian. The *m*-participle is not used in procedural texts, where the preferred forms are third person active (for example, in recipes) and second person imperative (for example, in sports instructions). The participle is however typical for legal texts (58). This is a parallel to Lithuanian, but also shows its stronger connection to obligation.

(58) Latvian (LVK2018)

Sastād-ot	mantoj	ium-a	sarakst-u,	atbilstoši
compile-сvв	inherit	ance-GEN.SG	list-acc.sg	accordingy
Civilproces-a		likum-am	rakst-ām	-s
Civil_process-ge	N.SG	law-dat.sg	write-prs.	PP-NOM.SG.M
akt-s.				
deed-noм.sg				

'When compiling an inventory of the estate, a deed **has to be drawn up** in compliance with the Civil law.'

As in Lithuanian, the meaning of possibility often, though not always, arises with adverbs that evaluate the feasibility of the activity (*viegli* 'simply', *grūti* 'hard').

Individual lexemes as well as lexical-semantic groups of verbs may show a preference for either necessity or possibility. As in Lithuanian, with verbs of perception the participle expresses possibility—this is the rule with involuntary perception (*redzams* 'visible', *dzirdams* 'audible') and a strong tendency with voluntary perception (*skatāms* 'to be looked at'). The *m*-participle of the verb *darīt*, on the other hand, is almost always used in the meaning 'is to do, has to be done', and not in the meaning 'doable' (59). In general, there is a correlation between agentivity and necessity: the more agentive verbs express necessity rather than possibility, and with less agentive verbs (with involuntary actors), possibility is the preferred reading.

(59)	Latvian (lvTenTen14)				
	Arī	režisori	zina,	kas	
	also	director.nom.pl	know.prs.3	what.nom	
	viņiem darāms.				
	3.DAT.PL do.prs.pp.sg.m				
	'The direc	tors also know what th	ney have to do.'	(Not: 'what they can do')	

Example (59) shows a typical pattern of the participle *darāms* 'to be done', where it is combined with the pronoun *kas* 'what', 'something' and an argument in the dative expressing the actor, or rather: the person for whom the activity is necessary. This dative is reminiscent of the 'dative of agent' in constructions with the gerundive in Latin (60).

(60)	Latin (cited from Taylor 2017, 72; glosses added)				
	urbs nobis delenda est				
	city.nom.sg 1pl.dat destroy.gdv.sg.f be.prs.3sc				
	'The city must be destroyed by us'; literal translation given by Taylor:				
	'The city is, for us, a needing-to-be-destroyed one.'				

In Latvian, the use of such a dative is however quite restricted. It is attested only with a few verbs and most often in combination with the pronoun kas 'what, something' as a subject, as in (59). Besides darīt 'do', it is mostly verbs of speaking that appear with a dative, most often sacīt 'say' (man ir kas sakāms 'I have something to say', 'I need to say something'), but also vaicāt 'ask', piebilst 'add'. Even more idiomatic are constructions with the *m*-participle of meklēt 'search' in either interrogative or negated clauses, as in (61). These constructions have an exact parallel in German and may have arisen as calques (German *Du hast hier nichts zu suchen*, literally 'you don't have anything to search here' = 'you have no reason for being here'; *Was hast du hier zu suchen*? literally 'What do you have to search here?' = 'What are you doing here?').

(61) Latvian (LVK2018)

Šeit	nu	tev	nekas	nav
here	PTC	2SG.DAT	nothing.noм	NEG.be.prs.3

meklējams! search.prs.pp.sg.m 'You have no business to be here!'

The modal construction with the *m*-participle is also found with intransitive verbs. According to Holvoet (2007, 51), this shows a further step in the grammaticalization of an impersonal modal construction, more precisely, of a construction expressing necessity, as he observes a narrowing of the potentially twofold meaning to necessity with intransitive verbs. Furthermore, he states that "at this stage, the construction is not copular anymore" (2007, 51). Some additions may be made to these important observations. Different kinds of intransitive verbs seem to differ with respect to the points raised by Holvoet (specialization to necessity and status as copular constructions). The intransitive verbs most frequently found in this construction are verbs of voluntary movement, especially iet 'go on foot', braukt 'go by transport', skriet 'run'. In the construction, these verbs however usually appear with an object raised to subject (as in 62), or with an element oscillating between object and adverbial, which may or may not be raised to subject, such as a phrase referring to the way (ejams garš ceļš 'one has to go (for) a long way'), the distance (ejams 8 km 'one has to go for 8 km'), the duration (ejams trīs stundas 'one has to go for three hours'), the direction, goal, or other types. A dative argument is often found in this type of construction.

(62) Latvian (lvTenTen14)

Nedēļu	pēc	šī		pasākuma	man
week.acc	after	DEM.GEN.S	G.M	event.gen.sg	1SG.DAT
skrienams	mans	3	pirmais	3	
run.prs.pp.sg.M	и ту.N	OM.SG.M	first.no	M.SG.M.DEF	
maratons		ar	mērķa		
marathon(м).N	IOM.SG	with	goal.G	EN.SG	
laiku	3:33.				
time.Acc.sg	3:33				
'A week after	this event	I have to r	un my fi	rst marathon with	1 a target
time of 3:33.'					

There are no examples in the corpora where the construction would express purely the necessity of carrying out the activity expressed by an intransitive verb, such as 'I have to go now', or 'I had to run to catch the bus'. Furthermore, the *m*-participles of the mentioned verbs of motion as well as of other intransitive verbs are often found in a predicative use which is not a passive construction, as the noun they relate to does not correspond to the object in an active construction; its semantic role is not patient, but path (63) or instrument.¹² In this case we rather have a copular construction, and the modal meaning usually is possibility.

(63)	Latvian (lvTenTen14)				
	Brīvības	ielas	veloceliņš	ir	
	PLN	street.gen.sg	cycle_lane.nom.sg	be.prs.3	
	forši	skrienams.			
	fine	run.prs.pp.sg.M			
	'The cycle-la	ne of Brīvības stree	t is fine to run along / fir	ne for running .'	

Here, the participles behave like predicative adjectives; they may be combined with other adjectives and appear in the comparative. They are also used attributively (*viegli skrienama taka* 'a path easy to run along'), but the predicative use is much more frequent. We may distinguish the copular construction as in (63) from the more verbal passive construction expressing necessity in (62), (61) and (57–59). The copular construction is found with further intransitive verbs that do not appear in the passive construction (64, 65).

(64)	Latvian (lvTenTen14)						
	tas	ir	ļoti	ērti			
	DEM.NOM.SG.M	be.prs.3	very	comfortably			
	guļams.						
	sleep.prs.pp.sg.m						
	(Talking about a children's pushchair:) 'It is very comfortable for						
	sleeping / to sleep in.'						
(65)	Latvian (lvTenTe	n14)					

Nemiers [...]navsmejams.anxiety.NOM.SGNEG.be.PRS.3laugh.PRS.PP.SG.M'Anxiety is not to be laughed about.'

To sum up, in Latvian two or more constructions may be distinguished where the *m*-participle is used as the predicate of a clause:

¹² The vehicle expressing the instrument of the verb *braukt* 'go by transport' may be the object of an active clause (*braukt mašīnu* 'drive a car'), but more often it is an oblique phrase (*braukt ar mašīnu* 'go by car').

A more passive-like construction where the subject corresponds to the patient of the verb; this construction has a modal meaning which may be either possibility or necessity, and is typical only for transitive verbs.

A subtype of the above or another type: a passive-like construction expressing necessity, where the person obliged or expected to carry out the action may be added in the dative. This type is found with agentive transitive and intransitive verbs, but seems to be lexically restricted and not fully conventionalized: It most often appears with the verb $dar\bar{t}t$ 'do', verbs of saying, and verbs of voluntary motion. Some uses are idiomatic. The construction is not always clearly distinguishable from the one described before and the following.

A copula construction where the subject can have various semantic roles, including patient, instrument, theme, path, and others. The participle behaves like an adjective: it may have the comparative suffix, or the negative prefix, and be combined with other adjectives. Both transitive and intransitive verbs are used in this construction, usually verbs characterized by low agentivity and volitionality of the actor, for example, verbs of involuntary perception. The modal meaning is often vague, or it is possibility rather than necessity. The participles that are primarily used in this and not the other construction tend to lexicalize.

4.3.3. Summary

We agree with Holvoet (2007, 51) that the modal meaning of *m*-participles is conventionalized only in Latvian, and that in Lithuanian one cannot speak of a modal construction. However, we do not agree that the combination of *be* and the *m*-participle is "without any modal meaning" in Lithuanian (Holvoet 2007, 51). In corpora of Modern Standard Lithuanian we found that modal meanings regularly arise in certain contexts. The meaning of necessity is mainly triggered by the communicative function of the register: it is conventionalized in cooking recipes, sports instructions and legal acts. It appears only in present tense (with deleted auxiliary). Possibility is most clearly observed with verbs of perception, or when the predicate is modified by an adverb meaning 'easily', 'quickly', 'with difficulties', or the like. Such constructions may be used in present and past tense. Otherwise, modal meanings mostly arise as implicatures from the generic-habitual meaning that *m*-passives often have.

In Latvian, the *m*-participle is not used in generic-habitual meaning, but a meaning of possibility is found in cases similar to Lithuanian. A further parallel is the more conventionalized use of the *m*-participle expressing necessity in legal texts (but not in recipes and rarely in other instructions). In general, in Latvian the *m*-participle as a predicate (with or without auxiliary) is used with a vague modal meaning, which is sharpened to either necessity or possibility by contextual, lexical and grammatical features. A special subtype may be singled out which is specialized for necessity and may include the person obligated in the form of a dative. This construction resembles necessitive constructions in Latin and Finnish. In Latvian it is more idiomatic: it is attested only with a limited number of verbs and often has a stylistic flavour (more colloquial, a bit old fashioned). We did not find that it has advanced much on the way that Holvoet (2007, 51) suggested, namely, spreading to intransitive verbs in general. With intransitive verbs, another construction is more often found, which is not specialized for necessity and where the participle behaves like an adjective in a copula construction.

Tables 11 and 12 present the profiles of the constructions (without the last mentioned copula construction).

Feature	Value
Participle	PRS.PP (<i>m</i> -participle)
Auxiliary, tense	usually no auxiliary and present tense meaning; constructions with adverbs such as 'easily', and passives of perception verbs permit auxiliary of all tenses
Actor	human
Agent phrase	not possible
Meaning	generic, habitual; possibility, necessity
Verbs	transitive and intransitive; agentive and non-agentive
Word order	follows general word order rules
Registers	all; necessity meaning typical for certain registers

Table 11. Lithuanian m-passive with modal meanings

Feature	Type (i)	Subtype
Participle	PRS.PP (<i>m</i> -participle)	PRS.PP (<i>m</i> -participle)
Auxiliary	'be', or no auxiliary	'be', or no auxiliary
Actor	human	human
Agent phrase	no	actor / affected person can be expressed as a dative phrase
Meaning	possibility, necessity; vague modal meaning	necessity
Verbs (transitivity)	transitive	transitive; some intransitive verbs (voluntary motion)
Verbs (semantic)	broad range	agentive, voluntary action
Word order	various	participle usually clause- finally
Tense, mood	various	mainly present tense or conditional, rarely past tense
Registers	all; in the meaning of necessity typical for legal texts	typically found in fiction and in colloquial registers

 Table 12. Latvian modal constructions with the m-participle

5. Stative passives

5.1. Stative passive or resultative proper

According to Nedjalkov & Jaxontov (1988, 17), the DYNAMIC (ACTIONAL) PASSIVE involves a change in diathesis (agent demotion, patient promotion), but not in the denotational meaning, i.e. a passive construction has the same denotational meaning as the corresponding active construction. The STATIVE PASSIVE or, in their terminology, OBJECTIVE RESULTATIVE is different in this respect in that it implies both a state and an event which the state has resulted from (*ibid.*, 6). A stative passive thus conveys an additional meaning compared to the corresponding active construction, cf. Mother cooked the soup — The soup is cooked. The subject of a stative passive is both the patient of the previous event and the holder of the resulting state.

In Baltic languages a stative passive is formed by a *t*-participle combined with an auxiliary 'be'. In both languages the auxiliary 'be' is not obligatory; its absence is mostly equivalent to its use in present tense. In Latvian it appears more often than in Lithuanian. While in Latvian the stative passive is formally differentiated from the actional passive, which is formed with the auxiliary *tikt* (cf. Section 3), in Lithuanian a *t*-passive may both have a dynamic and a resultative reading. As in many other languages, the stative passive in Baltic interacts with the perfect (of the passive). Constructs with an auxiliary 'be' and a past passive participle may thus have various meanings—they may represent a stative or a dynamic passive, express resultative or perfect, and various tenses and temporal nuances. The following examples give a first illustration.

Examples from the parallel corpus (LiLa)

(66a) Latvian (LiLa) <i>izrakstī-t-ais</i> issue-pst.pp-nom.sg.m.def pazaudē-t-s lose-pst.pp-sg.m	rēķins invoice(м).noм.sg	ir be.prs.3
(66b) Lithuanian (LiLa) <i>išrašy-t-a</i> issue-PST.PP-NOM.SG.F <i>pames-t-a</i> lose-PST.PP-SG.F 'the issued invoice is lost .	sąskaita invoice(F).NOM.SG / has been lost'	yra be.prs.3

The Lithuanian example (66b) can have two meanings: a resultative meaning (present tense of the objective resultative/stative passive) or a present perfect meaning (present perfect tense of the actional passive) (cf. Geniušienė & Nedjalkov 1988, 372). The form is ambiguous also in Latvian. However, in Latvian there is also an explicit perfect construction with the past active participle of the auxiliary *tikt*, as in (67). This may contrast with a resultative construction as in (68).

(67)	Latvian (lvk2018)					
	Labklājība	vienmēr	ir	tik	-us-i	
	prosperity(F).NOM.SG	always	be.prs.3	AUX	K-PST.PA-SG.F	
	atzī-t-a	par	pozitīvu		vērtību.	
	acknowledge-pst.pp-sg.f	for	positive.AC	C.SG	value.Acc.sg	
	'Prosperity has always be	en acknow	ledged as an	asset.'		

(68) Latvian (LVK2018)

Minē-t-ā		ēka	ir
mention-pst.pp-nom.sg.f.def		building(ғ).noм.sg	be.prs.3
atzī-t-a	par	kultūrvēsturiski	
acknowledge-pst.pp-sg.f	for	culture_historical.AD	v
nozīmīgu			
significant.Acc.sg			
'The mentioned building is ac	cknov	wledged as having a herit	age value'.

'The mentioned building is acknowledged as having a heritage value', i.e. has the acknowledged status of cultural heritage.

However, the participle of *tikt* is often dropped and a construction 'be' + PST.PP is therefore ambiguous or vague between resultative and perfect (cf. Holvoet 2001b, 163–165). A participle that is often used in a purely resultative construction is prone to lexicalization and may become an adjective. The passive participle of *atzīt* 'acknowledged' shown in (67) and (68) is already included in dictionaries of Latvian as a lemma of its own.¹³

With the 'be' auxiliary in past tense, the participle of the auxiliary *tikt* is very rare (only five examples of *bija* tikt.PST.PA + PST.PP in the corpus LVK2018), which means that in the past the difference between resultative and passive is even more blurred (69a). According to Geniušienė & Nedjalkov (1988, 372), in Lithuanian the combination of a past tense auxiliary with a *t*-participle as in (69b) can have three meanings: a resultative meaning (past tense of the objective resultative/stative passive), a simple past meaning of the actional passive, and a past perfect meaning of the actional passive.

¹³ Of course, whether a participle is included in a dictionary as a separate lemma also depends on general lexicographic decisions and traditions. In Lithuanian dictionaries, participles rarely have a separate entry, even if they are used more frequently than finite forms of the verb, for example, *nusagstytas* 'studded'.

(69a) Latvian (LiLa)

[Un vēlāk man sametās kauns, ka publiski biju tā izlielījusies un						
sasolījusi zilus brīnumus, tikai šī nožēla mani ķēra par vēlu–]						
pirmā grāmata bija jau						
first.nom.sg.f.def	book(f).nom.sg	be.pst.3	already			
uzrakstī-t-a.						
рvв.write-рsт.pp-se	G.F					

(69b) Lithuanian (LiLa)

[Dar vėliau man pasidarė gėda, kam taip viešai išsiliejau ir neregėtą					
stebuklą žadėjau, tik kad tas apgailestavimas vėlai aplankė —]					
pirmoji knyga buvo jau					
first.nom.sg.f.def	book(ғ).nom.sg	be.pst.3	already		
parašy-t-a.					

PVB.write-PST.PP-SG.F

'[Later I became ashamed that I had boasted publicly and promised miraculous things, only this feeling of regret came too late—] the first book was already written / had already been written.'

Also in the future, the distinction between a future event and a future state resulting from this event is fuzzy. In (70a, b) it is clear from the preceding context that the speaker is referring to a future state (imagined by him/her).

(70a)	Latvian	(LiLa)

$(I \cdot)$	(,					
	uz	kapsētas		būs	uzc	el-t-a	
	on	graveyard	.GEN.SG	be.FUT.3	PVB	.build-pst.pp-sg.f	7
	mašīnu	un	traki	toru	stac	cija.	
	car.gen.pl	and	tract	OR.GEN.PL	stat	ion(F).NOM.SG	
(70b)	Lithuaniar	n (LiLa)					
	kapinių		vietoje	bus		pastaty-t-a	
	graveyard.	GEN.PL	place.10C.	sg be.fu	т.3	build-pst.pp-sg.f	7
	mašinų	ir	traktorių	stotis	;		
	car.gen.pl	and	tractor.ge	N.PL static	on(F).N	OM.SG	
	'a machine	e and tracto	or station w i	i ll be built or	1 the pl	lace of the grave-	-
	yard'						

In Lithuanian the use of *t*-passives (including resultatives) differs significantly in different tenses: present tense 60%, past tense 31%, future tense 6% (Geniušienė & Nedjalkov 1988, 374). Interestingly, the ratio of stative and actional passives also differs with respect to different tense forms.

Table 13. Frequency of resultative and actional meaning in Lithuanian passive forms relative to different tenses (adapted from Geniušienė & Nedjalkov 1988, 374)

4	Tense			
<i>t</i> -passives	present	past	future	
resultative meaning	75%	64%	15%	
actional meaning	25%	36%	85%	

Table 13 shows that resultative meaning dominates in present and past tense, while future *t*-passives mostly have a dynamic meaning. Therefore, examples like (70b) are rare.

According to Geniušienė (2016, 80; 227), the stative passive is the most frequently used variety of the passive in Lithuanian. It amounts to 40-50%of all passive forms in her corpus of 5,730 passive constructions. Though in many cases the context helps us to distinguish stative passives from actional passives, there are cases of semantic and syntactic ambiguity where it is impossible or even meaningless to delimit the two constructions (Geniušienė 2016, 81). In Latvian, where we have a dedicated construction for the actional passive (with the auxiliary *tikt*, cf. Section 3), this construction is more frequent than the one with the auxiliary *būt* 'be'.

Geniušienė (2016, 91) mentions a property that pertains only to the stative—the passive participle can be conjoined with simple adjectives used predicatively; cf. (71).

(71)	Lithuanian (cited from Geniušienė 2016, 91)						
	Sodybos vartai nauji,			nauji,	žaliai		
	homestead.gen.sg	gate(pl.м).ı	NOM	new.nom.pl.m	green		
	nudažy-t-i,	tokie	iškiln	ıingi.			
	paint-pst.pp-pl.м	SO	festiv	e.NOM.PL.M			
	'The gate of the homes	stead is new,	painte	d green, so festive	.'		

To sum up, the stative passive in Baltic exhibits the following features:

• Agent defocusing—the actor is unknown or (for different reasons) unimportant; in general, it is not the topic of the text passage (but in (69ab) this is not so clear, the passage is about the author's feelings).

- Object to Subject promotion—the verbs are transitive and the Direct Object appears as the Subject of the Passive construction (nominative, agreement).
- An agent phrase is impossible (but see 5.2 and 5.3 below).
- The verbs are telic; achievements and accomplishments.
- The actors are human, the undergoers usually inanimate. The actions are intentional and the undergoers are affected—thus, the main arguments are typical agents and patients.
- In terms of information structure, the referent of the subject usually is the topic, (66 a, b), but it may also be part of the rheme, that is, new (70 a, b). In the latter case it appears after the verb and the clause typically starts with a locative expression. In (69 a, b) we have a clause where all is new.

5.2. Quasi-resultative or stative proper

(

Stative passives which are derived from stative verbs are termed quasiresultatives by Nedjalkov & Jaxontov (1988, 14). They are 'statives proper' as they express a state without presupposing a previous event; cf. (72).

(72)	Lithuanian (DLKT)							
	Baluošo	ežeras	iš	visų	pusių			
	PLN.GEN	lake.nom.sg	from	all.gen.pl	side.gen.pl			
	apsup-t-as		miškų					
	surround-ps	T.PP-SG.M	wood.gen.i					
	'Baluošas La	ke is surroun	ded by woo	ds from all side	s'			

While stative passives (or resultatives proper) are incompatible with an agent phrase (Geniušienė 2006, 31), example (72) contains a genitive which resembles an agentive object of the passive (*miškų* 'by woods'). Nedjalkov and Jaxontov (1988, 50) call such arguments AGENTIVE OBJECTS and distinguish between a DYNAMIC AGENTIVE OBJECT, whose referent does not participate in the resultant state, and a STATIC AGENTIVE OBJECT, whose referent does participate in the (resultant) state. The latter type is illustrated by (72). A static agentive object often cannot be omitted, as it is 'semantically obligatory', it is also typically non-human (cf. Geniušienė 2016, 76–77). According to Nedjalkov and Jaxontov (1988, 51), "[s]tatic agentive objects occur in about 70 per cent of textual examples of resultative and quasi-resultative constructions with the agentive object."¹⁴ As observed by the authors (*ibid.*, 14), quasi-resultatives in languages tend to be formed from verbs of two lexical groups: i) verbs of physical contact and ii) emotive verbs. (72) is an example of the contact quasi-resultative, while (73) represents the emotive group:

(73) Lithuanian (DLKT)

[Liūtas baugiai urgztelėjo, bet, manau,]				
pats	buvo	per	daug	prislėg-t-as
self.nom.sg.m	be.pst.3	too	much	oppress-pst.pp-sg.m
nelaimės	ir	manęs	nepu	olė.
disaster.gen.sg	and	1SG.GEN	NEG.a	attack.pst.3
'[The lion grow]	led fearfully	y, but I thi	nk] it wa s	s too disheartened by
the disaster so it did not attack me.'				

Holvoet *et al.* (2019, 227–231) make the interesting observation that verbs occurring in stative passives with obligatory agents have something in common—they are holistic surface impact verbs (e.g. *užversti* 'cover, bury under', *uždengti* 'cover', *apsupti* 'surround', *nutvieksti* 'suffuse (with light)', *užlieti* 'bathe, suffuse (with light)'). In clauses with these verbs, the theme argument may be the subject. Consequently, in a passive construction with *užversti* 'cover', the theme-argument may occur in the agent position and acquire genitival marking (though instrumental case is also possible and indeed more frequent); cf. (74a, b).

(74a)	Sniegas	užvertė	ir	Vilniaus	gatves
	snow.nom.sg	cover.pst.3	also	Vilnius.gen	street.ACC.PL
	'The snow also c	overed the stre	eets of V	'ilnius'15	
(74b)	Gatvės street(F).NOM.PL / sniegu. / snow.INS.SG	buvo be.pst.3		rs-t-os r-PST.PP-PL.F	sniego snow.GEN.SG
	(1997)			(I)	

'The streets were covered with snow.' (constructed)

¹⁴ It is not clear which language or languages Nedjalkov & Jaxontov (1988, 51) are referring to.

¹⁵ https://www.tv3.lt/naujiena/lietuva/372835/sniegas-uzverte-lietuva-vilniaus-meras-siuloji-nusikasti-patiems

Verbs denoting emotional (and mental) states, cf. *apnikti* 'beset', *iškankinti* 'torture, torment', *prislėgti* 'depress, oppress', *apimti* 'envelop', *persmelkti* 'pervade', *iškreipti* (*veidq*) 'distort (face)', behave similarly to holistic surface impact verbs. Here the surface impact is metaphorical: the emotional state covers or fills the whole individual:

(75)	Lithuanian (D	lkt)		
	Džekas	buvo	apim-t-as	ekstazės.
	PN.NOM	be.pst3	envelop-pst.pp-nom.sg.м	ecstasy.gen
	'Jack was en v	veloped with	ecstasy.'	

The same subtypes of quasi-resultatives are found in Latvian, cf. (76-78). The genitive always precedes the participle. In (76) we see a human referent in the role of agentive object. Nevertheless, the clause expresses the state of the square being encircled, not a prior action of the policemen.

(76)	Latvian (LV	/k2018)					
	un	tad	laukum	S	ir		
	and	then	square.	NOM.SG	be.pr	s.3	
	policistu		aplenk	-t-s:			
	policeman	.GEN.PL	encircle	-PST.PP-	-SG.M		
	[viņi stāv d	ar automā	tiem šauš	anas ga	tavībā].		
	'and then t	the square	is encir	cled by	, policem	en:	
	[they stand	d with the	ir machiı	ne pisto	ls ready to	o fire.]'
(77)	Tempļa	ie	ekšpuse	i	bija	gaiš	as
	temple.GEM	v.sg ir	nside.NON	1.SG l	be.pst.3	brigl	ht.gen.sg.f
	gaismas	p	ielie-t-a				
	light.gen.s	G P	vв.pour-	PST.PP-S	G.F		
	'The inside	e of the te	mple wa s	s bathe	d in brigl	ht lig	ht.'
(78)	Visi	ir		draus	mīga		naida
	all.nom.pl	м be	e.prs.3	terribl	e.GEN.SG.M	Л	hate.gen.sg

pārņem-t-i. overpower-PST.PP-PL.M 'Everybody **is overpowered by terrible hate**.'

5.3. Qualitative resultatives

As described in Section 5.1, a resultative proper, formed from telic verbs, expresses a state as a result. The fact that this state exists may be news-worthy in itself, cf. (79).

(79) Latvian (lvTenTen14)
[Šodien, pēc piecpadsmit Biedrības pastāvēšanas gadiem beidzot šie vārdi var izskanēt –]
bibliotēkas ēka ir uz-cel-t-a.
library.GEN.SG building.NOM.SG be.PRS.3 PVB-build-PST.PP-SG.F
'[Today, after fifteen years of existence of the Society, finally these words can ring out:] the building of the library is erected.' (i.e., it now stands, is ready for use)

With an atelic verb, such a simple clause is pragmatically odd:

(79') Latvian

? Bibliotēkasēkaircel-t-a.library.GEN.SGbuilding.NOM.SGbe.PRS.3build-PST.PP-SG.F'The building of the library is built.'

To be informative, some qualifying element has to be added, as in (80).

(80)	Latvian (lvTenTen1	4)		
	Ēka	cel-t-a	no	sarkaniem
	building.NOM.SG	build-pst.pp-sg.f	of	red.dat.pl.m
	ķieģeļiem.			
	brick.dat.pl			
	'The building is bu	ilt of red bricks.'		

We call this type of construction QUALITATIVE RESULTATIVE. It is used in Latvian and Lithuanian alike. As pointed out, a difference to the resultative proper is the use with atelic verbs. Telic verbs are also possible, cf. (81) and (85) below.

(81) Latvian (LVK2018; part of a review where the thesis is characterized) *Promocijas darbs ir* promotion.GEN.SG work.NOM.SG be.PRS.3 *uz-rakstī-t-s latviešu valodā.* PVB-write-PST.PP-SG.M Latvian.GEN.PL language.LOC 'The PhD thesis **is written** in Latvian.'

The construction is often found with verbs of creation, such as 'build', 'found', 'write', 'compose', etc. The qualifying element may express the material or manner used in the creation, as in (80, 81) from Latvian and (82) from Lithuanian.

(82) Lithuanian (ltTenTen14)

Muziejuje	yra	du	Korano	egzemplioriai –
museum.LOC.SG	be.prs.3	two	Koran.gen	сору(м).nom.pl

vienas	spausdintinis,	kitas	
one.NOM.SG.M	printed.NOM.SG.M	another.noм.sg.м	
rašy-t-as	ranka.		
write-pst.pp-sg.m	hand.INS.SG		
'In the museum there are two copies of the Koran—one is printed,			
the other one is handwritten .' (literally: 'written by hand')			

Another kind of qualifying element is the creator. Nedjalkov & Jaxontov (1988, 53) point out that resultatives of creation verbs in some languages may contain a dynamic (human) agentive object, which is rhematic and acquires a kind of 'qualitative force'. Their example of a dynamic agentive object from German is given in (83).

(83) German (Nedjalkov & Jaxontov 1988, 50; our glossing)
[Ich kann Ihnen ein Buch darüber geben,]
es ist von einem Arzt
it.NOM.SG be.PRS.3SG by IDF.DAT.SG.M physician verfaßt.
compose.PST.PTCPL
'[I can give you a book about this,] it is written by a physician.'

Example (83) is an objective resultative (stative passive): it is predicated that the book is in the state of having been written by a physician. By this fact it is implied that the book is of high quality and that one can trust its content. Note that without this qualifying element, the clause would be odd (*?das Buch ist verfasst* 'the book is composed'), or has to get a resultative reading with some stylistic value ('It is done! The book is composed!').

The use of dynamic agentive objects is also attested in Latvian. (84) is part of the reminiscence of a retired teacher. The fact that she has actively participated in building the school is important and explains her special attachment to the building. For more on the Latvian agentive construction see Holvoet *et al.* (2019).

(84) Latvian (LVK2018)

Babītes	vidusskola	ir	manis
PLN.GEN.SG	middle_school.nom.sg	be.prs.3	1SG.GEN
cel-t-a.			
build-pst.pp-s	G.F		
'The Babīte m	iddle school is / has been ${f b}$	uilt by me.'	

As has been mentioned above, in Lithuanian, the agentive construction evolved into an agentive passive. Nevertheless, some passives from creation verbs with stressed agentive objects in preverbal position can be interpreted as qualitative resultatives, as they predicate an authorship of a certain creation and a state which pertains to this creation by virtue of this authorship; cf. (85).

(85) Lithuanian

[Tarkime, spektakliui "No return", kuris atvežamas į Vilnių, panaudoti *Kafkos tekstai*,] bet veiksmo pusė antro yra half.nom.sg but act.gen.sg second.gen.sg.m be.prs.3 mano pa-rašy-t-a. 1SG.POSS PVB-write-PST.PP-SG.F '[For instance, in the play No return, which is brought to Vilnius, Kafka's texts are used] but half of the second act is written by me.'

Another type of qualitative resultatives is characterized by the use of adverbials of exact time. Nedjalkov & Jaxontov (1988, 54) argue that here "an adverbial of the time of action is re-interpreted as a kind of qualitative characteristic of the underlying subject of state". We may illustrate their reasoning with a Lithuanian example similar to the German example they give: In (86) the property which is predicated of the subject referent (the church) is that it is in a state of having been founded in the 12th century, which means it is old.

(86) Lithuanuan (ltTenTen14)

Jiyrastaty-t-aXII a.3.NOM.SG.Fbe.PRS.3build-PST.PP-SG.F12 c.[ir yra vienintelė bažnyčia Baltarusijoje, kuri niekad nebuvo perstatyta.]'It was (literally: is) built in the 12th century [and is the only church in Belarus which was never reconstructed.]'

Qualitative resultatives with temporal adverbials are common in Lithuanian in colloquial language and show a great variety of possible lexical input. In (87) it is implied that the boiler is new, and (88) implies that the floor is relatively clean. Thus (87–88) are statements about the present state of the subject, not about a past event.

(87) Lithuanian (forum post on supermama.lt)

Mūsų	katilas	pirk-t-as	pernai.
1PL.GEN	boiler.noм.sg	buy-pst.pp-sg.м	last_year
'Our boile	r was bought last y	vear.'	

(88)	Lithuanian (from facebook.com)				
	Grindys	plau-t-os	vakar.		
	floor.nom.pl	wash-pst.pp-pl.f	yesterday		
	'The floor was				

5.4. Summing up

The stative passive or resultative is the branch of the Passive Family where Latvian and Lithuanian are most similar. In both languages, the distinction between resultative and perfect tenses of a dynamic passive is usually not marked formally, and it is often unimportant. At the other end, some stative passives, especially qualitative resultatives, seem to be copular constructions rather than passive constructions (if such a distinction is valid at all).

There are more variants of the stative passive which may be worth further investigation. Two of these shall be briefly mentioned. Holvoet (2001b, 171–175) describes a possessive passive in Latvian which may represent an incipient stage of a possessive perfect (well developed in Estonian, see Lindström & Tragel 2010). Another only marginally developed construction in both Latvian and Lithuanian is the combination of an auxiliary 'stay' and a negated past passive participle (Latvian *jautājums palika neatbildēts* 'the question remained unanswered'). Wiemer (2004) describes the development of a regular passive from corresponding constructions in Polish, a process which however does not seem to have started in Baltic.

In Tables 14 and 15 we sum up the profiles of the three types distinguished in this section.

Feature	Value
Participle	PST.PP (<i>t</i> -participle)
Auxiliary, tense	'be' auxiliary in various tenses; in present tense often omitted
Actor	usually human; unknown or unimportant
Agent phrase	not possible
Subject	nominative subject is usually the topic

Table 14. Stative passive or resultative proper ('the invoice is / has been lost')

Feature	Value
Meaning	state resulting from prior event
Verbs	transitive; agentive; telic; prefixed
Word order	either s – v or Adverbial – v – s
Registers	all

 Table 15. Quasi-resultatives ('the streets are covered by snow')
 and qualitative resultatives ('the text is written by hand / by me / in the 16th century')

Feature	Quasi-resultative	Qualitative resultative
Participle	PST.PP (<i>t</i> -participle)	PST.PP (<i>t</i> -participle)
Auxiliary	'be', or no auxiliary	'be', or no auxiliary
Actor	mainly non-human; par- ticipates in the state	human; does not partici- pate in the state
Agent phrase	stative agentive object expressed as genitive; semantically obligatory	dynamic agentive object expressed as genitive; in some cases semantically obligatory
Meaning	state of a patient without implication of a previous action	state of a patient imply- ing a previous action; the state is further qualified by specifying the actor, the manner or time of the action
Verbs (transitivity)	transitive	transitive
Verbs (semantic)	stative; holistic surface impact; physical contact ('covered'); emotions ('overwhelmed')	agentive; +/- telic; typi- cal for verbs of creation ('build', 'compose' etc.)
Word order	s – agentive object – v, Lithuanian also s – v – agentive object	s – v – qualifier; s – agentive object – v
Registers	all	all

6. Subjectless and subject-weak passives

In this section we will examine constructions which are typical for passives from intransitive verbs and thus necessarily subjectless. However, the same constructions are found also with transitive verbs when the subject is 'weak'. By this we refer to situations where the subject of a passive is indefinite, often non-individuated, and follows the verb. In the linguistic literature, a fundamental difference is often made between passives from transitive and intransitive verbs (for example, Frajzyngier 1982), or between personal (subjectful) and impersonal (subjectless) passives. However, we found that the distinction between passives with definite and/or topical subjects on the one hand, and those with either an indefinite subject or without subject on the other is probably more important for characterizing passive constructions in Baltic.

Subjectless and subject-weak passives do not focus on a patient or theme participant. They present the pure action or state expressed by the verb. In this they are sometimes close to infinitives and nominalizations, and an English translation equivalent may contain a gerund or a noun (see examples in various parts of this section).

6.1. From generic to definite human actor

The demoted actor of subjectless and subject-weak passives is almost exclusively human. Certain constructions allow other animate actors such as pet animals.

Frajzyngier (1982) postulates that a passive form of intransitive verbs implies an indefinite (generic) human agent. This is not the case in the Baltic languages, where the actor often is a definite, known person. We distinguish between three types of actors with respect to referentiality (more fine-grained distinctions are of course possible):

- i. generic, referring to humans in general or at a given time or place, such as Latvians in the 19th century, inhabitants of a town, potential participants of an event;
- indefinite, referring to certain individuals or a certain group of individuals, like the government, or just 'somebody'; the actor may or may not be known to the speaker;
- iii. definite, referring to an individual or a group whose identity is known to both speaker and addressee and that is mentioned in the context.

To get an impression of the relative frequency of these types, we used the data of the study by Lindström, Nau, Spraunienė & Laugalienė (2020, this volume), where samples of selected intransitive verbs were drawn from the corpora lvTenTen14 and ltTenTen14.

Table 16. Reference types of the covert actor in passives from selected	
intransitive verbs	

	Latvian (700 tokens)	Lithuanian, <i>t</i> -participle (500 tokens)	Lithuanian, <i>m</i> -participle (200 tokens)
generic	28%	39%	85.5%
indefinite	21%	19%	7%
definite	51%	42%	7.5%

The verbs chosen for these samples were the following:

- Latvian: būt 'be', braukt 'ride, drive, go by transport', dziedāt 'sing', dzīvot 'live', iet 'go', sēdēt 'sit', strādāt 'work'
- Lithuanian: *dainuoti* 'sing', *eiti* 'go', *gyventi* 'live', *miegoti* 'sleep', *stovėti* 'stand', *važiuoti* 'ride, drive, go by transport' for the *t*-participle; *gyventi* 'live' and *važiuoti* 'ride' also for the *m*-participle

The different reference types are not evenly distributed, and there are certain preferences with respect to other parameters such as the verb lexeme, the auxiliary (in Latvian), the clause type (independent or subordinate).

6.1.1. Generic human actors

Generic human actors are most typical for actional passives. Lithuanian subjectless *m*-passives specialize for reference to generic human actors (cf. Geniušienė 2006, 40). They are used in gnomic statements, as well as in generic-habitual sentences where reference is made to hypothetical actors; cf. (89):

(89)	Lithuanian (ltTenTen2014)						
	Klasikinio	duatlono	varžybose				
	classic.gen.sg	duathlon.gen.sg	competition[PL].LOC				

bėg-a-m-a	asfalto	danga,		
run-prs-pp-nA	asphalt.gen.sg	pavement.m	NS.SG	
važiuoj-a-m-a	plento	dviračiais	ir	vėl
ride-prs-pp-na	road.gen.sg	bicycle.INS.PL	and	again
bėg-a-m-a	asfaltu.			
run-prs-pp-nA	asphalt.1NS.SG			

'In a classic duathlon there is a **running** on asphalt leg, a road **cycling** leg and again a **running** on asphalt leg.' (literally: 'it is run', 'it is ridden on road bicycles')

When the covert actor of a subjectless *m*-passive is generic, it is not possible to add an agent phrase such as 'by people'. Though constructed examples of agented *m*-passives are sometimes given in the literature, authentic examples of this kind are not attested. With *t*-passives this restriction is not so strict: though most examples with generic actors do not contain agent phrases (those that are found belong to the category of evidentials, see Section 7), we found a non-evidential *t*-passive with an overt generic actor 'people', see (90).

(90) Lithuanian (ltTenTen14)

[Tai po truputį į	sisavinom ta	iigą,]	
kurioje	prieš	mus	nebuvo
which.loc.sg	before	1PL.ACC	NEG.be.pst.3
žmonių	vaikščio	-t-a.	
people.gen.pl	walk-pst	.PP-NA	
'So little by little	e we master	ed the taiga v	where no people had walked
before us.'			

In Latvian, a subjectless or subject-weak passive with the auxiliary *tikt* 'get, become' often has a generic human actor. These constructions are most similar to impersonal passives in German or Dutch, which are well known from the literature. A typical context for impersonal passives with generic reference is reports about traditions, as in (91). An alternative to the passive is a subjectless third person active form (a Zero Subject construction). In (91), the choice of the active form for 'decorate', surrounded by passive predicates, may be motivated by the fact that the undergoer in this clause is definite and thus would become a preverbal ('strong') subject in the passive.

(91)	Latvian (l	vTenTen	114)				
	[Maija ko	ks, paras	sti bērzs,	ir auglības	nesējs.]		
	No	meža		tika	atnes-	t-i	
	from	wood.g	EN.SG	AUX.PST.	з рув.ca	rry-pst.pp	-PL.M
	Maija	koki		un	novieto-t-i		
	May.gen	tree.	NOM.PL	and	рvв.place-ры	C.PP-PL.M	
	sētā,		māja	s	priekšā.	Kokus	
	courtyard	.LOC.SG	hous	e.gen.sg	front.loc.sg	tree.AC	C.PL
	rotā		ar	krāšņām	lentēn	n.	Ap
	decorate.	PRS.3	with	ornate.dA	г.pl ribbor	1.DAT.PL	around
	Maiju	koku		tika	dejo-t-s,		
	May.gen	tree.GE	EN.PL	AUX.PST.3	dance-pst	.PP-NA	
	dziedā-t-	·s	un	smie-t	-s.		
	sing-pst.p	PP-NA	and	laugh-	PST.PP-NA		
	'The may	pole, usv	ially a bi	rch, brings i	fertility. Trees	for maypo	les were
	brought	from the	e wood a	and placed	in the courtya	ard, in fro	nt of the
	house. Th	e trees a	re decora	ated (literall	y: (they) deco	rate the tr	ees) with
	ornate rib	bons. T	here wa	as dancing	, singing, and	laughing	g around

Generic actors are less common with verbs expressing a state. They are mostly found in subordinate clauses in sentences that express some kind of rule.

(92) Latvian (lvTenTen14)

the maypole.'

Interesan	ti	ir	atgriezties	vietās,
interestin	Ig.ADV	be.prs.3	return.INF.RFL	place.loc.pl
kur	jau	kādreiz	bū-t-s []	
where	already	once	be-pst.pp-na	
"T4 1 - 1 - 4			1	- 1 1 - C ,

'It is interesting to come back to places where **one has been** before.'

6.1.2. Indefinite actors

Indefinite specific agents form the smallest group with most verbs that we examined. In our Latvian sample, they were only frequent with the verb *strādāt* 'work', where 57 out of 100 investigated examples of a subjectless passive had an indefinite actor. With other verbs, the percentage is much lower: 5 (*būt* 'be', *braukt* 'go by transport'), 6 (*sēdēt* 'sit'), 11 (*dzīvot* 'live'), 12 (*iet* 'go on foot') and 35 (*dziedāt* 'sing'). Indefinite actors are found with all three auxiliary options: *tikt* (example 94), *būt*, or zero (ex. 93). The construction can usually be translated into German by the

impersonal passive with *werden*. Clauses with a passive of *strādāt* 'work' often refer to work done by the government or members of an organization, as in example (94).

(93) Latvian (lvTenTen14)

redzēt. ka strādā-t-s uzreiz var at once can.prs.3 see.INF that work-pst.pp-NA kvalitatīvi atbildīgi. un high quality.ADV and responsible.ADV 'You can see at once that work was/has been carried out in high quality and with responsibility.' (German: 'Man sieht sofort, dass hochwertig und verantwortungsvoll gearbeitet wurde/worden ist.')

(94) Latvian (lvTenTen14)

[Kā norādījis Finanšu ministrijas valsts sekretārs Mārtiņš Bičevskis,]					
tiek	strādā-t-s	pie	garantijas		
AUX.PRS.3	work-pst.pp-na	at	guarantee.gen.sg		
fonda	izveides.				
fund.gen.sg	creation.gen.sg				

'According to the State Secretary of the Ministry of Finance Mārtiņš Bičevskis, **work is underway** to establish a guarantee fund.' (Translation by Google Translate, which gives the following German version with an impersonal passive: Nach Angaben des Staatssekretärs des Finanzministeriums, Mārtiņš Bičevskis, **wird** derzeit an der Einrichtung eines Garantiefonds **gearbeitet**.¹⁶)

Constructions where the underlying actor is indefinite are functionally most similar to subjectful passives. They probably do not constitute a special type, as the only difference to the typical passive (see Section 3 above for the Latvian passive with *tikt*) is the lack of a subject or the fact that the subject is weak. Also with verbs that have other arguments than a direct object (for example, dative complements, such as Latvian *palīdzēt* 'help', *kaitēt* 'harm'), the hidden actor is most often indefinite.

In the Lithuanian material, subjectless passives with indefinite actors are also the least numerous. As mentioned above, they constitute 19% of

¹⁶ It is interesting that Google Translate uses impersonal passives in both Latvian and German, though presumably the translation is done via English. This attests to the high frequency of such constructions.

the *t*-passives and 7% of the *m*-passives. Passives with indefinite actors usually refer to actions carried out by participants of a certain event as in (95) or workers of a company or institution as in (96):

(95) Lithuanian (ltTenTen14)

Antroji	renginio	dalis	buvo
second.nom.sg.f.def	event.GEN.SG	part(F).NOM.SG	be.pst.3
praktinė —	šiaurietiškai	ei-t-a	
practical.noм.sg.f	Nordic.ADV	go-pst.pp-na	
pažintiniu	"Žaliuoju taku"	Spindžiau	S
educational.1NS.SG	green_trail(м).1NS	.SG PN.GEN	
miške.			
forest.loc.sg			

'The second part of the event was practical—it consisted of Nordic **walking** along the educational "Green Trail" in the Spindžius forest.'

(96) Lithuanian (ltTenTen14)

Viena		mašina	1	naudojasi		šeši
one.ins.	SG.F	car(f).INS.SG	ı	use.RFL.PRS	5.3	six.nom
ar	net	daugiau	pareig	ūnų.	Tode	21
or	even	more	officer	r.GEN.PL	ther	efore
automo	biliais	važiuoja-m	-a	nuolat.		
car.INS.I	PL	drive-prs-pp	-NA	all_the_	time	
'One car is being used by six or even more officers. That's why the cars						
are being driven all the time.'						

Passives with evidential (inferential) meaning also have deleted indefinite actors:

(97) Lithuanian (ltTenTen14)

[*Tik virš veja apžėlusios kalvelės išlindę keli kaminai išduoda*,] *jog čia gyven-a-m-a.* that here live-PRS-PP-NA '[Oply a fay alignmany protuding above the gracey hill betray

'[Only a few chimneys protruding above the grassy hill betray] that someone **lives** here.'

Lithuanian agentless passives are in some cases interchangeable with indefinite personal constructions (for details see Geniušienė 2016, 247–268).

6.1.3. Covert definite actors

Definite actors are especially interesting in that they defy the general assumption often found in the literature that passives are used when the

actor is unknown, generic or indefinite. The examples that fall into this category cannot be translated by a German impersonal passive; their most natural equivalent in German as well as in English is an active construction with the actor as subject.

In both Latvian and Lithuanian, in passives of intransitive verbs with a *t*-participle and the auxiliary 'be', a definite actor is relatively frequent (see Table 16 above).

In Lithuanian, definite actors are common in subjectless passives with the *t*-participle, but rare with the *m*-participle. In a sample of 100 agentless *t*-passives, the amount of instances of definite actors ranges from 30 (with the verb *gyventi* 'live') to 65 (with the verb *važiuoti* 'ride, drive, go by transport'). In the case of *m*-passives, the amount of definite actors is also bigger with *važiuoti* 'ride, drive, go by transport' than with *gyventi* 'live' (10 vs. 5 out of 100 respectively).

In Latvian, definite actors appear with both auxiliaries, but are more frequent in constructions with the auxiliary $b\bar{u}t$ 'be' or without an auxiliary. They are relatively less frequent with pure activity verbs ('sing', 'work') and more frequent with verbs of displacement and localization ('go (to)', 'ride (to)', 'sit', 'be (at)', live (at)').

The identity of the actor is mainly to be inferred from the context. In general, it is the person that is currently being talked about. The passive construction alternates with a personal active form or a past active participle that agrees with the actor in number and gender. Reference assignment seems to be similar as in the case of modal verbs that are morphologically third person (for example, Lithuanian *reikėti* 'need', *norėtis* 'want (for oneself)', Latvian *vajadzēt* 'need', *gribēties* 'want') or the Latvian debitive formed with the prefix *jā*-. With these verbs and forms, the actor may be added as a dative argument, but is often omitted when the referent is given in the context. As a kind of default, reference is related to the speaker, as in example (98), where both a debitive and a passive participle refer to the speaker as actor.

(98) Latvian (lvTenTen14)

"Rokas	gan	bij	jā-mazgā,	visu		
hand.nom.pl	PTC	be.pst.3	дев-wash	all.Acc.sg		
dienu	ar	lopiem	strādā	- <i>t</i> -s,"		
day.Acc.sg	with	cattle.dat.p	L work-P	ST.PP-NA		
[Bisars sacīja, rokās skatīdamies . "Raug, cik melnas!"]						

""I should have washed my hands, (for) I have been working all day with the cattle," [Bisars said, looking at his hands. "Look, how black (they are)!"]"

In Latvian, a subjectless passive with a definite actor most often refers to the speaker, while in Lithuanian, reference to a third person is slightly more frequent then to the first person (see Lindström *et al.* 2020, this volume, for details). In both languages, a passive participle only rarely refers to the addressee.

In Lithuanian, the demoted actor may be added to the passive predicate as an agent phrase, as in (99); see also example (102) in Section 6.2.

(99)	Lithuanian (ltTenTen14)								
	Seniai	jau	mano	gyven-t-a					
	long_time	PTC	1SG.poss	live-pst.pp-na					
	kaip žmogaus.								
	as	man.GEN.SG							
	'It's been long time since I lived as a human.' (=decently)								

This shows that the motivation for the passive is not to avoid mention of the first person, for example for reasons of politeness.

Latvian does not use agent phrases, but the actor may be explicitly mentioned in the context, as in (100). From a discourse point of view, the overt expression of the actor by a pronoun or a personal ending in the following clauses is simply not necessary, as the actor is the topic: in a given text passage, all predicates relate to the person or persons talked about.

(100) Latvian (lvTenTen14)

[Šajā dienā daži pārskata gada notikumus, daži raksta apņemšanās sarakstus nākamajam gadam.]

Ja	runāj	u	par	sevi	tad	šaj	ā
if	talk.pr	S.1SG	about	self.A	cc then	DE	M.LOC.SG
gadā		ir	piedz	īvo-t-i		ļoti	daudz
year.1	OC.SG	be.prs.3	experi	ience-ps	T.PP-PL.M	very	much
notiki	umu,	ir	daı	ıdz	strādā-t-	s []	
event	.GEN.PL	be.prs.3	3 mu	ch	work-pst.	PP-NA	
'[On this day some people review the events of the year, some write							
lists c	of resolu	itions for t	he comin	ng year.]	When it	comes t	o myself

¹⁷ This example comes from one of the few older texts contained in the corpus lvTenTen14, the novel *Mērnieku laiki* by Reinis and Matīss Kaudzīte (1879).

[literally: 'when I talk about myself'], this year there were very many events (that I) **experienced**, there was a lot of **work(ing)** [...]' ('I experienced very many events, I worked/have been working a lot')

With reference to the first person these passives are typically found in blogs or other forms of personal reports, also in interviews. With reference to a third person, they are typical for press texts that report about a person or group of persons.

Subjectless and subject-weak passives with a definite actor form a branch of the passive family. They can be further differentiated according to temporal and aspectual meanings, with which we will deal in the two following sections. Most examples in these sections will have a definite actor. However, the constructions are also found with generic or indefinite actors, which means that their correlation with definite actors is only an (often strong) tendency but not a rule.

6.2. The cumulative construction

In both Baltic languages we have identified a type of usage of past passive participles (*t*-participles) that we have termed CUMULATIVE CONSTRUCTION. We start the description with Lithuanian and then point out what is common and what is different in Latvian.

6.2.1. Lithuanian

In Lithuanian, the construction is typically formed by a neuter *t*-participle without an auxiliary. A typical example of this construction is given in (101).

(101) Lithuanian (ltTenTen14)

[Kur norėtumėte groti, kad klausytojų būtų daugiau? м: Labiausiai aišku užsienyje. Nes čia viskas yra tas pats.]							
Visą	gyvenimą	čia	gyven-t-a,				
whole.acc.sg	life.Acc.sg	here	live-pst.pp-na				
gro-ta,	ei-t-a	į	koncertus.				
play-рst.pp-na	attend-pst.pp-	-NA to	concert.ACC.PL				
'[Where would yo	u like to play in	order to ha	ave more listeners? м: Most				
of all of course we	would like to p	lay abroad	l. Because here everything				
is the same.] Here we have lived, played and gone to concerts all							
our lives.'							

The construction usually refers to actions in the past of the life of a person or a group of persons which are either recurrent or which took a long time. For this reason we have called this construction *cumulative*: it denotes that some actions, so to speak, 'accumulated' in the past because they occurred many times or lasted for a long time. Iterativity of the past event(s) is often additionally expressed lexically using quantifying expressions such as *tiek* 'so much/so many times', *kiek* 'how much/how many times', kiek daug 'so many times', tiek kartu 'so many times', ne karta 'several times', kelios dešimtys 'several dozens', daug 'much/many'. The predicate does not refer to a specific event, but rather to a type of event, instances of which occurred within a certain period. The construction is thus type-focusing in the sense of Dahl & Hedin (2000). While an event type itself is not located in time and space, its instantiations are usually related to regions in time and space. In the Lithuanian construction, reference to the place where the past event(s) happened is often made by using place adverbs such as čia 'here' (as in 101) and others. Compared with its active counterpart, (101) has a distancing effect: the speaker, so to speak, looks upon himself from the side.

Listing of verbs as in (101) is common for this construction. The listed verbs do not refer to a sequence of successive events; they are enumerated in a more or less accidental order, describing what used to happen in the past. Because of its orientation towards the past, the Lithuanian construction may more precisely be named 'cumulative-retrospective'.

As is evident from the English translation of (101), it is the speaker who is referring to himself and the members of his music band by using a passive form. The underlying actor is thus first person plural. This is an important feature of the cumulative construction: The demoted actor is in many cases definite (identifiable for the addressee). Normally, the identity of the underlying actor is recoverable from the context, as in (101), but in some cases the actor is overtly expressed in the construction as a genitival NP or a possessive pronoun, cf. (102):

(102) Lithuanian (DLKT)

Kiek	anuomet	mano	vaikščio-t-a
how_much	at_that_time	1SG.POSS	walk-pst.pp-na
gatvėmis,	kiek	pamaty-t-a,	kiek
street.INS.PL	how_much	see-pst.pp-nA	how_much
nekantriai	ieško-t-a!		

impatiently search_for-pst.pp-NA 'How much I walked along the streets at that time, how much I saw, how much I impatiently searched for things!'

The demoted actor of a cumulative construction may as well be third person singular or plural—either overt (103) or covert (104):

(103) Lithuanian (LithuanianWaC v2)
 [Mažasis Liudukas augo trečias vaikas šeimoje, trijų seserų būryje.]
 Čia jo verk-t-a, juok-t-a-si,
 here 3.GEN.SG.M CTY-PST.PP-NA laugh-PST.PP-NA-RFL
 dainuo-t-a

sing-pst.pp-na

'[Little Liudukas grew up as a third child in the family, surrounded by three sisters.] Here **he cried**, **laughed**, **sang**'

(104) Lithuanian (DLKT)

[Dieve, čia ta pati Utena, apie kurią net naktį prabudęs apkasuose galvojo.]							
Kaip	brang	gios	tos		smėlėt	tos,	
how	dear.	NOM.PL.F	DEM	.NOM.PL.F	sandy.	.NOM.PL.F	
tos		purvinos		gatvelės,		kuriomis	
DEM.NOM	.PL.F	dirty.non	4.PL.F	street(F).NC	OM.PL	which.INS.PL.F	
čia	vaikš	čio-t-a	ir	važinė	-t-a.		
here	walk-	PST.PP-NA	and	drive-p	ST.PP-N	A	
'[Oh God, this is the same Utena which he was thinking of even when							
he would wake up at night in the trenches.] How dear to him are those							
sandy dir	ty stre	ets here alo	ng whi	ich (he) use	d to wa	lk and drive.'	

With an overt actor, the cumulative construction resembles the evidential construction described in Section 7, but there are also differences: The cumulative construction does not express evidential meaning and the Genitive of Agent is not obligatory. The most important difference is that the cumulative construction is restricted to verbs with human subjects, while the Evidential allows for all kinds of verbs, including those with nonhuman subjects. This corroborates the cross-linguistic rule that impersonal passives and impersonals must have human actors (cf. Frajzyngier 1982).

The lexical input of the cumulative construction is mainly intransitive verbs. As far as lexical aspect is concerned, atelic verbs denoting activities (vaikščioti 'walk', dalyvauti 'participate', dirbti 'work', dainuoti 'sing', koncertuoti 'give a concert', lipti 'climb', studijuoti 'study', verkti 'cry', etc.) and states (žiūrėti 'look, watch', kentėti 'suffer', ilgėtis 'long for', gyventi 'live', svajoti 'dream', liūdėti 'grieve' etc.) are dominant. Transitive verbs denoting activities may also occasionally occur; some are atelic (e.g. *rašyti raštus, prašymus* 'write papers, requests'), others are telic (e.g. *įsimylėti* 'fall in love', *pastebėti* 'notice', *sukurti vaidmenį* 'build a character', *režisuoti spektaklį* 'direct a play'). However, canonical subjects (corresponding to the direct object of the active) are rarely found in the cumulative construction. In (105) the participles of the transitive verbs *sukurti (vaidmenį)* 'build (a character)' and *režisuoti (spektaklį)* 'direct (a play)' are used with the non-agreeing ending, as their subjects don't trigger agreement (see Section 2.3). Agreement is found between the last predicate *dirbti* 'work (verb)', and the cognate object *darbas* 'work (noun)'. All three subjects are indefinite and occur in postverbal (rhematic) position.

(105) Lithunaian (DLKT)

[Už jos p	[Už jos pečių—trisdešimt septyneri darbo metai tik Muzikiniame teatre.]						
Čia	sukur	-t-a	kelio	S		dešimtys	
here	build-p	ST.PP-NA	severa	al.nom.i	PL.F	tenth(f).nom.pl	
vaidmer	ıų,	reži	suo-t-a	2	3	įvairaus	
characte	r.GEN.PL	dire	ct-pst.pp-:	NA 2	3	various.gen.sg	
žanro		spektal	kliai,	daug	1	koncertuo-t-a,	
genre.GE	N.SG	play(м).	NOM.PL	much	Ę	give_concerts-pst.pp-nA	
dainuo-t-	-а	per	radiją,	radiją, dirb-t-a		b-t-as	
sing-pst.	PP-NA	on	on radio-Acc.sg w		wor	k-pst.pp-nom.sg.m	
ir	pedago	oginis		darba	1 S.		
also	pedago	gical.NO	M.SG.M	work(м).N	IOM.SG	
'[Behind	her sh	oulders	there are	37 year	rs of	f work in the Musical	
Theatre.]	Here sł	ne built s	everal do	zens of	f cha	aracters (literally: here	
several tens of characters were built), directed 23 plays of various							
genres, gave a lot of concerts, sang on the radio and also worked as							
a teache	a teacher.' literally: '23 plays of various genres were directed'						

Often, however, the direct object of a transitive verb used in the cumulative construction is not only indefinite, but also quantified and therefore appears in the genitive, hence does not trigger agreement, as in (106) *raštų* 'letters', *prašymų* 'requests'.

(106) Lithuanian (DLKT)

[Galų gale 1994 m. lapkričio 11 d. Vilniaus miesto valdyba patvir-
tino tų pačių metų sausio 3 d. tarybos sprendimą perduoti gimnaziją
jėzuitams. Dabar, kai žiūri iš šalies, viskas atrodo labai paprasta.]Okiekrašy-t-arašt-ų,
buthow_manywrite-PST.PP-NApaper-GEN.PL

valdininkus. prašym-ų, vaikščio-t-a pas request-GEN.PL walk-pst.pp-na official.ACC.PL to dalyvau-t-a ivairiuose pasitarimuose. take part-pst.pp-NA different.LOC.PL meeting.LOC.PL '[At last on the 11th of November 1994 the Council of Vilnius approved of the Council's decision of January 3 to give the gymnasium to the Jesuits. Now when you are looking at it from the side everything seems simple.] But how many papers and requests were written, how many officials were contacted, how many different meetings were attended.'

It is also possible (though very rare) that an object is not promoted to subject and retains accusative marking. This is shown in (107) with the last predicate, *mylėta tėvų žemę* 'loved (one's) homeland'. The actor of all three predicates in this example is generic.

(107) Lithuanian (ltTenTen2014)

[Mirtis yra kažkas savaime suprantamo, bet trėmimai į Sibirą be jokios kaltės, vien už tai,]

kad	buv-o	sąžiningai	dirb-t-a	l	ir	
that	be-pst.3	honestly	work-pst.pp-na		and	
gyven-	t-a,	tikė-t-a	į	Dievą	ir	
live-ps1	C.PP-NA	believe-pst.pp-na	in	God.Acc.sg	and	
mylė-t-a		tėv-ų	žem-ę,			
love-ps	ve-pst.pp-na father-gen.pl		land-Ace	C.SG		
[netilpo žmonių galvose.]						

'[Death is natural, but deportation to Siberia without any guilt, only because] one (had) **worked** and **lived** honestly, **believed** in God and **loved one's homeland**, [was beyond people's understanding.]'

As was mentioned above, in the cumulative construction the non-agreeing form of the *t*-participle is normally used without an auxiliary. In those rare cases where an auxiliary is used, it occurs in the past tense, cf. (107).

Example (107) differs slightly from the examples presented before as it does not contain explicit quantifiers (as in 102, 105, 106) and also does not imply repeated activities of a type (as 101, 103, 104). However, the situations described in (107) are understood as long-lasting. Furthermore, it contains a temporally not ordered list of activities or states, which is a typical feature of the cumulative construction.

The borders of the construction may be fuzzy. Example (108) deviates from the typical instances in that the evoked situations occurred only

once and are not described as long-lasting. On the other hand, it contains two events which are listed as significant situations in the memory of the speaker, thus it still may be called 'cumulative-retrospective'.

(108) Lithuanian (ltTenTen2014)

Kartu	budė-t-a	prie	Seimo				
together	stand_in_guard-psr	T.PP-NA near	Parliament.gen.sg				
tragiškąją	1991-ųji	ų sausio	13-osios				
tragic.ACC.	SG.F.DEF 1991	January.gen	13th				
naktį,	stovė-t-a	Baltijos	kelyje.				
night(F).AC	с.sg stand-рsт.рі	P-NA Baltic.gei	N.SG way.loc.sg				
'Together we stood in guard near the Parliament on the tragic night of							
the 13th of	the 13th of January 1991, we also stood in the Baltic Way.'						

6.2.2. Latvian

In Latvian, there seems to be more variation within the cumulative construction. It is possible to distinguish several subtypes, or alternatively see cumulative constructions as subtypes of types otherwise defined.

Some examples, such as (109), show the same characteristic features as identified in Lithuanian: the participle is used without auxiliary, the verbs are mainly intransitive, or transitive verbs used without a nominative subject, therefore there is no agreement, the sentence contains a temporal quantifier and reference to a place.

(109) Latvian (lvTenTen14)

vietas,		par	kur	ām	daudzre	eiz
place.noм	I.PL	about	REL	.DAT.PL.F	many_t	imes
sapņo-t-s	в,	gar	ām	brauk-t	-s	un
dream-ps7	C.PP-NA	pas	t	ride-pst	.PP-NA	and
pāri	lido-t	-s				
over	fly-ps	T.PP-NA				
'places we	e often d	lreamed	about,	drove past	and flew	over'

However, it seems that in Latvian more often than in Lithuanian the construction—or another subtype—is also used with transitive verbs and nominative subjects—most often, but not always indefinite. Another and probably more important difference is that the auxiliary 'be' is frequently found in a Latvian cumulative construction, and it is in present tense. Both these features can be seen in (110): with the first participle in a sequence of coordinated clauses, the auxiliary is used, and the first two

predicates contain a nominative subject with which the participle agrees in number and gender, while the third and fourth participle are formed from intransitive verbs.

(110) Latvian (lvTenTen14)

[Jūras krasts un kāpas, mežs un pļavas ir tik labi pazīstami.]						
Jūrmalā	ir	sa	gaidī-t-i			
seaside.loc.sg	be.ı	PRS.3 We	elcome-pst.p	P-PL.M		
neskaitāmi		saulriet	i, 1	ēro-t-a		
uncountable.NOM	.PL.M	sunrise.	e.nom.pl watch-ps		.PP-SG.F	
bangainā		jūra	vētrā,			
rough.nom.sg.f.d	EF	sea.nom.s	G storm.	LOC.SG		
sēdē-t-s	uz	saules	sasildī	tajiem		
sit-pst.pp-na	on	sun.GEN.S	G warm.	DAT.PL.M	.DEF	
lielajiem	ak	meņiem	staigā-t-	·s	ра	
big.dat.pl.m.def	sto	one.dat.pl	walk-pst	.PP-NA	along	
ostas	mol	и,	skatoties	kā		
harbour.gen.sg	pier	ACC.SG	watch.cvв	how		
ostā	atgr	iežas	zvejas			
harbour.loc.sg	retu	rn.prs.3.rfi	fishing.	GEN.SG		
kuģīši.						

ship.dim.nom.pl

'[The seaside's shore and dunes, forest and meadows are so well known (to me/us).] At the seaside **I/we welcomed** uncountable sunrises, **watched** the rough sea during storms, **sat** on the big stones warmed by the sun, or **walked** along the harbour pier, watching how fishing boats returned to the harbour.'

With the auxiliary *ir* (be.prs.3), the construction formally belongs to the Present Perfect tense in Latvian. This tense is used in the active voice in the clauses that introduce the reminiscence in (110), see (111):

(111) Latvian (lvTenTen14)

Daudzus	gadus	mana	l	ģimene
many.ACC.PL.M	year.ACC.I	PL my.No	OM.SG.F	family.noм.sg
vasaras	ir	pavadīji	usi	Zvejniekciema
summer.ACC.PL	be.prs.3	spend.ps:	Г.PA.SG.F	PLN.GEN
jūrmalā,	tur	ir	izaugu	si
seaside.loc.sg	there	be.prs.3	grow_u	p.pst.pa.sg.f
mūsu bē	rni	un	mazbēr	ni.
1PL.GEN ch	ild.nom.pl	and	grandcl	hild.nom.pl

'For many years my family **(has) spent** the summers at the seaside of Zvejniekciems. This is where our children and grandchildren **grew up**.'

As (111) is the beginning of the text, the passive cannot be used—the topical actor (here: the author and her family) has to be introduced first.

It seems that in Latvian there is a stronger bond between type-focusing and perfect tense than in Lithuanian (see also Section 6.3). In Lithuanian, simple past or pluperfect would be the natural tense choice when 'translating' a cumulative construction into active voice, while in Latvian Present Perfect Active, or an active past participle without auxiliary, is also found in cumulative constructions (cf. Nau 2005, there described as 'listings of events'). An alternation of active and passive participles is observed in Latvian when, in a cumulative construction where passive is the main choice, certain predicates cannot be used in the passive. Reasons may be formal (reflexive verbs do not form passive participles in Latvian), lexical (some verbs, probably those that express unrepeatable events, never use a past passive participle as predicate), or semantic (restriction to human actors). Two longer examples shall illustrate this.

Example (112) is a typical part of a report about a person's career. The topical person is Anna, whose career as a singer is introduced in two sentences with past tense (112 a). This introduction is followed by seven clauses listing her achievements, six of which contain a passive participle (of which two combined with the auxiliary *ir*), but the first one (112 b) has the form of an active Present Perfect, as the verb is reflexive. After the listing, a sentence with past tense concludes the report (112 e).

- (112) Latvian (lvTenTen14)
 - (a) Skrundas sieviešu korī Anna sāka [start.pst.3] dziedāt 1960. gadā. Deviņdesmitajos gados viņa bija [be.pst.3] viena no piecām visilgāk dziedājušajām kora dalībniecēm.

'Anna **started** to sing in the women's choir of Skrunda in 1960. During the nineties she **was** one of the five members who had sung in the choir for the longest time.'

(b)	Ir	piedalījus	sies	visos
	be.prs.3	take_part.pst.pa.f.rfl		all.loc.pl.м
	dziesmu song.GEN.PL	svētkos, [] festival.loc.pl		
(c)	apmeklē-t-i attend-pst.pp		visi II.nom.pl.m	<i>koru</i> choir.gen.pl

```
salidojumi,
gathering.NOM.PL
```

- (d) dziedā-t-s daudzās dažādās sing-pst.pp-na manv.loc.pl.f various.LOC.PL.F vietās un dažādām uz place.loc.pl and various.dat.pl.f on skatuvēm. [...] scene.DAT.PL (She) took part in all song festivals [...], attended all choir gatherings, sang at many different places and on various scenes.' [omitted: four clauses with passive predicates continuing the list of achievements]
- (e) Anna korī dziedāja [sing.PST.3] līdz 2000. gadam un to atstāja [leave.PST.3] slimības dēļ.
 'Anna sang in the choir until the year 2000 and left it because of bad health.'

Just as in (110) above, in (112) clauses with a passive predicate referring to the same actor are combined regardless of whether they are subjectless or do have a nominative subject. Each clause starts with the verb. In the first clause, the auxiliary *ir* 'be.PRS.3' appears and seems to have scope over all following participles, active or passive.

Example (113) illustrates the use of the verbs 'be born' and 'die' in active voice besides other verbs in the passive. This extract is an instance of indefinite actor and the active participles are marked for masculine plural, which is the Latvian version of a third person plural indefinite (for this type see Siewierska & Papastathi 2011). It is not clear why the verbs *dzimt* 'be born' and *mirt* 'die' are never used in the passive in Latvian (in contrast to Lithuanian). Other verbs where the subject is the undergoer do appear in passives, for example, *krist* 'fall', *slimot* 'be ill', also verbs implying a change of state (though this is rare) such as *aizmigt* 'fall asleep'. A possible reason may be the fact that 'die' and 'be born' are not repeatable and not quantifiable—they cannot depict a type of which the same individual can experience more than one token, the situation that may be at the heart of the construction.

(113) Latvian (lvTenTen14)

Īsi	rakstīt	par	to	nav
short.ADV	write.INF	about	DEM.ACC.SG	NEG.be.prs.3

Par iespējams. to ir pat possible.nom.sg.m about DEM.ACC.SG be.prs.3 even dziedā-t-s [...]. Par to ir sing-pst.pp-na about DEM.ACC.SG be.prs.3 raudā-t-s, asiņo-t-s. Par to cry-pst.pp-na bleed-pst.pp-NA about DEM.ACC.SG ir dzim-uš-i mir-uš-i. un be.prs.3 be born-pst.pa-pl.M and die-pst.pa-pl.m 'It is not possible to write about it briefly. People have even sung about it. People have cried, shed blood for it. People have been born and died for it'

Example (113) is less typical for a cumulative construction, as it lacks explicit quantification. Each of the passive clauses in isolation could refer to just one single event. By being part of a list, and also because of the indefiniteness of the actor, it may however be inferred that events of this type have taken place repeatedly.

Perfect tense seems to be an important ingredient of the cumulative construction in Latvian when understood as a quantification over tokens of an event type indicated by the predicate. In contrast, a past form of the auxiliary *tikt* 'get' in listings of activities has a different effect: it draws attention to activities carried out on a single occasion. Consider example (114).

(114) Latvian (lvTenTen14)

[Šī gada Annas tika pilnībā "iznestas uz Rucavas sievu pleciem".] Tika dziedāts. dancots. gan gan add dance.pst.pp.sg.m AUX.PST.3 ADD sing.pst.pp.sg.m godinātas. Annas gan celebrate.pst.pp.pl.F ADD Anna.NOM.PL '[This year St Anna's day was completely "shouldered by the women of Rucava".] They sang, they danced, they celebrated Annas (-women whose name is Anna)', 'There was singing, dancing, and celebration of Annas.'

This also is a pattern found several times in the corpus, but it is a functionally and grammatically different kind of listing. The actor is less clearly associated with a known, given referent—in (114), the singing and dancing was probably done not only by the women of Rucava but by everybody attending the event (in this interpretation, a translation into

German with the impersonal passive would be possible). A similar example with a generic actor was (91) in Section 6.2.1 above.

A possible conclusion is that in Latvian, the cumulative construction with listing of event types is derived from the general function of experiential perfect, to which we will turn in Section 6.3, while listing of events with indefinite or vague actors and the auxiliary *tikt* as in (114) belong to the general functions of subjectless and subject-weak passives with *tikt*.

6.3. Experiential perfect in Latvian

As stated above, in Latvian the distinction between type-focusing and token-focusing event descriptions (cf. Dahl & Hedin 2000) is grammaticalized (to a higher degree than in Lithuanian) in the distinction between Simple Past (focusing tokens) and Present Perfect (focusing types). With atelic activities and states—the type of verbs we focused on in our analysis of passives of intransitive verbs-a perfect tense cannot entail the meaning of a resulting state (at least not one directly connected to the verb meaning). Instead, the Present Perfect of these verbs often expresses what has been called experiential (or existential) perfect or indefinite past (Comrie 1976, 58–59; Bybee, Perkins & Pagliuca 1994, 62; Lindstedt 2000, 369; Iatridou *et al.* 2003, 155).¹⁸ There are broader and narrower definitions of this concept, and we may use the different terms to distinguish them. Comrie's definition of the experiential perfect is essentially that of an indefinite past: it "indicates that a given situation has held at least once during some time in the past leading up to the present" (Comrie 1976, 58). It is the narrower definition that deserves the term experiential perfect, for example: "certain qualities or knowledge are attributable to the agent due to past experience" (Bybee, Perkins & Pagliuca 1994, 63), "asserts that the subject has a certain experience" (Iatridou et al. 2003, 155). As Lindstedt (2000, 369) notes, the narrower definition presupposes an animate agent.

¹⁸ Note that we are talking about an experiential perfect as one use of a gram of the gram-type PERFECT. Some languages have a distinct gram for experiential meaning, which leads to the postulation of a distinct gram-type EXPERIENTIAL (Dahl 1985, 139–144). The Latvian Present Perfect is a typical European perfect similar to the one in English or Swedish. A distinct form for the experiential is a construction containing the past active participle and the auxiliary *tikt* (see Daugavet & Holvoet 2019).

In Latvian we find that the Present Perfect with atelic verbs in the active voice is used as an indefinite past—it meets the broader definition, and the semantic range of subjects is not restricted, while in the passive voice it is restricted to human referents and very often used in the narrower meaning, namely, asserting experiences (or, when used with negation, asserting the lack of experience). As it is mostly individuals whose experience is noteworthy, this type of passive construction is mostly used when the covert actor has a referent known to both speaker and hearer, retrievable from the context and being the topic of the current discourse. However, it is also sometimes found with generic actors, especially in subordinate clauses (for example, of the type *If/when one has* v-ed...).

We illustrate the experiential perfect with subjectless passives and in the active voice with a longer example, which nicely shows the contrast between perfect and past. Like all examples in this section, (115) comes from the corpus lvTenTen14, but the original text, an interview with the alpinist Kristaps Liepinš, is still available on the Internet.¹⁹ In lines (a), (c) and (d) the verb $b\bar{u}t$ 'be' is used in the Present Perfect of the active voice. This part of the extract introduces the topic ('the highest mountains I have climbed') in a general way, while the following lines, where the main predicate is the verb $k\bar{a}pt$ 'climb'²⁰ or its prefixed lexical synonym *uzkāpt*, give examples either as types or as tokens. In line (d), with Present Perfect Active, the speaker's experience with a type of events (climbing high peaks) is asserted, while line (f) gives the example of a specific token of such an event, therefore using Simple Past. The same contrast between event type and asserting experience, on the one hand, and naming a concrete example, on the other, is found in the following lines, (g) and (h) vs. (i). Only here, the passive is used instead of the active in Present Perfect. Thus, we see that active and passive alternate within the Present Perfect, which contrasts with Active Simple Past.

(115) Latvian (lvTenTen14)

(a)	Man	bieži	vaicā,	kas	ir
	1SG.DAT	often	ask.prs.3	what.nom	be.prs.3

¹⁹ http://www.adventurerace.lv/?DocID=1999, accessed 01.07.2020.

²⁰ Note that this verb is intransitive in Latvian: the goal that is expressed as a direct object in English (*climb a mountain*) is in the locative in Latvian (*kāpt kalnā*, literally 'climb on a mountain').

augstākais		kalns,	kur		
highest.noм.sc	G.M.DEF	mountain.NOM.SG	where		
esmu	bijis?				
be.prs.1sg	be.pst.pa.s	SG.M			
'I am often asked what the highest mountain is where I have been .'					

- (b) [Nedaudz pāri sešiem kilometriem. Un tad cilvēks tā skatās: "Mmm, tas jau tā zemu ... Nav jau astoņi."]
 ['A little over six kilometres. And then they look at me: "Well, that is rather flat... It isn't eight."]
- bijis kalnos. (c) \bar{a} , neesmu yes NEG.be.prs.1SG be.pst.pa.sg.m mountain.loc.pl kas augstāki par sešiem what.nom higher.NOM.PL.M over six.dat.pl.m kilometriem. kilometre.DAT.PL

'True, I have not been on mountains higher than six kilometres.'

(d)	bet	et 30 gadu		laikā		esmu	
	but	30 year	.GEN.PL	tim	e.loc.sg	be.prs.1sg	
	kāpis			daudzās		cita	
	climb.pst.pp.sg.м		М	many.loc.pl.f		other.gen.sg	
	veida		virsotn	ēs	dažādās		
	1		OC.PL	various.Lo	OC.PL.F		
			та	lās.			
	world.G	EN.SG	edg	ge.loc.p	L		
	'but in the course of 30 years I have climbed many other kinds						
of peaks in various parts of the world.						-	

- (e) [Kurš ir tas sešu kilometru kalns?](interviewer) ['Which is this mountain of six kilometres?']
- uzkāpām (f) Līdz sešiem tūkstošiem PVB.climb.PST.1PL thousand.DAT.PL up_to six.dat.m Pamirā, tas bija sen. Pamir.loc be.pst.3 DEM.NOM.SG.M long_ago 'We climbed up to six thousand in the Pamir Mountains, that was long ago.'

(g)	Ir	uzkāpts		arī	virsotnēs,
	be.prs.3	pvb.climb.pst.pp.na		also	peak.loc.pl
	kas	ir	tuvu	sešu	kilometru
	what.nom	be.prs.3	close	six.gen	kilometre.GEN.PL

augstumamHimalajos.height.DAT.SGHimalaya.LOC.PL'I/we also (have) climbed peaks with a height close to sixkilometres in the Himalayas.'

- (h) Ir kāpts piectūkstošniekos
 be.PRS.3 climb.PST.PP.NA five_thousand.DER.LOC.PL
 Pamirā un Āfrikā.
 Pamir.LOC and Africa.LOC
 'I/we (have) climbed five-thousand-metres peaks in the Pamir
 Mountains and in Africa.'
- (i) Āfrikā kāpām otrajā Africa.LOC climb.pst.1pl second.loc.sg kontinenta augstākajā smailē. highest.LOC.SG.DEF continent.GEN.SG peak.loc.sg [kas no Kilimandžāro atšķiras ar Alpu smailes skatu.] 'In Africa we climbed the continent's second highest peak, [which differs from the Kilimanjaro with (having) a view of Alps' peaks.]'

What then is the function of the passive in this context, or what is the difference between the active clause (115 d) and the passive clauses in (115 g, h)? Both the Present Perfect Active and the Passive with the auxiliary $b\bar{u}t$ 'be' in present tense refer to event types with several tokens in an indefinite past (climbing various mountains). As the passive has no explicit mention of the actor, in this example it may refer to actions carried out by the speaker alone or by a group including the speaker. Strictly speaking, (115 g, h) only assert that events of this type have taken place ('there has been climbing of such peaks'), while (115 d) asserts that a named actor has carried out the action ('I have climbed such peaks'). In this way the passive construction highlights the verb without its main argument. Possibly the assertion of the event is therefore stronger in the passive construction. However, a stronger assertion in (115 g, h) may also result from word order, with the verb at the beginning of the clause.

Asserting the actor's experience with a certain type of events often includes quantification: it is asserted that the type has occurred more than once, or with a high intensity. Another typical pattern is listing of different events which together form the experience. Thus, we get what was described as cumulative construction in Section 6.2, but what in Latvian may be better classed as cumulative subtypes of an experiential perfect. Example (116) illustrates quantification of a single event type. Examples for listing of event types were given in Section 6.2.

(116)	Latvian (lvT	enTen14)		
	Ir	gana	kris-t-s,	vienmēr
	be.prs.3	plenty	fall-pst.pp-na	always
	veiksmīgi	bijis.		
	lucky.adv	be.pst.pa	NA	
	'I have fall	en down n	nany times, and al	lways been lucky.'

Another subtype of the experiential perfect contains negation, as in (117). With negation, the meaning is often that of a UNIVERSAL PERFECT, or PERFECT OF PERSISTENT SITUATION, as it asserts that a state has lasted for a certain period up to the moment of speech. The same holds for an active Present Perfect (118), with which the passive construction alternates. A universal perfect without negation occurs more rarely in both voices.

(117) Latvian (lvTenTen14)

Pēdējos13gadusnavslimo-t-slast.ACC.PL.M13year.ACC.PLNEG.be.PRS.3be_ill-PST.PP-NA'I haven't been ill for the last 13 years.'

(118) Latvian (lvTenTen14)

Šos	pēdējos	gadus	neesmu
DEM.ACC.PL.M	last.acc.pl.m	year.ACC.PL	NEG.be.prs.1SG
slimojusi	nevienu	dienu.	
be_ill.pst.pa.sg.f	NEG.one.ACC	c.sg day.Ad	CC.SG
'I haven't been ill	a single day for	these last years	s.'

Thus, the Present Perfect of a subjectless passive in Latvian has the same (temporal) functions as a Present Perfect in the active. The difference between the voices is that the passive is restricted to humans, most often refers to the first person and more often expresses an experiential perfect in the narrow sense (these three features are of course related). As it lacks morphological means of reference tracking, it is used when the referent has already been established in the discourse. It may be vague between 1SG and 1PL (exclusive), cf. examples (115) and (110). Being 'stripped' of its main argument, the verb meaning comes to the fore, which may result in a stronger assertion than that expressed with an Active Present Perfect. However, whether this is a regular difference between the active and the passive construction is not clear; this question needs a separate study with

native speaker judgements. The active form occurs in all registers, while the passive is rather informal and found especially in blogs and interviews.

6.4. Conclusions: tendencies and types

Our investigation of the so-called impersonal passive in Baltic has shown at least two things that challenge previous views, or add important aspects to them. First, we have argued that there is no categorical distinction between 'impersonal' passive (understood as subjectless) and 'personal' passive (where there is or could be a nominative subject). Instead, there are construction types that are characterized by either lacking a subject or having a 'weak' subject. In Lithuanian, weak subjects are usually in a non-nominative case and/or do not trigger agreement; therefore the nonagreement form of the participle is characteristic for these constructions (and they are 'impersonal' if this is the defining criterion). In Latvian, on the other hand, weak subjects are mainly distinguished by word order (they follow the verb) and the fact that they are not topics, but morphologically they are the same as strong subjects, showing nominative case and agreement. Second, it became clear that, however the category is defined, impersonal passives do not represent one single type, but branch into several types with subtypes. We will now summarize the features of those types that may be more clearly distinguished.

The most general of these is the use of subjectless and subject-weak passives with a generic meaning.

Feature	Latvian	Lithuanian
Participle	РST-PP (<i>t</i> -participle)	both, mostly <i>m</i> -participle
Auxiliary	most common with <i>tikt</i>	<i>būti</i> or no auxiliary
Actor	human; people at a cer- tain place or time	human; people at a cer- tain place or time
Agent phrase	_	not possible with <i>m</i> -participle, rare with <i>t</i> -participle

 Table 17. Generic descriptions (no or weak subject)

Feature	Latvian	Lithuanian
Meaning	description of typical, regular activities of all members of a large group (unspecific events)	description of typical, regular activities of all members of a large group (unspecific events)
Verbs (semantic)	typically agentive, activities	typically agentive, activi- ties
Verbs (transitivity)	intransitive or transitive	mostly intransitive; transitives occasionally occur
Word order	weak subject follows verb	various
Tense, mood	present or past tense	mostly present; past and future possible
Registers	all	all

Our next construction type is what we call the 'cumulative construction'. It seems to have several varieties. The 'cumulative-retrospective' construction is most clearly distinguished in Lithuanian. It also appears in Latvian, but for Latvian another variant, the 'cumulative-experiential', is more typical. The two subtypes are compared in Table 18. The cumulativeexperiential construction may also be seen as a subtype of the experiential perfect summarized in Table 19.

 Table 18. Cumulative constructions typical for Lithuanian and Latvian compared (the Lithuanian type occurs also in Latvian, but is less typical there)

	Cumulative-retrospective construction (typical for Lithuanian)	Cumulative-experiential construction (typical for Latvian)
Participle	РЅТ-РР (<i>t</i> -participle); almost always non-agree- ment form	РST-РР (<i>t</i> -participle)
Auxiliary	usually without auxiliary; if auxiliary occurs, it is in past tense	'be' typically appears and is in present tense
Actor	human; usually known, third or first person	human; usually known, most often first person

	Cumulative-retrospective construction (typical for Lithuanian)	Cumulative-experiential construction (typical for Latvian)
Agent phrase	possible	-
Meaning	habitual past, cumulative action(s)	experiential perfect; event types which have occurred in the past; attesting agent's experience or achievements
Verbs (semantic)	agentive and non-agen- tive; activities and states	agentive and non-agentive; activities and states; rare with change-of-state verbs
Verbs (transitivity)	predominantly intransitive; transitives occasionally occur	intransitive and transitive; transitives often occur
Subjects/ Objects	predominantly without subject; if subject occurs, it is typically quantified, genitive marked; possible, but rarely attested: direct object not promoted	nominative subjects with transitive verbs common
Word order	various; sentence-initial adverbial is common	verb at the beginning of clause
Tense, mood	indicative past tense	present perfect
Registers	typical for certain registers: media, blogs, fiction	typical for certain registers: media, blogs, fiction

 Table 19. Experiential perfect with the passive in Latvian

Feature	Value
Participle	рsт-рр (<i>t</i> -participle)
Auxiliary	'be' (in present tense) or no auxiliary
Actor	human; most often first person

Feature	Value
Meaning	experiential perfect: states that a token of an event type took place in the past and attests the agent's experience
Verbs (transitivity)	intransitive and transitive
Verbs (semantic)	agentive and non-agentive
Word order	verb typically clause-initially
Tense, mood	perfect; alternates with active present perfect and is opposed to simple past tense
Registers	typical for blogs, personal reports, also interviews

7. Evidential meaning, evidentials and evidential passive

In Latvian, a bare past participle, active or passive, is often used in reports and contexts of hearsay. They can be interpreted as past tense forms of the Evidential, which in present tense has a special form with the suffix *-ot* (historically a present active participle). A passive participle of an intransitive verb is usually pragmatically bound to the topical person of the report, while an active participle can be used with any overt or covert subject. In (119), the whole extract is marked for reported evidentiality by the choice of verb forms.

(119) Latvian (lvTenTen14)

Gripa		un	citi			vīrusi	
influenza	.NOM.SG	and	oth	er.nom.pi	L.M	virus.	NOM.PL
šim		vīram		es-ot	sveš	i.	
DEM.DAT.	SG.M	man.DAT.S	G	be-evi	fore	ign.noi	M.PL.M
Slimnīcā		gulē-t-s		tikai	reiz	i n	nūžā,
hospital.1	LOC.SG	lie-pst.pp-	NA	only	once	e li	ife.loc.sg
kad	plīs-us-	i	a	klā zarna		Ā	İrsti
when	burst-ps	Г.PA-F.SG	a	ppendix.N	NOM.SC	g d	octor.nom.pl
toreiz	ārstēj-u	š-i	Ę	gastrītu,		b	et
then	treat-ps1	C.PP-NOM.PI	L g	gastritis.A	CC.SG	b	ut
izrādīj-1	ısies		šāda			vaina.	
turn.out-	PST.PP.SG	.F.RFL	such	.NOM.SG.F	t t	fault.No	OM.SG
	influenza šim DEM.DAT. Slimnīcā hospital.I kad when toreiz then izrādīj-	influenza.NOM.SG šim DEM.DAT.SG.M Slimnīcā hospital.LOC.SG kad plīs-us- when burst-PST toreiz ārstēj-u then treat-PST izrādīj-usies	influenza.NOM.SG and šim vīram DEM.DAT.SG.M man.DAT.S Slimnīcā gulē-t-s hospital.LOC.SG lie-PST.PP- kad plīs-us-i when burst-PST.PA-F.SG toreiz ārstēj-uš-i then treat-PST.PP-NOM.PD izrādīj-usies	influenza.NOM.SG and oth šim vīram DEM.DAT.SG.M man.DAT.SG Slimnīcā gulē-t-s hospital.LOC.SG lie-PST.PP-NA kad plīs-us-i a when burst-PST.PA-F.SG a toreiz ārstēj-uš-i g then treat-PST.PP-NOM.PL g izrādīj-usies šāda	influenza.NOM.SG and other.NOM.PI šim vīram es-ot DEM.DAT.SG.M man.DAT.SG be-EVI Slimnīcā gulē-t-s tikai hospital.LOC.SG lie-PST.PP-NA only kad plīs-us-i aklā zarna when burst-PST.PA-F.SG appendix.M toreiz ārstēj-uš-i gastrītu, then treat-PST.PP-NOM.PL gastrītis.Au izrādīj-usies šāda	influenza.NOM.SG and other.NOM.PL.M šim vīram es-ot sveš DEM.DAT.SG.M man.DAT.SG be-EVI fore Slimnīcā gulē-t-s tikai reiz hospital.LOC.SG lie-PST.PP-NA only once kad plīs-us-i aklā zarna. when burst-PST.PA-F.SG appendix.NOM.SG toreiz ārstēj-uš-i gastrītu, then treat-PST.PP-NOM.PL gastritis.ACC.SG izrādīj-usies šāda	influenza.NOM.SG and other.NOM.PL.M virus.N šim vīram es-ot sveši. DEM.DAT.SG.M man.DAT.SG be-EVI foreign.NO Slimnīcā gulē-t-s tikai reizi r hospital.LOC.SG lie-PST.PP-NA only once li kad plīs-us-i aklā zarna. Ā when burst-PST.PA-F.SG appendix.NOM.SG d toreiz ārstēj-uš-i gastrītu, b then treat-PST.PP-NOM.PL gastritis.ACC.SG b izrādīj-usies šāda vaina.

'Influenza and other viruses **are** alien to this man. Only once in (his) life (he = this man) **had been** to hospital, when he had appendicitis.' (literally: 'when the appendix **(had) burst**') The doctors at the time **medicated** him for gastritis, but it **turned out** to be that fault (appendicitis).'

However, this use of the passive participles as evidentials is not fully grammaticalized. Bare participles are also used in other functions, especially for indicating anteriority, or as experiential perfects (see 6.3). The use in evidential meaning differs from other uses of the participle in allowing definite time reference and in that it can be used in narratives, though this is not frequent in modern standard Latvian. With certain verbs, the evidential use seems to be more frequent than average. One such verb is *varēt* 'can, be able', as in (120) (cf. Holvoet 2015, 388–390). With this verb, the actor is most often generic or indefinite, not a topical or first person. Thus, the two predicates in the form of past passive participles in (120) have different actors.

(120) Latvian (lvTenTen14)

Dzira	lē-t-s,	ka	agrāk	Jaunn	ıoku	un	Jaunpils
hear-	PST.PP-NA	that	earlier	PLN.GI	EN.PL	and	PLN.GEN.SG
pilīs		varē-t-s		gan	saraks	tīties,	gan
castle	LOC.PL	can-PST.I	PP-NA	ADD	marry	INF.RFL	ADD
svinē	t.						
celeb	rate.1NF						
'I he	ard that e	earlier in	the cast	les of Jau	unmoka	as and Ja	aunpils one
could	l get marr	ied as we	ll as hav	e a party.			

Lithuanian has gone much further in the grammaticalization of a passive construction into an Evidential, and the remainder of this section will deal with Lithuanian exclusively.

7.1. The Lithuanian Evidential

As is well known from the literature, the Lithuanian impersonal passive has developed extended uses; more specifically, it has moved into the domain of evidentiality. The evidential (inferential) meaning initially rested on implicature which later on became more and more conventionalized (Wiemer, forthcoming). This gave rise to a new construction which, although based on non-agreeing passive participles, is in many respects distinct from the impersonal passive.

Several scholars have presented arguments against a passive analysis of the evidential construction; we will briefly present these here.

Firstly, a personal passive can serve as an input to an evidential, cf. (121), where (121b) is derived from (121a).

(121) Lithuanian (cited from Spraunienė et al. 2015)

(a)	Jis	buvo	muš-t-as.	
	3.NOM.SG.M	be.pst.3	beat-pst.pp-sg.m	
	'He was beate	en.'		
(b)	Ŧo	bū-t-a	muš-t-o	

(b)	f0	bu-t-a	mus-t-o.
	3SG.GEN.M	be-pst.pp-na	beat-pst.pp-gen.sg.m
	'He was beater	ı (apparently).'	

If passivization is understood as an operation which demotes or deletes the agent (or the most agent-like argument), then double passivization should be precluded.

Secondly, evidentials with non-agreeing participles do not impose any restrictions on the lexical input to the construction; e.g. they may be formed from zero-place verbs such as *lyti* 'rain' and epistemic modals which, as raising verbs, do not have an argument structure of their own and therefore should not allow passivization (Nau & Holvoet 2015; Spraunienė *et al.* 2015; Wiemer 2006b, 301); cf. (122) and (123).

(122) Lithuanian (DLKT)

	Naktį	smarkiai	ly-t-a,	žolė
	night.Acc.sG	heavily	rain-pst.pp-na	grass.nom.sg
	su	didele	rasa.	
	with	big.INS.SG.F	dew(f).1NS.SG	
	'It rained he	eavily at night: th	ne dew is heavy on th	e grass.'
,	\ T ' 1 ' (·· 10 0		

Lithuanian (cited from Spraunienė <i>et al.</i> 2015, 342)					
Spėj-a-m-a,	kad	čia	galė-t-a	būti	
believe-prs-pp-na	that	here	can-PST.PP-NA	be.inf	
pirmosios	Kėdaini	ų	rotušės		
first.gen.sg.f.def	Kėdaini	ai.gen.pl	town_hall(F).c	GEN.SG	
'It is believed that the	first Town	Hall of Kee	lainiai could have b	een there.'	
	Spėj-a-m-a, believe-prs-pp-na pirmosios first.GEN.SG.F.DEF	Spėj-a-m-a,kadbelieve-prs-pp-NAthatpirmosiosKėdainifirst.GEN.SG.F.DEFKėdaini	Spėj-a-m-a,kadčiabelieve-prs-pp-NAthatherepirmosiosKėdainiųfirst.GEN.SG.F.DEFKėdainiai.GEN.PL	believe-prs-pp-na that here can-pst.pp-na pirmosios Kėdainių rotušės	

Evidential constructions are so distinct from the passive proper that they should be considered non-passive (cf. Lavine 2006; Holvoet 2007; Nau

& Holvoet 2015, 18). As observed by other authors (cf. Wiemer 2006a, 35), evidential constructions operate almost exclusively on the non-agreeing form of the *t*- participle, with the exception of the *m*-participle of the verb $b\bar{u}ti$ 'be' which may convey evidential meaning:

(124)	Lithuanian (dlкт)					
	Antpečių	žvaigždutės	rodo,	kad	јо	
	epaulette.gen.pl	star.nom.pl	show.prs.3	that	3.GEN.M	
	es-a-m-a	leitenanto.				
	be-prs-pp-na	De-PRS-PP-NA lieutenant.GEN.SG				
	'The epaulette stars show that he must be a lieutenant.'					

The evidential construction has further formal and semantic properties which distinguish it from other constructions with a non-agreeing *t*-participle. The following three properties are necessary and defining for the evidential construction:

- i. the participle appears without auxiliary and functions as a finite verb (cf. Holvoet 2007, 81–105);
- ii. the agent (if there is one) is obligatorily expressed and marked with the genitive;
- iii. the construction has evidential meaning (see below).

The genitive of agent exhibits some subject properties, for example, it can trigger predicative agreement in gender, number and case, as illustrated in (125); see also (121b).

(125)) Lithuanian (Lithuanian WaC v2)					
	Baudžiauninko	bū-t-a	gudraus			
	serf(m).gen.sg	be-pst.pp-na	clever.gen.sg.м			
	'Evidently, the serf was clever'					

The lexical input of the evidential construction is mostly intransitive verbs with no restrictions on the semantics of the single argument—it may be human, animate, or inanimate. In this respect evidential constructions clearly differ from impersonal passives, which require that the demoted agent is human (see Section 6; Holvoet 2004, 118–119).

Following Lavine (2006), we believe that in evidential constructions, the genitive of agent is most plausibly analysed as a quirky subject of an active construction. The genitival NP is normally used preverbally (as in ex. (125)), but it may also appear in the focus position:

(126) Lithuanian (DLKT) Akivaizdu, kad XIII-XIV a. čia bū-t-a obvious that 13-14th century there be-pst.pp-na bent penkiu. tikriausiai nedideliu mūriniu at_least five.gen.pl probably small.gen.pl brick.gen.pl pastatų. building.gen.pl 'It is obvious that in 13–14th century there were at least five, probably small brick buildings.'

While in Latvian, the Evidential and evidential uses of the participles are specialized for reportative evidentiality, Lithuanian evidential constructions can express different evidential meanings, as illustrated in ex. (127–129) (cf. Ambrazas *et al.* 2006, 281; Holvoet 2007, 90).

a) **inferential**:

(127)	Lithuanian (Lithuanian WaC v2)					
	[Sprendžiant iš archeologinių iškasenų,]					
	Indijos	teritorijoje	2	žmonių	gyven-t-a	
	India.GEN.S	g territory.	LOC.SG	people[pl].gen	live-pst.pp-nA	
	jau	paleolite.				
	already	Paleolithic.LOC.	SG			
	'[Judging fi	om the archeol	ogical fin	ds,] people already	lived in the	
	territory of	India in the Pal	eolithic A	.ge.'		

b) reportative:

(128)	Lithuanian (Lithuanian WaC v2)						
	Pasak		M. Dilienės,	kariuomenės	bū-t-a		
	accordii	ng_to	PN.GEN	army.gen.sg	be-pst.pp-na		
	kaip	miško.					
	as	forest.c	GEN.SG				
	'According to M. Dilienė, the army must have been like a forest.'						

c) **mirative**:

(129)	29) Lithuanian (cited from Holvoet 2007, 90)						
	Užeinu,	0	jos	jau			
	drop_in.prs1.sg	but	3.GEN.SG.F	already			
	miškan	išei-t-a.					
	wood.ill.sg go_out-pst.pp-nA						
	'I drop in, but she (it turns out, to my surprise) is gone to the wood						

7.2. Evidential passive

Though we have attempted to delimit evidential constructions from the passive proper, the boundaries between the evidential and the passive in Lithuanian are fuzzy (cf. Spraunienė *et al.* 2015). On the one hand there are constructions with *t*-participles which have the formal properties of the evidential but do not convey evidential meaning. Clear examples are the cumulative constructions discussed in Section 6.3. On the other hand, there are impersonal passives which do not meet either the requirement (i) or the requirement (ii) of evidentials but nevertheless have an evidential meaning:

Non-omitted auxiliary, omitted genitive of agent:

(130) Lithuanian (Lithuanian WaC v2)

Ten kur XII–XIII a. buvo tankiai there where 12th-13th c. be.pst.3 densily gyven-t-a, atsirado dvkros. live-pst.pp-na uninhabited area.NOM.PL appear.PST.3 [XIV a. pietinėse kuršių žemėse ir Lamatoje liko nedaug kaimų.] 'Those places which were densely inhabited in the 12-13th centuries, turned into uninhabited areas; [in the 14th century in the southern Curonian land and in Lamata there were not so many villages left.]'

(131) Lithuanian (Lithuanian WaC v2)

Kad čia nuo seno buvo gyven-a-m-a that here old.gen.sg since be.pst3 live-prs-pp-na byloja dideli. išsilaikę gerai witness.prs.3 big.nom.pl.m well preserved.NOM.PL.M Jutonių, Žingių, Degsnės pilkapynai. PLN.GEN PLN.GEN tumulus(M).NOM.PL PLN.GEN 'One can see from the well-preserved tumuli of Jutonys, Žingiai and Degsne that this place has been inhabited since early ages.'

Omitted auxiliary, omitted genitive of agent:

(132) Lithuanian (Lithuanian WaC v2)

Bet yra ženklų, kad Gedimino but Gediminas.GEN be.prs3 that sign.GEN.PL kalne gyven-t-a net I hill.gen.sg live-pst.pp-na first even tūkstantmetvie prieš Kristų. millennium.LOC.SG B.C.

'But there are signs that around Gedimino hill people **lived** even in the first millennium B.C.'

We would regard ex. (130–132) as EVIDENTIAL PASSIVES, a variety of the impersonal passive which does not have dedicated formal means of expression. Many authors (cf. Willett 1988; Lavine 2006; Wiemer 2006; Holvoet 2007; Nau & Holvoet 2015, 18) acknowledge that evidentiality is a parasitical category feeding on other grammatical categories, such as voice, tense and aspect.

As far as lexical input is concerned, it is noteworthy that evidential passives, like evidential constructions and unlike the impersonal passive, can be formed from verbs which do not have human subjects, cf. (133) which refers to the growth of a company's sales:

(133)	Lithuanian (DLKT))				
	Vasarį	buvo	aug-t-a	dar		
	February.ACC	be.pst3	grow-pst.pp-na	even		
	smarkiau —					
	big.comp					
	[pardavimai pasiekė 5,608 mln. Lt ir dvigubai viršijo 2005 m. vasari					
	rodiklius.]'In February the growth was even bigger—[the sales reached					
	5.608 mln. Litas and doubled the indicators of February 2005.]'					

The common and distinguishing features of the Lithuanian Evidential and Evidential Passive are presented in Table 20.

	Evidential	Evidential Passive
Participle	PST.PP (only with 'be' also PRS.PP) non-agreement form	PST.PP, PRS.PP non-agreement form
Auxiliary	no auxiliary	+/-
Subject	rare, analyzable as non- canonical object	-
Agent	obligatory; analyzable as quirky subject	+/-
Meaning	evidential: inferential, reportative, mirative	evidential

Table 20. Lithuanian Evidential vs. Evidential passive

	Evidential	Evidential Passive
Verbs (transitivity)	mostly intransitive	intransitive
Verbs (semantic)	all kinds	all kinds
Actor	all kinds	all kinds
Word order	various	various
Registers	all kinds	all kinds

8. Conclusions

The aim of this paper was to distinguish and 'profile' passive and formally related constructions in Baltic. For this purpose, we used a set of formal and functional parameters, considerably exceeding the syntactic features that are usually the focus of descriptions of the passive. We see multiple connections between the constructions so distinguished, and speak of them as a family of constructions: The Passive Family. We did not identify a progenitor of this family. First, because our study is strictly synchronic, based on corpus data of Modern Standard Latvian and Lithuanian. Second, given the variety of morphological input (two different participles, two different auxiliaries), it is evident that the various members of the Passive Family do not go back to one common ancestor. In our case, the source domain of the family metaphor is not the biological family, but rather the modern patchwork family, which mixes people related by blood, by marriage, and by affinity.

It is also not possible to identify one center or prototype within our motley assemblage. Formally, the *t*-participle and the *m*-participle provide two different starting points, and within one language they are clearly distinguished. In Lithuanian, construction types have a distinct preference for one of the participles, but some types allow both. In Latvian, most constructions investigated here use the *t*-participle, while the *m*-participle is specialized for modal meanings. Constructions with the auxiliary *tikt* (< 'become; get to') in Latvian may be seen as a third center, a strong stem in the family, which has however not (yet) branched, maybe because it is too young. These constructions represent the most typical passive, a 'pure' passive without special temporal or modal meaning, which is actional and clearly verbal (see Section 3). It represents the BASIC PASSIVE as described by Keenan & Dryer (2007) very well. The Lithuanian equivalent is formally split between the *m*-participle and the *t*-participle (Section 4.1), and constructions with the latter are formally not clearly distinguished from non-actional types of the passive. For these reasons, we did not establish a profile of the actional passive in Lithuanian. There seems to be not one typical passive construction in Lithuanian, but rather several subtypes or patterns specialized (in the sense of strong tendencies) for features such as actionality, tense, and reference type of the deleted actor. Taken together, these patterns may be regarded as representing not only Keenan & Dryer's basic passive, but also a **PROTOTYPICAL PASSIVE** in the approach of Siewierska & Bakker (2012), distinguished by the possibility of expressing the demoted actor in an agent phrase, a possibility only marginally given in Latvian. However, also in Lithuanian this possibility is rarely used in actual texts, where agent phrases occur in less than 10% of passive constructions (cf. Sections 2.2 and 4.1).

While Latvian and Lithuanian differ considerably in their expressions of an actional passive, they are astonishingly similar with respect to the stative passive and its subtypes (Section 5). These constructions are probably the oldest and represent common heritage in the two Baltic languages (and beyond), but it is still surprising that this remote common heritage has remained so stable amidst many language-particular innovations in the passive domain. In general, in these constructions a subject, which usually is the topic, is characterized by the state expressed by the participle. They may be seen as copular constructions rather than verbal forms, but such a distinction is probably of no further importance. The pure stative passive, or resultative proper (type 'the invoice is lost'), is formed from telic verbs and does not allow an agent phrase (5.1). An oblique argument similar to an agent phrase is possible, and sometimes obligatory, in quasi-resultatives ('the streets are covered by/with snow', 5.2) and qualitative resultatives ('the play is written by me', 5.3), which also differ in the range of possible verbs, showing lexical restrictions. Following Nedjalkov & Jaxontov (1988), we call these agent phrases "agentive objectives". They are similar to agent phrases expressing demoted actors in passive constructions and provide the source for the development of the latter, a process that took place in Lithuanian, but not in Latvian. Lithuanian is unusual in allowing agent phrases even with impersonal passives, though they are found still less often than with passives that have a subject.

We have argued that a simple dichotomy between impersonal and personal, or subjectful and subjectless passives is too narrow a view for a typology of passive constructions in Baltic. First, it is not a trivial question what should count as a subject in the passive (2.3). We argue that besides nominative noun phrases that trigger agreement, quantified nouns and some non-nominal arguments may make a passive construction 'subjectful'. On the other hand, especially in Latvian we see that passive constructions which do have an agreeing nominative subject may behave like impersonal passives, if the subject is indefinite and follows the verb. This made us introduce the concept of 'weak subject', which admittedly needs further specification (left for the future). The concept is useful in the description of those passive constructions which are typical for intransitive verbs, but also found with transitive verbs if the subject is omitted or weak. In Section 6 we described general characteristics of constructions of subjectless and subject-weak passives and profiled some of its types. Of special interest is the cumulative construction, which contains predicates (typically more than one) which are quantified with respect to the occurrence, duration, or intensity of the event. In Lithuanian, the construction has a past-habitual meaning, while in Latvian, cumulative constructions are a subtype of the experiential perfect. In both languages, the actor most often is a known, definite person, which contrasts with the generic human actor that characterizes other passive constructions with intransitive verbs. Although the actor is known, in Lithuanian it may be additionally given in an agent phrase. The undergoer is usually deleted or a weak subject, but in Lithuanian it may also occur as a non-promoted accusative object (very rarely found). The alternation of nominative subjects and non-promoted objects is more typical for another construction in Lithuanian, Subject Impersonals (Section 4.2), which are formed from transitive verbs and have a present-habitual meaning. In Section 6, but also in other parts of our studies, we saw connections between passive constructions and temporal and aspectual meanings. These certainly deserve more investigations, focusing on individual construction types.

Other meanings that passive constructions may acquire belong to the domains of modality and evidentiality, and the Baltic languages show how the same situation can lead to new developments in one language but not the other. Constructions with the *m*-participle may have vague modal meanings in both languages, but these get more pronounced in Latvian, while Lithuanian develops a more general, often generic passive construction (4.3). On the other hand, only Lithuanian develops a fully grammaticalized evidential construction with the *t*-participle, which in Latvian only in certain contexts has an evidential (reportative or hearsay) meaning (Section 7).

In this paper we have enriched known facts about the passive in Baltic with some new analyses based on data from contemporary corpora of Latvian and Lithuanian. While the types that we described in the sections of this paper may deserve more investigation and individual publications, their treatment in one place and their profiling according to common criteria help to see the family in its entirety and will be useful as a point of departure for further synchronic and diachronic studies.

Abbreviations

1 — first person, 3 — third person, ACC — accusative, ADD — additive (particle), AUX — auxiliary, ADV — adverb, COMP — comparative, CVB — converb, DAT — dative, DEB — debitive, DEF — definite, DEM — demonstrative, DER — derivational suffix, DIM — diminutive, EVI — evidential, F — feminine, FUT — future, GEN — genitive, GDV — gerundive, IDF — indefinite, ILL — illative, INF — infinitive, INS — instrumental, IRR — irrealis, LOC — locative, M — masculine, NA — non-agreement form (in Lithuanian and Latvian), NEG — negation, NOM — nominative, PA — active participle, PL — plural, PLN — place name, PN — proper name, POSS — possessive, PP — passive participle, PRS — present, PST — past, PTC — particle, PTCPL — participle, PVB — preverb, REL — relative pronoun, RFL — reflexive, RPOSS — reflexive possessive pronoun, SG — singular

Sources

DLKT = Dabartinės lietuvių kalbos tekstynas, http://tekstynas.vdu.lt/tekstynas, corpus.vdu.lt

LiLa = Lithuanian-Latvian-Lithuanian Parallel Corpus, https://klc.vdu.lt/en/lila-parallel-corpus/

LithuanianWaC v2 = Lithuanian Web Corpus v2, https://www.sketchengine. eu/lithuanian-wac/

ltTenTen14 = Lithuanian Web Corpus, https://www.sketchengine.eu/lttenten-lithuanian-corpus/

LVK2018 = Balanced Corpus of Modern Latvian, http://www.korpuss.lv/id/ LVK2018

lvTenTen14 = Latvian Web Corpus, https://www.sketchengine.eu/lvtentenlatvian-corpus/

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Impersonal constructions with personal reference. Referents of deleted actors in Baltic and Estonian

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This paper explores referential features of deleted actors in impersonal passive and impersonal constructions in three languages: Latvian, Lithuanian and Estonian. Though cross-linguistically passive or impersonal verb forms of intransitive verbs are generally associated with indefinite human agency, our study shows that this correlation is not absolute: in the investigated languages passives and impersonals of intransitives, apart from generic and indefinite actors, may also imply contextually given, definite actors, and for some constructions, e.g. Estonian impersonals with the auxiliary *saama* 'get', this is actually their main use. Data for our study comes from large comparable corpora of web resources. In a small quantitative study we determine the factors that condition a personal use of an impersonal verb form in the three languages. The most important factors are verbal lexeme (certain lexemes show a greater preference for certain types of covert actors), as well as construction type: of two formally distinct impersonal (passive) constructions, one is preferred in non-impersonal functions where the covert actor is a contextually given person.

Keywords: voice-related impersonal constructions, impersonal, passive, Estonian, Latvian, Lithuanian, covert actors, cumulative construction, experiential perfect

1. Introduction¹

The topic of this paper is constructions with a passive participle as predicate where the actor, though syntactically deleted, has a referent known to speaker and addressee. The investigated constructions are the Subjectless

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or Impersonal Passive in Latvian and Lithuanian, and the Impersonal in Estonian. Both belong to the category of 'voice-related impersonal constructions' in the typology recently proposed by Creissels (2019; see also Creissels 2018, where the grouping of types is slightly different). They are characterized by the fact that an actor, which is expressed by a nominative subject in the active, is deleted or demoted, and no other argument is promoted to subject. Voice-related impersonal constructions are found with both transitive and intransitive verbs; our study is restricted to intransitive verbs.

In passives and impersonals, an argument with the macrorole Actor (Van Valin 2001, 29–33), is part of the argument structure of the verb, even if it is not expressed in the clause. Thus, a clause such as *Snow White was killed* presupposes an external agent or force, as opposed to the clause *Snow White died*. It is therefore possible to ask who the referent of this actor is and how it is understood when it is not expressed. This question has often been answered in a general way, for example, by saying that unexpressed agents of passive constructions are unknown, or irrelevant for the current discourse. However, different kinds of passives vary with regard to the referentiality and topicality of the demoted/deleted actor. An important factor is whether or not another argument, the undergoer, is promoted to a subject and a topic.

While the typical passive² involves the syntactic promotion of an undergoer argument to subject position, in voice-related impersonal constructions there is no such promotion. A well-known case in point is the German dynamic passive with the auxiliary *werden* 'become'. Example (1) contains the potentially transitive verb *essen* 'eat' with and without an object promoted to subject, and the intransitive verb *tanzen* 'dance'.

(1) German (constructed example)

Erst	wurde	(der	Nachtisch)	gegessen,		
first	AUX.PST.3SG	DEF.NOM.SG.M	dessert	eat.pstp		
dann	wurde	getanzt.				
then	AUX.PST.3SG	dance.pstp				
'First one/they/we ate (the dessert), then one/they/we danced.'						

² 'Typical passive' here may be understood both as Shibatani's (1985) 'prototypical passive' and Keenan and Dryer's (2007) 'basic passive', and what is said also applies to the 'canonical passive' (see Siewierska & Bakker 2012).

Passives with intransitive verbs such as German *(es) wurde getanzt*, literally '(it) was danced', meaning 'people danced', are often called impersonal passives and compared to other (semantically) impersonal constructions,³ such as the German active construction with the pronoun *man* 'one'. The underlying actor of these constructions is typically a group of people. The referent may be indefinite-specific (referring to participants of a specific event) or non-specific, generic (referring to people in general, either mankind in general or everybody at a certain time or place).

In Latvian, however, such impersonal passives are also used when the referent of the underlying actor is indeed known to speaker and addressee; it may even refer to a participant of the speech act. The impersonal passive may thus function in place of a personal form, and it may be combined with an active form in one sentence. In (2), both the agentless passive form *ir būts* (be.PRS.3 be.PST.PP.NA, literally 'it has been been') and the personal active form *nezināju* 'I did not know' refer to the same actor.

(2)	Latvian (lvTenTen14)						
	Barselonā		un	Limasolā	ir	bū-t-s ,	
	Barcelona.LOC		and	Limassol.loc	be.prs.3	be-pst.pp-na	
	bet	tajā		laikā	nezināj-u,		
	but dem.		LOC.SG	time.loc.sg	NEG.know.ps	T-1SG	
	kas ir		ir	skriešana.			
	what.nom be.prs.3		run.ACN.NOM.SG				
	'I have been [= impersonal passive] to Barcelona and Limassol, but at						
	that time	I didr	n't know [=	personal active] v	what running	means.'	

This observation was one of the starting points for this study, raising the question of how frequent and systematic the 'definite person' use of a passive construction is in Latvian, and how similar the situation is in Lithuanian and Estonian. Our study is strictly synchronic, and we don't make any claims about a possible common heritage in Latvian and Lithuanian, or areal influence between the Baltic languages and Estonian. For various types of passive constructions in Latvian and Lithuanian see Nau, Spraunienė & Žeimantienė (2020, this volume).

Estonian as well as other Finnic languages has a dedicated impersonal voice, used with transitive and intransitive verbs and marked morphologi-

³ Constructions with a generalizing pronoun such as German *man* 'people' are not impersonal constructions as defined by Creissels (2018; 2019). See section 2.1.

cally on the verbal stem, e.g. *ela-takse* 'live-IPS.PRS', *ela-t-i* 'live-IPS-PST'. For the sake of comparability, in this paper we look only at impersonal perfect and pluperfect, which involve a past passive participle (*on ela-tud* 'be.PRS.3SG live-PST.PP', *ol-i ela-tud* 'be-PST.3SG live-PST.PP'), and are thus structurally closer to Baltic impersonal passives than the synthetic forms. The formal similarity can be seen in (3) in comparison to the first predicate in (2).

(3) Estonian (ENC2017)

Ol-dud	ja	ela-tud	on
be-pst.pp	and	live-pst.pp	be.prs.3
ning	nüüd	on	aeg
and	now	be.prs.3	time
otsi	kokku	tõmma	ı-ta.
end.PAR.P	L togeth	er pull-in	IF
'I have ex	isted and liv	ed [for a long	time] and now it is time to pull the
ends toge	ther.'		

The Balto-Finnic Impersonal generally refers to an indefinite, general referent, e.g. an indefinite group of people. In colloquial Finnish, it has developed into a form for first person plural, e.g. *me mennään* 'we go.IPS', i.e. 'we (will) go' (cf. for example Helasvuo 2006). A development from generic meaning to first person (plural) is also known from other languages, though with pronouns rather than verbal morphology. The best-known case is the French pronoun *on* (< 'man'), which in modern colloquial French is used both as a generic pronoun ('one') and for 1PL ('we'). These facts led us to the question whether in Latvian, Lithuanian and Estonian we may be witnessing an early stage of a shift from generic reference to first person reference, or any other tendencies of reference shift.

Our main research questions thus are the following:

- How often do passive or impersonal constructions with intransitive verbs have definite referents?
- How does the proportion of definite and generic reference vary within one language (i) with morphosyntactic features (different auxiliaries in Latvian and Estonian, different participles in Lithuanian), and (ii) with different verbs?
- How often and under which circumstances is reference made to first person (singular or plural)?

• What are the motivations to use a passive or impersonal when the actor is specific and known?

The quantitative questions were investigated in samples drawn from corpora of the TenTen series (Jakubíček *et al.* 2013) and the Estonian National Corpus. Additionally, the corpus material was studied to find characteristic features accompanying the use of voice-related impersonal constructions with definite referents of deleted actors. If not otherwise indicated, all examples in this paper come from the corpora mentioned.

The following Section 2 provides the background of our study, first with regard to the general question of reference in impersonal (passive) constructions, and second the language-specific background of the investigated constructions. In Section 3 we explain the methods of selecting and categorizing data in our study. Section 4 presents the quantitative results of the study, while Section 5 discusses these results and our further observations.

2. Background

2.1. Impersonal constructions and their reference

In the linguistic literature, the label 'impersonal' is used for a huge variety of constructions, variously defined by semantic, syntactic, and morphological criteria, which sometimes overlap but in general lead to distinct classes of constructions (for overviews and critical discussion see especially Siewierska 2008; Malchukow & Siewierska 2011, and further references given there). Creissels (2018; 2019) proposes to restrict the term 'impersonal construction' to constructions with clearly defined syntactic properties within languages with nominative-accusative alignment (A-alignment). He arrives at the following definition:

In the languages in which A-alignment is strongly predominant, an impersonal construction is a construction that does not include a syntactic slot for an argument encoded in the same way as the agent in the basic transitive construction. (Creissels 2019, 4; cf. Creissels 2018, 6).

This definition of impersonal construction, and the subtype of voicerelated impersonal construction introduced above, are most suitable for our purpose. An alternative term for 'impersonal' in this sense is 'subjectless'. We are here not concerned with what happens to other arguments,

especially the object of transitive verbs. This is the primary concern of another definition of impersonal constructions or 'impersonals', where these are distinguished from passives by the lack of full object promotion (see especially Blevins 2003; 2006). With additional criteria, even constructions with intransitive verbs can be classed as either passives or impersonals in Blevins' approach. For example, Holvoet (2015) shows that the Latvian passive of intransitive verbs is not an impersonal, but a passive according to Blevins' classification. However, as pointed out by Holvoet (2001a, 366), if there is only one construction in a language, the decision whether to call it Passive or Impersonal is somewhat arbitrary. It is also important to note that in languages which have two distinct constructions, it may not always be possible to decide to which one an actual construct belongs (see Section 2.4 for details on Estonian). Therefore, we base our use of the term 'impersonal (construction)' on Creissels' and not Blevins' approach. In this sense, both the Baltic Passive of intransitive verbs and the Estonian Impersonal are impersonal, or subjectless, constructions.

Regardless of the terminology used, it has often been remarked that voice-related impersonal constructions usually imply an indefinite human actor (from a cross-linguistic point of view most explicitly by Frajzyngier 1982). Blevins proposes that this implication "is associated with subjectless forms of personal verbs, irrespective of the syntactic source of that subjectlessness", and that it is also a reason for the low acceptability of agent phrases with such constructions (Blevins 2003, 489).

It is however important to separate the two components of 'indefinite human' when discussing the covert actor of an impersonal predicate. A restriction to human actors is a very strong cross-linguistic tendency with voice-related impersonal constructions, though not an absolute universal. Napoli (2009, 167) cites Latin examples of impersonal passives which refer to animals (*latretur* 'there is barking') and weather phenomena (*nubilabitur* 'it will be cloudy'). Much more disputable is the claim that the actor is always indefinite. Our empirical study will show that in Latvian, Lithuanian and Estonian, reference to a definite actor is far from marginal. That this is not an idiosyncratic property of these three languages is evident from data of unrelated or not closely related languages. However, there are very few studies on this topic, which is seldom part of treatments of the passive—for example, Keenan & Dryer (2007) do not even mention the question of semantic or pragmatic properties of the deleted actor in their section on *Passives of non-transitive verbs*. The best-known case is Latin,⁴ where subjectless passives (for example, of *ire* 'go', *venire* 'come', *pugnare* 'fight') even allow agent phrases, although these are extremely rare in texts (Pinkster 1992; Pieroni 2000; Napoli 2009; 2013). Pinkster's article contains some valuable observations for comparative studies of the phenomenon. For example, he points out:

A positive reason for selecting the impersonal (passive) expression may be that in this way the event is presented not from the perspective of one of the participants, but as such. A clause with an impersonal passive is a statement about what happened rather than about who did what. We might call this 'promotion' of the action involved. (Pinkster 1992, 168–169)

Pinkster also mentions the idiomatic nature of some of the constructions found in Latin texts: similar observations were made in our material from the Baltic languages and Estonian. In a small empirical study on Latin, Pieroni (2000) found evidence for differences among individual verbs with respect to the referentiality of the deleted actor, which she associated with different degrees of transitivity. A further difference was observed between tenses, with a higher degree of individuation and predictability of the agent in constructions with the perfect tense than with the present tense. Napoli (2009), who examined a bigger corpus of Latin texts, refutes Pieroni's claim about the degree of transitivity, and for the correlation between individuation of the agent and tense/aspect she proposes another explanation: it may be "simply a by-product of the fact that a generic (and unexpressed) agent is more frequently found within a generic sentence, which typically involves the imperfective aspect and/or the present tense" (Napoli 2009, 168). While generally approving of the idea expressed by Pinkster (1992) and other scholars of Latin, that the impersonal passive foregrounds the action, Napoli comes to the conclusion that at least in certain contexts this may lead also to a foregrounding of the actor:

In my opinion, this 'promotion' [of the action] turns out to be the function that the various instances of Latin impersonal passives have in common; at the same time, it must be underlined that to foreground the action may favour, rather than disfavour, the presence of an explicit agent, in order to put emphasis on that participant as opposed or compared to somebody else. (Napoli 2013, 381–382)

⁴ Pinkster remarks that "The primary interest [in Latin subjectless passives] has always been in the identity of the Agent" (Pinkster 1992, 160).

Napoli here refers to text passages where the impersonal passive occurs with an agent phrase (thus the actor is demoted, not deleted, or maybe it is re-inserted after deletion); cf. example (4).

(4) Latin (Terence, cited from Napoli 2009, 175; our glossing)						
	Peccatum	а	me	maxumest.		
	be_wrong.pst.pp.sg.n	by	1SG.ABL	much.be.prs.3sG		
	'I was very much in the wrong.'					

Of the languages investigated by us, only Lithuanian allows the use of agent phrases with voice-related impersonal constructions (see 2.3), and for the sake of comparability we did not consider such instances. Nevertheless, we find Napoli's conclusion an important insight for the interpretation of impersonal constructions in general. The fact that a construction highlights the action itself does not necessarily lead to conclusions about the deleted actors. These constructions may of course have a generic meaning, or the actor may be a non-specific person, but they may also invite the listener to search for a specific referent in the context. Among other factors, tense and aspect may play a decisive role, and correlations between a certain tense and a certain interpretation of the referent may be more than a by-product.

The studies of Latin show that the deleted or demoted actor of a passive construction with intransitive verbs can be of any person and number. There does not seem to be any general preference, for example, for speaker inclusion or exclusion.

Also in Turkish, a language neither genetically nor areally related to Latin, Baltic, or Estonian, the covert actor in impersonal passives may be a definite person, but here we find a specialization for first person plural. There are certain correlations between referentiality and verbal lexical semantics and tense. Nakipoğlu-Demiralp (2001) found that in Past tense, the referent is construed as 1PL (see example (5)), while in the Aorist (which expresses present tense, habitual, and epistemic modality), it is either generic ('people', 'anyone') or indefinite-specific ('some people', 'someone'), cf. example (6).

 (5) Turkish (Nakipoğlu-Demiralp 2001, 137, example 16a)⁵
 Dün iki saat koş-ul-du. yesterday two hour run-PASS-PST.3

⁵ In examples (5) and (6) glosses were adapted to our conventions.

literally: 'Yesterday it was jogged for two hours.' = 'Yesterday we jogged for two hours.'

(6) Turkish (Nakipoğlu-Demiralp 2001, 136, example 14a) Burada iyi koş-ul-ur. here well jog-PASS-AOR.3 literally: 'It is jogged well here.' = 'One jogs well here.'

In both tenses the constructions have in common that the focus is on the activity itself, "drawing the attention away from the individual by whom the activities in question are carried out" (Nakipoğlu-Demiralp 2001, 130). It is not possible to add an agent phrase in Turkish. The class of intransitive verbs that allow a passive construction in past tense in Turkish is described by the author as "verbs of internally instigated situations" (Nakipoğlu-Demiralp 2001, 130–132). This class includes, first, verbs with an agentive subject who acts volitionally and has control over the action ('run', 'sing', 'work'), and second, verbs that describe processes internal to animate beings ('cry', 'yawn', 'shiver', 'sweat'). Verbs of both groups are later labelled 'unergative'. Verbs which imply an external instigator ('unaccusative' verbs, such as 'sink', 'melt', 'explode'), on the other hand, do not allow passive constructions. Of special interest is a small group of 'unaccusative' verbs that can be used in the passive in the Aorist, but not in Past tense (for example, 'die', 'drown', 'be born', 'grow up'). This group is further divided into verbs which are used with both generic and indefinite referents and those which appear in the passive only in generic meaning. This shows a link between verb meaning and types of reference in impersonal passive constructions, but it also shows that a simple division into 'unergative' and 'unaccusative', especially when based on the meaning of the lexeme alone, is insufficient.

Scholars of Finnish have been interested in the referential properties of covert actors in a broader perspective. Helasvuo & Vilkuna (2008) analyse a wide range of constructions that are impersonal from a semantic point of view, but differ formally (thus, only some of them are impersonal constructions in Creissels' sense). They found that beyond the case mentioned in the Introduction (the Finnish Impersonal becoming the form for 1PL), "many of the constructions in question subtly contribute to the expression of the speech act participants" (Helasvuo & Vilkuna 2008, 219). One of these is the so-called 'zero-person construction', which consists in the use of an active verb marked for third person without any subject. This

construction is mostly found with verbs where the actor has the semantic role of experiencer rather than agent. It may also have specific reference, for example in conversations it typically is used for the speaker or the addressee (see VISK: §1347–1348; Laitinen 2006; Helasvuo & Vilkuna 2008, 233; Kärkkäinen, Sorjonen & Helasvuo 2007; Jokela 2012). A zero-person construction is present also in Estonian, but compared to Finnish, its use is somewhat more limited: it occurs most commonly with modal and perception verbs (Jokela 2012). It also exists in Latvian (Holvoet 1995; 2001a).

As the present study is restricted to two special types of voice-related impersonal constructions, we will not consider zero-person constructions further. Neither do we examine here a third type of voice-related impersonal constructions, those based on middle or reflexive forms (Creissels 2019, 16). Studies on these constructions in Romance languages offer several interesting parallels, which will be worth further research (for examples and further references see Cennamo 2016, 974 for a short overview on Romance; Cennamo 2014, 75–76; 82, on the interpretation of the actor in *si*-constructions in Italian dialects). Also a comparison regarding referentiality with special impersonal pronouns such as German *man* or French *on*, or with the impersonal use of personal pronouns (such as English *they, you*) is beyond the scope of our paper. Comparisons of trends in various formal constructions may be a promising topic for future investigations on shifts in referentiality from indefinite to definite, from impersonal to personal, or the other way around.

2.2. Passives of intransitive verbs in Latvian

The Latvian passive construction is formed with the Past Passive Participle and an auxiliary, either $b\bar{u}t$ 'be' or tikt 'become; get'. Not infrequently, a passive participle appears as the predicate of a clause without any auxiliary. Such constructions are generally assumed to be instances of a passive with $b\bar{u}t$. It is however not clear which tense and mood forms of $b\bar{u}t$ may be subject to omission and whether forms of tikt cannot be omitted. In our study we will therefore not presume omission, but distinguish between three types of auxiliary use: with $b\bar{u}t$, with tikt, and without auxiliary. All formal types are found with transitive as well as intransitive verbs. The participle of a passive construction agrees with the subject of the clause in gender and number, while the auxiliary agrees with the subject in person. If there is no subject, it takes the default values masculine, singular and third person. In this paper, we will gloss the ending of the participle as NA (non-agreement) to distinguish it from instances where the values masculine, singular are the result of gender and number agreement. For more on the Latvian passive, see Nau, Spraunienė & Žeimantienė (2020, this volume). The following shortened examples demonstrate the three variants: auxiliary *tikt* 'become, get' (7), auxiliary $b\bar{u}t$ 'be' (8), and no auxiliary (9). The free translation is based on the context of the full example.

(7)	Latvian (see full example 34)					
	brauk-t-s	tiek	daudz.			
	ride-pst.pp-na	AUX.PRS.3	a_lot			
	'we are travelling a lot'					

ir	brauk-t-s	vairākas	reizes,	
be.prs.3	ride-pst.pp-na	several.ACC.PL.F	time.ACC.PL	

 (9) Latvian (see full example 47) *par daudz sēdēts*, too much sit.PST.PP.NA 'you have been sitting too much'

The difference between a construction with $b\bar{u}t$ and one with tikt roughly corresponds to the difference between a stative and a dynamic (actional) passive, though there are also non-dynamic uses of a construction with tikt (Holvoet 2001b, 163–166). In the Latvian grammatical tradition, the two auxiliaries are associated with different tenses: constructions with tikt are described as expressing simple tenses (corresponding to simple present, past and future in active voice), while constructions with $b\bar{u}t$ express compound tenses, corresponding to present, past, and future perfect (Endzelin 1923, 764; Kalme & Smiltniece 2001, 223–224). In both interpretations, the choice of auxiliary may be an important parameter for the use and interpretation of impersonal passives.

Holvoet (2001b, 163) suggests that the distinction between dynamic and stative passive is made only in the 'personal passive', that is, a construction with a promoted subject. Interestingly, the Latvian Academy grammar of 1959 mentions the passive with non-transitive verbs only as part of the passive with the auxiliary $b\bar{u}t$ 'be' (MLLVG I, 553), while its successor of 2013 does not contain such a restriction and gives examples with both auxiliaries (LVG2013, 503). As the Passive with the auxiliary *tikt* has clearly spread during the 20th century (ousting other auxiliaries such as *tapt* 'become' and becoming more frequent than the Passive with $b\bar{u}t$ 'be'), it is possible that its use with intransitive verbs is a more recent development. In our data dynamic passives with intransitive verbs are very well attested, especially with the past tense form of the auxiliary *tikt*.

Passives from intransitive verbs are a clear minority of all passive constructions (see Nau Spraunienė & Žeimantienė 2020, this volume, for some corpus data). Furthermore, there are lexical restrictions and preferences found with certain verbs to be used in the construction. MLLVG I (1959, 653) mentions two lexical groups of intransitive verbs that are more often found in passive constructions: (i) verbs of movement (braukt 'go by transport', lidot 'fly', skriet 'run', staigāt 'walk', peldēt 'swim') and (ii) verbs expressing a 'state', that is, body posture (sēdet 'sit', gulēt 'lie', also 'sleep', stāvēt 'stand') and verbs expressing being at a location ($b\bar{u}t$ 'be' and *palikt* 'stay'). As a lexical group of intransitive verbs that do not allow passivization the grammar mentions verbs that express a change of state, such as *augt* 'grow' and *klūt* 'become' (MLLVG I, 653). Our corpus searches have shown that change-of-state verbs are indeed very rare in the passive construction; no instances of a passive with augt 'grow', mirt 'die', or dzimt 'be born' could be found. However, individual examples attest that at least some change-of-state verbs may form a passive. Holvoet (2015, 376) gave an example for *aizmigt* 'fall asleep'; a passive construction with this verb occurs three times in the largest Latvian corpus lvTenTen14.

In general, passive constructions are found with intransitive verbs that entail internal instigation as described by Nakipoğlu-Demiralp (2001, 130–132; see section 2.1). Volitionality is not a necessary feature: verbs which express processes and experiences involving an animated body (such as 'be ill', 'cry', 'sweat', 'sneeze') are well attested.

Holvoet (2001b, 161) emphasises the 'extraordinary productivity' of impersonal passives in Latvian and acknowledges only one restriction: a passive of a copular verb is not possible. Productivity concerns the potential of using a form and does not equal frequency, which measures how usual a form is in actual texts. To give an impression of the frequency, Table 1 presents figures of the occurrence of the Past Passive Participle of selected intransitive verbs, with which the participle was found more than 100 times in the largest corpus lvTenTen14.⁶

Table 1. Occurrence of past passive participles of selected intransitive verbs in two corpora of Latvian

First row: Participle form,	lexeme meaning.	lexeme frequency	per million in lyTenTer	114
instron i articipie form,	iewenne meaning,	ieneme nequency	Per minion mit renier	

	lvTenTen14 number	lvTenTen14 per million	LVK2018 per million	LVK2018 number
strādāts 'work' (648.95)	4035	6.14	4.88	60
<i>būts</i> 'be' (26,630.07)	1524	2.32	1.55	19
<i>braukts</i> 'go by transport' (333.23)	1102	1.68	0.41	5
<i>iets</i> 'go on foot' (557.37)	615	0.94	1.06	13
dziedāts 'sing' (88.57)	576	0.88	0.49	6
dejots 'dance' (41.11)	340	0.52	0.33	4
<i>skriets</i> 'run' (92.37)	296	0.45	0.24	3
<i>dzīvots</i> 'live' (538.65)	260	0.40	0.24	3
gulēts 'lie', 'sleep' (95.68)	244	0.37	0.16	2
sapņots 'dream' (24.28)	177	0.27	0.24	3
sēdēts 'sit' (131.3)	116	0.18	0.16	2
staigāts 'walk' (53.62)	109	0.17	0.08	1

 $^{^{6}}$ These raw data contain a few instances where the participle is used in another function, as well as some typographic errors, where the form stands erroneously for an infinitive or a future form (e.g. *būts* instead of *būt* or *būs*). The figures also include transitive uses of the verb (for example 'sing a song', 'go a certain way'), so the number of actual impersonal passive constructions is smaller. However, the great majority of occurrences represent the construction.

Table 1 shows that the overall frequency of the construction is not high and that the majority of instances in texts contain tokens of a rather small set of verbs. Besides representatives of the lexical groups mentioned in MLVG I, three verbs expressing unbounded activities are among the top lexemes here: $str\bar{a}d\bar{a}t$ 'work', $dzied\bar{a}t$ 'sing', and dejot 'dance'. For our quantitative study, we chose the top five lexemes of Table 1 plus two from the second half ($dz\bar{i}vot$ 'live' and $s\bar{e}d\bar{e}t$ 'sit'). Though the selection is not big, it includes representatives of several verbal classes: telic and non-telic verbs, actions and states, movements and other activities. It is however not possible to fully characterize these verbs out of context. For example, *iet* 'go' may refer both to telic movement ('go to some place') and non-telic movement ('walk').

The typical meaning of a passive with an intransitive verb is characterized in LVG2013 as "expressing a generalization, a regularly or continuously performed activity, or the statement of an impersonal fact" (LVG2013, 503; our translation). Grammars of Latvian do not mention (nor deny) that an impersonal passive may have a known, definite actor. Holvoet (2001b) indirectly refers to this possibility when stating after two examples with a passive of the verb $b\bar{u}t$ 'be':

The main reason for the productivity of impersonal passives like this is that they provide a means of avoiding the use of a 1st person form if the speaker is reluctant to use this form out of modesty or for other motives. (Holvoet 2001b, 162)

We treat this statement as a thesis to be tested in our corpus study, trying to give answers to two questions it opens: (1) are definite referents mostly first person?, (2) is avoidance of a personal form for reasons of modesty an important motive for the use of the impersonal passive?

2.3. Impersonal passive in Lithuanian

The passive in Lithuanian is a periphrastic construction formed by an auxiliary $b\bar{u}ti$ 'be' and a present or past passive participle with the suffixes *m* and *t* respectively. *m*- and *t*-participles are formed from nearly all verbs, both transitive and intransitive, including reflexives of some reflexive classes (Geniušienė 2006, 39). The meaning difference between *m*-passives and *t*-passives is partly temporal, partly aspectual. *m*-passives

are always dynamic (actional),⁷ while *t*-passives can obtain both a dynamic and a stative (resultative) reading.

In present tense the auxiliary is commonly omitted. In passive clauses with an explicit past tense reference, also a past tense auxiliary may be left out (cf. Nau, Spraunienė & Žeimantienė 2020, this volume). The demoted agent is expressed in genitive case, but in the majority of passives (91.6%⁸ according to Geniušienė 2016, 146, table 5.11), it is omitted. In the proto-typical personal passive, the patient is promoted to subject and acquires the properties of a canonical subject such as nominative case and ability to agree with the predicate (the passive participle) in gender, number and case. Apart from the prototypical passive construction, *m*- and *t*-participles in predicative use can enter into various types of constructions constituting 'the passive family'. For a more detailed overview of these constructions, see Nau, Spraunienė & Žeimantienė (2020, this volume). Here it will suffice to mention some of the types of passive constructions which are relevant for this article.

IMPERSONAL PASSIVE, or, using Geniušienė's (2016, 144) terminology, 'subjectless passive' is defined as a passive construction which lacks a nominative subject. Thus, in the case of impersonal passives, passivization only affects the agent which is demoted from the subject position but no other constituent is promoted to subject and the passive participle therefore is used in a non-agreeing form with the ending $-a^9$ (cf. Nau &

⁷ *m*-passives of stative verbs such as *mylėti* 'love', cf. *Jis buvo visų mylimas* 3SG.M be.PST3 all.PL.GEN love.PRS.PP.SG.M 'He was loved by everyone' of course refer to states due to the actionality class of the input verb but they are nevertheless considered actional (verbal) passives both in Lithuanian and English.

⁸ Geniušienė's figures are based on a sample of 5,730 passive clauses collected mainly from fiction texts and comprising different types of passive constructions (personal, impersonal, actional, statal etc.), including evidentials with obligatory 'oblique agents'. If the latter were excluded, the ratio of agented passives may be even lower. On the other hand, in the case of actional passives, the reported percentage of agented subjectful passives is much higher—16.7% (259 out of 1552, figures are taken from Geniušienė 2006, 40, table 2).

⁹ The ending -*a* was originally a neuter ending which after the loss of the neuter gender in Lithuanian nouns came to be used as a default form in the absence of a proper controller of verbal agreement in a clause. Note that the non-agreeing form and the singular feminine form of the passive participle in Lithuanian are homographs, cf. (i) *Moteris paguldy-t-a i ligoninę* woman(F).NOM.SG PVB.put-PST.PP-SG.F to hospital.ACC.SG 'The woman is/was hospitalized' vs. (ii) *Daug žmonių paguldy-t-a į ligoninę* many people[PL].GEN PVB.put-PST.PP-NA to hospital.ACC.SG 'Many people are/were hospitalized'.

Holvoet 2015, 11). Passivization of one-place predicates always yields a subjectless output. In Lithuanian, both agentive (e.g. *gydyti* 'cure', *laikytis* 'follow' in example (10)) and non-agentive intransitives (e.g. *sirgti* 'be ill', *mirti* 'die' in (10) and (11)) can be passivized, and both *m*- and *t*-participles may be used (cf. Spraunienė, Jasionytė, Razanovaitė 2015):

(10) Lithuanian

Per	tiek	laiko)	pra-ein	-a
during	so_much	time	.GEN.SG	в PVB-go-	-PRS3
bronchita	s,	jei	sirg-t	-a	ūmia
bronchitis	S.NOM.SG	if	be_ill-	-PST.PP-NA	acute.INS.SG.F
јо	forma		ir	tinkamai	gydy-t-a
3GEN.SG.M	form(F)II	NS.SG	and	properly	cure-pst.pp-nA
bei	laiky-t-a-si		gydy	vmo	režimo.
and f	follow-pst.pp-1	NA-RFL	treat	ment.gen.sg	regime.GEN.SG
'So much	time does it t	ake to re	ecover	from bronchit	is if one has had
acute bro	nchitis and ha	as receive	ed prop	er treatment a	and followed the
treatment	regime.'				

(11)	Nuo	gripo		bei	јо	
	from	influenza.gen.s	G	and	3GEN.SG.M	1v
	sukel-t-ų		komp	likacijų		miršta-m-a.
	cause-PP.P	ST-GEN.PL.F	comp	lication(F).	GEN.PL	die-prs.pp-na
	'One may	die of influenza	and of	complicati	ions cause	d by it.'

The lexical input of impersonal passives in Lithuanian is restricted to intransitives with human subjects (cf. Geniušienė 2006, 39). Having examined 1200 impersonal passives formed of 400 intransitive verbs, Geniušienė concluded that "all intransitive verbs with a human agent can be passivised" (Geniušienė 2016, 274). However, it has to be mentioned that only one-place predicates with nominative subjects may passivize. Both restrictions are abandoned in evidentials allowing for use of *t*-participles of some zero-place verbs such as *lyti* 'rain', *snigti* 'snow' and two-place verbs with a first argument in dative such as *reikėti* 'need' (for more details see below).

From a typological perspective it is important to note that Lithuanian passives of intransitive verbs are quite numerous in texts. According to Geniušienė (2016, 270), they constitute 15% of all predicative passive forms in fiction and about 25% in newspaper texts. Compared to other languages, these figures are very high: e.g. Laanemets (2012, 180) reports

that impersonal passives in Danish, Norwegian and Swedish comprise 3.8%, 2.3% and 1.1% of the passive forms, respectively.

The neuter form of passive participles in Lithuanian may also be used in EVIDENTIAL CONSTRUCIONS. In this type of constructions, the verb always appears in the non-agreeing form of the *t*-participle¹⁰ without auxiliary and the initial subject (if there is one) is used in the genitive case, as the agent phrase of the passive, cf. (12) and (13):

(12) Lithuanian (ltTenTen14) Legenda pasakoja, kad šioje legend.NOM.SG tell.prs.3 that DEM.LOC.SG.F vietoje bū-t-a deivės pagonių place(F).LOC.SG be-pst.pp-na pagan.GEN.PL goddess.gen.sg Mildos šventvklos. PN.GEN.SG temple.gen.sg 'A/the legend says that, evidently, in this place there was a temple for

the pagan goddess Milda.'

(13) Lithuanian (DLKT)

Ei,	žiūrėk!		Ant	to	luisto
hey	look.1M	P.2SG	on	DEM.GEN.SG.M	block(м).gen.sg
esa-m-a	!	žmonių!			
be-prs.p	P-NA	people[1	PL].GEN		
'Hey, look! There (apparently) are people on that block!'					

It has been argued that evidential constructions should be regarded as non-passives due to their formal and semantic properties (cf. e.g. Lavine 2006; Holvoet 2007; Nau, Holvoet 2015; Spraunienė, Jasionytė, Razanovaitė 2015). Apart from evidential meaning (inferential, reportative or mirative), evidentials differ from impersonal passives in that they exhibit obligatory auxiliary deletion and obligatory expression of the genitival argument. Evidentials may also be formed of copular constructions. In this case the genitival constituent triggers predicative agreement:

 (14)
 Lithuanian (ltTenTen14)

 darbo
 bū-t-a
 atsakingo

 work(M).GEN.SG
 be-PST.PP-NA
 responsible.GEN.SG.M

 'the work was responsible (apparently)'
 'the work was responsible (apparently)'

 $^{^{10}\,}$ *m*-participles are rarely used in evidential constructions, the *m*-participle of the verb $b\bar{u}ti$ 'be' being the only exception.

The predicative adjective in (14) agrees with the genitival NP in number, gender and case. This shows that the genitival NP possesses a coding property of a syntactic subject (Christen 1995) and should be analysed as a non-canonically marked subject rather than an oblique agent phrase.

In Standard Lithuanian, evidential constructions are mostly formed of intransitive verbs. Importantly, the Evidential does not impose any restrictions on the semantics of the subject of the input verb: it may be human, non-human, animate, inanimate. In this respect evidentials differ from impersonal passives, which are restricted to intransitives with human subjects.

In this paper we investigate the referential properties of covert actors in Lithuanian impersonal passives in comparison to Latvian and Estonian. As in evidential constructions the actor is obligatorily expressed, such constructions were excluded from our material. EVIDENTIAL PASSIVES (i.e. impersonal passives lacking the formal properties of evidentials but conveying an evidential meaning (for details, see Nau, Spraunienė & Žeimantienė 2020, this volume)), on the other hand, were included in the study.

Overt vs. covert agents in the passive

In the Lithuanian Academic Grammar the passive voice is defined as "a means of expressing an action irrespective of its agent" (Ambrazas *et al.* 2006, 279). It was mentioned above that in Lithuanian passives the agent is commonly deleted. As in many other languages, there are several motivations for omission of the agent: it may be unknown, unimportant, indefinite or generalized, but it may also be contextually given and therefore known to the speaker and the addressee. In the latter case, an explicit mention of the agent may be irrelevant for the act of communication (cf. Geniušienė 2006, 41).

Geniušienė (2016, 158–159) distinguishes three semantic types of covert agents in agentless passive constructions:

i. specific and definite, i.e. the agent is known, recoverable from the context:

(15) Lithuanian (Geniušienė 2006, 42, our glossing)

Puolusi	žmona	užčiaupė	jam
rush.pst.pa.nom.sg.f	wife(f).nom.sg	close.pst.3	3.DAT.SG.M

 burną
 bet
 žodžiai
 jau
 buv-o

 mouth.Acc.sg
 but
 word(M).NOM.PL
 already
 be-PST.3

 pasaky-t-i
 utter-PST PP-NOM PL M

utter-pst.pp-nom.pl.m

'(His) wife rushed up to him and pressed his mouth, but the words had already been uttered [by him]'

ii. indefinite, i.e. the agent refers to 'some', 'someone'. This type of agent is not recoverable from the context:

(16) Lithuanian (Geniušienė 2006, 42, our glossing) Dukart buv-au su-žeis-t-as, twice be-PST.1SG PVB-wound-PST.PP-NOM.SG.M kontūzy-t-as. shell-shock-PST.PP-NOM.SG.M 'I was twice wounded, shell-shocked.'

iii. generic, i.e. the agent is generalized and refers to 'one, everyone, all people'. According to Geniušienė, this type of agent occurs with m-passives only:¹¹

(17) Lithuanian (Geniušienė 2006, 40, our glossing)
 Didvyriais ne-gimsta-m-a, didvyriais miršta-m-a.
 hero.INS.PL NEG-be.born-PRS.PP-NA hero.INS.PL die-PRS.PP-NA
 'One is not born a hero, one dies a hero.'

Geniušienė (2006, 43) reports that the implied agent is definite in 59%, indefinite in 32% and generic in 9% of subjectful actional passives.

Impersonal passives with overt agents are rare, especially *m*-passives (cf. Geniušienė 2016, 167). Though examples of agented impersonal passives with the *m*-participle are sometimes given in the literature (cf. 18), authentic examples of this kind are almost non-attested.

(18)	Lithuania	an (Geniušienė 2016,	15)	
	Čia	žmonių	dirba-m-a.	
	here	people[pl].gen	work-prs.pp-na	
	'People are at work here.'			

As it was mentioned above, the neuter form of the *t*-participle in combination with a genitive of agent has developed into the Evidential construction.

¹¹ Note that Geniušienė's definition of generic agent is narrower than ours, including only truly universal (gnomic) uses.

Non-evidential agented impersonal *t*-passives are attested, but they are not numerous:

(19)	[Rašau ir įsivaizduoju, kad aš vaikščioju nuo vieno Vilniaus architektūros stebuklo į kitą.]				
	Kaip	mano	vaikščio-t-a	anksčiau.	
	as	1.SG.POSS	walk-pst.pp-na	earlier	
	'[I am writing and imagining that I walk from one architectural won-				
	der of Vilnius to another.] The way I used to walk before.'				

Since our study explores the referential types of covert actors of passives of intransitives, examples with overt agents as (19) were excluded from our material.

Agentless subjectless passives (of intransitives) are quite common in Lithuanian (they constitute 33% (820 out of 2,464) of actional passives in Geniušienė's (2006, 40) material).

Geniušienė assumes that the semantic types of covert agents in agentless subjectless passives are the same as in subjectful passives but gives no figures for the ratio of the different types.

However, she says that subjectless agentless passives "are used to emphasize the action itself, which **usually correlates with a concrete and known agent whose mention is therefore redundant**" (2006, 44, emphasis added).

2.4. Impersonal and passive in Estonian

Estonian, like other Baltic-Finnic languages, distinguished historically only between personal (active) and impersonal voice (Viitso 2003, 216). The Estonian Impersonal is subjectless; the actual actor of the event is not expressed. The impersonal can be derived from both transitive and intransitive clauses. The forms of the impersonal are shown in Table 2; the intransitive use is exemplified in (20).

Tense	Indicative, affirmative	Indicative, negative
Present	laul-dakse	ei laul-da
Simple past	laul-d-i	ei laul-dud
Perfect	on laul-dud	ei ole laul-dud
Pluperfect	oli laul-dud	ei ol-nud laul-dud

Table 2. Estonian impersonal paradigm, verb laulma 'sing'

(20)	Estonian				
	Kodu,	loodus,	armastus–	– nende-st	
	home	nature	love	they-ela	
	on	laul-dud	ja	laul-dakse	edaspidi-gi.
	be.prs.3	sing-PST.PP	and	sing-IPS.PRS	henceforth-ADD
	'Home, nat	ure, love—(p	eople) have	sung about them	and will sing also
	in the futu	re.'			

With transitive verbs, the P argument is encoded as an object; it is marked with either the partitive (partial object, example (21) or the nominative case (total object, example (22) and (23)). The choice between partial and total object depends on polarity, quantitative boundedness (quantitative definiteness) of the object's referent, and aspectual boundedness of the event. The total object is used if all the following criteria are met: the verb form is affirmative, the object is quantitatively bounded, and the event is aspectually bounded (perfective, resultative meaning, temporally bounded). If any of these criteria are not met, the partial object is used (Erelt *et al.* 1993, 51–52; Ogren 2015).

(21) Estonian

	<i>Se-da</i> this-par	<i>raamatu-t</i> book-рак	<i>loe-t-i</i> read-1PS-PST	<i>suure</i> big.gen	<i>huvi-ga</i> . interest-сом		
'(People) read this book with great interest.'							
22)	See	raamat	loe-t-i	suure	huvi-ga		

- (22) See raamat loe-t-i suure huvi-ga this book.NOM read-IPS-PST big.GEN interest-COM läbi. through '(People) read this (whole) book with great interest.'
 (23) See raamat on suure huvi-ga
- (23) See raamat on suure nuvi-ga this book.NOM be.PRS.3SG big.GEN interest-COM *läbi loe-tud.* through read-PST.PP '(People) have read this (whole) book with great interest.'

Another important restriction (in addition to the demoted human actor) is related to the choice of verbs that can be impersonalized: only verbs that take nominative, canonical subjects are impersonalized (Torn-Leesik 2009; Lindström 2013).

Estonian has another periphrastic voice construction, which is usually called **personal passive**, sometimes also referred to as a resultative or

stative passive. It has an overt subject in the nominative case and expresses a state into which the referent of the subject (semantically the patient) has entered as a result of the action. The personal passive in Estonian is a result of language contact with Indo-European languages, an innovation based on participial passives in Indo-European languages (see Haspelmath 1990; for Estonian, Vihman 2007, 169–170; Torn-Leesik & Vihman 2010). It emerged after the model of impersonal compound tenses. The main difference is in the alignment: in the passive construction, the P argument is promoted to a subject and agrees with the verb *olema* 'be', while in the impersonal construction it is not promoted. In the 3rd person, however, the agreement is evident only in the past tense (24a), since in present tense *on* 'is, are' stands both for 3SG and 3PL (24b).

(24) Estonian

(a)	Raamatu-d	ol-i-d	läbi	loe-tud.
	book-nom.pl	be-pst-3pl	through	read-pst.pp
	'The books we	re read (all the	way through	ı).'

 (b) Raamat / raamatu-d on läbi loe-tud.

 book.NOM.SG / book-NOM.PL
 be.PRS.3
 through read-PST.PP

 'The book/books was/were read (all the way through).'

Examples like (23) and (24b) reveal that there is an overlap between passive and impersonal paradigms in Estonian, more precisely between the compound tenses of the Impersonal and simple present and past of the Passive. This has been discussed widely in Estonian linguistics (e.g. Wiedemann 1875, Erelt 1979, Pihlak 1993, Rajandi 1999 [1968], Torn 2002, 2006, Vihman 2007, Torn-Leesik 2009, Lindström & Tragel 2007, 2010, Torn-Leesik 2016).

Lindström & Tragel (2007, 2010) have distinguished a third construction, the so-called **possessive perfect**, which has parallels in many European languages (Heine & Kuteva 2006, 140-182). The Estonian possessive perfect construction shares the same morphosyntactic means that are used in personal passive and impersonal compound tenses (auxiliary 'be', past passive participle), but in this construction the agent of the event is expressed as an oblique argument in the adessive and it occurs in the topical position (like *mul* in 25-26). The construction is formed both with transitive and intransitive verbs. For more information, see Lindström &Tragel (2010).

(25)	Estonian				
	Mu-l	on	raamat	läbi	loe-tud.
	1SG-ADE	be.prs.3sg	book.nom.sg	through	read-pst.pp
	'I have read	the book (thro			
<i>(</i>)					

(26)	Mu-l	on	maga-tud.
	1SG-ADE	be.prs.3sg	sleep-рsт.рр
	'I have slept	,	

Our empirical study is restricted to intransitive verbs or intransitive uses of transitive verbs, so the problem of distinguishing between promoted or non-promoted P-arguments is avoided. We also excluded clauses with an adessive S argument.

Auxiliary. All the constructions listed above (impersonal, passive and possessive perfect) use two auxiliaries: *olema* 'be' and *saama* 'get, become'. *Olema* 'be' is a common auxiliary in written standard Estonian, while *saama* 'get, become' is mentioned less in grammar descriptions (Erelt *et al.* 1993, 30–31, Erelt 2017), although it occurs often in informal use, e.g. in North Estonian dialects or Old Literary Estonian (Alvre 1993, Uiboaed 2013: 182, Lindström 2015), and as will be shown in the present paper, also in Internet language. *saama* is a polysemous verb that is used in many grammatical constructions and is one of the most common modal verbs in Estonian (Habicht & Tragel 2014, Tragel & Habicht 2017; Kehayov & Torn-Leesik 2009). In the impersonal, *olema* and *saama* are used differently: *olema* as an auxiliary in the impersonal construction forms regular perfect and pluperfect forms (see Table 2), while *saama* is mostly used in the 3rd person past tense form (*sai*, example (27)). The construction is called also periphrastic impersonal (Erelt 1990).

(27)	Estonian	(ENC2017)
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Kui	õpeta	ija-lt	sa-i		küsi-tud,	miks
when	teach	er-ABL	get-рsт.	3SG	ask-pst.pp	why
just	n	arv	maailm	amudel	damise-s	mängu-s,
exactly	n	number	world_r	nodelin	IG-INE	game-ine
vasta-s		ta,	et	see	on	
answer-P	ST.3SG	3SG	that	this	be.prs.3	
puhas	mate	emaatika.				
pure	math	nematics				

'When (we) asked the teacher why exactly the number n is used in world modelling, s/he answered that this is pure mathematics.'

Demoted agents of the impersonal. The demoted agent of the Estonian Impersonal is claimed to be human, mostly a general or plural participant (Rajandi 1999, Pihlak 1993, Torn 2002, Blevins 2003, Erelt 2003, Vihman 2008, Torn-Leesik 2009, Torn-Leesik & Vihman 2010, Pajusalu 2015, Torn-Leesik 2016), sharing this feature with other Finnic languages. According to Shore (1988), there are two prototypes of impersonal in Finnish: in Prototype I the actor has a generalised plural reference, while in Prototype II, the reference can be made to a specific person or group of people, but for some reason, the identity of the actor(s) has been left unidentified (Shore 1988). The same applies to Estonian: example (28) exemplifies Prototype I (generic reference), example (29), Prototype II (unidentified person or group, specific reference).

(28) Estonian (title in the newspaper Postimees, 4.12.2019)
Selle-l detsembripäeva-l minnakse kõige this-ADE december_day-ADE go.IPS.PRS most sagedamini lahku frequently apart
'(People) divorce most often on that day in December.'

(29) Estonian (ENC2017)

Täna	on	mei-l	töö	juures	
today	be.prs.3	1PL-ADE	work.gen	by	
jälle	moe-s	kõigi-le	e teata-da		millal
again	fashion-1N1	e all-All	announce	-INF	when
puhkuse-	le min	nakse.			
vacation-	ALL go.I	PS.PRS			
'Today a	t work it is i	in fashion to	tell everyboo	ły when	you are going
to vacatio	on.'				

Torn-Leesik and Vihman (2010) have studied the referents of demoted actors of impersonal present and simple past tense forms in spoken Estonian. They distinguish five main types of readings related to demoted actors: (1) universal reading (general reference, as in Prototype I); (2) vague existential reading ("the speaker does not know the identity of the actor [...] [or] the speaker knows the identity and leaves it unspecified—whether because of relevance or politeness considerations", p. 315); (3) specific existential readings (the identity of the actor(s) is known for the interlocutors from the context; the reference can be made to singular actors and even discourse participants); (4) corporate reading ("the impersonal referent is a socially designated group of people, such as the government, committees, or institutions and authorities such as the school, the police, and others", p. 328), and (5) hypothetical impersonals: unspecifiable actors of hypothetical events. According to Torn-Leesik & Vihman (2010), in spoken data the most common type is existential, vague reference (42.2%), followed by corporate (26.9%) and universal readings (19%). In parliament speeches, the corporate reading is the most common (74.5%), followed by vague existential reading (15.2%). Also specific reference is possible; it was found in 7.8% of uses in spoken corpus data and 4.5% in parliament speeches. Their study did not concern perfect and pluperfect, which are the focus of the current study.

According to Torn-Leesik & Vihman (2010) the impersonal is sometimes used in cases when the identity of the actor is entirely clear and specific to the speaker as well as to the addressee, due to the linguistic context. The reason for specific reference to a person or group is related to discourse needs, such as a speaker's need for distancing from the event described; negative (distancing) politeness strategies, dramatic effect etc.

Pajusalu (2015) shows how impersonal forms are used in referential chains. Typically, the impersonal verb form is used for referring to a group of people. In spoken language the same referent(s) are referred to with different means in a sequence of clauses, e.g. impersonal, 3rd person plural verbal ending, 3rd person pronouns. Moreover, also 3rd person singular pronouns and sometimes even 1st and 2nd person may alternate with the impersonal. The impersonal may alternate also with so-called personless conditional, which is typically used speaker-inclusively, while impersonal is typically speaker-exclusive.

Erelt (1990) and Lindström (2010) have shown that impersonal voice can be used as a negative politeness strategy in Estonian—it is one of the means that helps to avoid explicit reference to interlocutors. Especially the impersonal construction with the auxiliary *saama* in the past tense form (*sai*) + PST.PP is commonly used for referring to the speaker, e.g. in internet fora where interlocutors do not know each other in person (Lindström 2010, Erelt 2017, 223).

3. Methods of data selection, preparation and processing

To find out how often a voice-related impersonal construction is used with definite actors, and to compare the three investigated languages, we conducted in each language a small empirical study. We used corpora of the TenTen series (Jakubíček *et al.* 2013)—lvTenTen14, ltTenTen14, and the Estonian National Corpus 2017 (ENC2017) at the platform sketchengine.eu. These corpora have been compiled from Internet resources and contain registers in which certain constructions with the properties we were interested in typically occur, such as blogs, fora and reports in newspapers and magazines.

As it is not possible to search for passive constructions of intransitive monovalent verbs automatically, and to provide for a better compatibility of data across languages, we decided to search for constructions with certain verbs. As described in Section 2.2 for Latvian, the choice of verbs for this study was partly based on frequency of occurrence and partly by the wish to include verbs of various semantic classes. Our initial aim was to gather 100 constructions for each of five verbs with the same meaning in Latvian, Lithuanian and Estonian. However, this turned out not to be feasible, as Latvian and Lithuanian differed too much with respect to intransitive verbs which are typically used in the passive and sufficiently attested. We therefore ended up with slightly different samples. For the statistical analysis, whose results are presented in Section 4, we then selected the samples shown in Table 3.

	'be'	'live'	ʻgo'	ʻride'12	'sing'	'sit'	Other
Latvian	būt (100)	<i>dzīvot</i> (100)	iet (100)	<i>braukt</i> (100)	dziedāt (100)	sēdēt (100)	strādāt 'work' (100)
Lithuanian		gyventi (100)	eiti (100)	važiuoti (100)	dainuoti (100)		miegoti 'sleep' (63 + 11 negated) stovėti 'stand' (26)
Estonian	olema (111)	elama (141)	<i>käima</i> (108)	sõitma (102)	_	istuma (141)	

Table 3. Verbs chosen for comparative statistical analysis, with number offiltered constructions

¹² The meaning of the verbs we gloss as 'ride' comprises various ways of going by transport—they are used for driving a car, going by bus, travel by boat, riding a bicycle, etc. The actual English translation of tokens of these verbs therefore varies greatly.

In Latvian, the query was simply that for the past passive participle (*t*-participle) of the respective verb with the default ending nominative masculine singular, which we gloss here as NA (no agreement), for example, *dzīvots (dzīvo-t-s 'live-PST.PP-NA')*. The first 200 hits (or all if there were less than 200) were downloaded for manual filtering to obtain samples of up to 100 observations. Criteria for not considering an example for the sample included:

- constructions with a nominative subject (for example, 'the car was driven', 'a song was sung'), or attributive use of the participle ('a car driven in Latvia');
- clauses without context—for example, a title or subtitle of a newspaper article;
- copies or quotes of examples that were already included;
- a second occurrence of the same construction within one sentence;
- examples from poetry where rhyme and rhythm influenced the choice of construction;
- examples with grammatical mistakes which may come from not fully competent speakers or automatic translation; examples with a large amount of typographic errors that resulted from very careless production and made the example not fully comprehensible.

About 90% of raw observations qualified for the sample.

For Lithuanian, the same procedure was used. In order to achieve formal comparability with the Latvian and Estonian data, only passive constructions with *t*-participles of the selected intransitive verbs were analyzed. The *t*-participle of $b\bar{u}ti$ 'be' ($b\bar{u}ta$) was not included into the study, as it is mainly used as an evidential. In order to determine whether definite reference of a covert Actor is possible with impersonal *m*-passives, random samples of 200 examples of the verbs *gyventi* 'live' and *važiuoti* 'ride' were taken from ltTenTen14. After sorting out attributive uses and other irrelevant examples, samples of 100 examples of each verb were obtained and analyzed.

As described in Section 2.4 above, the Estonian Impersonal has synthetic and analytic forms, of which only the latter were considered for this study. For the sake of better comparability all occurrences with an explicit P argument were excluded from the data. Estonian data was obtained from the Estonian National Corpus 2017 (collected similarly to TenTen corpora) in two steps: first, only the verb *elama* 'live' was analysed; in this case we searched for a combination of an auxiliary (either 'be' or 'get') and the verb in the past passive participle. Therefore, the data includes only some accidental usages of past passive participle alone as a core of the impersonal clause. For other verbs, the search was conducted similarly to other languages—by the participle.

The obtained samples of all three languages were then annotated for the referential type of the deleted actor and for features that possibly correlate with it.

As we were primarily interested in definite, known actors, we divided the remaining types of reference into just two groups, labelled 'generic' and 'indefinite', where the latter also serves as a container for all observations that do not fall into one of the other, better defined, groups. A similar division was made in other studies, for example Napoli (2009, 169–170).

As 'generic' we classified situations where the covert actor of a passive predicate was everybody, or could be anybody, of a vaguely specified group of persons. The following two examples illustrate this type.

(30) Estonian

Senionela-tudpimeduse-s.so_farbe.PRS.3live-PST.PPdarkness-INE'So far, (people/everybody) have/has lived in darkness.' (about peoplein Estonia)

(31) Latvian

Interesai	nti	ir	atgriezties	vietās,
interesti	ng.ADV	be.prs.3	return.INF.RFL	place.loc.pl
kur	jau	kādreiz	bū-t-s.	
where	already	once	be-pst.pp-na	
'It is inte	eresting to	return to pla	ces where (one has	/ you have) already
been on	ce'.			

This reference type is called 'universal' in Torn-Leesik & Vihman (2010). Giacalone Ramat and Sansò (2007) distinguish between 'species-generic' and 'human non-referential indefinite'. In Gast & Van der Auwera's (2013) system, developed for the semantic description of human impersonal pronouns, there are four classes that correspond to our 'generic', as they distinguish between internal and external universal and combine this distinction with parameters concerning the state of affairs. Such finer distinctions may be important when discussing border cases between generic and definite actors. For example, it is not always clear whether a meaning 'we' has a definite referent or is rather generic. However, in our study we disregarded these aspects.

The 'indefinite' reference type includes Torn-Leesik & Vihman's (2010) types 'vague existential' and 'corporate', or the diverse subtypes of 'existential' distinguished in Gast & van der Auwera (2013). The actor is a person or group of persons whose identity may be known to the speaker, but is not identifiable for the addressee (32). When the identity is not specific, the meaning is similar to generic reference, but the scope is narrower (33).

(32) Estonian

<i>Pärast</i> after	renoveerimis-t renovation-PAR	on be.prs.3	<i>korteri-s</i> flat-ine	<i>ela-tud</i> live-pst.pp
paar	aasta-t.			
couple	year-par			
'After the	renovation, the fl	at has been	lived in for a	couple of years.'

(33) Latvian

 Viņu	dziesmām	jau	tiek	dziedā-t-s
3.GEN.PL	song.dat.pl	already	AUX.PRS.3	sing-pst.pp-na
līdzi.				
along				
'(Some) pe	ople are already	singing alo	ng to their son	ıgs.'

In the case of 'definite' reference, the actor is known to both speaker and addressee and recoverable from the context. Sometimes a rather large context was required to determine the referent, or knowledge about the register and text function. Without context, example (34) could be understood as generic, but as it is the beginning of a personal report in a blog, it is evident for the reader that the author is talking about themselves, and the following text will show that the actor is the author's family, thus 1PL rather than 1SG.

(34) Latvian

Jauks		šogad	d	septembris		Т	ādēļ
fine.NC	DM.SG.M	this_	year	September	.nom.sc	s th	nerefore
uz	mežu		un	ezeru		gribas	
to	wood.A	CC.SG	and	lake.Acc	.SG	want.P	RS.3SG.RFL
biežāk		un	brau	k-t-s	tiek		daudz.
often.c	COMP	and	ride-P	ST.PP-NA	AUX.F	PRS.3	a_lot

'September is fine this year. Therefore, one wants (= we want) to go more often to the forest and the lake, and **we go** there a lot.'

In the Estonian example (35) it was the previous context which identified the referent as the speaker.

(35) Estonian

Selle	piina	-ga	ei	taht-nud	ena	т
this.GEN	a pain-	СОМ	not	want-pst.A	.P any	_more
olla	ja	ela-ti	ud	on	juba	küllalt
be.inf	and	live-p	ST.PP	be.prs.3	already	enough
ja	ükskord	реа	ı-b	mine-ma.		
and	once	mu	st-3sG	go-sup		
'In this p	pain (one =	I) didn	't want t	o exist anymo	ore. (I) hav	e lived enough
and onc	e one has	to go.'				

For definite referents, we further marked the person and number of the referent. In addition, we annotated for polarity, auxiliary type, and clause type, as these parameters were suspected to have an influence on the interpretation in at least one of the languages. Auxiliary type was of special interest because two of our three languages, Latvian and Estonian, use two different auxiliaries in impersonal constructions. Furthermore, we annotated for person and tense; these parameters do not go into the quantitative analysis in Section 4, but will be considered in section 5.

Auxiliary type had the values 'no auxiliary' and "be' auxiliary' in all three languages, and additionally "get' auxiliary' in Latvian and Estonian. In Lithuanian, the majority of observations had no auxiliary. In consequence, polarity was not annotated for Lithuanian, as negation is marked by a prefix on the participle if there is no auxiliary, and these forms were not included in the samples (except for 11 instances of *nemiegota* 'not slept' obtained by a special query for this form). 'Clause type' had the values ADV (adverbial clause), COMPL (complement clause), REL (relative clause), and MAIN (independent clause).

For the statistical analysis, we applied Pearson's chi-squared test that enables us to decide whether the observed variables (auxiliary type, verb lemma, and clause type) affect the distribution of reference types significantly. In addition, we applied to each language dataset the conditional inference tree model (Hothorn *et al.* 2006). The method works by partitioning the observations (= uses of generic, indefinite and definite reference) in the sample recursively into two distinct groups based on the explanatory variables which are most strongly associated with the response variable. Partitioning continues until no further statistically significant splits can be made, i.e. there are no more explanatory variables the levels of which significantly differ from each other in terms of evoking a preference for a certain type of reference. The method also helps to visualize the effect of variables in the model. The method is applied to each dataset separately; the aim is to find out whether the variable that we take into account have any effect on the preference for generic, indefinite or definite usages of the passive impersonal.

4. Some quantitative results

When looking at the quantitative data in Table 4, one can easily observe that the distribution of generic, indefinite and definite uses of the impersonal passives in Latvian, Lithuanian and Estonian is similar in the sense that all three languages use the impersonal passive often for definite reference (in Lithuanian 42%, in Latvian 51% and in Estonian 63%). According to Pearson's chi-squared test, the distribution of generic, indefinite and definite uses in three languages is statistically different (χ_2 (4, 1776) = 88.22, p < .001), meaning that there are important differences between the languages. As it can be seen from Table 4, generic reference is more common in Latvian and Lithuanian than in Estonian, while Estonian refers more often to an indefinite (vague) group of people; this has generally been considered being characteristic to impersonal voice in Estonian (see Section 2.4.).

Reference type	Latvian		Estonian		Lithuanian	
	N	%	N	%	N	%
generic	195	27.9%	83	14.4%	197	39.4%
indefinite	147	21.0%	129	22.4%	93	18.6%
definite	358	51.1%	364	63.2%	210	42.0%
	700		576		500	

Table 4. Distribution of generic, indefinite and definite usagesof the impersonal in the data

In all three languages, the construction occurs remarkably more often in affirmative clauses than in negative clauses. In Estonian, only 4% of the investigated impersonal constructions are negated. For the Latvian subjectless passive, the figure is a bit higher – 14%. In Lithuanian, negation was not systematically investigated, but it seems to be rarer than in Latvian. In the Estonian data definite reference was rare under negation but in Latvian and Lithuanian it was common. Since negative polarity is infrequent in our data, we do not look at it more closely in the following sections.

In the next sections we look at each language separately, considering in turn auxiliaries, verb lemmas and clause types. The aim is to find out under which conditions different reference types typically are used.

4.1. Latvian

4.1.1. Auxiliaries

The raw data is given in Table 5, the proportions are shown in Figure 1. According to the chi-squared test there is a statistically significant relation between auxiliary type and reference type: χ_2 (4, 700)= 89.204, p < .001.

In Latvian, *tikt* 'get, become' is slightly more frequent than $b\bar{u}t$ 'be' in our data (40.9% vs. 35.1% of all observations). However, the use of the bare participle is also common (24%), and this is traditionally considered to be a variant of the 'be' auxiliary.

	'get'	ʻbe'	no auxiliary	Total
Definite	92 (32.2%)	163 (66.3%)	103 (61.3%)	358
Generic	93 (32.5%)	64 (26%)	38 (22.6%)	195
Indefinite	101 (35.3%)	19 (7.7%)	27 (16.1%)	147
Total	286 (100%)	246 (100%)	168 (100%)	700

Table 5. Distribution of reference types with different auxiliaries in Latvian

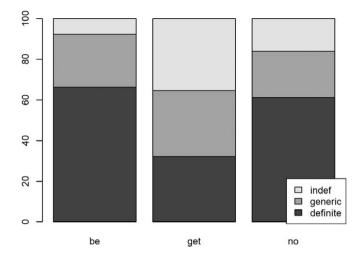


Figure 1. Distribution of reference types with different auxiliaries in Latvian

As can be seen in Figure 1, get-passive behaves differently from bepassive and shows a higher rate of generic and indefinite actors. With zero auxiliary, the distribution of reference types is closer to that of the be-passive than to the get-passive: both are often used for referring to definite actors.

4.1.2. Verbs

Data of 7 different verb lexemes were included in the analysis: $b\bar{u}t$ 'be', *iet* 'go', *dzīvot* 'live', *braukt* 'ride', *dziedāt* 'sing', *sēdēt* 'sit', and *strādāt* 'work'. The results are shown in Table 6 and Figure 2.

The difference in the distribution of reference types between verb lexemes is statistically significant: χ_2 (12, 700) = 159.57, p < .001, meaning that the use of definite, generic and indefinite reference types is not independent from the verb lexeme.

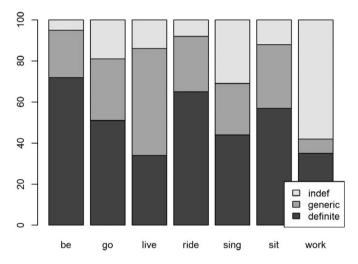
The impersonal passive of the verb 'live' is used more often generically (referring to 'everybody') than other verbs (52%). The same appears also in Estonian and Lithuanian.

The verb 'work' has a surprisingly high number of indefinite usages (58%). The verbs 'be' and 'ride' have high numbers of definite actors (72% and 65% respectively).

	'be'	'go'	'live'	'ride'	'sing'	'sit'	'work'	Total
Definite	72	51	34	65	44	57	35	358
Generic	23	30	52	27	25	31	7	195
Indefinite	5	19	14	8	31	12	58	147
Total	100	100	100	100	100	100	100	100

Table 6. Distribution of reference types with different verbs in Latvian

Figure 2. Distribution of reference types with different verbs in Latvian



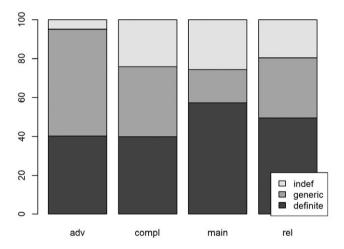
4.1.3. Clause type

We have distinguished between main clauses and three types of subordinated clause: adverbial, complement and relative clauses. As expected, more than half of the data come from main clauses (see Table 7 and Figure 3). In adverbial clauses the impersonal passive is more often used for generic reference, compared to other clause types. Definite reference is most commonly found in main clauses. The differences in the distribution of reference in the analysed clause types are statistically significant (χ_2 (6, 700) = 78.546, p < .001).

Table 7. Distribution of reference types in different types of clausesin Latvian

	Main clause	Adverbial	Complement	Relative	Total
Definite	228 (57.3%)	49 (40.2%)	33 (39.8%)	48 (49.5%)	358
Generic	68 (17.1%)	67 (54.9%)	30 (36.1%)	30 (30.9%)	195
Indefinite	102 (25.6%)	6 (4.9%)	20 (24.1%)	19 (19.6%)	147
Total	398 (100%)	122 (100%)	83 (100%)	97 (100%)	700

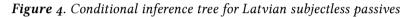
Figure 3. Distribution of reference types in different types of clauses in Latvian

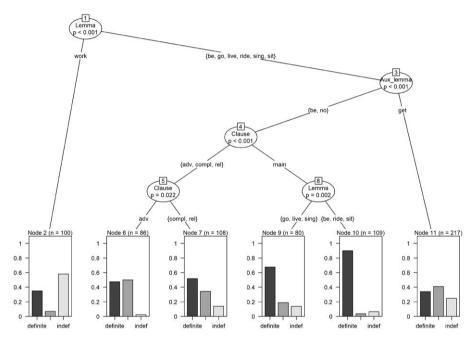




In order to analyse and visualise the interplay of different variables, we apply conditional inference tree analysis. We included all possible explanatory variables: polarity, auxiliary (Aux_lemma), verb lemma (Lemma), and clause types (Clause) in order to find out the most important variables and their interactions that favour or counteract the different reference types.

The conditional inference tree in Figure 4 shows that the most important variable in predicting definite, indefinite and generic use of the deleted actor is the verb lemma: 'work' behaves differently from other verbs in the data, as it is used more often with indefinite actors (Node 2, light column). The second split is done by the predictor Aux_lemma (Node 3), grouping constructions with the get-auxiliary separately from the two other types: with 'get', the distribution of reference types is more equal (Node 11) than with the auxiliary 'be' and without auxiliary. Within this group the predictor Clause_type (Node 4) makes a statistically significant split, grouping main clauses separately from others.





4.2. Lithuanian

4.2.1. Auxiliaries

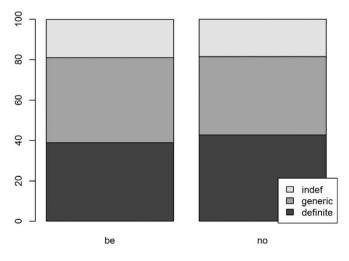
In Lithuanian, only $b\bar{u}ti$ 'be' can be used as an auxiliary in the impersonal passive, and as can be seen from Table 8, the most common pattern is to use the participle without any auxiliary. By this feature, Lithuanian differs from Latvian and Estonian, where the use of auxiliary is the more common option.

Both options of the impersonal passive—with an auxiliary 'be' or without the auxiliary—show very similar distribution of reference types in the data (see Table 8 and Figure 5). Definite actors occur without auxiliary only slightly more often (42.7% in the group without the auxiliary and 38.9% in the group of be-impersonal). Also the Chi-squared test confirms that the distribution of reference types is not related to the auxiliary: χ_2 (2, 500) = 0.48568, p = .7844.

	ʻbe'	no auxiliary	Total
Definite	37 (38.9%)	173 (42.7%)	210
Generic	40 (42.1%)	157 (38.8%)	197
Indefinite	18 (18.9%)	75 (18.5%)	93
Total	95 (100%)	405 (100%)	500

Table 8. Distribution of reference types with and without auxiliary inLithuanian

Figure 5. Distribution of reference types with and without auxiliary in Lithuanian



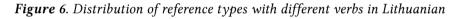
4.2.2. Verbs

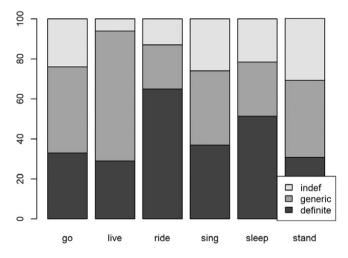
There were data from 6 verbs in our samples. Table 9 and Figure 6 show the distribution of definite, generic and indefinite reference types with the verbs.

Distribution of reference types in different verb lemmas differs widely: the impersonal passive construction with *gyventi* 'live' refers more often to a generic actor than other verbs (similarly to Latvian and Estonian). The passive of *važiuoti* 'ride' is used mostly when the actor is definite and specific. The differences in the distribution of reference types with different verb lexemes are statistically significant ($\chi_2(10, 500) = 66.305$, *p* < .001).

	ʻgo'	'live'	ʻride'	'sing'	'sleep'	'stand'	Total
Definite	33	29	65	37	38	8	210
Generic	43	65	22	37	20	10	197
Indefinite	24	6	13	26	16	8	93
Total	100	100	100	100	74	26	500

 Table 9. Distribution of reference types with different verbs in Lithuanian





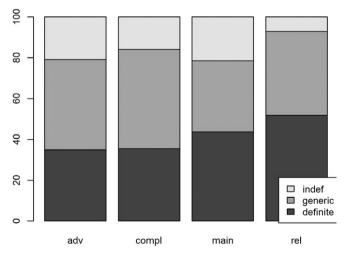
4.2.3. Clause types

Also in Lithuanian, more than half of the occurrences of impersonal passive constructions come from main clauses. The distribution of reference types in different clause types seems to be more equal than in Latvian. In relative clauses the definite use is more common than in others. According to the chi-squared test that was applied to Table 10 the relation between the reference types and clause types is not strong: χ_2 (6, 500) = 13.371, p < .03751.

Table 10. Distribution of reference types in different types of clausesin Lithuanian

	main clause	adverbial	complement	relative	Total
Definite	126 (43.8%)	15 (34.9%)	40 (35.4%)	29 (51.8%)	210
Generic	100 (34.7%)	19 (44.2%)	55 (48.7%)	23 (41.1%)	197
Indefinite	62 (21.5%)	9 (20.9%)	18 (15.9%)	4 (7.1%)	93
Total	288 (100%)	43 (100%)	113 (100%)	56 (100%)	500

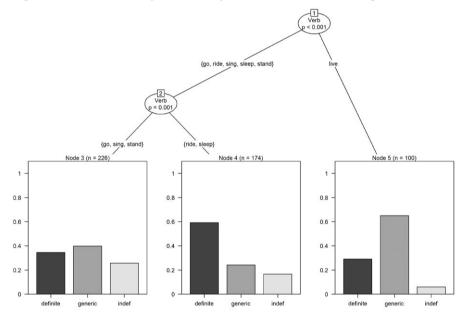
Figure 7. Distribution of reference types in different types of clauses in Lithuanian



4.2.4. Interplay of variables

According to the conditional inference tree model (Figure 8), the most important variable in predicting the reference type in Lithuanian impersonal passives is the verb lemma: *gyventi* 'live' behaves differently from other verbs, allowing frequent generic use in the passive. Also the second split in the data is made by the predictor Verb lemma (Node 2). Other predictors do not seem to have an important role in making choices between definite, indefinite and generic reference. Clause type, which was an important predictor in Latvian, does not play a role.





As was mentioned above, Lithuanian can form subjectless passives with two participles: the *m*-participle and the *t*-participle. According to Geniušienė (2006, 40), generic agents may only occur with *m*-passives. Her definition of generic agency though is slightly different from ours: Geniušienė assumes generic agents only in truly generic (gnomic) statements (cf. (17)), while for us a generic agent may also refer to 'people (in general)', cf. example (36).

(36)	Lithuanian (ltTenTen14)						
	Šimtmečiais	gyven-t-a	be	vargonų.			
	for_many_ages	live-pst.pp-na	without	organ-gen.pl			
	'They lived withou	t organs for many a	ges [in the Chr	istian Church].'			

Though this study mainly focusses on *t*-passives, we also investigated the referential properties of deleted actors in *m*-passives of two Lithuanian intransitive verbs: *gyventi* 'live' and *važiuoti* 'ride'. From what is said in the literature we didn't expect to find any instances of *m*-passives with covert definite actors. However, our expectations proved to be wrong: after analysing 100 examples with each verb, we found 5 and 10 cases of definite covert actors with the *m*-passive of the verbs *gyventi* 'live' and *važiuoti* 'ride', respectively. An example with 'live' is given in (37). The context proved that the referents were a specific, known group of young actors.

(37) Lithuanian

Atsidavimas,	kuriu	kuriuo		a-a-m-a
devotion(м).noм	i.sg whicl	which.ɪns.sg.м		RS-PP-NA
scenoje,	verčia	didžiuotis		jaunų
scene.LOC.SG	force.prs3	be_proud	_of.INF	young.gen.pl.m
aktorių	gebėjimu	įsit	traukti	į
actor(m).gen.pl	ability.1NS	.sg eng	gage.INF	in
bendrą	darbą,		0	ne
common.ACC.SG.	м work(м).acc.sg	but	not
demonstruoti	save			
demonstrate.INF	self.Ac	CC		

'The devotion with which **they live** on the scene makes us admire the young actors' ability to engage in common work rather than demonstrating themselves.'

Our small study of *m*-passives of the two verbs proves that although definite reference of covert actors in *m*-passives of intransitive verbs is possible, it is nevertheless very rare in comparison to *t*-passives (5–10% vs. 42%). Thus, the most important factor determining the reference type of covert actors in Lithuanian impersonal passives is the type of the participle: the *m*-participle specializes for generic reference, while the *t*-participle may to a large extent also be used for definite reference. This is confirmed by earlier studies. Geniušienė (2016, 276) postulates a dependence between the type of the omitted agent and the participle of the impersonal passive: *t*-participle is typically used with specific covert

agents (known or unknown), while *m*-participle is used with generic or indefinite agents.

4.3. Estonian

4.3.1. Auxiliaries

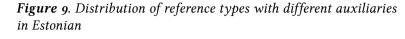
In the construction two auxiliaries can be used: *saama* 'get' and *olema* 'be'. get- and be-impersonals behave differently in terms of reference, as can be seen in Table 11 and Figure 9; the differences in Table 11 are statistically significant (χ_2 (4, 576) = 247.34, p < .001).

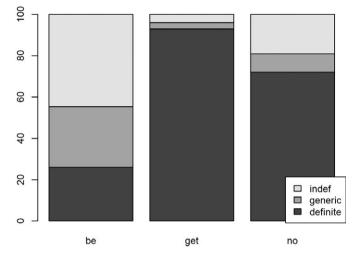
The Estonian get-impersonal is overwhelmingly used for specific, definite reference (93%), while be-impersonal is used mostly with indefinite (44.7%) or general referents (29.4%). Thus the distribution of reference types in the be-impersonal is closer to impersonal simple tenses than that of the get-impersonal, but still the differences from simple tenses are striking: in the be-impersonal, specific definite reference occurred in 26% of cases, while in the corpus data studied by Torn-Leesik and Vihman, only 7.8% and in parliament speeches 4.5% of the tokens had a definite actor (Torn-Leesik & Vihman 2010). The differences may be related to the nature of the different corpora (written vs. spoken), but also to the systematic difference between the use of Impersonal simple tenses (studied by Torn-Leesik and Vihman 2010) and compound tenses. Impersonal compound tenses are closer to the Passive in many respects in Estonian (see section 2.4.).

The clauses without the auxiliary are somewhat in between the two impersonal types with respect to the reference type; however, as the definite use is frequent, they are closer to the get-impersonal.

	ʻbe'	'get'	no auxiliary	Total
Definite	61 (26.0%)	254 (93.0%)	49 (72.1%)	364
Generic	69 (29.4%)	8 (2.9%)	6 (8.8%)	83
Indefinite	105 (44.7%)	11 (4.0%)	13 (19.1%)	129
Total	235 (100%)	273 (100%)	68 (100%)	576

Table 11. Distribution of reference types with different auxiliariesin Estonian





4.3.2. Verbs

In Estonian, the impersonal constructions of five different verbs were analysed: *olema* 'be', *käima* 'go', *elama* 'live', *sõitma* 'ride, drive', and *is-tuma* 'sit'; see Table 12 and Figure 10. The difference in the distribution of reference types with different verbs is statistically significant (χ 2 (8, 576) = 66.671, *p* < .001).

The Estonian data also shows a difference between *elama* 'live' and other verbs: *elama* is more often used for generic reference. Interestingly, the same does not apply to the verb *olema* 'be', which is often used for indefinite (vague) reference. Specific reference is more common with the verbs *istuma* 'sit', *käima* 'go, walk', *sõitma* 'ride'.

	ʻbe'	ʻgo, walk'	ʻlive'	ʻride'	'sit'	Total
Definite	60	76	80	64	84	364
Generic	16	4	45	7	11	83
Indefinite	35	28	16	31	19	129
Total	111	108	141	102	114	576

Table 12. Distribution of reference types with different verbs in Estonian

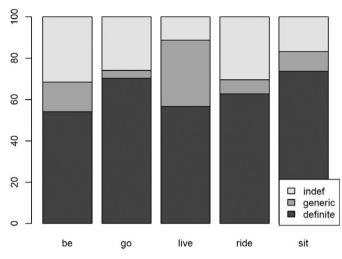


Figure 10. Distribution of reference types with different verbs in Estonian

4.3.3. Clause types

There seem to be differences between the reference types also in different clause types: relative and complement clauses include more indefinite usages than others; definite reference is more common in main and adverbial clauses. See Table 13 and Figure 11. The differences in the distribution of reference types in different clause types are statistically significant (χ_2 (6, 576) = 626.562, p < .001).

 Table 13. Distribution of reference types in different types of clauses in Estonian

	main clause	adverbial	complement	relative	Total
Definite	272 (67.8%)	59 (60.8%)	18 (41.9%)	15 (42.9%)	364
Generic	46 (11.5%)	21 (21.6%)	11 (25.6%)	5 (14.3%)	83
Indefinite	83 (20.7%)	17 (17.5%)	14 (32.6%)	15 (42.9%)	129
Total	401 (100%)	97 (100%)	43 (100%)	35 (100%)	576

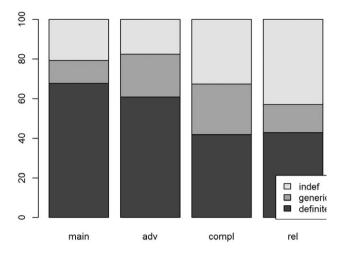


Figure 11. Distribution of reference types in different types of clauses in Estonian

4.3.4. Interplay of variables

The inferential conditional tree model (Figure 12) shows what are the most important predictors for the choice between general, indefinite and definite reference.

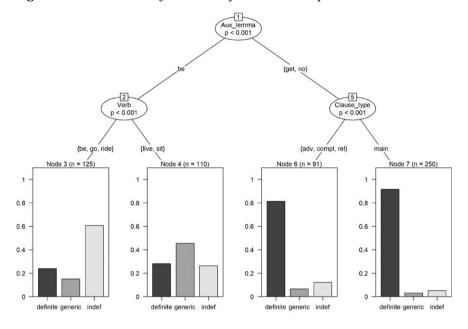
In the Estonian data most of the predictors (verb, auxiliary lemma and clause type) are important in the model, except polarity (mostly because there are not enough negative clauses in the data). In this, Estonian data particularly differs from Lithuanian, where only the verb lexeme made statistically significant splits in the data.

The first split is made by the predictor Aux_lemma: there is a clear difference (statistically most significant difference) between 'be' (one group, left) and 'get' + no aux (second group, right). As was shown already earlier, the get-impersonal is used overwhelmingly if the demoted actor is definite and specific (Nodes 6 and 7). Within the be-impersonals, the next split is done by the predictor Verb (Node 2).

4.4. Summary of quantitative results

All three languages have a voice-related impersonal construction which may refer generally (generic reference, 'everybody', 'all in the situation'), specifically (definite reference, persons which can be identified from the context) or vaguely (indefinite, unidentifiable person or group of persons). Although we are dealing with semantic-pragmatic categories which are sometimes difficult to delimit, we still can draw a general picture on it.

Figure 12. Conditional inference tree for Estonian impersonal constructions



First of all, impersonal constructions in all three languages often refer to definite, specific actors. The rate of specific actors is highest in Estonian, mostly because of the get-impersonal, which seems to be specialized for definite and mostly first person reference (see Section 5.3). The Baltic languages have a higher rate of generic usages than Estonian. One of the possible reasons for that could be the fact that Estonian—like other Finnic languages – has another construction for generic reference—the so-called zero person construction.

The investigated constructions are used mostly in affirmative clauses in all three languages. In negated clauses, definite reference was common in Latvian, mostly with the verb $b\bar{u}t$ 'be', but rare in Estonian and Lithuanian.

The impersonal passive construction in Latvian and Estonian may have two auxiliaries—'be' and 'get', and in both languages, they have different functions. In Estonian, the get-impersonal is used mostly for expressing action of specific, definite actors. The be-impersonal is used more with indefinite and general actors and is therefore closer to impersonal simple forms. In Latvian, on the contrary, the get-impersonal is more often used for generic and indefinite reference, whereas the be-impersonal is used often for marking the action of definite, specific actors.

In all three languages the participle can also be used as an impersonal construction without any auxiliary. In Lithuanian we can observe that the distribution of generic, indefinite and definite reference is almost equal in clauses with or without the auxiliary, which makes us infer that we are dealing with variants of the same construction. Other factors (such as clause type and polarity) do not affect the distribution of reference types in Lithuanian either. The most important factor for the distribution of reference types in Lithuanian impersonal passives is the type of the participle: the *m*-participle is almost exclusively used for generic reference while the *t*-participle to a large extent may also be used for definite reference.

In Latvian, clauses without auxiliary are closer to the be-impersonal by allowing more definite uses. In Estonian, clauses without auxiliary are closer to get-impersonals, and also allow more definite uses.

In Latvian data, clause type also appeared to be another important predictor in the data: generic and indefinite uses are more often found in subordinated clauses, while in main clauses, definite uses are more common, especially in be-impersonals. In the other languages the differences between clause types were less important.

The lexical meaning of the verb may also affect how the passive impersonal is used: with the stative verb 'live' all three languages showed a tendency for referring to generic actors. Furthermore, the difference between the verb meaning 'work' and all other verbs in the sample was the strongest predictor in Latvian.

5. Further results and discussion: Why use an impersonal construction when the person is known?

In this section we will take a closer look at the covert actors with definite reference, analysing grammatical categories such as person, number, and tense, but most of all discussing the circumstances under which a passive or impersonal construction is used when the actor is known. We first report on each language separately and then draw conclusions based on a comparison of the three languages.

5.1. Latvian

In the investigated passive constructions of intransitive verbs, the predicate appears in various tenses, and the contextually recovered actor corresponds to various persons. However, there are some clear trends, which correlate with trends already seen in Section 4.1 and together can help us understand what triggers the use of an impersonal construction when the deleted actor is a known person. In this section, *the sample* refers to the subset of 358 observations classed as having a definite actor out of the whole sample of 700 observations (7 x 100 tokens) analyzed in Section 4.1.

For the analysis of tense forms used in impersonal passives we follow the traditional approach which associates forms with the auxiliary *tikt* 'get, become' with simple tenses (present, past, future) and forms with the auxiliary $b\bar{u}t$ 'be' with perfect tenses. The preference of the auxiliary $b\bar{u}t$ over *tikt* that was shown in Figure 1 above thus corresponds to a preference for perfect tenses over simple tenses. Recall that with the basic passive, the auxiliary *tikt* is more frequent than the auxiliary $b\bar{u}t$. Tentatively we also assume that the use of the passive participle without an auxiliary represents the same tense as the construction with the present tense of $b\bar{u}t$. In this interpretation, we may state that two-thirds of the examples in our sample represent the present perfect (235 of 358 = 65.64%). The next frequent tenses are simple past and simple present with 14.8% and 9.5%, respectively, followed by past perfect with 6.98%. The figures are given in Table 14.¹³

auxiliary	auxiliary tense	example with 'ride'	tense with PST.PP	
'be'	present	ir braukts	present perfect	132
no	-	braukts	present perfect	103
'get'	past	tika braukts	past tense	53

Table 14. Most frequent tense forms of Latvian impersonal passiveswith definite actors

¹³ Other forms of the auxiliary $b\bar{u}t$ 'be' were the conditional (5 tokens) and one instance of a compound past perfect (*nebija bijis* + PST.PP), while other forms of the auxiliary *tikt* 'get' included 2 future forms, 2 evidential forms and 1 compound present perfect (*ir ticis* + PST.PP); these forms will not be considered further here.

auxiliary	auxiliary tense	example with 'ride'	tense with PST.PP	
'get'	present	tiek braukts	present tense	34
'be'	past	bija braukts	past perfect	25
'be'	other			6
'get'	other			5

The deleted actor of the predicates in our sample most often could be reconstructed as the speaker or a group including the speaker: these instances of a first person actor make up 61% of the sample (217 of 358), and first person singular alone accounts for 42% (149 of 358). In about 36% of observations the actor was third person (singular or plural, 128 of 358), while second person was relatively rare with 3.6% (13 of 358). When we look at individual verbs, two groups may be distinguished: the verbs 'sing' and 'work' behave differently from the rest in showing reference to a third person (plural) actor more often; see Table 15.

	1SG	1PL	3SG	3PL	2SG	2PL	sum
ʻbe'	39	9	11	9	1	3	0
'go'	22	12	6	9	2	0	0
'live'	22	5	4	2	1	0	0
ʻride'	30	16	9	7	1	2	0
'sit'	31	11	8	4	2	1	0
	0	0	0	0	0	0	0
'sing'	0	9	10	25	0	0	0
'work'	5	6	6	18	0	0	0
	0	0	0	0	0	0	0
all verbs	0	0	0	0	0	0	0

Table 15. Person and number of definite actors in Latvian¹⁴

¹⁴ Note that 1SG etc. is not a grammatical category here, but stands for 'refers to the speaker'.

Before we try to explain the differences among verbs, we will discuss the most important functions in which the investigated constructions are used.

As shown in Table 14 above, the most frequent form of the passive constructions in our sample is the present perfect, and indeed a majority of uses reflect one of the two main functions of the Latvian Present Perfect (cf. Nau 2005): CURRENT RELEVANCE, the defining feature of the gram type perfect, and/or INDEFINITE PAST, also called EXPERIENTIAL PERFECT (Comrie 1976; Dahl 1985; Lindstedt 2000). Actually, these two meanings are not clearly distinguished, as the 'current relevance' may be more or less important (cf. Dahl & Hedin 2000, 291, who propose that current relevance is a graded concept), and the two functions may be combined (Lindstedt 2000, 369). Essentially, the construction expresses that the event—or more precisely, an event of this type, has taken place at least once in the past, or, when negated, that it has not occurred during a period lasting from some time in the past up to the current moment. Of course, the speaker will have a reason for making such a statement, so in one form or other it must be "relevant". It attests the actor's experience (38) or lack of experience (39) with a situation that is talked about.

(38) Latvian

Ar	šo		kompān	iju	ir	
with	DEM.AC	CC.SG	compan	y.ACC.SG	be.prs.3	
braukts		vairākas	;	reizes,	un	
ride.pst.pp	.NA	several.A	ACC.PL.F	time.ACC.PL	and	
problēmu		nav		bijis.		
problem.G	EN.PL	NEG	.be.3	be.pst.pa.sg	Э.М	
'I have travelled with this company several times, and there have been						
no problems.' (implied: I can therefore recommend it)						

(39)	Līdzsvars		nesokas	s.	
	balance.N	OM.SG	NEG.go	_well.prs.3	
	Ar	tādu		kanoe	nav
	with	such.Acc.	.SG	canoe.NOM.SG	NEG.be.prs.3
	braukts.				
	ride.pst.p	P.NA			
	'The bala	nce doesn'	t work v	vell. [Because] I h	aven't been in such
	a canoe (e	ever before	e).'		

In positive statements, reference is typically made to more than one event. This finds its expression either in adverbials such as 'several times' in (38), or in some kind of listing. For example, in (40) a list of countries where the activity took place is given. Another type often found in our sample is the listing of different activities, as in (41).

(40) Latvian
[Sieviešu kora "Noktirne" dalībnieces ir ceļojušas arī pa pasauli —]
dziedā-t-s Anglijā, Vācijā un
sing-PST.PP-NA England.LOC.SG Germany.LOC.SG and
Itālijā.
Italy.LOC.SG
'[The members of the women's choir Noktirne have also travelled the world —] (they have) sung in England, Germany and Italy.'

(41)	Ar	šo		somu	ir			
	with	DEF.ACC.SG		bag.Acc.sg	be.prs.3			
	apceļo-t-a		Latvija,	kā	arī			
	PVB.travel-PST.PP-SG.F		F	Latvia.noм	as also			
	ārzemēs bū-t-s -			ра	upēm		brauk-t-s,	
	abroad be-pst.pp-na		PP-NA	over	river.dA	T.PL	ride-pst.pp-na	
	kalnos kāp		• t-s ,	uz vel		osipēda		
	mountain.loc.pl cl		climb	D-PST.PP-NA	on bic		ycle.gen.sg	
	sēdē-t-s		un	ра	pilsētān	ı	klīs-t-s.	
	sit-pst.pp-na and		and	over	city.dat.pl		wander-pst.pp-NA	
	'With this bag, I have travelled Latvia as well as been abroad—(I have boated on rivers, climbed mountains, sat on a bike, and wandere							
	about tow	ns.'						

In these examples, activities are named and listed as facts that have occurred and form part of the topical person's accumulated experience. As can be seen in the first clause of (41), the construction is also found with a basic (personal) passive, with a nominative subject following the passive participle. The construction exemplified in (40) and (41) is called CUMULATIVE-EXPERIENTIAL in Nau, Spraunienė & Žeimantienė (2020, this volume). An active present perfect is also sometimes used in such a function, but the passive seems to be more typical. This may be related to the fact that the impersonal passive is restricted to human actors (with very few exceptions, for example when speaking about pet animals) and can therefore be associated with human experience. The active is more neutral in this respect. Speaking of the 'experience' of an object, only the active present perfect can be used, as in (42); a passive could not be used,

even if it were clear from the context that we are talking about a specific bag. This semantic-pragmatic rule is also enforced by a grammatical fact: In line with general rules of reference (cf. Fraurud 1996), a non-human referent, even if known and topical, is more likely to be expressed with a full noun phrase or pronoun, which in turn triggers agreement, while a known and topical person may easily have zero expressions—as is the case with a passive predicate.

(42) Latvian

Līdz ar to šī soma together with DEM.ACC.SG DEM.NOM.SG.F bag.nom.sg ir bijusi daudz kur loti gan be.prs.3 be.pst.pa.nom.sg.f verv much where ADD oficiālās gan pieņemšanās, īru official.LOC.PL.F reception.LOC.PL ADD Irish pabos. pub.loc.pl 'Therefore this bag has been in many places—at official receptions as well as in Irish pubs.'

Less often temporal reference is not to individual points in the past, but the situation expressed by the participle has held for a whole time span (what is called PERFECT OF PERSISTENT SITUATION by Comrie 1976 and UNIVERSAL PERFECT by Dahl 1985). Again, the current relevance may be more or less salient. In example (43), the stated fact is noteworthy in itself, while in (44) it serves as the explanation for a current state.

(43) Latvian

Izrādās	visu	gadu	ir
turn_out.pst.3.RFL	all.Acc.so	g year.ACC.SG	be.prs.3
brauk-t-s	bez	apdrošināšanas.	
ride-pst.pp-na	without	insurance.GEN.SG	
'It turns out I have	been driving	; without insurance	e the whole year.'

(44)	Bet	Bet ir		tāda			kā
	but	be.prs.3	such	1.NOM.SG.F	thing	g.NOM.SG	as
	pieradums. habit.nom.sg jau по		Pie	ie Windas		sēdē-t-s	
			at Windows.gen		.sg sit-pst.pp-na		ΙA
			3.1	laikiem.			
	already	from	3.1	time.DAT.PL			

'But there is such a thing as habit. **I have been working** with Windows since the times of version 3.1.' (= so I am used to it and reluctant to change to Linux)

Note however that Latvian does not use the perfect for a persistent state, and in the equivalents of clauses such as English *I have known him forever; she has lived here for three years*, the present tense is used. When the predicate is in the passive, the present tense of the auxiliary *tikt* is used in this situation; the present perfect is used only for negative statements; cf. (45).

(45)	Latvian						
	Jau	vairāk	k kā	gadu	ti	ek	
	already	more	than	year.Acc.so	G AU	JX.PRS.3	
	dzīvo-t-s		Podniekos	bet	ne	reizi	
	live.pst.pp.na		Podnieki.loc.pl but		NEG	time.ACC.SG	
	nav		saņem-t-a	C	avīze.	vīze.	
	NEG.be.PRS.3 receive-PST.P ' I have lived in Podnieki for mo			P-SG.F g	IOM.SG		
				ore than a year, but I haven't receive			
	the gazette	a singl	e time.'				

With the passive of intransitive verbs, meanings associated with the category of perfect (current relevance, indefinite past, persistent situation) are most often found with a first person (singular) actor, and they are typical for blogs, interviews and other registers where an author talks about what they have experienced. The passive as experiential perfect is also found in questions with reference to the addressee, but this is attested only a few times in our sample. With third person, the experiential perfect occurs when a report focuses on a specific person or group (as in 40). In such reports, however, past participles, passive as well as active, may be used in reportative meaning and lose the defining characteristic of perfects, 'non-narrativity'. In this function the participles are mainly used without an auxiliary. In (46), the passive predicate occurs in a context of speech report, and it refers to an event at a specific time. One may thus conclude that not all instances of a bare past participle represent the present perfect—or that the language specific category of the Latvian Present Perfect has uses outside of the gram type perfect. Occasionally such uses are also found in constructions with the auxiliary *būt* 'be'.

(46) Latvian

[Silva Linarte izstādes atklāšanā atzina, ka katra izstāde māksliniekiem ir svētki un skrīverieši šos svētkus prot noorganizēt īpaši košus un sirsnīgus. Māksliniece priecājās, ka cilvēki vēlas redzēt viņas radošos darbus, un atklāja, ka Skrīveros nav pirmo reizi.]

Septiņdesr	nitajos		gados	šajā		pusē
seventieth	n.loc.pl	M	year.10	C.PL DEM.	LOC.SG	part.loc.sg
bū-t-s		Mākslas	5	akadēmijas		
be-pst.pp-	-NA	art.gen.	.SG	academy.gen.s	ŝG	
praksē,		kad	šeit	izdevies		satikt
practice.L	OC.SG	when	here	manage.ps	T.PA.NA.RF	L meet.INF
ļoti	interes	antus		cilvēkus.		
very	interes	ting.acc	.PL.M	people.acc	C.PL	

'[At the opening of the exhibition, Silva Linarte acknowledged that each exhibition is a feast for the artists and that the people of Skrīveri were capable of organizing especially brilliant and heart-warming feasts. The artist [said she] was happy that people wanted to see her creative work and disclosed that this was not her first time in Skrīveri.]

In the seventies, **she was/had been** in this part during field practice [as a student] of the Academy of Arts, and **was lucky** to meet a lot of interesting people.'

The verb *izdoties* 'manage, be lucky' in the last clause of this example is reflexive and takes a dative experiencer as main argument (here not expressed). With such verbs, a past passive participle is not possible, therefore the active participle has to be used.

Another function where a passive or active past participle typically appears without auxiliary is to signal anteriority in dependent clauses. This function is attested with all persons and is not associated with definite actors—it is also frequent with generic reference, cf. example (31) in Section 3. In complement and relative clauses, the actor can usually be inferred from the main clause, as in (47), while in adverbial clauses, it must be retrieved from the context.

(47) Latvian

Ja	jūtat,		ka	par	daudz	sēdēts,
if	feel.prs.	2PL	that	too	much	sit.pst.pp.na
biežāk		izkust	aties.			
more_often PVB.move.PRS.2PL.RFL						
'If you feel that you have been sitting too much, stretch (your body)						
more o	ften.'					

For simultaneity, the passive participle is combined with the auxiliary *tikt*, usually in present tense, as in (48).

(48)	Latvian				
	Reizēm	radās		pārlie	ecība,
	sometime	es come.ab	out.pst.3	convi	iction.NOM.SG
	ka	tiek	ie-t-s		pareizajā
	that	AUX.PRS.3	go-pst.pp-n/	4	right.loc.sg
	virzienā.				
	direction.	LOC.SG			
	'Sometim	es I had the cor	viction that \mathbf{I}	was g	oing in the right direction.'
	(speaking	about experie	nces during a	trainii	ng)
	(speaking	about experies	nces during a	trainii	1g)

In independent clauses, the present tense is mostly used for habitual activities, or an activity continually performed in the present time ('I am now working on this task'). Another use of an impersonal passive with *tikt* in both present and past tense is found when one type of activity is contrasted to another, or more generally, is foregrounded. Though this type is not frequent, it is attested with several verbs and both plural and singular actors in first and third person; cf. (49).

(49)	Latvian					
	Šogad	labākai	is	laiks		un
	this_year	best.nc	M.SG.M.DEF	time.	NOM.SG	and
	labākais		skrējiens,	jo	faktiski	vienā
	best.nom.sg.м	A.DEF	run.NOM.SG	for	actually	one.loc.sg
	tempā	no	skrēju	vis	u	distanci
	speed.loc.sg	PV	B.run.PST.1SG	wh	ole.Acc.sg	lap.Acc.sg
	(ie-t- s	ne	tika).			
	go-pst.pp-na	NE	G.AUX.PST.3			
	'(My) best tin	ne and t	he best run thi	is year	, for I actua	lly ran the whole
	lap in one spe	eed (I di	d not walk).'			

In (49) the passive construction is reminiscent of an active construction with a cognate infinitive, cf. (50), which is conventionally used to put emphasis on a verb (for more on this construction cf. Nau 2019).

(50) Latvian (lvTenTen14)

[Tāpat šajā posmā sarunāju ar sevi, ka līdz Gūtmaņa alas ēšanas punktam es aizskriešu kaut ļoti lēni,] bet aizskriešu **ie-t ne-ie-š-u**

bet	aizskriesu	ie-t	ne-ie-s-u
but	PVB.run.FUT.1SG	go-inf	NEG-go-FUT-1SG

'[So at this stage I agreed with myself that up to the food station at the Gūtmaņa cave I would run, even if very slowly,] but **I would** run, **not walk**.'

In past tense, the covert actor of an impersonal passive construction most often is a group of persons, which may or may not include the speaker (12 instances were identified as 1PL and 24 as 3PL, against 8 of 1SG and 9 of 3SG). In these instances, the meaning is more similar to generic reference and may be derived from it. Also in German, where the impersonal passive usually has generic or indefinite reference, it is sometimes found with reference to a definite group of persons in a specific situation. Passive predicates in past tense may also occur in a kind of cumulative construction, listing activities that were performed by the respective group at a specific occasion. This contrasts with the cumulative-experiential construction with the present perfect (see above), where activities having taken place at some not specified points in the past are listed to attest a person's experience. With the past tense, listing of activities rather characterizes a situation, an event that is situated at a given time and place, and not its participants.

(51) Latvian

[Spītējot rudenīgajam laikam, mazajai pādītei par godu]							
tika	dūšīgi	dziedā-t-s	un	dejo-t-s,			
AUX.PST.3	heartily	sing-pst.pp-na	and	dance-pst.pp-NA			
ēs-t-s	un	dzer-t-s.					
eat-pst.pp-n	A and	drink-pst.pp-nA					
'[Defying the autumnal weather, in honour of the little godchild] we sang							
and danced,	ate and dran	k heartily.' (reporti	ng about	a baptism party)			

Coming back to differences between individual verbs: $dzied\bar{a}t$ 'sing' and $str\bar{a}d\bar{a}t$ 'work' are found in our sample more often in constructions with the auxiliary tikt than with the auxiliary $b\bar{u}t$ or without auxiliary, thus, they are used more often in present or past tense than in a perfect tense. As shown above, constructions with past tense more often refer to a group of persons, while in constructions with the experiential perfect the covert actor most often is the speaker. This partly explains the difference in preferences for person and number displayed in Table 15 above.

However, why $dzied\bar{a}t$ 'sing' and $str\bar{a}d\bar{a}t$ 'work' should differ so much from the other five verbs, or why these other verbs should behave so much alike, is not easy to explain. Probably several factors play a role.

First, dziedāt 'sing' and strādāt 'work' almost always express unbounded activities, they are atelic. But also dzīvot 'live' and sēdēt 'sit' are atelic, and *iet* 'go' and *braukt* 'ride' may express atelic as well as telic movement. Telicity cannot be the deciding parameter, and neither can agentivity. One feature that the five verbs of the first group have in common and that distinguish them from 'sing' and 'work' is localization, a kind of boundedness in space. As Dahl & Hedin (2000, 389-390) remark, assertions about event types in the past generally need to be anchored in time and/or space. Constructions with the verbs 'be', 'go', 'ride', 'sit' as well as 'live' usually provide an anchor in space when there is no anchor in time (as the temporal reference is indefinite with the present perfect). This is most evident with 'be', which in the passive is almost exclusively¹⁵ used in the meanings 'be at a certain place' and 'be at (take part in) a certain event'. The verbs 'go', 'ride' and 'sit' are related in that they express a (dis)placement of the main argument, which thus is not only an actor, but also an undergoer (theme). It is possible that these semantic features support the use of the passive participle in constructions with perfect meaning, especially the experiential perfect which correlates with first person. In addition, some of the constructions in the perfect are idiomatic, especially with 'be', for example sen nav būts x 'long time not been at x', which is strongly associated with first person.

5.2. Lithuanian

This section examines Lithuanian impersonal passives with covert definite actors in some detail.

VERB	18G	1PL	38G	3PL	28G	2PL	Sum
'LIVE'	8	4	12	6	—	—	30
'go'	9	6	15	2	1	_	33

Table 16. Person and number of covert definite actors in Lithuanianimpersonal passives

 $^{^{15}\,}$ In two examples in the sample, the past passive participle of 'be' is used in the construction $b\bar{u}t\,kop\bar{a}$ 'be together (with someone)', which still may be interpreted as a localization in a broader sense.

VERB	1\$G	1PL	3SG	3PL	2SG	2PL	Sum
'sing'	2	_	24	11	_	—	37
'SLEEP'	14	14	5	5	_	_	38
'RIDE'	17	10	14	23	1	_	65
'stand'	—	3	4	1	—	—	8
TOTAL	50 23.7%	37 17.5%	74 35%	48 22.8%	2 0.95%	_	211 100%

As shown in Table 16, most impersonal passives with covert definite actors refer to a 3rd person actor (122 or 57.8% of the cases); 1st person actors constitute a second large group (87 or 41.2%), while 2nd person actors only occur in 2 examples (0.95%) in our sample. Singular actors are more common than plural actors (126/59.7% and 85/40.3%, respectively). As far as different lexemes are concerned, all the verbs show a greater preference for 3rd person actor, with the exception of the verb *miegoti* 'sleep' which is predominantly used with 1st person actors. An explanation for this fact may be that the verb *miegoti* 'sleep' denotes an activity which is considered private—that's why it is more common for speakers to talk about their own sleeping than to discuss other people's sleeping.

In 82% of passives with implicit actors the auxiliary is omitted. In the remaining 18% of the examples a past tense auxiliary is used. No other tense form seems to be possible.

An example of a covert 2nd person actor (from an interview) is given in (52):

(52) Lithuanian

Į	knygą –	kai	p	liudija	publikacijos
to	book.acc.	sg as		witness.prs3	publication.NOM.PL
bei	įvairi		liter	atūrinė	veikla —
and	various.	.NOM.SG.F	liter	ary.nom.sg.f	activity(F).NOM.SG
ei-t-a		neskubriai,		atkakliai,	nesiblaškant.
go-ps:	Г.PP-NA	not_in_a_h	urry	persistently	without_distraction
'As w	itnessed by	your public	ations	and various lit	terary activities, you
moved towards [writing] your book slowly, persistently and w					
distra	ction.'				

The passive verb in (52) denotes an activity or a process which lasted for some time in the past and finished shortly before the moment of speech (the sentence is from an interview with the author of the book after it has been published). A corresponding active would be in the past tense (*j knygq ... ėjote* to book.Acc.sG go.PST.PL2¹⁶)

Examples with 1st person actors come from quotes and from texts written in 1st person (internet media articles, blogs, travel descriptions etc.). In (53) the speaker refers to himself with an impersonal passive:

(53) Lithuanian

[Tokios pozicijos laikėsi ir A.Mitrulevičius, nors jis nepaneigė ketinąs kandidatuoti į Seimą.]

"Kodėl	ne?	Juk	ir	mano	amžius —			
why	NEG	PTC	PTC	1.SG.POSS	age.nom.so	3		
dar	ne	kliūtis.		Patirties				
yet	NEG	obstacl	e.NOM.SG	experience.	GEN.SG			
sukaup-t-a, tiek				metų	gyven-t-a			
рvв.gather-рsт.рр-na so_many				year.gen.pl	live-pst.	live-pst.pp-na		
tarp	žm	onių,		kurie	dabar	yra		
among	peo	ople[pl]	.GEN	which.nom.pl	now	be.prs3		
rinkėjai	", –	LŽ	aiškino	jis.				
elector.	elector.nom.pl pn explain.psт3 3.nom.sg.m							
'[A. Mit	'[A. Mitrulevičius took this position as well, although he did not deny							

'[A. Mitrulevičius took this position as well, although he did not deny that he intended to stand for parliamentary elections.] "Why not? My age is by no means an obstacle. I **have gathered** experience; (for) many years I (**have**) **lived** among people who are now voters", he explained to the newspaper *Lietuvos Žinios*.'

The use of the passive in (53) enables the speaker to enumerate his qualities in a more modest way placing more emphasis on the actions rather than himself. The use of the passive makes the statement more generalized as it implies that anyone having these qualities can stand for parliamentary elections.

¹⁶ The second person plural form of the verb is used as a polite form of address in Lithuanian.

The non-agreeing form *sukaupta* 'gathered' in (53) is an instance of a 'subject-weak' passive¹⁷ of a transitive telic verb. It is a clear case of a present perfect with the meaning of current relevance. The second passive form of an intransitive state verb *gyventi* 'live' is ambiguous. If the speaker still lives among these people then the passive predicate can be interpreted as a perfect of persistent situation—this means that the past passive participle may have this meaning.¹⁸ If he no longer lives there, the passive verb form denotes a past event which lasted for a long time in the past and terminated at some point before the moment of speech. A corresponding active verb form would be in the present tense (if the passive refers to an ongoing event) or in the simple past tense (if the event finished prior to the moment of speech).

(54) is an example of a covert actor (1st person plural) in a subordinate clause which is (at least partially) co-referential with the actor of the main clause. The deleted actor of the passive serves as a link to the preceding clause, making the text more concise and cohesive:

(54) Lithuanian

/							
	Pakeliui	užtikome		du	objektu	<i>s</i> ,	apie
	on_the_way	find.pst1.pl		two	object.	ACC.PL	about
	kuriuos,	nežiūrin	t to,	kad	čia	ne kar	tą
	which.acc.pl.m	in_spite_	of	that	here	not_oi	nce
	važiuo-t-a	su	auto	omobiliu,	nieko		
	drive-pst.pp-na	with	car.	INS.SG	nothin	g.gen.sg	
	nežinojom	arba	jau		užmirš	ome.	
	NEG.know.pst.1pi	or	alre	ady	forget.	PST.1PL	

¹⁷ Sukaupti 'gather' is a transitive verb which may alternate between an accusative and a partitive (genitive) object. As argued by Holvoet and Semeniene (2004, 25), the genitive case in partitive objects is a semantic case which is 'laid upon' the structural case, namely the accusative. Thus, partitive objects should be considered transitive objects on a par with accusative objects. Whether or not partitive objects are promoted to subjects in passive constructions is difficult to prove. In Nau, Sprauniene & Žeimantiene (2020, this volume), such constructions are regarded as instances of 'subject-weak passives'. Geniušiene (2016, 144–145) maintains that the distinction between subject and object in such constructions is neutralized and the constructions are 'intermediate' between subjectful and subjectless passives.

¹⁸ Note that in the active, the present perfect in Lithuanian (as in Latvian) does not have the use of PERFECT OF PERSISTENT SITUATION; in the Lithuanian equivalents of clauses like *They've been waiting for an hour now* and *I have lived in Vilnius for 20 years already* the present tense is used, cf. *Jie laukia jau valandq* 3PL be.PRS3 wait.PRS3, *Vilniuje gyvenu jau 20 metų* Vilnius.LOC live.PRS.3 already 20 year.GEN.PL.

'On the way we found two places which we didn't know anything about or about which we had forgotten, in spite of the fact that **I/we had come** here by car several times.'

The co-referentiality of the actors of the main and the subordinate clauses is indeed an inference or a conversational implicature which may be cancelled. We can imagine that the actor of the active clause is the speaker plus (at least) one person and the actor of the passive clause is the speaker with someone else. Thus the reference of the deleted actor of the passive is to some extent indeterminate: It surely includes the speaker but the identity of his or her companion is not specified. The use of a corresponding active form instead of the passive would eliminate the possibility of such interpretation. The passive verb form denotes a recurrent past event which is anterior with respect to the events denoted by the active past tense verbs of the main clause. Thus, the passive predicate in (54) has anterior meaning. The past tense auxiliary is omitted as is common for Lithuanian passives. In a corresponding active form of the past perfect (*buvome važiave* be.PST.1PL drive.PST.AP.1PL), the use of the auxiliary would be mandatory in order to express the anteriority meaning. Thus the passive enables a shorter way of expression in comparison to the active.

The motivation for using an impersonal passive in (53–54) is backgrounding of the actor and thereby achieving a stylistic effect, as the passive, due to its rarity, is more expressive than the active (cf. Geniušienė 2006, 44). The reference of the deleted actor of the passive may be ambiguous, which may serve the communicative purpose of the speaker.

As was mentioned above, impersonal passives with deleted third person actors are the most numerous in our material. A third person actor may be a reported speaker in a speech report:

(55) Lithuanian

[Knygoje "gyvenanti" buvusi mokytoja Julija Kavaliauskienė sakė, kad
skaitant šią knygą, sukilo liūdni, bet labai brangūs jaunystės prisiminimai,]

kuomet	pėsčiomis	iš	Musteikos	į
when	on_foot	from	PN	to
Marcinkonis	s mokyk	lon	ei-t-a,	prieš
PN	school	.ILL.SG	go-pst.pp-na	before
pamokas	ilgoje		eilėje	duonos
lesson.ACC.I	PL long.Lo	OC.SG	queue.loc.sg	bread.gen.sg
stovė-t-a.				
stand-pst.p	P-NA			

["Toks buvo laikmetis, kurį išgyveno visi mano kartos žmonės."] '[The ex-teacher Julija Kavaliauskienė, who 'is living' in the book, said that while reading the book sad but very precious memories from her youth arose in her mind,] when **she would go** on foot to school from Musteika to Marcinkonys and **would stand** in a long queue for bread before lessons. ["Such was the time which all the people of my generation experienced."]'

The passive forms in (55) refer to recurrent (habitual) actions in the past performed by the reported speaker. Such use of the passive pertains to the Cumulative construction (for details see Nau, Spraunienė & Žeimantienė, 2020, this volume). There is no current relevance, and the corresponding active forms would be in the simple past (*ėjo* go.PST.3, *stovėjo* stand.PST.3) or the habitual past tense (*eidavo* go.HAB.PST.3, *stovėdavo* stand.HAB.PST.3).

The referent of the deleted actor is singular (the reported speaker), but due to the use of the passive and because of the following sentence (*Toks buvo laikas* ... 'Such was the time ...'), the reference of the covert actor may also be interpreted as more generalised: It may comprise the speaker and all the people of her generation. If the corresponding active forms had been used instead of the passive, such an interpretation would have been lost. Thus, the use of the passive in (55) allows the reported speaker to present her own experience as a common experience of the whole generation.

Examples referring to types of recurrent past events or past events which lasted for a long time (i.e. representing the Cumulative construction) constitute approximately 45% of the data. Example (56) is different in that it clearly refers to a single past event. Examples of this group constitute approximately 40% of the data. The remaining 15% of the examples are either vague between the meaning of single vs. repeated event or represent cases where the distinction of single vs. repeated event is non-applicable.

(56) Lithuanian

[Pasak jo, į įvykio	vietą	atskubėję	žmonės	stebėjosi,	kad j	jis ir	bendrake-
leiviai liko sveiki,]							

nes	mikroautobusas,	kuriuo
because	minibus(м).NOM.SG	which.1NS.SG.M

važiuo-t-a,

drive-pst.pp-na

[po avarijos tiko tik metalo laužui.]

'[According to him, people who rushed to the place of accident were amazed that he and his passengers remained intact] because the minibus in which they **had driven** [could only be used for scrap after the accident.]' In passives with covert definite actors, the actor is usually topical and well-established in the preceding context. In a corresponding active of (56) an anaphoric subject pronoun would be required (cf. *nes mikroauto-busas, kuriuo jie važiavo* because minibus.(M)NOM.SG which.INS.SG.M **3PL** drive.PST.3). The effect of the use of an agentless passive is emphasis on the action, defocusing of the actor and a shorter expression. The deleted actor of the passive also provides topic continuity with respect to the previous discourse.

5.3. Estonian

As the quantitative analysis in Section 4.3.1 revealed that be-impersonals and get-impersonals have very different profiles, they will be analysed here in two separate sub-sections.

Constructions without an auxiliary, which were the least numerous, were shown to mostly resemble get-impersonals and will not receive a separate treatment. However, there is one meaning that is associated with the use of the bare passive participle: indirect evidentiality (quotative).

In example (57), the first clause has evidential meaning, having a bare active past participle as a main verb (*ol-nud* 'be'); in the subordinate clause it is a past passive participle (*käi-dud* 'go'). The actor of the second clause is an indefinite group of people – thus a typical referent of the implicit actor of Estonian Impersonal.

(57) Estonian

Liha	aga	ol-nua	l	Kunda-s	sotsialismi		
meat.PAR	but	be-ps1	C.AP	Kunda-ine	socialist.gen		
aja-l	nii	palju,	et	kogunisti	Rakvere-st		
time-ADE	SO	much	that	even	Rakvere-ela		
käi-dud	se-da	os	t-ma-s	S.			
go-pst.pp	his-pa	r bu	y-sup-	INE			
'There was [allegedly] so much meat in Kunda in socialist times that							
even [people] from Rakvere went to buy it'							

However, in our data there were only a couple of examples of evidential uses; thus, it is not an important factor in explaining the use of participles or impersonal pluperfect in general. Estonian mainly uses a special quotative mood as well as several other evidential strategies to express indirect evidentiality, including pluperfect and bare participles (see Kehayov 2008, Kehayov & Siegl 2006).

5.3.1. Be-impersonals

Be-impersonals are regular perfect and pluperfect forms of the Estonian morphological Impersonal, and therefore it can be expected that they behave similarly to synthetic forms of the impersonal also with respect to reference to implicit actors. Among our data, 44.7% of the be-impersonals (105/235) had an indefinite (vague) actor whose identity was not recoverable from the context, 29.3% (69/235) had a generic actor and only 26% had a specific, definite actor, recoverable from the context. This distribution differs from that attested in the simple tenses (see section 2.4), but even more so from the get-impersonals. When we look at the data more closely, we can easily notice that the be-impersonals also tend to express generalized and indefinite, non-specific events.

Another tendency in be-impersonals is related to tense: be-impersonals overwhelmingly include the auxiliary in the present tense (212 occurrences out of 235, i.e. 90.2%), preferring thus regular perfect forms.

Before turning to the uses with a definite actor, we would like to add a few words about indefinite usages. Even when the reference is vague, with the auxiliary *olema* 'be' we get a hint whether the implicit actor is a single person or a group: this is reflected in the number marking on the predicative complement.

In example (58) the predicative complement (*leebe-d* 'gentle-PL') is in the plural, thus an indefinite group of people are seen as an actor. In (59), the predicative complement (*aktiivne kasutaja* 'active user') is in the singular—the actor is an imaginary, unknown person.

(58) Estonian

	Michali		suhtes	on	ol-dud				
	Michal.G	EN	regard_to	be.prs.3	be-pst.i	PP			
	ikka	veel	väga	leebe-d.					
	PTC	PTC	very	gentle-pl					
	'[They] have been very gentle to Michal.'								
(59)	Ilmselt		loe-b	natuke	nii	see,	1		

(59)	Ilmselt		loe-b	natuke	nii	see,	kui
	appare	ntly	count-3.sG	a_bit	PTC	this	how
	aktiivne		kasutaja	on	ol-dud,	kui	
	active		user	be.prs.3	be-pst.pp	if	
	ka see,		kas	varem	on	Nami-l	Vami
	too	this	whether	earlier	be.prs.3	Nami-l	Vami.gen

koolituse-lkäi-dud.training-ADEgo-PST.PP'Apparently it counts how active a user [someone] has been but alsowhether [someone] has been in Nami-Nami training.'

In the sample of the main verb *olema* 'be' the predicative complement occurred 14 times in plural and 15 times in singular, i.e. almost equally. This indicates that the plural is not a default value, the number being related to the number of the implicit actor.

Of the 61 observations where the actor was identified as a definite person, 36 (59%) referred to the speaker or a group including the speaker.

Be-impersonals with definite actors typically express events that take place over some time: they have some duration (longer processes) or express a series of (sub)events that are summarised from the present point of view. Thus they are used as instances of a typical perfect, which "indicates the continuing present relevance of a past situation" (Comrie 1976, 52). This use is expected since the impersonal compound forms that we have analysed in this paper are regular perfect and pluperfect forms, as in (60).

(60)	Estonian
------	----------

Selle	Järvamaa-lt	pärit	mehe	-ga	on	
this.gen	Järvamaa-AB	L from	man-	сом	be.pr	s.3
koos	ela-tud	kolmkün	nmend	aasta	ı-t	ja
together	live-pst.pp	thirty		year-	PAR	and
see	ol-i	esimene	kord,	k	:ui //	
it	be-pst.3sg	first	time	W	vhen	
<pre>/</pre>						

'With this man from Järvamaa she had lived together for thirty years and it was the first time that...'

When looking closer at the data, the two main functions of the perfect, CURRENT RELEVANCE and INDEFINITE PAST (EXPERIENTIAL PERFECT), are central in the data, similarly to Latvian (Section 5.1). Example (61) represents indefinite past: an event, or more likely a series of sub-events have taken place in the past, without referring to a particular occasion. Current relevance is obvious from the example (62), which explains the children's behavior by their living together with animals, which has lasted for a long time (*kogu aeg* 'all the time').

(61)	Estonian <i>Meie</i> we.gen	projektipa	urtneri — artner.gen	1	rupp oü — Grupp oü	koolitaja-te-ga trainer-р1-СОМ
	on be.prs.3	maha down	istu-tud sit-pst.pp	<i>ja</i> and	<i>edasine</i> further	<i>plaan</i> plan
	paika	pan-dud.			1010101	P
	'With the	-	f our project	: partner T	ripod Grupp	o OÜ, we have

(62)	Tema	arva-tes		tulen	e-b	pois-te
	s/he.gen	think-o	ER	deriv	e-prs.3sg	boy-pl.gen
	käitumine	ja	armast	us	looma-de	vastu
	behavior	and	love		animal-gen.pi	towards
	selle-st,	et	kogu	aeg	on	looma-de
	this-ela	that	all	time	be.prs.3	animal-gen.pl
	keskel	ela-tud.				
	among	live-pst.	РР			
	'In her opinion, the boys' behaviour and love for animals comes from					
	the fact that	t [they] h	ave lived	ł amo	ng animals all	the time.'

The motivation for using the impersonal construction thus seems to be foregrounding a situation that has lasted for some time and has some relevance in the present situation (as in 62). The duration of the situation or incremental nature of it (series of sub-events) can also be expressed with time adverbials, as in (63).

(63)	Estonian	l						
	Ikka	kordi	ja	kordi	on			
	PTC	time.pl.pai	r and	time.pl.par	be.prs.3			
	siit	mööda	sõide-tud.					
	here	by	drive-pst.pp					
	'[We] have driven by this place time after time.'							

However, it seems that the impersonal perfect itself may indicate that the action has lasted long, or at least it can be inferred from clauses where the impersonal is not accompanied by any adverbials, as in (64).

(64) Estonian

.,	Ol-dud	ja	ela-tud	on
	be-pst.pp	and	live-pst.pp	be.prs.3

kokku ning nüüd on aeg otsi together and now be.prs.3 time end.pl.par tõmma-ta. pull-inf 'I have existed and lived [for a long time] and now it is time to pull the ends together.'

In the next example (65) the impersonal perfect form refers to a single event of visiting Mount Elbrus, which probably took some time. However, here the author focuses on the completion of the event, and from the context it appears that the statement was made just after finishing visiting Elbrus. Thus this use can be related to the perfect of RECENT PAST (or 'hot news'), which is found in Estonian as well, although not very often (Metslang 1997).

(65)) Helista-si-n		Magomet	i-le	ja	and-si-n	teada,
	call-pst-	1SG	Magomet	t-ALL	and	give-pst-1sg	know.inf
	et	Elbru	ise-l	on		käi-dud.	
	that	Elbru	S-ADE	be.prs	.3SG	go-pst.pp	
	'I called to Magomet a		omet and l	let him l	know tha	at [we] had just v	isited
	Mount Elbrus.'						

But why, in these examples, is impersonal perfect preferred to regular active perfect forms?

One reason probably lies in the opportunity to focus more on the event itself rather than on the actor who is involved in the action and is given in the context.

Another possible reason is related to the meaning of past passive participles. Passive past participles tend to be inherently more 'resultative' than the active past participle: the passive past participle can function as a resultative adverb ('already') occurring without arguments; e.g. stating that a job is accomplished, one may say *Tehtud!* 'done', or answering to 'Did you go for lunch?' one may say *Juba käidud!* already go:PST.PP 'We already did' (Lindström & Tragel 2010). Thus it seems that the past passive participle has acquired aspectual meaning of perfectivity, which is not so evident with past active participles. The Impersonal perfect thus enables one to focus on the accomplishment of the action, as in the previous example (65).

5.3.2. Get-impersonals

Get-impersonals typically refer to specific, single events and not to long processes or multiple events. Get-impersonals can easily be replaced with simple past and active voice, compare (66) and (67). In this example the auxiliary 'get' occurs in the past tense and provides the additional meaning 'manage, succeed'.

(66) Estonian

· · ·					
	Kui	sa-i	lõpu-ks	taevaskotta	n maha
	When	get-pst.1sG	end-tr	Taevaskoda	a.111 down
	istu-tud	siis	muutu-si-n	turisti	
	sit- pst.pp	then	change-pst-1sG	tourist.	GEN
	atraktsioon	i-ks.			
	attraction-	ГR			
	'When I fir	nally managed	d to sit down in Ta	aevaskoda, I	turned into a
	tourist attr	action.'			
(67)	Kui	lõpu-ks T	aevaskotta	maha	istu-si-n,
(07)		I I I I I I I I I I I I I I I I I I I	aevaskoda.111	down	sit-PST-1SG
			acvaskoua.ILL	uowii	SIL-PS1-18G
	siis				
	11				

then

'When I finally sat down in Taevaskoja, then...'

The construction thus refers to specific events that are determined in time and space. Also it has a specific, definite actor, although not expressed overtly. The actor is typically speaker-inclusive—out of 254 get-impersonals with a definite actor, 232 (91.3%) referred to the speaker or to a group where the speaker was involved. Constructions without auxiliary show the same trend: in 44 out of 49 (89.9%) examples where the actor was identifiable, it was a first person singular or plural, as in (68).

(68) Estonian

Seekord	näg	-i-n	Eestima	a-d	Põhj	a-Läti
this_time	e see-	PST-1SG	Estonia-	PAR	Nort	h-Latvia.gen
poolt,	kus	varem	ainult	auto	-ga	läbi
from	where	earlier	only	car-	СОМ	through
sõide-tu	d .					
1.						

drive-pst.pp

'This time I saw Estonia from the side of North-Latvia, where (I have) earlier only **driven** through by car.' In (66) and (68), the identity of the actor is evident from the second clause that includes an active form with 1SG ending (*muutusi-n* 'I changed' in (66), and *nägi-n* 'I saw' in (68)).

However, it is often the case that the context does not explicitly point to a potential actor. The actor can be revealed by some specific contextrelated details. Such details are usually accessible only to the speaker/ writer (or sometimes to a main protagonist, whose action is described in the text). Therefore, if there are no other potential referents in the context, such impersonal constructions get a 1st person interpretation, either in singular or plural, because normally the 1st person—who is at the same time the author of the text—is the only person who has access to such details (e.g. time, place or other adverbials that make the event specific). In (69), the adverbial *isiklikult* 'personally' indicates that the only person in the situation can be the speaker/writer himself.

(69)	Estonian				
	Isiklikult	sa-i	mitme-le	auto-le	abi-ks
	personally <i>ol-dud.</i>	get-PST.3SG	several-All	car-ALL	help-tr
	be-pst.pp				
	'Personally (I)) got to help man	iy cars.'		

In the following example, there is no explicit hint about the actor in the context but still it is clear that the speaker/writer expresses his/ her own experience, since the information is too detailed for expressing somebody else's experience (the example comes from a forum dedicated to American cars).

(70)	Ol-les	Zo6-ga	käe	,	valge-ks	saa-nud,
	be-ger	Zo6-сом	hand.G	EN V	white-тr	get-pst.ap
	sa-i	järgmise	-na	500-hob	ujõulise	
	get-pst.3sG	next-ess		500 hors	epower.GEN	
	kompressor	rmootori-ga	<i>C</i> ₄	rooli	istu-tu	ıd.
	compressor_	_engine-сом	C4	wheel.111	sit-pst.	PP
	'Having gained experience		using th	e Zo6, (I) s	at down at th	ne wheel of
	00	1				

The construction is thus specialised to express personal experience, mostly speaker's own experience. The essential part of the construction is *saama* 'get' in the past tense 3SG form: among 273 occurrences of the get-impersonals in the data even 261 occurred in the past tense form. Among these past tense forms, 227 occurrences (87%) were used speakerinclusively: reference to the 1SG 185 times and to 1PL 42 times; reference to the second person was done only once—to 2PL; reference to the 3SG 19 times and 3PL two times. Speaker-inclusivity has been mentioned in relation to the get-impersonal also by some earlier researchers (e.g. Aavik 1936, 84, Erelt 1990, 2017), although the construction has not gained much attention in Estonian linguistics.

Habicht & Tragel (2014) and Tragel & Habicht (2017) have found that in passive and impersonal constructions with *saama* 'get', the constructions typically have an additional meaning of 'success' or 'resultativity'. In addition to the speaker-inclusivity we can thus characterise the construction as providing a meaning of success: the speaker has managed to do something. This appears e.g. in example (66) at the beginning of this section.

The construction has been also mentioned in the context of negative politeness (Erelt 1990, Lindström 2010). Estonian negative politeness strategy includes avoiding (or at least reducing) open reference to interlocutors: to the speaker and to a listener (Erelt 2003, Keevallik 2005, Lindström 2010). Avoiding open reference to interlocutors is widely used especially in internet fora, where the participants do not know each other personally (Lindström 2010). The get-impersonal provides a good opportunity for self-reference without any explicit person marking and is probably therefore so frequent in our data.

Saama 'get' can sometimes be used in the present tense as well. However, in this case it is almost always accompanied either by some modal meaning or by a future reference. In (71), both the meaning of success and that of future reference appear (ongoing situation which lasts long). The implicit actor is a specific 3rd person, a protagonist of the journalist's story.

(71)	Estonian					
	Praegu	aga	pole		se-da	vaja,
	now	but	be.nec	3	this-par	need
	kuna	ela-tud		saa-	b	niigi.
	because	live-pst.1	PP	get-	PRS.3SG	so
	'But now s/	he doesn'	t need i	it bec	ause s/he car	1 live without

The get-impersonal is used relatively rarely in the present tense—in our sample, there were only 12 instances of it. Its use seems to be more related to modal meanings of the verb *saama* than in the past tense, and also it does not have so clear specialisation in reference.

it.'

5.4. Some comparison of the languages

In the preceding subsections, we discussed details of the usage of impersonal constructions with a definite covert actor, and possible motivations for the choice of these constructions in the three languages of our study. As in Section 4, where we analysed the predictors of definite vs. indefinite or general actors, we find several common features as well as differences between the languages. The most important observations regard temporal reference, and the degree to which a construction is associated with the speaker or a group including the speaker.

In all three languages, definite covert actors are much more typical when the clause refers to an event in the past than when it refers to the present or the future. For Latvian, this preference could be clearly seen in the investigated material in the choice of auxiliary and its tense form (Table 15). For Estonian, we found that the construction with saama 'get', which is highly specialized to definite actors, appears mostly in past tense, whereas be-impersonals include the auxiliary in present tense mostly and have a lower rate of definite reference. Also the study by Torn-Leesik & Vihman (2010) revealed that definite actors are twice as frequent in simple past then in simple present tense. In Lithuanian, all investigated constructions with the *t*-participle have some kind of past time reference. Present tense is expressed with the *m*-participle, for which we investigated only a small control sample, as it overwhelmingly has generic reference. Thus, what the languages have in common is that in present tense, a voice-related impersonal construction is relatively rarely used with reference to a known actor. While this partly reflects the fact that present tense is used in general statements which would involve a generic actor (cf. Napoli's (2009) remark quoted above in Section 2.1), this is not the whole story. When it is possible to refer to one's own, or another known person's, past actions with an impersonal construction, why shouldn't this possibility be used likewise when talking about presently ongoing actions?¹⁹ In the rare instances where Estonian saama was used in present tense, the construction usually had a modal reading. This again has a parallel in Lithuanian, where impersonal (but also personal) passives with the *m*-participle in the present tense may get a meaning

¹⁹ We are grateful to Axel Holvoet for pointing out this question.

of possibility or necessity (see Nau, Spraunienė & Žeimantienė 2020, this volume). In Latvian, present tense (with the auxiliary *tikt* 'get, become') sometimes occurs with definite actors and reference to ongoing activities in present time, but this is rather rare.

With respect to past time reference, languages and individual constructions show significant differences. In Latvian and Estonian, constructions with the 'get' auxiliary refer to a specific event at a specific time in the past, while in all three languages constructions with a 'be' auxiliary refer always or predominantly to an indefinite past and to types rather than tokens of activities. In Latvian, the be-auxiliary is most often used in present tense and the construction represents the perfect. In Lithuanian, the auxiliary is in past tense and the construction represents past tense. Constructions without auxiliary behave like these types and respectively represent present perfect in Latvian, but mostly past tense in Lithuanian. In Estonian, like in Latvian, constructions with a 'be' auxiliary have perfect meaning, but those without auxiliary rather behave like the 'get' type. An interesting feature found in all three languages is that constructions with an auxiliary 'be' (and in Latvian and Lithuanian without auxiliary) typically involve a quantification of the event: emphasising its duration or incremental nature or stating its repetition.

There are more differences when we compare which of the constructions is more often used when the actor is a known person (as opposed to generic and indefinite actors), and whether there is a preference for speaker inclusion.

First person reference is especially pronounced in the Estonian impersonal with the 'get' auxiliary, where it was found in 91.3% of examples with definite reference (232 of 254). With the auxiliary 'be', which less often is used with definite reference, the first person was the referent in 59.0% of instances (36 of 61). This figure is similar to the Latvian average of all auxiliary types and all verbs (61%, 219 of 358). However, in Latvian there are significant differences between individual verbs. In contrast to Estonian, in Latvian first person reference is most common with the be-auxiliary, thus in the present perfect, not in past tense. Notwithstanding these differences with respect to auxiliary and tense, in both languages the construction which typically refers to the speaker is associated to personal experience. In Lithuanian, first person reference was found only in 40.8% of observations with a definite actor (86 of 211), while in 57.8% the referent was a third person.

The differences just discussed are summarized in Table 17.

Table 17. Reference to definite or i	indefinite past in language-specific
constructions	

Language, construction	past time reference	definite actor	person, number
Ltv. 'be.prs' + pst.pp (or no auxiliary) present perfect	indefinite often: repeated ac- tivity; current rel- evance	often	mostly first person singular > plural
Est. 'be.prs' + pst.pp present perfect	indefinite activity enduring or repeated; current relevance	less often	slight preference for first person
Lith. 'be.pst' + pst.pp (or no auxiliary) past tense	indefinite typically repeated event no current relevance	often	slight preference for third person
Ltv. 'get.pst' + pst.pp past tense	definite single event or set of events no current relevance	not often	more often third person more often plural
Est. 'get.pst' + pst.pp past tense	definite single event	almost always	clear preference for first person

Constructions without an auxiliary or with the 'be'-auxiliary are in all three languages also used with the meaning of a relative tense, to signal anteriority to another event. Furthermore, in Latvian and Estonian constructions without an auxiliary can have reportative evidential function; this was however found rarely in our samples.

To sume up: we find similar meaning elements and similar tendencies of specialization across languages, but the languages differ in how they combine these elements and which construction shows a tendency how strongly. It is also worth stating that we did *not* find a shift from generic meaning to first person plural, as it is known from the Finnish and the Turkish impersonal.

6. Conclusions and implications for further cross-linguistic research

This study has revealed how voice-related impersonal constructions are used in the function of personal predicates, implicitly referring to a known, contextually given person. The existence of such uses, and the relative frequency with which they were found in the three investigated languages, challenges the view that impersonals and impersonal passives are only or overwhelmingly used with generic reference or when the actor is indefinite, vague or unknown. It also gives new input to discussions of the function of the passive in general, of passives (or impersonals) without object promotion, and of agent demotion. Importantly, we find counter evidence to the claim that "agents that are syntactically demoted are characteristically low in topicality" (Myhill 1997, 804)—in the data investigated by us, high topicality was a regular feature of the demoted agents.²⁰

The claim made by Frajzyngier (1982) that impersonals and impersonal passives always have an indefinite human agent, is thus too strong. What is corroborated by our data is the restriction to human agents, and this seems to be important for the development of personal uses of the impersonal constructions. In all three languages we found that an important function of the constructions is to report or attest personal experiences, either of the speaker or of a third person protagonist of a report. Out of this general function, the languages developed more specific functions in individual constructions. In Latvian, the construction with the auxiliary $b\bar{u}t$ 'be' is used most often as an experiential perfect, attesting that an event of the type named by the predicate has occurred at least once (but typically more than once) and is relevant for the current experience of this person. In Estonian, the construction with the auxiliary saama 'get' is used to report specific events in which the speaker took part. In Lithuanian, most prominent is a cumulative construction (also attested in the other two languages), where emphasis is laid on the duration, intensity or frequency of past events from the perspective of the protagonist. This may be associated with a habitual meaning.

²⁰ A similar point against Myhill's claim was made by Napoli (2009, 176)—beati qui ante nos nostra dixerunt.

The languages we analysed, two Baltic and one Balto-Finnic, have a long history of contacts and mutual influences. However, we do not assume that what we found is an areal phenomenon. There are a few studies on other languages with a similar topic and goal, and comparable results (cf. Pinkster 1992; Pieroni 2000; Napoli 2009, 2013 on Latin; Nakipoğlu-Demiralp 2001 on Turkish).

A correlation between past or perfect tense and definite actors of impersonal (passive) constructions was also found in Turkish (past tense of Impersonal develops 1PL meaning, Nakipoğlu-Demiralp 2001), Latin (definite agents are more frequent in Perfect than in Present tense, Pieroni 2000), and Finnish (the zero construction is used with definite reference in Past tense, Laitinen 2006). This may support the thesis that definite reference does not directly develop from a generic meaning (such as 'all' > 'we all' > 'we'), as generic meanings are rather associated with present tense, or atemporal statements.

Several researchers have stated what we also found in our study: the impersonal constructions are not so much used for agent defocusing as for verb focusing—as Pinkster (1992, 169) put it, the action involved gets promoted. This makes the construction (potentially) more expressive, which according to Geniušienė (2006, 44) is the main motivation for its use. This emphasis on the action correlates with the diverse variants of quantification that we often found in our material: the activity or state named by the verb is depicted as long-lasting or repetitive, or several activities are listed that together form the experience in question. Another function related to emphasising the verb was less often found: that of contrasting one action with another.

However, this 'promotion of the activity' does not directly explain the use with known actors. Napoli (2013) analyzed intransitive passives in Latin with an agent phrase and argued that the focus on the action may prepare the ground for a secondary focus of a re-introduced actor. As we investigated only constructions with covert actors, we cannot apply this explanation. Instead, we tentatively propose that the deletion of the actor opens the possibility to reconstruct 'who done it'. For this reconstruction, the listener or reader may use several clues. If the clause refers to specific past events, it is less likely that the actor is generic. If the utterance has relevance for a current point in the discourse, it is more likely to be associated with the topical person. When the use of an impersonal construction with reference to a known actor gets conventionalized, language-specific associations between person (especially: speaker vs. third person), tense and construction type may emerge.

Another observation made by researchers of Latin and Turkish impersonal constructions is that there are significant lexical differences. In our quantitative analysis, whose results are reported in Section 4, we found that the verb lexeme is one of the most important predictors of the referentiality of the covert actor. These differences are however not easy to explain, as they do not follow directly from verbal semantic features such aspectuality, agentivity, volitionality. In all three investigated languages, the passive or impersonal of the verb meaning 'live' was less likely to be used with a known actor and more likely to have a generic reading. All languages showed a higher percentage of definite actors with at least one verb of movement/displacement ('ride' or 'go', or both). The behaviour of the verb 'be', on the other hand, differs widely among the three languages: in Latvian, it is the intransitive verb most often found in the passive with reference to a definite actor (typically the speaker), in Estonian it was in the middle of the sample, while in Lithuanian the past passive participle of 'be' never occurs in a passive construction, as it has specialized for the evidential function.

The most important predictors however were formal, language-specific features of various constructions within one language. In Lithuanian, the choice of the participle (*t*- or past vs. *m*- or present passive participle) distinguishes the two main morphological variants of passive constructions. With intransitive verbs, the covert actor of constructions with the *m*-participle is overwhelmingly (by 90% or more) generic or indefinite, while with the *t*-participle, we found reference to a definite actor in 211 out of 500 (42%) instances in our sample. In Estonian, constructions with the auxiliary saama 'get' specialize in their use as quasi-personal forms with speaker inclusion (over 90%), while with the auxiliary olema 'be' only 26% of constructions in our sample had a definite actor. Compared to a previous study by Torn-Leesik & Vihman (2010), these periphrastic forms of the Estonian Impersonal however are still more often used with definite actors than the synthetic forms (simple tense forms). In Latvian, the auxiliary also played an important role, but in contrast to Estonian it is the impersonal passive with the 'be' auxiliary that is most often found with a known actor, while constructions with the auxiliary tikt 'get (to),

become' on average showed no preference for one of the three reference types that we distinguished. Thus, we found not only language-specific, but also construction-specific tendencies.

Empirical studies of referential properties of a covert actor in voicerelated impersonal constructions in more than one language are still rare. The similarities and differences we found investigating two Baltic languages and the genetically unrelated Estonian may inspire further crosslinguistic investigations, leading to a more differentiated understanding of impersonal constructions and how they get 'personal'.

Abbreviations

1 — first person, 2 — second person, 3 — third person, ACC — accusative, ABL — ablative, ACN — action noun, ADD — additive (particle), ADE — adessive, ADV — adverb, adverbial, ALL — allative, AOR — aorist, AUX — auxiliary, COM comitative, COMP — comparative, COMPL — complement, DAT — dative, DEF definite, DEM — demonstrative, ELA — elative, ESS — essive, F — feminine, FUT — future, GEN — genitive, GER — gerund, HAB — habitual, ILL — illative, INF — infinitive, IMP — imperative, INE — inessive, INF — infinitive, INS instrumental, IPS — impersonal, LOC — locative, M — masculine, NA — nonagreement form (in Lithuanian and Latvian), NEG — negation, NOM — nominative, PA — active participle, PAR — partitive, PASS — passive, PL — plural, PN — proper name, POSS — possessive, PP — passive participle, PRS — present, PST — past, PSTP — past participle, PTC — particle, PVB — preverb, REL — relative, RFL — reflexive, SG — singular, SUP — supine, TR — translative

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(Non-)agreement of passive participles in South-Eastern Lithuanian

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The phenomenon of non-agreement of passive participles (mostly *t*-participles) is discussed on the basis of the TriMCo corpus of South-Eastern Lithuanian dialects. A quantitative analysis of the examples shows that non-agreeing *t*-participles appear significantly more often in East Aukštaitian than in South Aukštaitian. It is also shown that plural subjects and position of the participle before the subject increase the probability of use of the non-agreeing form. At the same time we show that (non-)agreement of passive constructions in South-Eastern Lithuanian dialects does not correlate with the semantic type of passive. We also argue that the Lithuanian dialectal constructions with non-agreeing passive participles are most probably not related to the similar constructions in East Slavic (either areally, or diachronically). The non-agreeing passive constructions are also not areally related to non-agreeing active participle constructions, but probably illustrate the same tendency for the lack of agreement with plural subjects.

Keywords: Lithuanian, participles, agreement, dialectology, passive

1. Introduction¹

In this paper we offer a corpus-based quantitative analysis of the passive constructions in South-Eastern Lithuanian dialects with the focus on the agreement and non-agreement of passive participles with their nominative subjects. It is a well-established fact that in some Aukštaitian dialects non-agreeing forms of participles can appear with full-fledged nomina-

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tive subjects in canonical passives (see e.g. Ambrazas 1990, 200–201), as in example (1).

(1) sklå.p-as pa-darí-t-a
 cellar-NOM.SG PVB-do-PST.PP-NA
 'the cellar is built' (South Aukštaitian, Leskauskaitė 2006, 63)

Although non-agreement of passive participles is also attested in Standard Lithuanian (see Nau *et al.*, this volume, section 2.3), there they seem to be restricted to specific contexts such as enumeration of items or comparison of alternatives. These constraints do not apply to the dialectal constructions under discussion. Our goal is to investigate the extent of the use of non-agreeing passive participles in South-Eastern Lithuanian dialects and to try to pinpoint the factors potentially favouring or disfavouring their non-agreement as well as the areal connections of this phenomenon.

The data for this study come from the TriMCo Corpus of South-Eastern Lithuanian dialects, which is a part of the larger project covering different Baltic and Slavic dialects (https://www.trimco.uni-mainz.de/trimcodialectal-corpus/) led by Björn Wiemer at the University of Mainz. The corpus contains transcribed narratives of over 140 000 tokens (including the interviewers' lines), or 21 hours and 25 min in running time, recorded in four districts in Lithuania (Švenčionių, Druskininkų sav., Varėnos, Ignalinos) and in Belarus (Ramaškancy, Pel'asa). The corpus is divided into two equal parts covering two major Aukštaitian groups—East Aukštaitian vilniškiai (Lith. rytų aukštaičiai vilniškiai) and South Aukštaitian (Lith. pietų aukštaičiai). The recordings were transcribed using the ELAN software (https://tla.mpi.nl/tools/tla-tools/elan/), and then morphologically annotated (on the basis of the 'Salos glossing rules', see Nau & Arkadiev 2015) using the Fieldworks Language Explorer tool (FLEx; http://fieldworks.sil.org/ flex/). All Lithuanian dialectal transcriptions in the TriMCo corpus use additional IPA diacritics: : for long vowels, · for half-long vowels, ^j for palatalization. The vertical line | marks a pause in a sentence. As these dialects do not distinguish between different types of accent on monophthongs, we decided to mark stress by a neutral symbol ' (in case of diphthongs, the same symbol is used on one of the elements of the diphthong). See Wiemer *et al.* (2019) for more information about the corpus.

The remainder of the article is structured as follows: in section 2 we briefly introduce the system of participles and their main uses in Standard

Lithuanian, in section 3 we present an overview of the passive participles attested in the TriMCo corpus, and in section 4 deal specifically with the distribution of agreeing and non-agreeing participles in canonical passive constructions. Section 5 offers a discussion of possible areal connections of the phenomenon of passive participle non-agreement.

2. Participles and passive in Standard Lithuanian

Standard Lithuanian has a complex system of participles, both active and passive, derived in all available tenses, see Table 1 with the example of the verb *daryti* 'do'. Note that we do not consider the non-inflecting participles, traditionally called 'gerunds', as well as the agreeing converb of simultaneity in *-dam-* (the 'half-participle') and the debitive participle in *-tin-*; for more details on the Lithuanian participles and non-finite forms in general, see Ambrazas, ed. (2006, 326–372), Klimas (1987), Wiemer (2001), Arkadiev, Holvoet & Wiemer (2015, 28–31) and Arkadiev (2020).

	Active (м, f)	Passive (м, ғ)
Present	darąs, daranti	daromas, daroma
Future	darysiąs, darysianti	darysimas, darysima
Past	daręs, dariusi	darytas, daryta
Past Habitual	darydavęs, darydavusi	_

Table 1. The system of participles in Lithuanian

Participles agree for number, gender and case with their head when used in the attributive position, cf. (2), and with the nominative subject when used in the predicative position (Ambrazas 2006, 483-485), cf. (3)

(2)	Darbir	1 ink-ai	visk-ą	iš-met-ė	
	worke	r-nom.pl	everything-Acc	рvв-throw-pst	.3
	į at-važiav-u		ısi-ą	šiukšli-ų	mašin-ą
	in	рvв-drive-ря	ST.PA-ACC.SG.F	garbage-gen.pl	car-ACC.SG
	'The workers threw (DLKT)		v everything into	o the garbage trucl	x that arrived.'
	()				

(3) <i>T-q</i>	ryt-ą	į	statybviet-ę
that-ACC.SG	morning-ACC.SG	in	construction.site-ACC.SG

buv-o	at-važiav-us-i	automašin-a		
be-pst.3	pvb-drive-pst.pa-nom.sg.f	car-NOM.SG		
su	kalk-ėmis.			
with	lime-ins.pl			
'A truck with lime arrived at the construction site that morning.' (DLKT)				

Under certain circumstances predicatively used participles in Standard Lithuanian can lack agreement, see Arkadiev 2017 for an overview, and Nau *et al.* (this volume, section 2.3) specifically on passive participles. These are the cases of default agreement (or 'neuter gender', according to Ambrazas, ed., 2006, 346, 371–372), and non-inflecting participles or gerunds (Ambrazas, ed., 2006, 339–340). The gerunds are used in dependent clauses whose subject (usually overt and marked by the dative or accusative case) is distinct from the nominative subject of the main clause (for more details see Arkadiev 2013, 2020 and literature therein); these forms won't be discussed here.

Generally, default agreement forms (glossed NA for 'non-agreement') appear when the subject is either not in the nominative, as in (4), or is altogether lacking, as in (5), or when a nominative subject is deficient in terms of gender (e.g., such words as *kas* 'what', *viskas* 'everything', *tai* 'that'), as in example (6), see also Sawicki (2004). For active participles the default form is identical to NOM.PL.M (e.g. *darq* from 'do'), and for passive participles a special form (segmentally identical to NOM.SG.F, but sometimes differing from it by accent) is used, cf. *ùždrausta* (NA) v. *uždraustà* (NOM.SG.F.) from 'forbid'.

- (4) *Dėl* bū-tu reikėj-e t-o j-iems for need-pst.pa.na that-gen.sg.m 3-DAT.PL.M be-sBJV.3 dalyvau-ti ši-ų met-ų pasauli-o participate-INF year-gen.pl world-gen.sg this-gen.pl čempionat-e. championship-loc.sg 'For this reason they would need to participate in this year's world championship.' (DLKT)
- (5) T-q klaid-q bū-tų reikėj-ę that-ACC.SG mistake-ACC.SG be-SBJV.3 need-PST.PA.NA kaip nors ati-taisy-ti. how INDF PVB-correct-INF
 'It would be necessary to fix that mistake somehow.' (DLKT)

(6)	K-ą	j-ie	prival-o,	0
	what-ACC	3-NOM.PL.M	be.obliged-prs.3	and
	<u>k-as</u>	yra	uždraus-t-a?	
	what-NOM	be.prs.3	forbid-pst.pp-na	
'What is required from them, and what is prohibited?' (DLKT)				(dlkt)

The canonical sentential passive constructions in Lithuanian employ the present or past passive participles of transitive verbs together with the auxiliary $b\bar{u}ti$ 'be', which can be omitted in the present tense and sometimes also in the past tense. For a comprehensive description of the passive in Standard Lithuanian see Geniušienė (2006; 2016); Nau *et al.* (this volume) provide a comparative perspective on Latvian and Lithuanian passives and related constructions.

Constructions with the present passive participles (*m*-participles) are used imperfectively and denote ongoing or habitual situations, as in (7a), while past passive participles (*t*-participles) are used either perfectively, expressing completed situations, as in (7b), or statively, as in example (8) (thus there is no overt distinction between actional and statal passive in Lithuanian; on the relations between passive and resultative in Lithuanian see Geniušienė & Nedjalkov 1988). In the canonical passive, the accusative patient object of the original active construction is promoted to the nominative subject, with which the auxiliary agrees in person and number and the participle in gender and number (and nominative case). The original agent can be expressed by a genitive noun phrase, as in (9).

- (7) (a) Ši-uo met-u tok-s įstatym-as this-INS.SG.M time-INS.SG such-NOM.SG.M law-NOM.SG yra rengi-a-m-as, be.PRS.3 prepare-PRS-PP-NOM.SG.M
 - (b) *ir* tik-i-m-a-si, kad artimiausi-u and hope-prs-pp-na-rfl that nearest-INS.SG.M met-u j-is bu-s pri-im-t-as. 3-NOM.SG.M be-FUT.3 PVB-take-PST.PP-NOM.SG.M time-INS.SG 'Now such a law is being prepared, and hopefully it will be passed in the nearest future.' (DLKT)

(8)	Ne-si-girde	ij-o	net	bažnyči-os	varp-ų,
	neg-rfl-h	ear-pst.3	even	church-gen.sg	bell-gen.pl
	nes	siaut-ė	ер	oidemij-a	ir
	because	rage-PST.3	ep	oidemic-NOM.SG	and

bažnyči-osbuv-ouždary-t-os.church-NOM.PLbe-PST.3close-PST.PP-NOM.PL.F'Even church bells could not be heard, because an epidemic was raging,
and churches were closed.' (DLKT)

(9) Po trejet-o dien-ų vėl buv-au after three-GEN.SG day-GEN.PL again be-PST.1SG j-o pa-kvies-t-as.
3-GEN.SG.M PVB-call-PST.PP-NOM.SG.M 'After three days I was again invited by him.' (DLKT)

In addition to the canonical passive, there is a variety of non-canonical constructions with passive participles, e.g. impersonal, built both from intransitive and transitive verbs and implying a human agent, see examples (10–11), and evidential, employing the same morphology as impersonal but differing from it in terms of both lexical input and morphosyntax, see (12). On non-canonical passives in Lithuanian see e.g. Timberlake (1982), Wiemer (2004, 2006), Lavine (2010, 2016), Spraunienė *et al.* (2015) and Nau *et al.* (2020). In all these constructions the participle features the non-agreeing default form and the subject, if present at all, shows genitive case marking, see again Sawicki (2004).

- (10) *7-i* huv-o *i-si-tikin-us-i*, 3-NOM.SG.F be-pst.3 PVB-RFL-assure-PST.PA-NOM.SG.F kad buv-o kalb-a-m-a apie medži-us. that be-pst.3 talk-prs-pp-na about tree-ACC.PL 'She was sure that they were talking (lit. it was being talked) about trees.' (DLKT)
- (11) Vis daugiau buv-o stat-o-m-a still more be-pst.3 build-prs-pp-NA moderni-os architektūr-os bažnyči-ų. modern-GEN.SG.F architecture-GEN.SG church-GEN.PL 'There were more and more churches built in modern architectural styles.' (DLKT)
- (12) Odaktar-o bū-t-a kiek doctor-GEN.SG be-pst.pp-na somewhat and geresni-o žmog-aus negu *i-o* better-gen.sg.m than person-GEN.SG 3-GEN.SG.M padėjėj-os. apprentice-GEN.SG

'The doctor apparently was a better person than his apprentice.' (DLKT)

Against this background, we shall now describe the morphosyntax of the passive constructions in the South-Eastern Lithuanian dialects, which is in certain respects different from the standard language. The focus is put on the agreement in passive participles.

3. Passive participles in the TriMCo corpus

South-Eastern Lithuanian dialects demonstrate a great disbalance between the present and past passive participles. The *m*-participles are extremely rare: in the whole corpus we found only 15 uses (9 lemmas), and no examples from the Lithuanian dialects in Belarus. Most examples of the *m*-participles are adjectival and do not show a passive meaning, cf. (13), where the participle *valgomas* means 'edible', but not 'being eaten'. This is in line with the observation by Ambrazas (1990, 191) that the periphrastic passive constructions with the present passive participles widespread in the standard language are limited to the Žemaitian and West Aukštaitian dialects, while in the East Aukštaitian dialects such participles are mainly used adjectivally.

(13)	kaz ⁱ lė:k-ai	tai	се	valgo m-i
	suillus-nom.pl	that	here	edible-NOM.PL.M
<i>'Suillus</i> mushrooms are edible' (east)				

On the other hand, the *t*-participles are well represented in the corpus. We found 545 uses of the *t*-participles representing 283 lemmas. It is worth noting that a similar disbalance between present and past participles is observed among active participles, where the present forms are also extremely rare, cf. Table 2.

 Table 2. Total number of participles in the TriMCo corpus

	active	passive
present	13 (2%)	15 (3%)
past	781 (98%)	545 (97%)
Total	794 (100%)	560 (100%)

In the following discussion, we will focus on the $t\mbox{-} participles$ in the TriMCo corpus.

The *t*-participles seem to be somewhat more frequent in East Aukštaitian than in South Aukštaitian, and within the latter particularly infrequent in Belarus. But still their productivity (estimated by the share of hapax legomena, see Baayen 1993) is more or less equal across the regions, see Table 3.

Table 3. t-participles in the TriMCo corpus

	east (65,593 tokens)	south (42,319 tokens)	Belarus (34,989 tokens)
tokens	316	144	85
item per 10,000	48,18	34,03	24,29
lemmas	196	89	60
hapaxes	150 (47.5%)	68 (47,2%)	49 (57.6%)

Out of 283 lemmas, 5 appear in the corpus at least 10 times, see Table 4. There are 198 hapaxes (36%), which once again prove a high productivity of the *t*-participles in the Lithuanian dialects under discussion.

Table 4. The most frequent t-participles in the TriMCo corpus

Lemma	Frequency
<i>padarytas</i> 'done'	43
pastatytas 'built'	24
<i>būtas</i> 'been'	23
mokytas 'taught'	11
išaustas 'woven'	10

There are no restrictions on the morphological features of the *t*-participles. They can be negated, have a prefix or a reflexive marker, see ex. (14–15). It should be noted that all examples of the reflexive *t*-participles are prefixed. The distribution of these features is given in Table 5.

	Negation	Prefix	Reflexivity
yes	25 (5%)	433 (79.5%)	9 (2%)
no	520 (95%)	112 (20.5%)	536 (98%)

(14)	ne-sėː-t-a	ni [.] k-as
	NEG-SOW-PST.PP-NA 'nothing is sown' (south	nothing-NOM ı)
(15)	s ⁱ pi [·] n-ė [·] l-e [·]	<i>nù-s-im-t-a</i> рvв-rfl-take-рsт.рр-NA
	lock-dim-nom.sg	PVB-RFL-take-PST.PP-NA

'the lock is taken off' (south)

The *t*-participles are used predicatively (512 instances, or 94% of all examples), cf. (14–16), attributively (26 uses, or 5%), cf. (17), or independently as heads of noun phrases (7 uses, or 1%), cf. (18).

(16)	<i>vi:r-as</i> husband-nом.sg '[my] husband wa		<i>bú'v-o[.]</i> рм.sg.м be-pst.3
(17)	vanden-ú:k-a. water-DIM-GEN.SG '[they] used to giv	dúo:-dav-o [.] give-нАВ-РST.3 e enchanted water' (e	<i>aš-kalbė:-t-a.</i> pvb-speak-pst.pp-gen.sg.m ast)
(18)	<i>tai šit-uós</i> so this-ACC. <i>i[·]š^j-vež-e</i> [.] PVB-carry-PST.3 'so [the Soviets] du	vis-ús	r.pp-ACC.pl.m and

Most predicatively used participles function as the main predicate of the clause with or without auxiliary, see examples (15–16) above, however there are a few examples when they are used as a part of a complex predicate, see example (19), or as a secondary predicate, see example (20):

(19)	iš-ein-a	suoʻtk-oʻs	lie:k-a			
	PVB-go-PRS.3	are-nom.pl	remain-prs.3			
	ne-sė:-t-o·s					
	NEG-SOW-PST.PP-NOM.PL.F					
	'it turns out the land remains not sown [with crops]' (east)					

(20)	ki [.] t-u [.]	ra·d-a·	nu-šau-t-u ⁻	
	other-Acc.sg	find-pst.3	рvв-shoot-pst.pp-acc.sg	
	'[they found] the o	d] the other one shot' (east)		

In most cases *t*-participles describe an action or a resultative state, however there are examples when these participles are lexicalized. Such instances are especially common when participles are used attributively or independently, cf. *kⁱrišⁱčitas tė:vas* 'godfather', lit. 'baptized father' (Belarus), or *mokintas* 'educated' lit. 'taught' (see ex. (18) above), *išvežtieji* 'deportees' lit. 'carried out' (probably from the standard language).

When used predicatively, *t*-participles can take part in different types of passive constructions (487 instances, or 95% of all predicatively used examples), cf. (21) for an actional and (22) for a statal (=resultative) passive, as well as in evidential constructions (25 instances, or 5%), cf. (23):

 (21) [jó:s nevá·lⁱgė | jó:kⁱo· maisto· nevá·lⁱgė | išaina⁻] rús-u⁻ bú-s uš-núodi⁻t-a Russian-GEN.PL be-FUT.3 PVB-poison-PST.PP-NA '[they didn't eat, they didn't eat any food, assuming they] will be poisoned by Russians' (south)

(22)	ka pú:st-ai	iš ⁱ -vir-t-a		
	cabbage-NOM.PL 'the cabbage is cool	рvв-cook-1 ced' (east)	PST.PP-NA	
(23)	<i>švar-oús</i> clean-gen.sg.м '[they] say there us	<i>så[.]k-o[.]</i> say-prs.3 ed to be a clea	<i>å:žer-o</i> lake-gen.sg n lake' (south)	bü:-t-a be-pst.pp-na

Most passive constructions have an object promoted to subject and marked by the nominative case without an overtly expressed agent, cf. (24).

(24)	<u>ló:v-os</u>	pa-klo:-t-oz	graž-ei	
	bed-nom.pl	PVB-cover-PST.PP-NOM.PL.F	beautiful-ADV	
	'the beds are covered beautifully' (south)			

There is only one example in the corpus where the object is not promoted to the subject position and keeps the accusative marking, cf. (25):

(25)	<u>vi s-u</u>	<u>liėtuv-u</u>	mˈaː no [,]	ap-važ ^j uo:-t-a	
	all-Acc.sg	Lithuania-Acc.sg	my	рvв-drive-pst.pp-nA	
	'I travelled across all Lithuania' (east)				

There are a few examples of impersonal passive without a nominative subject, see (26) and (27):

(26)	cig	må•n	bù'oʻ	pa-saki:-t-a
	only	1.DAT.SG	be.pst.3	PVB-say-PST.PP-NA
	lietůvišk-a	ai	ne-š ^j nekė:-t ^j	
	Lithuania	n-ADV	NEG-speak-INI	F
	ʻbut it wa	s said to me	e not to speak L	ithuanian' (south)
(27)	kur	må na	šienau-t-o	a
	where	my	cut_grass-	PST.PP-NA
	'where I c	ut grass' (ea	ast)	

As can be seen from the examples (21) and (27) above, the agent can be optionally expressed by the genitive or a possessive pronoun. Out of 487 passive constructions, there are only 22 examples (or 4.5% of all cases²) with an expressed agent, see also the following example:

(28) *ti*· <u>pó:n-u</u>· *bú*·*v*-*a*· *i*· *baž^jni:č-e* there lord-GEN.PL be-PST.3 and church-NOM.SG *stati:-t-a* build-PST.PP-NOM.SG.F 'the church was also built by the lords' (east)

There is one example where the agent is expressed by a prepositional phrase with the preposition *nuo* 'from', and this is probably not a coincidence that the context of this example is religious³:

(29)	virs-ors		kalb-o [.] s	a'n-o's	iš-ein-a
	all-nom.pl.f		language-NOM.PL	3-PL.NOM.F	PVB-go-PRS.3
	<u>nuó</u>	<u>nuo</u>	<u>die:v-o</u> ·	su-t ^j vėr-t-a	
	from	from	God-gen.sg	PVB-create-PST.	PP-NA
	ʻall langua	ages, it	turns out, are created b	y God (lit. from	God)' (east)

The evidential construction differs from the passive in that it is almost exclusively based on intransitive verbs and the erstwhile nominative subject takes the genitive marking, as in (30):

² According to Geniušienė (2016, 146), passives with the expressed agent constitute about 7% of passive constructions in written Lithuanian.

 $^{^3}$ Cf. similar observations on the rare instances of agent phrases with the preposition *no* in Latvian passives in Nau *et al.* (2020).

(30)	pa-galvó:	kat	cė	<u>j-ó:</u>	<u>žmo·n-ó:z</u>
	рvв-think.psт.3	that	here	3-GEN.SG.M	wife-gen.sg
	buː-t-a	su	vaik-ú	gulė:-t-a	!
	be-pst.pp-na	with	child-1NS.So	д lie-pst.pi	P-NA
	'he thought that h	nis wife with	n the kid had	been there, had	l lain [there]'

Most examples of the evidential are with the participle $b\bar{u}ta$ of the verb 'be'. There is also one example with a regular passive embedded into an evidential construction:

(31)	[a [.] jú: t ⁱ ri:z ^j dé [.] šims aštuon ⁱ ú: bú:ta inkavadí·stu [.]]					
	tai	bu:-t-	а	api [.] -sup-t-a		i [.]
	SO	be-рsт	.PP-NA	рvв-surround-ря	ST.PP-NA	and
	klúo:n-as		i [.]	tvårt-as	i-	nam-ai
	barn-NOM	.SG	and	shed-NOM.SG	and	house-nom.pl
	'[there were [allegedly, approximately] 38 of them, of the Soviet secre				he Soviet secret	
	police officers;] thus the barn, the cattle-shed and the house were					
	surrounde	d' (east)			

Note that the subject in the second part of (31) is marked by the nominative.

All attributively used participles are derived from transitive verbs, whereas predicatively used *t*-participles are derived from both transitive and intransitive verbs. All *t*-participles derived from intransitive verbs appear in the evidential function.

4. (Non-)Agreement in passive participles

The default (non-agreeing, or in more traditional terminology 'neuter') form of the *t*-participles appears in the corpus under the following conditions. First, it is required when the subject lacks the categories of gender and number, as in (32):

(32)	<u>visa</u>	iš-kasavo:-t-a		
	everything.NOM	рvв-destroy-pst.pp-na		
	'everything is destroyed' (Belarus)			

Second, when the subject is marked by the quantificational (partitive) genitive:

(33)	stal ^j -úk-az	graž-us	<u>gėlⁱ-u:</u>
	table-дім-Nom.sg	beautiful-NOM.SG.M	flower-gen.pl

pa-stact:-t-a
PVB-put-PST.PP-NA
'the table is beautiful, [there are] a lot of flowers put on it' (south)

Third, in the impersonal constructions, i.e. with no obvious nominative subject:

(34) cig màn | bùo pa-saki:-t-a |
only 1SG.DAT be.PST.3 PVB-say-PST.PP-NA lietůvišk-ai ne-šⁱnekė:-t^j
Lithuanian-ADV NEG-speak-INF
'but I was told not to speak Lithuanian' (east)

Fourth, in the evidential constructions, where the subject is marked by the genitive, see examples (23) and (30) above. All these examples have parallels in the standard language.

Different from the standard language are the examples in which there is a subject in the nominative case, and the participle does not show any agreement with it, as in example (35).⁴

(35)	<u>dú·r-îs</u>	adari:-t-a	pó·jezd-o·
	door-nom.pl	open-pst.pp-na	train-gen.sg
	'train's doors are o	pen' (Belarus)	1 0

In order to assess the distribution of participial (non-)agreement in South-Eastern Lithuanian dialects, we excluded all examples where we would not expect agreement, i.e. constructions listed above. As a result, we had a dataset of 331 examples. Within this dataset there was another problem we had to deal with, i.e. the frequent syncretism between default forms and NOM.SG.F forms, cf. (36) where the participle *aždari:ta* looks identical for both forms. Such examples were marked as 'indeterminate' for agreement and, consequently, excluded from the counts.

(36)	tadú	bˈuːv-a·	jou	gi		
	then	be-pst.3	already	PTC		
	až-dar	i:-t-a	baž ^j	baž ⁱ ni:č-e		
	рvв-do-	PST.PP-NA/NOM.S	G.F chui	F church(F)-NOM.SG		
	losed' (east)					

⁴ As has been already mentioned in section 2, examples of non-agreement in the presence of a full-fledged nominative subject are indeed attested in Standard Lithuanian as well, however, there such constructions appear to be much more constrained.

We checked the following predictors that can potentially trigger the lack of agreement on the participle:

- Dialectal group (East (Eastern Aukštaitian of the Vilnius region, Lith. rytų aukštaičiai vilniškiai) vs. South (South Aukštaitian in Lithuania and Belarus, Lith. pietų aukštaičiai)).
- ii) Number of the subject (SG VS. PL).
- iii) Gender of the subject (м vs. F).
- iv) Semantic type of the passive (static vs. dynamic).
- v) Auxiliary (yes, no).
- vi) Position with respect to the subject (before vs. after).

The statistical analysis of the data shows that the lack of agreement in the *t*-participles is more common in the East Lithuanian dialects (the dependency between geographical distribution and the lack of agreement proves to be statistically significant), cf. Table 6. The odds of non-agreement in past passive participles are 5 times higher in East Aukštaitian dialects than in the South Aukštaitian dialects.

Table 6. (Non-)agreement of past passive participles across regions χ^2 (1) = 31.877; p < 0.0001 (Pearson's χ^2 -test), Cramér's V = 0.357

_	+Agr		–Agr		Totals
East	71	45%	86	55%	157 (100%)
South	85	81%	20	19%	105 (100%)

As the difference between the two dialectal groups is so large, we decided to check all other factors for the whole bulk of examples and for each dialectal group separately. Let us first look at the grammatical features of the subject and its possible effect on the agreement in the participle. The dependency between number of the subject and the lack of agreement proves to be significant: the odds of non-agreement are 4 times higher with plural subjects than with the singular ones, cf. Table 7. The factor of the number of the subject is also significant in both dialectal groups when considered separately, cf. Tables 7a-b.

Table 7. (Non-)agreement of past passive participles and number of the subject

	+Agr		-Agr		Totals
SG	116	73%	43	27%	159 (100%)
PL	40	39%	62	61%	102 (100%)

 Table 7a. (Non-)agreement of past passive participles and number
 of the subject in East Aukštaitian

χ^2	(1) =	10.742; $p = 0.001$	(Pearson's χ^2 -test)	, Cramér's <i>V</i> = 0.275
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	+Agr		–Agr		Totals
SG	48	59%	34	41%	82 (100%)
PL	23	31%	51	69%	74 (100%)

 Table 7b. (Non-)agreement of past passive participles and number
 of the subject in South Aukštaitian

 χ^2 (1) = 8.4312; p = 0.0037 (Pearson's χ^2 -test), Cramér's V = 0.311

	+Agr		-Agr		Totals
SG	68	88%	9	12%	77 (100%)
PL	17	61%	11	39%	28 (100%)

However, if we look at the relationship between agreement and the gender of the subject, there is no statistically significant dependency either for the whole corpus or for either of the two dialectal areas, see Table 8.

Table 8. (Non-)agreement of past passive participles and gender of the subject

 $\chi^{\rm 2}$ (1) = 0.70352; p = 0.4016 (Pearson's $\chi^{\rm 2}\text{-test}),$ Cramér's V = 0.062

	+Agr		–Agr		Totals
masculine	123	58%	88	42%	211 (100%)
feminine	33	66%	17	34%	50 (100%)

Table 8a. (Non-)agreement of past passive participles and gender of the subject in East Aukštaitian

 χ^2 (1) = 0.11915; p = 0.73 (Pearson's χ^2 -test), Cramér's V = 0.044

	+Agr		-Agr		Totals
masculine	56	56%	70	46%	126 (100%)
feminine	15	50%	15	50%	30 (100%)

 Table 8b. (Non-)agreement of past passive participles and gender
 of the subject in South Aukštaitian

p = 0.3509 (Fisher's exact test), Cramér's V = 0.112

	+Agr		-Agr		Totals
masculine	67	79%	18	21%	85 (100%)
feminine	18	90%	2	10%	20 (100%)

Let us now look at the properties of the passive construction as a whole. First, we look at the word order, namely the position of the passive participle with respect to the subject. This factor proves to play a somewhat significant role in the distribution of non-agreeing forms, as they generally appear more often before the subject.⁵ The odds of the non-agreeing participle appearing before the subject is 3.3 times higher than appearing after it, see Table 9. However, if we look at this factor in the two dialectal groups separately, it proves to be significant only in East Aukštaitian, cf. Tables 9a-b.

Table 9. (Non-)agreement of past passive participles and the positionof the subject

 χ^2 (1) = 11.802; p < 0.0006 (Pearson's χ^2 -test), Cramér's V = 0.223

	+Agr		–Agr		Totals
participle before S	16	36%	29	64%	45 (100%)
participle after S	140	65%	77	35%	217 (100%)

⁵ The same seems to apply to the use of the non-agreeing passive participles in Standard Lithuanian discussed in Nau *et al.* (2020, section 2.3).

Table 9a. (Non-)agreement of past passive participles and the position of the subject in East Aukštaitian

 $\chi^{2}(1) = 10.068; p = 0.0015$ (Pearson's χ^{2} -test), Cramér's V = 0.269

	+Agr		-Agr		Totals
participle before S	6	19%	26	81%	32 (100%)
participle after S	65	52%	60	48%	125 (100%)

Table 9b. (Non-)agreement of past passive participles and the positionof the subject in South Aukštaitian

p = 0.7 (Fisher's exact test), Cramér's V = 0.039

	+Agr		–Agr		Totals
participle before S	10	77%	3	23%	13 (100%)
participle after S	75	82%	17	18%	92 (100%)

It has also been claimed that agreeing passive participles occur significantly less frequently without an overt auxiliary than in the presence of the auxiliary in all Baltic languages (Ambrazas 1990, 194). This suggests that the absence of the auxiliary would correlate with the lack of agreement in the participle. However, the data from the TriMCo corpus does not support this hypothesis. The presence or absence of the overt auxiliary does not seem to play any statistically significant role in the agreement on the participle, see Tables 10 and 10a–b.

 Table 10. (Non-)agreement of past passive participles and presence of the auxiliary

	+Agr		-Agr		Totals
overt auxiliary	47	62%	29	38%	76 (100%)
no auxiliary	104	57%	77	43%	181 (100%)

 $\chi^{\scriptscriptstyle 2}\left(1\right)$ = 0.2628; p = 0.6 (Pearson's $\chi^{\scriptscriptstyle 2}\text{-test}),$ Cramér's V = 0.041

Table 10a. (Non-)agreement of past passive participles and presence of the auxiliary in East Aukštaitian

 χ^2 (1) = 1.2729; p = 0.26 (Pearson's χ^2 -test), Cramér's V = 0.105

	+Agr		–Agr		Totals
overt auxiliary	24	52%	22	48%	46 (100%)
no auxiliary	44	41%	64	59%	108 (100%)

 Table 10b. (Non-)agreement of past passive participles and presence
 of the auxiliary in South Aukštaitian

 χ^2 (1) = 0.13685; p = 0.71 (Pearson's χ^2 -test), Cramér's V = 0.063

	+Agr		–Agr		Totals
overt auxiliary	23	77%	7	23%	30 (100%)
no auxiliary	60	82%	13	18%	73 (100%)

Finally, we have tested whether there is a correlation between the semantic type of the passive (actional vs. static-resultative) and the (non-) agreement of the participle. It has been suggested that the main function of the non-agreeing constructions is to describe the state of the subject (Ambrazas 1990, 200). Therefore, one could speculate that non-agreeing forms would appear more often in the static-resultative passive constructions. Bearing in mind that semantic interpretation of passive constructions is not always straightforward, the coding process was organized in the following way: both authors coded the examples independently, then the results were compared and the examples with conflicting judgments were discussed separately. In the end we managed to agree on the interpretation of the majority of examples, however in four cases we could not come up with any solution, so these cases were excluded from the statistics. The results are given in Tables 11 and 11a-b and show that there is no statistically significant correlation between semantics and presence of agreement either in general or in either of the dialectal areas taken separately.

Table 11. (Non-)agreement of past passive participles and the semantic type of passive

 $\chi^{2}(1) = 0.17657; p < 0.6743$ (Pearson's χ^{2} -test), Cramér's V = 0.035

	+Agr		-Agr		Totals
static	100	61%	65	39%	165
dynamic	49	57%	37	43%	86

Table 11a. (Non-)agreement of past passive participles and the semantic type of passive in East Aukštaitian

χ^2	(1) =	0.6736; <i>p</i> =	0.41 (Pe	earson's	χ^2 -test),	Cramér's	V = 0.081
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	+Agr		–Agr		Totals
static	47	47%	54	53%	101 (100%)
dynamic	19	38%	31	62%	50 (100%)

Table 11b. (Non-)agreement of past passive participles and the semantic type of passive in South Aukstaitian

	+Agr		-Agr		Totals
static	53	83%	11	17%	64 (100%)
dynamic	30	83%	6	17%	36 (100%)

 $\chi^{2}(1) = 1.8725e-30; p = 1$ (Pearson's χ^{2} -test), Cramér's V = 0.007

Thus, only the factors of region, number of the subject and its linear position with respect to the passive participle turned out to be significant — though by no means deterministic — predictors of the choice of agreeing vs. non-agreeing *t*-participle. The non-agreeing default form of the *t*-participle is favored by plural subjects, postposed subjects and especially frequently occurs in the East Aukštaitian dialects.

5. Discussion and conclusions

The statistical analysis of the South-Eastern Lithuanian dialects shows that non-agreeing predicative past passive participles appear more often in East Aukštaitian than in South Aukštaitian.

Ambrazas (1990, 201–203) argues for the archaic nature of non-agreeing passive constructions, comparing them, on the one hand, with the similar constructions in East Slavic and, on the other hand, with the non-agreeing adjectives describing the state of the subject such as shown in (37).

(37)	al-us	gard-u
	beer(м)-nom.sg	tasty-na
	'the beer is tasty'	

The comparison with East Slavic does not seem to be straightforward. At first sight, non-agreeing past passive participles in the Lithuanian dialects indeed find their parallel in the Northwest Russian dialects, especially often in the Novgorod dialects, see Kuz'mina & Nemčenko (1971, 28, 34), cf. example (38).

(38) Northwest Russian muž=to u=nej ubi-t-o husband(M)[NOM.SG]=PTC at=she.GEN kill-PST.PP-N 'Her husband has been killed.' (Pskov region, Kuz'mina & Nemčenko 1971, 35)

However, it is unclear whether the Lithuanian dialectal construction with the non-agreeing *t*-participle is a direct areal counterpart of the similar Northwest Russian construction (see e.g. its discussion in Seržant 2012 and references therein), since the two areas seem to be disconnected. Such constructions do not reach the territory of the Belarusian dialects, see the map in Požarickaja (2014, 129). In some Northern Belarusian dialects, similar constructions with the subject, probably marked by the accusative, are rarely attested, cf. (39):

(39) Northern Belarusian
 hryb-ý pa-zbirá-n-a
 mushroom-NOM/ACC.PL PVB-collect-PST.PP-NA
 'the mushrooms are picked' (Vicebsk region, Avanesaŭ, ed., 1964, 301)

Still more importantly, as was convincingly argued by Trubinskij (1984, 120–122), the East Slavic dialectal construction is of fairly recent

development (20th century), hence the areal connection with Aukštaitian is highly improbable.

However, the non-agreeing passive participles have been compared to the non-agreeing past active participles in Lithuanian dialects, e.g. (40), see Ambrazas (1990, 202–205), as well as to the special non-inflecting active participles (gerunds) in East Slavic dialects, e.g. (41), see Kuz'mina & Nemčenko (1971, 116–223), Trubinskij (1984, 121–122), both used in resultative-perfect constructions (see Wiemer & Giger 2005 for a general comparative overview and Danylenko 2020 for a new look at their origins).

(40)	South Aukštaitian; TriMCo corpus						
	died-e	0.	sen-ei	tan-ė			
	uncle-voc	and	old-adv	Tanya-Noм.sg			
	bú·o	atvaža:v-i 🗄	2				
	be.pst.3	3 arrive-pst.pa.na					
	'uncle, has Tanya come a long time ago?'						

 (41)
 Russian dialects (Tver region)

 on-a
 belj-e

 stira-vši

 3-NOM.SG.F
 clothes-ACC.SG

 wash-PST.PA.NA

 'she has washed clothes' (Kuz'mina & Nemčenko 1971, 132)

However, as was shown by Kozhanov (2018), the distribution of nonagreeing past active participles in South-Eastern Lithuanian dialects is different from that of non-agreeing past passive participles: non-agreeing past active participles appear more commonly in South Aukštaitian (especially in the dialects spoken in Belarus), cf. Table 12 also based on the TriMCo corpus.

Table 12. (Non-)agreement of past active participles across regions χ^2 (2) = 59.447; p < 0.0001 (Pearson's χ^2 -test), Cramér's V = 0.368

	+Agr		-Agr		Totals
East	189	94%	12	6%	201 (100%)
South	135	89%	17	11%	152 (100%)
Belarus	52	60%	35	40%	87 (100%)

In other words, even though the phenomenon of non-agreement is found in both active and passive past participles, its distribution is different. This might hint at a different origin of such non-agreement. Non-agreeing past active participle forms are primarily attested in the Lithuanian dialects of Belarus and might be a result of Slavic influence on the model of the -v s y type participles, whereas the non-agreeing past passive participles look like a distinct phenomenon, possibly of an archaic origin. However, at the grammatical level both phenomena are related to the more general tendency towards lack of agreement with plural subjects (the factor of number is relevant for past active participles as well, see Kozhanov 2018).

Another important outcome of our study is the demonstration of the fact that non-agreeing passive constructions in South-Eastern Lithuanian dialects do not correlate with the semantic type of passive. Even though it was suggested for East Slavic (Trubinskij 1988, 405–406) and hinted at for Lithuanian (Ambrazas 1990, 200) that non-agreeing passive participles tend to have stative (=resultative) semantics while agreeing constructions seem to be more common in actional passives, our data did not corroborate this hypothesis for South-Eastern Lithuanian dialects.

Abbreviations

1 — 1st person, 2 — 2nd person, 3 — 3rd person, ACC — accusative, ADV — adverb, DAT — dative, DIM— diminutive, F — feminine, FUT — future, GEN — genitive, HAB — habitual, INDF — indefinite, INF — infinitive, INS — instrumental, LOC — locative, M — masculine, N — neuter, NA — non-agreeing form, NEG negation, NOM — nominative, PA — active participle, PL — plural, PP — passive participle, PRS — present, PST — past, PTC — particle, PVB — preverb, RFL reflexive, SBJV — subjunctive, SG — singular, VOC — vocative

Sources

DLKT = The Corpus of Modern Lithuanian, tekstynas.vdu.lt

TriMCo = The corpus of Baltic and Slavic languages created within the project *Triangulation Approach for Modelling Convergence with a High Zoom-In Factor*, https://www.trimco.uni-mainz.de/trimco-dialectal-corpus/, not fully available online

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Antipassive reflexive constructions in Latvian: A corpus-based analysis

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The article presents a corpus-based investigation of the antipassive reflexive constructions of Latvian. They are subdivided into deobjectives (with suppression of the object) and deaccusatives (with oblique encoding of the object). The emphasis is on the lexical input for the two constructions, frequencies and degrees of lexical entrenchment. The authors identify two subtypes of deobjectives: behaviour-characterising deobjectives (lexically entrenched) and activity deobjectives (weakly entrenched but freely produced 'online', hence detectable only through a corpus search). Deaccusatives tend to be lexically entrenched; they are strongly associated with the lexical class of verbs of (chaotic) physical manipulation, but extend beyond this class thanks to processes of metonymy and metaphorisation. The authors argue that while antipassives are often defined as constructions suppressing the object or optionally expressing it as an oblique argument, patientless and patiented antipassives can actually be viewed as different constructions with constructional meanings of their own. While deobjectives conceptualise agency as a self-contained event even though an object is notionally required, deaccusatives additionally convey low affectedness of the object.

Keywords: Latvian, reflexive, antipassive, deobjective, deaccusative

1. Introduction¹

The article deals with Latvian reflexive-marked verbs instantiating the cross-linguistic category of antipassive. Antipassives are defined as "constructions in which the logical object of a transitive (two-place) predicate

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vouth-ABS

is not realized as a direct object, but instead appears as a non-core argument or [is] left unexpressed (but presupposed)" (Polinsky 2017, 308). The opposition between the basic transitive and the derived intransitive construction is illustrated in (1a–b) below:

(1a)	Chukchi (from Polinsky 2005)						
	?aaček-a	kimit?-ən	ne-nl?etet-ən				
	youth-erg	load-авs	3PL.SUBJ-carry-AOR.3SG.OB				
	'The young men carried away the/a load.' (transitive)						
(1b)	?aaček-ət	ine-nl?etet-g?e-	-t kimit?-e				

ANTIP-carry-AOR.3SG.SUBJ-PL

'The young men carried away the/a load.' (antipassive)

load-ins

The above definition points to the existence of two varieties, one with object suppression and one with oblique encoding of the object. We will refer to the first as 'deobjective' and to the second as 'deaccusative'. The terms are borrowed from Haspelmath & Müller-Bardey (2004, 1132) and Geniušienė (1987, 94) respectively. They are not used in the typological literature on antipassives, where the terms 'patientless' and 'oblique' (Heaton 2017, *passim*) can be found though the more general tendency is simply to refer to one antipassive construction with suppression or oblique realisation of the object. The terms 'deobjective' and 'deaccusative' are here chosen because they can both stand by themselves as a means of referring to what we will here describe as distinct though related constructions.

Latvian antipassive reflexives have previously been dealt with in Holvoet (2017). This earlier publication is concerned most of all with notional matters and problems of demarcation; it makes no use whatsoever of corpora, and therefore gives but a rather rough idea of the lexical input, and no idea at all of the frequency, the distribution according to register, and similar aspects. The present article aims to offer all this to the extent that the available corpora enable it. The structure of the article is as follows. We will first deal with questions of definition and demarcation. After a brief characterisation of the corpus on which we base our research, we will first discuss the deobjective and its subtypes. Next, we will examine in greater detail the class of 'physical manipulation verbs', in which the process of expansion of deobjective constructions with oblique objects seems to have occurred; and we will look at the ways in which this expansion occurred. We will then pause over the relationships between the two antipassive constructions, and over their constructional meanings.

2. Questions of definition and demarcation

In early publications in which the notion of antipassive was first used (Silverstein 1972, Dixon 1979) the emphasis was on its function in relation to morphosyntactic alignment: it was characterised as a voice construction enabling the alignment of A with s in ergative alignment systems basically aligning o with s, a mirror image to the passive, which aligns o with s in a system basically aligning A with s. Nowadays the antipassive is no longer associated only with alignment, given that constructions suppressing or demoting the patient, in the same way as 'realigning' antipassives do, are attested in languages with a nominative-accusative alignment system, see, e.g., Janic (2013).² Within a nominative-accusative alignment system the antipassive can still, to a certain extent, be characterised as a mirror image of the passive in that it demotes or eliminates the patient whereas a passive demotes or eliminates the agent. Its function cannot, however, be formulated in purely syntactic terms, as it is associated with certain semantic and pragmatic effects. The pragmatic effect is diminished prominence of the object (in different senses, see below); the semantic effect is diminished affectedness. Cf. the following formulations:

- "[The antipassive] denies grammatical prominence to the patient nominal by either encoding it as an oblique constituent or not syntactically encoding it at all." (Shibatani 1988, 5)
- "The use of a prototypical transitive verb entails that the event denoted by that verb causes a change of state in the object participant [...] The semantic function of the antipassive is to cancel such an entailment." (Polinsky 2005)

The two features defined here will be invoked throughout this article. We will refer to them as 'low object prominence' and 'low object affectedness' respectively. The first of these notions is somewhat heterogeneous, as it can refer either to a weakly individuated object or to a clearly individuated object that is non-prominent in the sense of being known and taken for granted. From the formulations above it is clear, and probably uncontroversial, that the notion of antipassive combines features observed at three distinct levels:

² The published version of this thesis (Brussels etc.: Peter Lang, 2016) was not accessible to us.

- morphology: there must be morphological marking on the verb. If a construction has the semantic and pragmatic effects formulated above but lacks marking on the verb, it is not an antipassive. This need not necessarily be a dedicated antipassive marker; it has been noted that reflexive and reciprocal markers often assume an antipassive function, and here, in the case of Latvian, we will be dealing with an instance of this;
- the antipassive always has certain syntactic effects, viz. suppression of the object or the substitution of oblique marking of the object for canonical object marking;
- if the antipassive is not used for syntactic (alignment) purposes, it is used to convey certain semantic and pragmatic effects. In our view, the fact of a construction displaying the formal features characteristic of the antipassive is not in itself sufficient to classify it as antipassive, as similar types of formal marking can be of different origin and do not always have the same function.

This last point is particularly important as the notion of antipassive is sometimes used to characterise constructions calling for another type of description. First of all, when the reflexive marker doubles as antipassive marker, drawing the line of division between reflexive and antipassive functions is not always straightforward. The borderline is fluid in cases involving extended metonymy, that is, cases where the affected object remains unexpressed because it belongs to the subject's personal sphere and can therefore stand metonymically for the subject's self; rather than antipassive, the construction is then simply reflexive. Correspondingly, we do not regard as antipassive the Russian reflexive verbs which Say (2008, 378–396) describes as such, as in (2):

 (2) Russian (Say 2008, 379) *Ty* čto, budeš' kserit'-sja? 2SG.NOM what.ACC FUT.2SG xerox.INF-REFL 'Well, are you going to do your xeroxing?'

Say paraphrases *kserit'sja* as *kserit' svoi bumagi* 'xerox one's (own) papers', and the possessive relationship shows that this verb form is, in fact, simply reflexive. It is only when the possessive relationship (creating a relationship of metonymic identity between subject and object) is abandoned

that the reflexive becomes an antipassive.³ The question might seem terminological, but the conceptual distinctness of A and O is in fact an essential element of transitivity (as emphasised in Næss 2007, where the principle of maximally distinguished arguments is described as the basis of prototypical transitivity); where A and O are conceptually insufficiently distinct, we are in the domain of the middle voice as characterised by Kemmer (1993). The notion of antipassive, as an intransitivising device, presupposes a transitive base with clearly distinguishable arguments. We should therefore make the definition of the antipassive more precise by saying it suppresses an object that is low in prominence, more often than not generic but, when made explicit, conceptually clearly distinct from the subject, that is, not in any sense part of the subject.

Secondly, not every construction consisting of a reflexive verb and an oblique object, standing alongside a non-reflexive transitive construction, is antipassive; the two constructions may coexist for a number of reasons, which are discussed in Holvoet (2019). Janic (2013, 196) treats as antipassives alternations like the following:

(3a)	French							
	Il	confesse		ses		péchés.		
	3.M.SG	confess.prs.3sg		3SG.POSS.M.PL		sin.pl		
	'He confesses his sins.'							
(3b)	Il	se	confesse		de	ses	péchés.	
	3.M.SG	REFL	confess.	PRS.3SG	of	3SG.POSS.M.PL	sin.pl	
	(same meaning)							

Though the relationship illustrated here satisfies the formal criteria for an antipassive, it is not clear in what sense we are really dealing with an antipassive. An essential link between (3a) and (3b) is (3c):

(3c) Il se confesse. 3.M.SG REFL confess.PRS.3SG 'He has his confession heard.'

³ Say (2008, 424) actually cites one instance of this, viz. the Russian verb *ubirat'sja* 'do the cleaning', not necessarily 'do one's cleaning, tidy up one's own room etc.' As the possessive relationship has been abandoned here and subject and object have thereby become sufficiently distinct, this construction could indeed be described as antipassive.

This can be characterised as a metonymic reflexive construction: the subject's conscience and the sins burdening it are conceptualised as part of his personal sphere, so that they can metonymically stand for the penitent's self. The metonymy is eliminated when an oblique object is reintroduced in (3b), but (3a) retains a trace of the semantic effect of metonymy which we find in (3c): the subject unburdens his conscience by the act of confession and is therefore an 'affected subject'. How can we be sure that this difference between (3a) and (3b) is associated with the antipassive? The common wisdom about antipassives is that they eliminate the object and optionally express it in an oblique phrase. But (3c) is clearly reflexive rather than antipassive for the reasons expounded above: the implicit object is not conceptually distinct from the subject. This makes it doubtful that (3b) could be an instance of the same allegedly antipassive construction, this time with optionally expressed object in the guise of a prepositional phrase. There is a semantic difference between (3a) and (3b), and Janic (2013, 196) provides interesting comments on it. But when she regards it as being associated with the 'antipassive' construction, this merely shows how the reasoning concerning the semantic features of the antipassive can become circular. If every construction that displays formal features coinciding with those of the antipassive is automatically counted as antipassive without a critical examination, then the inventory of semantic features associated with the antipassive is bound to expand beyond what can really be regarded as characteristic of this voice construction. It is conceivable that as a result of the object being deprived of prominence the emphasis shifts to the subject and the subject's affectedness; the problem is, however, that in (3b) the low prominence of the object is associated with the reflexive rather than antipassive character of the construction. Affectedness of the subject is hardly surprising in a reflexive construction; indeed it constitutes its very essence. Ascribing the feature of affectedness of the subject to antipassives as a result of mixing up antipassives with reflexives is a misunderstanding.

We must emphasise at this point that we accept the important distinction between comparative concepts and language-specific descriptive categories, introduced in Haspelmath (2010). The facts which we will be describing in this article basically pertain to the Latvian reflexive forms instantiating the cross-linguistic category of antipassive, and we are claiming nothing beyond that. On the other hand, in saying that we prefer not to treat (2) and (3) as instantiations of the antipassive we are making a claim about the cross-linguistic concept of antipassive, as we think that it should be kept notionally distinct from other cross-linguistic concepts like that of reflexive.

3. The classification of antipassive constructions

As mentioned above, we will operate with the notions of deobjective and deaccusative construction, the two subsumed under the general denomination of antipassive. These two types can be illustrated with the following examples:

- (4) [Runā, ka zem kalna apraktas bagātības.] Te nāca un rakņājā-s ik gadu. here come.PST.3 and dig.PST.3-REFL every year.ACC.SG '[They say a treasure is buried under the hill.] People came and dug about here every year.'
- (5) Un pietiek raknātie-s ра pagātni, mēģinot suffice.prs.3 dig.INF-REFL try.cvb and about past.ACC.SG to ievilkt tagadnē. present.LOC.SG draw.into.INF it.ACC 'We've had enough of that digging into the past and trying to integrate it into the present.'

The identification of these constructions is not always straightforward, so that the criteria must be clearly stated here. First of all, deobjectives look like reflexives, but they are not semantically reflexive. In most cases no confusion is possible, e.g., (4) cannot in any sense be reflexive.

The identification of deaccusatives is not straightforward either, and this is a problem we have had to deal with throughout our research. It is easy to distinguish a deaccusative from a reflexive (if there is an explicit object that is not a reflexive pronoun, it is by definition not a reflexive), but it is sometimes difficult to distinguish it from a deobjective. A deobjective construction contains no external object, but it may contain an adverbial modifier:

(6) [Mūsu ģimene gada laikā ir kļuvusi kuplāka]

unnuauklējo-spamāju.andnownurse.PRS.1SG-REFLabouthome.ACC.SG'[Our family has expanded in the course of this year] and now I am busynursing at home.

The PP pa māju has the same formal marking as the object in (5), but here it is clearly an adverbial that just locates the event. While this case is straightforward, it is not always, and the problem of how to distinguish adverbials from objects, or adjuncts from complements, has plagued syntacticians at least since the early days of x-bar syntax. The time-honoured test that has been used since Jackendoff (1977, 58) to identify complements (???He likes digging, and he does so into other people's past) is usually helpful; of course we are unable to motivate our decision for every single case.

As the reflexive marking shows, both antipassive constructions ultimately arose through a semantic shift from originally reflexive (or reciprocal) constructions with unexpressed object. This entails a two-stage process leading to the rise of deaccusative constructions. We may safely assume that diachronically the deaccusative arises from the deobjective through expansion with an oblique object: this follows from the fact that first a reflexive (naturally occurring without object) has to be reinterpreted as an antipassive, after which antipassives with oblique objects can arise. But this relationship does not necessarily hold synchronically. The deaccusative has established itself as a construction in its own right, and in the corpus from some verbal stems a deaccusative is derived while no deobjective is attested. Of course, it is impossible to prove the non-existence of the corresponding deobjective; it could exist *in potentia*. Nevertheless the deaccusative now arguably stands to the non-reflexive transitive construction in a direct relationship that does not presuppose a deobjective construction; we will return to this question further on.

If we accept that the deobjective and the deaccusative are distinct constructions subsumed under the broader category of antipassive, the question of their constructional meanings arises: is there one common antipassive function or are there two? Much depends on what we make of the presence or absence of an oblique object. It is often stated (e.g., Dixon 1994, 146) that in the antipassive the object is either suppressed or optionally expressed in the form of an oblique NP or PP. This view is also reflected in Zuñiga & Kittilä's (2019, 105) confusing terminology in which deacusatives are called 'adjunct-P antipassives'. In fact, the patient is either unexpressed, or it is a complement. The borderline may be fuzzy, which is hardly surprising as the borderline between complements and modifiers is notoriously fuzzy. But this lack of a clear-cut borderline has not prevented linguists from operating with the useful complement-modifier

distinction; the prototypical cases are opposed clearly enough, and this also holds true for the distinction between deobjectives with adverbial modifiers and deaccusatives with oblique objects. When both a deobjective and a deaccusative construction are derived from the same transitive construction, this creates the impression that we are dealing with one and the same construction in which the expression of the patient is optional. But complements are normally not optional, and therefore it seems more likely that we are simply dealing with two different constructions. If we assume a distinct deaccusative construction, we can dispense with the notion of optional expression of the object. In this article, we argue that the deobjective and the deaccusative are different constructions with different, though related, constructional meanings. This idea was advanced, for Latvian, in Holvoet (2017) and has since been argued, on a broad typological basis, by Vigus (2018). We are not claiming that definitions characterising the oblique object of an antipassive construction as optional are wrong. We have just opted, in dealing with Latvian, for a description distinguishing two constructions, one with suppressed object and one with expressed object. The optionality lies in the co-occurrence of the two constructions.

4. The corpus

One possible way of producing antipassives from a Latvian corpus is automatically searching for a large enough sample of reflexive verbs and then manually selecting antipassives from this sample. This method, however, turned out to be unproductive in the earlier stages of the research, as a sample of 1000 reflexives from the Balanced Corpus of Modern Latvian (*LVK2018*) only yielded a couple of examples, thus proving the antipassive construction to be infrequent in Latvian and uncommon in the small *LVK2018* corpus (10 mln words). Consequently, the larger *lvTenTen14* corpus (about 500 mln words) was chosen for the research. The corpus reflects the use of Latvian on the internet, making it possible to include informal registers that appear to provide a typical environment for antipassives. The frequency problem was solved by conducting the search in multiple steps and applying different solutions for deaccusatives and deobjectives.

Since the deaccusative construction contains a prepositional phrase in addition to the reflexive verb, it can be extracted from the corpus by searching for reflexives in combination with the prepositions *pa* 'about', *ap* 'around', *gar* 'along', *ar* 'with', which are known to be associated with the deaccusative construction from previous research. The results thus obtained were then manually searched for deaccusatives in order to separate them from any other uses of reflexives in combination with the corresponding prepositions. The procedure revealed a productive class of deaccusatives involving what we call 'physical manipulation verbs' such as *bakstīties* 'poke around', *rakņāties* 'dig around' etc., of which many alternatively employ more than one preposition to introduce the oblique object.

In the next step, the search focused on physical manipulation verbs. About twenty verbs were singled out for extraction of all their uses from the corpus, including their non-reflexive counterparts. Among other things, this allowed us to establish another subtype of deaccusatives with an oblique object encoded by the locative case. But most importantly, it turned out that physical manipulation verbs are also frequently used as deobjectives. Apart from the two varieties of the antipassive construction, at least some of the verbs were also found in other uses typical of Latvian reflexives (natural reflexives, anticausatives and facilitatives).

Non-reflexive counterparts showed several things. First, there is considerable variation in the frequency of antipassives in comparison with non-reflexive forms of the same verbs: some (but not all) iterative verbs are mostly used as antipassives, with only a few examples of non-reflexive uses. Secondly, the range of objects found in the transitive construction may differ from the range of oblique objects in the deaccusative construction. Thirdly, non-reflexive verbs sometimes combine with the prepositional phrases also found in the deaccusative construction to produce intransitive uses that are not antipassives because they lack the marking on the verb.

A separate search was conducted in order to find those deobjectives that do not have deaccusative counterparts. The deobjective construction does not have any additional elements that could be helpful in narrowing the search, and it appears not to participate in frequent collocations. Thus, it has to be searched by checking any likely candidates for antipassive uses. The list of potential deobjectives was established by analogy with the verbs that are described as such in Holvoet (2017), viz. those potentially referring to types of behaviour and occupations. Apart from these, we used the reverse dictionary (Soida & Kļaviņa 2000) to obtain a list of verbs with iterative and causative suffixes that often serve as bases for Latvian antipassives. While these attempts mostly yielded verbs that are only used in the deobjective construction as antipassives, none of them had the frequency of the physical manipulation class. At the same time, the spontaneous character of many examples that seemed to be produced 'online' for a single occasion suggested the deobjective construction is productive.

An extra search for antipassive versions of recently borrowed verbs like $g\bar{u}gl\bar{e}t$ 'google', *skrollēt* 'scroll' confirmed the productivity of both antipassive constructions.

5. Lexical and grammatical features of verbs occurring in the antipassive construction

The importance of the putative class of 'manner verbs' (a notion developed in a series of studies by Levin and Rappaport Hovav, e.g., Rappaport Hovav & Levin 1998) as a lexical basis for antipassives has been pointed out in the literature; it underlies Say's notion of 'natural antipassives' (Say 2008, 148). Latvian antipassives fall broadly within this class, but further divisions are relevant for their classification. Thus, we single out a class of what we call 'physical manipulation verbs', whose meaning is not strongly associated with a specific type of result, such as *dig*, *scratch*, *pull* etc. as opposed to *sew*, *wash* etc.

The Latvian antipassive strongly prefers iterative verbs, which conforms to the cross-linguistic pattern known from the literature (Polinsky 2005). Most of the verbs cited in the article are derived from primary⁴ verbs that by themselves do not enter antipassive constructions: $gr\bar{a}bt > gr\bar{a}b\bar{a}t$ 'grab, seize', *saukt* 'call, name' > *saukāt* 'call names', *raust* > *rušināt* 'stir', *stumt* > *stumdīt* 'push', *šaut* > *šaudīt* 'shoot', *ost* > *ostīt* 'sniff' etc.; see Soida (2009, 192–197) on iteratives in Latvian. The only primary verb that is regularly used as an antipassive alongside its iterative derivatives is *rakt* 'dig'.

The suffix *-inā-* is polysemous, combining iterative and causative meaning; see Nau (2015, 209). In antipassives, the polysemy is most evident

⁴ In Baltic scholarship, the term 'primary verbs' refers to verbs with a basically monosyllabic stem not expanded with syllabic suffixes, e.g., *brauk-t* 'drive (a vehicle)'. Secondary verbs are verbs whose stem is expanded with a syllabic suffix in at least part of the forms, like *staig-ā-t* 'walk'.

in the closed class of verbs describing sound/light emission which are regularly produced by the same polysemous suffix *-inā-* from secondary verbs (for example, *grabēt > grabināt* 'rattle', *zibēt > zibināt* 'flash'), but is also found outside it, as in the behaviour deobjective *ķircināties* 'tease'.

Derivatives with other suffixes include denominal verbs (*auklēt* 'nurse' from *aukle* 'nurse', $c\bar{u}k\bar{a}t$ 'spoil' from $c\bar{u}ka$ 'pig', gleznot 'paint' from glezna 'picture'; $z\bar{i}m\bar{e}t$ 'draw' from $z\bar{i}me$ 'mark', as well as borrowings from Middle Low German (*skrāpēt* 'scrape, scratch', *krāmēt* 'arrange, stow', *stīvēt* 'lug, drag') and recent borrowings from English (*skrollēt* 'scroll'), which are usually assigned to the class of secondary $-\bar{e}$ - verbs in Latvian. The rest are imperfective non-primary verbs that might have originated as iteratives and sometimes still retain the iterative meaning but have no base verbs in modern Latvian: gramstīt 'seize', *taustīt* 'feel, probe', *knibināt* 'fiddle, fidget', *mānīt* 'deceive' and *darīt* 'do, make'.

Apart from *rakties* 'dig' the few entrenched uses of primary (noniterative) verbs in antipassive constructions include *ņemties* (from *ņemt* 'take') and *burties* (from *burt* 'practice magic'), as well as *krāpties* 'practice deceit' from *krāpt* 'deceive' (there is an iterative *krāpināt* but it does not underlie antipassive constructions).

As seen from Table 1, *rakties* 'dig' is, in fact, the most frequent antipassive verb in the corpus, immediately followed by the iterative *rak*natiesand *rakaties* (1601, 1215 and 1069 instances respectively). For many physical manipulation verbs including the 'digging' subgroup, the percentage of non-antipassive reflexive uses is negligible; see the column headed 'NANTIP'. (For this reason, the latter are not filtered from the numbers of reflexive uses in the 'REFL' column.) Exceptions correlate with verbs of caused motion (see Section 7 for the classification) that are often used as reciprocals and natural reflexives (138 instances of *stivēt* 'drag, lug' and 22 instances of *stumdīt* 'push'),⁵ as well as *skrāpēties* 'scrape, scratch' (79 instances) and *grabināties* 'rattle' (27 instances), often found as facilitatives and anticausatives.

⁵ The numbers are not absolute as it is sometimes difficult to clearly differentiate reflexive verbs of caused motion between reciprocals and behaviour-type deobjectives and, in certain cases, between behaviour deobjectives and natural reflexives, when it is unclear if the activity is directed at the agent's surroundings or their own body. This kind of ambiguity is, however, absent from many instances of *staipīties* 'stretch' which is very common as a natural reflexive in descriptions of sport activities.

verb, translation	suffix	REFL	NANTIP	NREFL	verb class
rakt 'dig'	-	1601	2	10765	operations on amorphous substances
rakņāt 'dig'	ITER	1215	о	34	operations on amorphous substances
rakāt 'dig'	ITER	1069	0	18	operations on amorphous substances
<i>taustīt</i> 'feel, probe'	+	749	1	1138	superficial operation on solid objects
<i>rušināt</i> 'stir'	ITER	557	1	211	operations on amorphous substances
grābstīt 'seize'	ITER	535	5	66	prehensile motion
<i>staipīt</i> 'drag pull'	ITER	433	410	1513	caused motion
<i>krāmēt</i> 'pack'	+	341	1	707	operations on collec- tions of small discrete objects
<i>knibināt</i> 'fiddle, fidget'	ITER	269	1	222	operations on collec- tions of small discrete objects
<i>skrāpēt</i> 'scrape, scratch'	+	238	79	834	superficial operation on solid objects
<i>stīvēt</i> 'drag, lug'	+	220	138	114	caused motion

Table 1. Most common physical manipulation verbs⁶

⁶ In Tables 1 and 2, 'NREFL' and 'NANTIP' refer to non-reflexive verbs and non-antipassive uses of reflexive verbs respectively. The column headed 'suffix' provides information on whether a verb is expanded with a syllabic suffix (+) or not (-). If a particular suffix conveys iterative or causative meaning, instead of '+' the corresponding rows are marked with 'ITER' or 'CAUS'.

verb, translation	suffix	REFL	NANTIP	NREFL	verb class
grabināt 'rattle'	CAUS	151	27	281	sound/light effects
gramstīt 'seize'	ITER	133	0	18	prehensile motion
<i>bakstīt</i> 'poke'	ITER	131	0	2192	superficial operation on solid objects
stumdīt 'push'	ITER	119	22	508	caused motion

Considering that the antipassive is a derived construction, the marked member of the opposition of transitive and antipassive, we should expect it to be lower in type and token frequency. This is indeed the case if we look at overall type and token frequencies, but if we look at the frequencies for individual deaccusatives compared to the corresponding non-reflexive transitive verbs, they are often higher. Table 2 shows frequencies of reflexive forms of verbs frequently participating in the antipassive constructions divided by frequencies of non-reflexive forms of the same verbs (see the column headed 'REFL/NREFL'). While these figures are not accurate, as possible non-antipassive (e.g., anticausative) uses of reflexive forms have not been filtered out, they give a general idea of the situation. We see that whereas the non-iterative non-reflexive *rakt* 'dig' is much higher in frequency than its reflexive counterpart, one has the impression that the iterative raknāt has been derived from it mainly for the sake of providing the base for an antipassive reflexive. The two classes of verbs clearly standing out with respect to the frequency of their iterative reflexives are operations on amorphous substances and verbs of prehensile motion.

verb, translation	suffix	REFL	NREFL	REFL/ NREFL	verb class
rakāt 'dig'	ITER	1069	18	59.4	operations on amor- phous substances
rakņāt 'dig'	ITER	1215	34	35.7	operations on amor- phous substances

Table 2. Frequency of reflexive and non-reflexive forms fromthe same verbal stem.

verb, translation	suffix	REFL	NREFL	REFL/ NREFL	verb class
grābstīt 'seize'	ITER	535	66	8.1	prehensile motion
gramstīt 'seize'	ITER	133	18	7.4	prehensile motion
rušināt 'stir'	ITER	557	211	2.6	operations on amor- phous substances
<i>stīvēt</i> 'drug, lug'	+	220	114	1.9	caused motion
<i>knibināt</i> 'fiddle, fidget'	ITER	269	222	1.2	operations on collections of small discrete objects
<i>taustīt</i> 'feel, probe'		749	1138	0.7	superficial operation on solid objects
grabināt 'rattle'	CAUS	151	281	0.5	sound/light effects
<i>krāmēt</i> 'pack'	+	341	707	0.5	operations on collections of small discrete object
s <i>taipīt</i> 'drag pull'	ITER	433	1513	0.3	caused motion
<i>skrāpēt</i> 'scrape, scratch'	+	238	834	0.3	superficial operation on solid objects
stumdīt 'push'	ITER	119	508	0.2	caused motion
rakt 'dig'	-	1601	10765	0.1	operations on amorphous substances
<i>bakstīt</i> 'poke'	ITER	131	2192	0.1	superficial operation on solid objects

6. Deobjectives

Deobjective reflexives, as argued in Holvoet (2017), have different sources. An important source is the reciprocal use of reflexive verb forms, illustrated in Latvian by such verbs as *kauties* 'fight', *ķīvēties* 'quarrel', *lamāties* 'exchange abuse' etc. In many languages, including Baltic, these combine not only with plural subjects but in the so-called 'discontinuous reciprocal construction' (for this notion cf. Dimitriadis 2004) also with singular subjects. In this case they require a complement (with comitative marking) denoting the other partner in the reciprocal relationship:

(7)	Māte	patstāvīgi	lamājā-s		ar
	mother.nom.sg	constantly	quarrel.pst.3-refl		with
	tēvu	par	dažādiem	sīkumiem	<>
	father.Acc.sg	about	various.dat.pl	trifle.dat	.PL
	'My mother constan	ntly quarrell	ed with my father al	oout all soi	rts of trifles.'

In a construction like this, the complement can be suppressed as being generic or backgrounded, and the focus is then on the external behaviour of the subject participant. Possibly, but not necessarily, this backgrounding of the complement is connected with a habitual or potential reading of the construction, where the propensity of an individual for participating in the kind of (usually aggressive) reciprocal relations is characterised.

(8)	[Jaunatne dzīvo virtuālajā pasaulē.]							
	Vienīgi	ēd,	pīpē	un				
	only	eat.prs.3	smoke.prs.3	and				
	lamāja-s	rec	īli <>.					
	swear.prs.3-1	REFL rea	ally					
	'[Young people live in the virtual world.] In the real world, they only eat,							
	smoke and sw	/ear <>.'						

A second type starts out not from the reciprocal but from the properly reflexive function of the reflexive marker. Reflexivity often involves metonymy: an object belonging to the subject's personal sphere may metonymically stand for the subject's self, as in the case of clothes in (9):

(9)	Tev	nav	līdz	augšai	
	2SG.DAT	be.prs.3.neg	up.to	top.dat.sg	
	jā-aizpogāja-s	;	un	jā-jūta-s	savā
	DEB-button.up-REFL		and	deb.feel-refl	RPO.LOC.SG
	apģērbā	neērti.			
	clothes.loc.sg	uncomfor	tably		
	'There's no nee	ed for you to bu	tton yours	elf up to the chin	and feel uncom-
	fortable in you	r clothes.'			

In a further development, constructions like these extend to objects that do not necessarily belong to the subject's personal sphere. The construc-

tion then ceases to be reflexive and can now be regarded as antipassive: the object, conceptually distinct from the agent, is suppressed as being backgrounded. The following example is from the Latvian Academy Dictionary (LLVV), as no instance was found in the corpus (as we will show further on, the verbs constituting the core group from which the activity deobjective spread further are no longer frequently used nowadays):

(10) LLVV (Skaidrīte Andersone, 1974)
 Sievietes vērpj, ada vai lāpā-s.
 woman.NOM.PL spin.PRS.3 knit.PRS.3 or mend.PRS.3-REFL
 'The women are spinning, knitting or mending.'

We disagree with Sansò (2017, 207–208), who hypothesises that reflexivemarked antipassives always start out from the reciprocal function of the reflexive marker. In many languages the reciprocal reflexive is probably the only source of antipassive reflexives, but Latvian shows that there is another possible source, viz. metonymic reflexives. We will now discuss in greater detail the two subtypes starting out from reciprocals and metonymic reflexives respectively.

6.1. Behaviour-characterising deobjectives

Behaviour-characterising deobjectives originate, as mentioned above, as reciprocal reflexives. The original core group of behaviour-characterising deobjectives consists of verbs that still combine the two functions. The physical or verbal behaviour described by the verb can be interpreted as an element of human interaction or as being characteristic of a person (at a particular moment or habitually) while abstracting away from the possible human interaction of which it is or could be part. Among the verbs represented in the corpus, some describe aggressive physical behaviour of humans or animals, like *spārdīties* 'kick', *badīties* 'butt (with the horns)', *spļaudīties* 'spit', *stumdīties* 'push, jostle, elbow', *spaidīties* 'id.', *grūstīties* 'id.'; others characterise aggressive or provocative verbal behaviour, like *saukāties* 'call names', *lamāties* 'utter abuse', *ķircināties* 'speak teasingly', *mēdīties* 'speak mockingly, mimicking somebody'. The following examples illustrate the reciprocal (11) and the deobjective use (12) respectively:

 (11) [Mēs tagad mēģinām pierast pie riņķīšiem pirkstā un saukt vienam otru par vīru/sievu.]
 Pašlaik tas notiek vairāk kā

happen.prs.3

more

like

now

this.nom

kircinotie-s savā starpā. tease.cvb-refl mutually

'[We are now trying to get used to these circlets on our fingers and to call each other wife and husband.] Now this happens more like when we're teasing each other.'

[Pats īsti nesapratu, vai es tagad centos būt atklāts pret viņu,] (12) arī tikai kārtēio vai or also only another.ACC.SG.DEF kircinājo-s. reizi time.Acc.sg tease.pst.1sg-REFL '[I haven't quite understood whether I was now trying to be sincere with her] or whether I was once more teasing.'

Reciprocal interaction presupposes animacy, and most of the verbs in the group under discussion have animate subjects. Just a few verbs have extended to inanimate subjects, which, of course, precludes a reciprocal interpretation, e.g., *skrāpēties* 'scratch' or *durstīties* 'prick':

(13)	Skūtie-s	nāksies	reizi	2	dienās,
	shave.INF-REFI	L be.needed.FUT.3	once	2	day.loc.pl
	citādi	ataugošie	ıgošie		matiņi
	otherwise	grow.again.ppra.nom.	.PL.M.DEF		hair.dim.nom.pl
	sāks	skrāpētie-s.			
	begin.FUT.3	scratch.INF-REFL			
	'You will have	to shave every two da	ys, otherv	vis	e the stubbles will
	start scratchin	ıg.'			

Other extensions are not concerned with the animacy scale, but with the character of the physical behaviour that is being characterised. One of these extensions involves a shift towards perceptible manifestations of bodily functions or processes, as reflected in verbs like *ostīties* 'sniff' (from *ostīt* 'sniff', iterative of *ost* 'smell') or *vemstīties* 'retch' (from *vemstīt*, iterative of *vemt* 'vomit'):

(14)	Bērni	vemstījā	ī-s	redzot	tos	
	child.nom.pl	vomit.P	ST.3-REFL	see.cvb	that.Ac	CC.PL.M
	kaulus	un	ādas,	novērsā-s		to
	bone.ACC.PL	and	skin.ACC.PL	avert.pst.3	REFL	that.acc
	visu	maļot.				
	all.Acc	grind.cv	В			
	(77) 1.11		1 . 1 . 6 .1	,		C 1 ·

'The children retched at the sight of these bones and shreds of skin, and averted their gazes while all this was being ground.'

The transition to such uses could have been provided by a verb like *ostīties*, which also allows for a reciprocal use, as in *suņi ostās* 'dogs sniff each other'. As *ostīt* can also take inanimate objects, the connection with the original reciprocal use of the reflexive is easily shed and the emphasis shifts to externally perceptible physical behaviour:

(15)Paceļugalvuunsākuostītie-s.raise.PRS.1SGhead.ACC.SGandbegin.PRS.1SGsniff.INF-REFL[Patīkams aromāts iesitas vēl dziļāk manās degunu porās.]'I raise my head and start sniffing around. [The pleasant aroma invades
my nasal receptors even more deeply.]'

An important subgroup of types of physical behaviour is represented by reflexive verbs describing such physical behaviour as is involved in manipulation of objects rather than in physical aggression towards people. For this very reason they do not occur in reciprocal constructions. We could describe them as the manipulation type. The non-reflexive verbs take inanimate rather than animate objects, as shown in (16); the corresponding reflexive verb describes a person going through the type of motion necessary for performing the physical manipulation described by the transitive verb:

- (16) <...> [tādam uzņēmumam uzplaukums nespīd...] laiku Visu tik рa kaktiem all.Acc.sg time.Acc.sg only about corner.DAT.PL kapeikas grābstīt. kopeck.ACC.PL grab.INF [jo uz cilvēku apkrāpšanu nopelnīt nevar!] '<...> [Such an enterprise isn't going to prosper.] It will be a mere raking in of pennies on the side all the time, [because you can't make money from deceiving people!]' Bodnieks rāda šо
- (17) Bodnieks grābstā-s, rāda šo shopkeeper.NOM.SG grasp.PRS.3-REFL show.PRS.3 this.ACC un to. and that.ACC

'The shopkeeper grapples around, pointing now at this, now at that.'

The transition from physical behaviour to manipulation may have involved verbs combining both types of use. Compare (18) (physical behaviour as part of human interaction) and (19) (physical manipulation of an object):

- (18) Pieturā vēl stīvējā-s vīrietis still struggle.PST-REFL stop.loc.sg man.NOM.SG pretim, against [taču beidzot konduktors viņu pa aizmugurējām durvīm izgrūda laukā <...>.] 'At the bus stop the man was still struggling in resistance, [but finally the conductor pushed him out by the rear entrance.] (19) Ŧа konkrēti līnim. paskaties
- pastingrāku if concretely tench.DAT.SG look.IMP.2SG strong.COMP.ACC.SG kātu. lai vari stīvētie-s. handle.Acc.sg so.that be.able.prs.2SG tug.INF-REFL 'If [the fishing rod] is specifically for catching tench, then you must look for a solid handle, so you can tug [at it] properly.'

We will return to the physical manipulation type further on as it seems to play an important part in the rise of deaccusative constructions from deobjective ones.

The core group of the behaviour-characterising deobjectives shows very little productivity because the lexical class, pertaining to bodily demeanour and functions, is closed. The manipulation subtype is an exception, as verbs referring to different types of manipulation can acquire new senses inspired, e.g., by technological innovation.

6.2. Activity deobjectives

Judging by the exemplars that are apparently sufficiently entrenched to have made it to the dictionaries, the source class for activity deobjectives was a very small group of verbs denoting domestic activities including above all maintenance of clothes; LLVV lists *velēties* 'do one's washing', *lāpīties* 'do one's mending' and *gludināties* 'do one's ironing'; Kagaine & Raģe (1977) also mention *pletēties* 'do one's ironing' (from German *plätten*, now replaced in the standard language with *gludināt*). Presumably these were originally normal reflexives involving metonymy, i.e. the clothes (or other objects belonging to the subject's personal sphere) stood metonymically for the subject's self. The dictionaries do not reflect this extended reflexive meaning any more: LLVV defines *velēties* as 'being occupied with washing for a long time', and the definitions for *lāpīties* and *pletēties* are similar. The dictionaries, hence, do not regard a possessive relationship between the patient and the subject as an essential feature of the meaning of these verbs. This means that the implicit object is no longer part of the subject's personal sphere, and no longer stands metonymically for the subject's self. That is, the meaning has shifted from reflexive to antipassive. We may reconstruct the original possessive relationship on the grounds that it is notionally necessary in order to explain the transition from reflexive to antipassive, and also on the basis of other instances of metonymy that have escaped the shift to antipassive, as in (20), where the subject's house is conceived as part of their personal sphere (for more examples from Baltic and Slavonic languages and some discussion see Holvoet 2020, 30–35):

(20) [Šos būvgabalus pamazām sadalīja,]
 un cilvēki sāka būvētie-s.
 and human.NOM.PL start.PRS.3 build.INF-REFL
 '[These building plots were gradually allotted,] and people started building houses for themselves (literally: started building themselves).'

The verbs of the presumable source group, though still listed in the dictionaries, are difficult to find in internet sources; some have gone out of use (like velēties 'launder', which refers to the obsolete practice of washing on a washboard), while others, being restricted to the domestic sphere, rarely make it to the internet. But the antipassive construction that sprang from them is fully alive and expanding. It has acquired additional constructional meanings beyond the element that originally motivated the rise of the construction. This element was the diminished prominence of the patient; this was already a defining feature of the reflexive construction from which the antipassive construction developed and it was inherited by the antipassive construction. Objects belonging to the agent's personal sphere are default patients in various kinds of domestic activities, which motivates the rise of a construction like 'mend oneself' meaning 'mend one's clothes'. In the first stage of the rise of the antipassive construction this feature is still present; but when we look at the productive deobjective construction as it manifests itself in the corpus, we see that the suppression of the backgrounded object is not an essential feature of their use. Indeed, the corresponding non-reflexive verbs can, in many cases, also be used absolutely, without overt object, to denote a type of activity. Consider (21), with a deobjective reflexive:

(21)	Nesanāk	laika		arī	pārāk			
	NEG.be.found.prs.3	time.gen	.SG	also	too.much			
	lasītie-s	un	kome	entētie-s.				
	read.inf-refl	and comment			F-REFL			
	[Interneti kļuvuši mazs	varīgi.]						
	'There is also not time enough left to do a lot of reading and commenting							
	[All this Internet stuff	has beco	me irre	elevant.]	,			

The corresponding non-reflexive verb in absolute use, presumably also with non-prominent implicit object, is seen in (22):

(22) <...> [arī tas ir labi, ka kāds ir atradis laiku,]
 lai lasītu un komentētu!
 in.order.to read.IRR and comment.IRR
 '<...> [it is also good that someone has found time] for reading and commenting.'

Thus, while the reflexive derivation is still object-backgrounding, the object-backgrounding function ceases to be the principal motive for its use. Instead, emotive and evaluative effects come to the fore as main factors. These effects are somewhat diversified according to the type of situation in which the deobjective forms are used. We could speak of a general implication that the activity is self-contained and in some way withdrawn from the surrounding world. This might then be interpreted as a kind of self-absorbed activity completely engrossing the agent, or else it can also develop more strongly evaluative overtones, conveying a general idea of the irrelevance of the activity to the surrounding world. The self-engrossing activity use can be observed in examples like the following (note the adverbial $uz \ neb\bar{e}du$ 'to one's heart's content'):

(23) <...> [darbnīcās šāda grīda ir nenovērtējama ērtība,] trieptie-s škaidītie-s var un be.able.prs.3 smear.INF-REFL and splatter.INF-REFL uz nebēdu. to one's heart's content [kopšanu neprasa]. '[In a workshop such a floor is an invaluable convenience,] one can smear and splatter to one's heart's content, [it doesn't require any maintenance.]' (24) [Kad beigs vidusskolu, tad lai iet profesionālaiā dienestā.]

-4)	[11111 00185	11443511014, 144	iai iei projesiolia	iaja arene.	sta.]
	Tur	iedos	stroķi,	un	varēs
	there	give.fut.3	rifle.Acc.sg	and	be.able.fut.3

šaudītie-suz nebēdu.shoot.INF-REFLto his heart's content'[When he finishes secondary school, let him become a career military man.]They will give him a rifle and he will be able to shoot to his heart's content.'

Such deobjectives referring to self-engrossing activity often occur in strings of verbal forms, as in the following example. Note that the last verb form, *krāsot* 'coat with paint', is non-reflexive, apparently because the deobjective derivation is blocked by the naturally reflexive reading of *krāsoties* as 'apply make-up, do one's face':

(25) knibinātie-s. Es varu potter.about.INF-REFL be.able.prs.1sg 1SG.NOM līmētie-s krāsot! un glue.INF-REFL and paint.INF [Patīk no salvetēm pagatavot super izturīgu saiņošanas papīru!] 'I can potter about and happily glue away and paint. [I like making super strong wrapping paper out of paper napkins.]'

It should be noted that there is also a deobjective form of $dar\bar{\iota}t$ 'do', which, being poor in semantic content, usually does not stand alone but is coordinated with another verb that is richer in content, often also a deobjective:

(26) [To, ka pastāv tāda lieta kā otiņas, ar kuru palīdzību var uzklāt kosmētiku, es uzzināju tikai, kad man bija gadi piecpadsmit,] skatoties lielām kā ar acīm watch.cvb with large.DAT.PL.F eye.dat.pl how māmina darā-s un burā-s <...> mum.NOM.SG do.prs.3-refl and do.magic.prs.3-refl '[It wasn't until age fifteen that I discovered there was such a thing as brushes with which you could apply cosmetics,] as I looked on roundeyed while my mum went about doing her magic.'

It is not quite clear whether such combinations are sufficiently entrenched, and their form is sufficiently stable, for them to be recognised as a constructional idiom. More research is needed to establish the classes of verbs with which this *darīties* combines, and the function of the whole combination. The construction is superficially reminiscent of co-compounds with 'echo words' (Wälchli 2005, 167–169), but in such co-compounds the echo-word is normally in second position. A parallel construction appears with the

deobjective *ņemties*, derived from *ņemt* 'take'. Part of its uses seems to be similar in function to *darīties un V*:

(27) [Tāpat arī aizbraucot trešdienas vakarā uz Kuldīgu viss bija kārtībā —] mazie ņēmā-s un spēlējā-s little.NOM.PL.M.DEF take.PST.3-REFL and play.PST.3-REFL ar mani. with me.ACC
'[Similarly, when I was leaving for Kuldīga on Wednesday evening, everything was all right—] the children were happily playing with me.'

However, not all uses of '*nemties* + v' are of this type; some are more reminiscent of the 'take and v' construction dealt with by Nau *et al.* (2020), a constructional meaning wholly unconnected with the antipassive. Nau *et al.* (2020, 245) actually mention a variety with the reflexive form of *nemt*, but don't discuss it in detail. More research is needed here as well.

In many cases evaluative effects manifest themselves. When the subject is referring to her or his own activity, the use of the deobjective reflexive is a way of depreciating this activity, presumably out of modesty:

(28) [Šodien uzrakstīju eksāmenu, biju Preses Bārā ar foršajiem kursabiedriem un Maiju],
zīmējo-s ar krītiņiem <...>
draw.PST.1SG-REFL with crayon.DAT.PL
'[I wrote an exam today, went to the Preses Bārs with my cool fellow students and Maija,] did some drawing with crayons <...>'

When another person's activity is referred to, the implication is often that this activity is devoid of sense and annoying to other people:

(29)	Brāli,	beidz		te	sludinātie-s	,	ar
	brother.voc	end.IMP.25	G	here	proclaim.1N	F-REFL	with
	varu	taču	tu		to	savu	Jēzu
	force.Acc.sg	PTC	TC 2SG.NO		that.Acc.sg	RPO.ACC.SG	Jesus.Acc
	nevienam	neuzbāzīsi					
	nobody.dat	NEG.impos	se.FU	T.2SG			
	'Brother, stop y	our preach	ning	here, yo	u can't force	this Jesus of	yours on
	anybody.'						

If the activity is not actually going on but only considered in an abstract way, the implication is also that it would be a waste of time and energy:

(30)	Pēdējā		laikā	galīgi	nesanāk	ne	
	last.10	C.SG	time.loc.sg	at.all	NEG.be.found.prs	.3 ne	ither
	iedvesi	nas,	ne	laika	rakstītie-s		blogā.
	inspira	ation.G	EN.SG nor	time.GE	N.SG write.INF-	REFL	blog.loc.sg
	'Lately	' I canr	not find either i	nspiratio	n or time to write o	on my b	olog.'
(31)	Ja	nu	esi	dikti	ticīgais		un
	if	now	be.prs.2sg	very	religious.nom.sc	.M.DEF	and
	vēlies		svinētie-s,				
	wish.p	RS.2SG	celebrate.1	NF-REFL			
	[tad ņem brīvu dienu uz atvaļinājuma rēķina!]						
	ʻIf you	are ve	ry religious an	d go in fo	r all that celebratin	g [ther	ı take a
	day of	f at the	expense of you	ur annua	l leave!]'		

It is interesting to note that reflexive forms of the type discussed here can be derived from intransitive verbs: the verb *burt* 'do magic' in (26) is always intransitive except for some rare poetic uses. It was already noted above that object backgrounding is no longer the defining feature of the activity deobjective in its present-day function, and it is therefore not astonishing that the construction should, at some moment, have spread to intransitive verbs.

The activity subtype of the deobjective is only weakly entrenched in usage. As mentioned above, the verbs of the original core group (referring to traditionally well-established domestic activity without evaluative nuance) are not very frequent any more. In its new, evaluatively marked variety, the activity type is, however, productive and new instances are created online, so that only corpus research can bring to light their existence. They are apparently characteristic of informal spoken language as well as of the language of the internet, which is intermediate between spoken and written language. Though in Latvian lexicography reflexive forms are regarded as distinct lexemes and listed separately in the dictionaries, the currently productive activity subtype of the antipassive reflexive is not reflected in them at all owing to its occasional character and low frequency. It would be interesting to know when it became productive, but to establish this would probably be difficult: as the type is characteristic of the spoken language, a historical corpus would not necessarily reflect this process.

7. The physical manipulation type of deobjectives

We will now deal in somewhat greater detail with the above-mentioned subtype of 'manipulation' deobjectives, as these regularly occur alongside deaccusatives, which suggests they could have been the source class within which the rise of deaccusatives through expansion of deobjective constructions with oblique objects took place.

The distinguishing feature of manipulation deobjectives is, as already mentioned, that they derive from verbs usually or exclusively taking inanimate objects. What is still involved is the description of a type of physical demeanour abstracted away from the interaction with the external world of which it is normally part. The reflexive morphology utilised to mark this originates as reciprocal marking, and in a first stage the physical demeanour is abstracted from reciprocal physical (sometimes verbal) interaction between humans or animate beings; then an extension occurs in the lexical input of deobjectively used reflexives so as to include descriptions of physical behaviour abstracted from interaction with inanimate objects like tools or other objects of everyday use surrounding us. Unlike the deobjectives of the original core group, the deobjectives resulting from this extension no longer combine their deobjective use with a reciprocal use (though a few lexemes straddle the borderline between the two types, see (18) and (19) above). The verbs of physical manipulation providing the base for such extended use of the originally reciprocal reflexive marking can be divided into several subgroups. Part of them (7.1-7.4) describe the physical manipulation directly, while two subtypes (7.5-7.6) evoke different types of physical manipulation through the auditory effects or light effects they produce. The justification for including these verbs in the 'manipulation' type will be discussed further on. A distinct place is occupied by verbs of caused motion (7.7).

7.1. Operations on amorphous substances

This group comprises *rakt(ies)* 'dig' and its iterative derivates *rakāt(ies)* and *rakņāt(ies)*, as well as *rušināt(ies)* 'loosen (earth) by rooting or digging':

(32)	[Ejot gar	pirti	redzēju,]
------	-----------	-------	-----------

ka	putni		atgriezuš	ies	pie	vecajām
that	bird.No	OM.PL	return.pp	A.NOM.PL.REFL	to	old.dat.pl.f.def
liepām		un	tur	rakņā	sniegu.	
linden.dA'	T.PL	and	there	dig.prs.3	snow.AC	C.SG

'[As I walked past the bathhouse, I saw] that birds had returned to the old linden trees and were digging the snow there.'

laikā (33) *Pēdējā* man iepaticies please.ppA.NOM.SG.M recent.LOC.SG time.LOC.SG 1.SG.DAT rakņātie-s savā dārziņā, audzēt dig.INF-REFL garden.LOC.SG RPO.LOC.SG grow.INF pukes. flower.ACC.PL 'Recently I have come to like digging around in my little garden and growing flowers.'

7.2. Superficial operations on solid objects

Typical verbs of this type include *taustīt* 'feel, probe, search with the hands', *bakstīt* 'poke', *skrāpēt* 'scrape, scratch' etc.

(34) [Pirmais no viņiem gāja,]

taustīdams		ceļu	ar	zarainu	
search	.by.touch.cvв.м.sg	way.Acc.sg	with	knotty.acc.sg	
un	stingru	nūju.			
and	pliant.Acc.sg	stick.acc.sg			

(35) pirksti, kas taustā-s finger.NOM.PL search.by.touch.prs.3-REFL REL.NOM рēс slēdža tumšā telpā. gaismas after light.gen.sg switch.gen.sg dark.loc.sg room.LOC.SG '... fingers that grope about in search of the light switch in a dark room.'

7.3. Operations on collections of small discrete objects

Verbs of this type refer to the manipulation of small objects, and their deobjective counterparts evoke an unspecified fussy and trivial activity. For instance, *krāmēt* 'arrange, stow' refers to the arranging and rearranging of small objects, and the deobjective *krāmēties* usually reflects a person's resentment at having to fuss about with some unimportant business:

(36) [Lielākā dienas daļa paiet pie kafijas tases,]

krāmējot shift.about.cvв	<i>рар</i> і рар	īrus er.acc.pl	<i>no</i> from	viena one.gen.sg.m
galda	uz	otru <>		
table.gen.sg	to	other.Acc	.SG	

'[The greater part of the day goes by with a cup of coffee,] shifting papers from one table to another.'

(37) [Problemātiskie klienti tiek atsijāti pirmie,]

јо	neviens	nevēlas	krāmētie-s			
because	nobody.noм	NEG.wish.prs.3	shift.about.INF-REFL			
ar	naudas	atgūšanu.				
with	money.gen.sg	recovery.ACC.SG				
'[Problematic clients are sifted out first,] because nobody wants to fuss						
about with recovering their money.'						

7.4. Prehensile motion

This type was illustrated with a pair of examples for $gr\bar{a}bst\bar{t}t(ies)$ 'grasp' in (16) and (17) above. Other verbs belonging here are $gramst\bar{t}t(ies)$ and $gr\bar{a}b\bar{a}t(ies)$, which do not differ notably in meaning from $gr\bar{a}bst\bar{t}t$.

7.5. Sound effects produced by physical manipulation

All verbs of this group are based on morphologically marked causatives derived from sound verbs: *čabināt* from *čabēt* 'rustle', *čaukstināt* from *čaukstēt* 'rustle, crackle', *grabināt* from *grabēt* 'clatter, rattle', *klabināt* from *klabēt* 'rumble, clatter', *klibināt* '(make) clatter' (with no attested intransitive base), *klikšķināt* from *klikšķēt* 'click'. Whereas in English such verbs can be both intransitive and transitive (*his papers rustled : he rustled his papers*), Latvian requires overt causative marking for the transitive use:

(38) <...> tauta jau stāv rindā un people.NOM.SG already stand.prs.3 queue.LOC.SG and nepacietībā čaukst-ina banknotes. impatience.LOC.SG rustle-CAUS.PRS.3 banknote.ACC.PL [tvīkstot pēc iespējas tās iztērēt.] '<...> people are already standing in the queue and impatiently rustling banknotes [burning with desire to spend them.]'

The following table shows the type of nouns these transitive sound verbs take as objects:

čabināt 'rustle'	<i>lapas</i> 'leaves', <i>papīrus</i> 'papers', <i>maisu</i> 'bag', <i>turzu</i> 'paper bag'
<i>čaukstināt</i> 'rustle, crackle'	<i>papīrus</i> 'papers', <i>lapas</i> 'leaves', <i>avīzes</i> 'newspapers', <i>maisu</i> 'bag', <i>turzu</i> 'paper bag'
grabināt 'clatter, rattle'	grabuli 'rattle', naudu / kapeikas / santīmus / monētas 'coins', traukus 'kitchenware', instrumentus 'instruments'
<i>klabināt</i> 'rumble, clatter'	<i>zobus</i> 'teeth', <i>taustiņus</i> 'keys', <i>klaviatūru /</i> <i>tastatūru</i> 'keyboard', <i>knābi</i> 'beak'
klibināt 'clatter'	<i>tastatūru</i> 'keyboard'
klikšķināt 'click'	<i>taustiņus</i> 'keys (of a keyboard)', <i>peli</i> '(computer) mouse'

Table 3. Types of objects with transitive sound verbs

The causatives usually occur in transitive constructions; there are occasional intransitive uses which we will not discuss in detail here. As we can see from the definitions in LLVV, the verbs of the group *klabināt* 'rumble, clatter', *klibināt* 'clatter', *klikšķināt* 'click' are also associated with riding a horse, due to the sounds produced by horseshoes, and *grabināt* 'clatter, rattle' in Mühlenbach and Endzelin's dictionary (ME) has an additional meaning 'drive about in a vehicle'. These are clear instances of lexicalisation in intransitive use. An example is shown in (39):

(39) *uzsauca braucējam ... grabini* ātrāk call.out.PST.3 driver.DAT.SG **rattle.CAUS.IMP.2SG** quicker *uz priekšu!* forward '[He] called out to the driver: Rattle forward swiftly!'

The deobjectives derived from causative sound verbs refer to an unspecified activity of the subject producing a sound of the type described by the verb:

(40) zem vecās mājas grīdas sāk under old.gen.sg.f.def house.gen.sg floor.gen.sg begin.prs.3 grabinātie-s pele. rattle.INF-REFL mouse.NOM.SG 'Under the floor of the old house a mouse starts rustling.'

When we compare such constructions with the causative construction in (38), a conspicuous difference is that the object emitting the sound effect under the impact of the subject's manipulation remains unspecified. This part of the semantic content being backgrounded, a relatively greater weight is laid on the motion, manipulations etc. of an animate subject. This metonymic shift from the sound effect to the motion or manipulation producing it can also be seen in the above-mentioned intransitive uses of the causatives derived from sound verbs (see ex. (39)). In this sense the constructional meaning of the deobjective construction referring to a certain type of physical behaviour conceived as self-contained is realised in this case as well; the causation of a sound effect is rather a means of identifying the type of manipulation.

There are, however, instances where a verb of the type described here occurs with an inanimate subject:

(41)	Durvis	ik pa laikam	grab-inā-s.
	door[pl].nom	every now and then	rattle-caus.prs.3-refl
	'The door rattles	every now and then.'	

In such cases two elements of the semantic characterisation just given are absent: first, the object emitting the sound effect is not left unspecified—it is clearly the subject referent that functions as sound emittor. Secondly, the subject referent being inanimate, there can be no agency—self-controlled motion or manipulation—identified on the basis of the sound effect. The constructional meaning of the deobjective is therefore clearly not realised here. The reflexive causative is, for all practical purposes, identical to that of the corresponding intransitive sound verb (*durvis grab* 'the door rattles'). The function of the reflexive derivation could be described as anticausative. However, the deobjective origin of the reflexive form in uses like this is not in doubt. A kind of metaphorisation is apparently involved here, just as in other cases of extension of a deobjective formation to inanimate subjects (cf. the above-mentioned case of Latvian *matiņi skrāpējas* 'the stubbles scratch', Russian *krapiva žžetsja* 'the nettles burn' etc.).

7.6. Light effects produced by physical manipulation

This subtype is analogous to the one discussed in 7.5 but is much less important. Like the sound type, it consists of verbs with overt causative marking and comprises but a few verbs: *spīdināt*, causative of *spīdēt* 'shine' and *zibināt*, causative of *zibēt* 'glitter, flash'. Examples (42) and (43) illustrate the transitive use and the deobjective reflexive respectively:

- (42) Marka laukumā laudis baro Mark.gen.sg square.LOC.SG human.NOM.PL feed.prs.3 baložus, [...] un zibina fotoaparātu pigeon.ACC.PL and flash.prs.3 camera.GEN.PL objektīvus zibspuldzes uz nebēdu. un flashbulb.ACC.PL lens.ACC.PL and to one's heart's content 'At Piazza San Marco people feed the pigeons [...] and flash their camera lenses and flashbulbs to their heart's content.'
- (43) [Noslēpumainais radījums peldēja pa ūdens virsmu pāris sekundes,]
 zibinotie-s vairākās krāsās.
 flash.cvb-REFL various.LOC.PL colour.LOC.PL
 '[The mysterious creature swam on the surface of the water for a few seconds]
 flashing around in various colours.'

7.7. Caused motion

This subtype comprises verbs like *staipīt* 'drag, pull', *stīvēt* 'drag, lug'. It is illustrated in example (19) above.

All the subtypes here enumerated have been found in the corpus alongside deaccusative constructions. For considerations of space, we will not illustrate the deaccusative counterparts of all subtypes; the exemplification in the next section involves a verb of subtype 7.1.

8. From deobjective to deaccusative

A deaccusative reflexive is originally a deobjective reflexive expanded with an oblique object. We assume this process of expansion to have taken place in the class of 'physical manipulation verbs' characterised above, as verbs of this class show a systematic coexistence of deobjective and deaccusative formations. For most subtypes the process of expansion starts out from an optional adverbial phrase locating the event in space. This situation is illustrated in (44):

(44)	[Tirgotāji un ražotāji, protams, būs pret, bet patērētājiem ir jābūt
	iespējai nopietnāk patestēt,]

nekā	tikai	pa-grābstītie-s	veikalā	pāris
than	just	delim-grab.inf-refl	shop.loc	a.few
minūtes	5			
minutes	S.ACC.PL			
[un aps	katīt jūtr	ubā atsauksmes].		
'[Vendo	rs and m	anufacturers will be against i	t, of course, b	ut consumers
should l	nave mor	e serious testing opportunitie	s] than just gi	abbing about
for a fev	v minutes	s in the shop [and looking at tl	ne comments o	on YouTube.]'

Here the object of manipulation (a shop item) is implicit, and the locative phrase is undoubtedly an adverbial modifier. Subsequently the locative phrase may be narrowed so as to refer to the part of space specifically affected by the activity, so that it becomes unclear whether the locative phrase is just a location for the event or the object affected:

(45) [Kad viņš izlīdīs no sava patvēruma, lai atrastu barību, viņš tiks parkā,] kur grābstīsie-s atkritumos pie where grab.FUT.3-REFL garbage[PL].LOC near kioskiem.
kiosk.DAT.PL
'[When it gets out of its hiding place in search of food, it will get into the park], where it will rummage in the garbage next to the kiosks.'

Here it is not obvious whether the garbage is just a location or the object of manipulation. But the situation is different in (46), which has the preposition *gar* instead of the locative:

(46) [Domājat, ka man mamma neteica, ka uguns ir sāpīte? Teica gan.] Un. vienalga, pamēģināju es and all.the.same try.pst.1sg 1SG.NOM pa-grābstītie-s sveces liesmu. gar DELIM-grab.INF-REFL along candle.gen.sg flame.Acc.sg '[Do you think my mum didn't tell me fire hurts? She did.] And all the same I tried to grab at the flame of the candle.'

Here the flame cannot be seen as a location where the event takes place; rather, it is the object of the kind of manipulation expressed by the verb. Compare also the following, which is analogous to (46) but shows metaphorical transfer, with emotions being compared to physical objects being manipulated and the verb refers to mental impact rather than physical manipulation: (47) [Un es izjutu riebumu, kādu izjūti, kad saproti, ka ar tevi cenšas manipulēt,] grābstotie-s netīri gar tavām vilelv grab.cvb-refl along your.DAT.PL.F vissvētākaiām iūtām. feeling.DAT.PL holiest.DAT.PL.F.DEF '[And I felt the kind of disgust which you feel when you understand somebody is trying to manipulate you,] vilely playing about with your most sacred feelings.'

The adverbial interpretation being excluded in (46) and (47), we can only interpret the oblique phrase as an object. The cline here described between the construction with a locative adverbial phrase added to a deobjective reflexive and that with an oblique object borrowing its morphological shape from locative phrases marks the transitional zone between the deobjective and the deaccusative construction.

The pathway here outlined for the rise of deaccusative reflexives is probably not the only one. Non-reflexive verbs may also combine with oblique objects, which is a device for conveying diminished semantic transitivity in its own right; it is observed in several languages, including English, cf. *was lugging a heavy suitcase upstairs* and *was lugging at a heavy suitcase* (the conative alternation, see Levin 1993, 41–42). The same can be found in Baltic:

(48) Nu kā var ъа miskasti be.able.prs.3 PTC how about waste.container.ACC.SG rakņājošā bomža balsi dig.ppa.gen.sg.m.def homeless.gen.sg voice.Acc.sg pielīdzināt augsti intelektuālajiem equate.INF highly intellectual.DAT.PL.M.DEF neta komentētājiem. commenter.DAT.PL. internet.GEN.SG 'How can you treat the voice of a tramp who digs around in a waste container on a par with highly intellectual internet commenters.' (49) Pabeiguši vienu, iet pie otra

finish.ppa.nom.pl.m other.GEN.SG.M one.ACC.SG go.PRS.3 to un tādām netīrām rokām. ar pat and with such.dat.pl.f PTC dirty.dat.pl.f hand.dat.pl ar tiem pašiem netīriem with dem.dat.pl.m same.DAT.PL.M dirty.dat.pl.m pirkstiem grābsta рa tavu ģīmi. finger.DAT.PL about grab.prs.3 your.ACC.SG face.Acc.sg

'When they are finished with one, they go to another and with the same dirty hands, with the same dirty fingers they grab at your face.'

This oblique marking of objects reflecting diminished transitivity may combine in a natural way with verbs already marked for diminished transitivity by means of the deobjective (formally reflexive) derivation. In this way a deaccusative construction arises:

regulāri	cilvēki		mēdz		rakņātie-s
regularly	human.noм	I.PL	be.used.pr	as.3	dig.INF-REFL
miskastēm		un	cik	labi	
waste.conta	iner.dat.pl	and	how	well	l
s	viņi		mēdz		būt.
A.NOM.PL.M.R	EFL 3.NOM	I.PL.M	be.use	d.prs.	3 be.inf
new place of	residence I o	ften fee	el surprise	d at]]	how regularly
lig around in	waste contai	ners an	d how we	ll-dres	ssed they tend
	regularly miskastēm waste.conta s A.NOM.PL.M.R new place of	regularly human.NOM miskastēm waste.container.DAT.PL s viņi A.NOM.PL.M.REFL 3.NOM new place of residence I o	regularly human.NOM.PL miskastēm un waste.container.DAT.PL and s viņi A.NOM.PL.M.REFL 3.NOM.PL.M new place of residence I often fee	regularly human.NOM.PL be.used.PF miskastēm un cik waste.container.DAT.PL and how s viņi mēdz A.NOM.PL.M.REFL 3.NOM.PL.M be.use new place of residence I often feel surprise	regularly human.NOM.PL be.used.PRS.3 miskastēm un cik labi waste.container.DAT.PL and how well s viņi mēdz

So there were apparently at least two processes feeding into the rise of deaccusatives: adverbial modification in the deobjective construction and the carrying over of oblique object marking into deobjective constructions. In view of the diversified origin of the constructions put to use in the deaccusative construction, it is clear that there cannot be one single uniform pattern for the oblique expression of the object; rather, one finds a great variety of constructions, some of which have become more entrenched than the others, without any of them gaining absolute predominance. We will present the results of our corpus research in section 10. But first we will comment on the lexical content of the oblique object phrases in its relation to the lexical range of subjects in the corresponding transitive constructions.

9. The range of objects in deaccusative constructions

Within the lexical class discussed here—that of verbs of physical manipulation—the range of objects introduced in the deaccusative construction does not completely coincide with that of original objects of the transitive construction. This is not unexpected considering that the rise of the deaccusative construction is, historically, a complex process consisting of two distinct operations—the suppression of the object in the deobjective construction⁷ and the introduction of a new oblique object in the deaccusative construction. In many cases this leads to a situation in which the same complement can appear as a direct object in the transitive construction and as an oblique complement in the antipassive construction, which creates the impression of one single construction with optional oblique expression of the object.⁸ This situation is illustrated in (51) and (52):

- (51) *Paēduši* sākam **krāmēt** somas <...> eat.part.PST.act.NOM.PL.M start.PST.1PL **pack.INF** bag.ACC.PL 'After eating we started packing our bags <...>'
- (52) [Man vienkārši noveicās, ka vagons bija vismazākais un ļoti labi pārredzams] (līdz ar to tā mierīgi krāmētie-s рa because of that calmly rummage.INF-REFL around svešām somām nevarēja) <...> strange.DAT.PL.F bag.dat.pl. NEG.be.able.pst.3 '[It was simply my luck that the passenger car was very small and easily seen from end to end] (because of that one wouldn't have been able to rummage around strangers' bags unhindered) <...>'

But we will also find examples where the oblique object of the deaccusative construction has no counterpart in a transitive object, e.g. *rakņāties atmiņās* 'delve in one's memories' has no transitive counterpart **rakņāt atmiņas*.

The case of rak native atminas 'delve in one's memories' vs. the non-existent *rak native atminas represents one of many examples of metaphorisation characterising the deaccusative construction whereas it is less pronounced or completely absent in the transitive construction. This metaphorisation often goes in hand, on the part of the object, with metonymic processes. This is shown in (53), where the noun $d\bar{l}zeli$ 'diesel-driven vehicles' stands metonymically for a more abstract meaning of 'transportation with diesel-driven vehicles':

(53)	Nevajag	grābātie-s	gar	dīzeļiem,
	NEG.be.needed.prs.3	grapple.INF-REFL	along	diesel.dat.pl

⁷ Diachronically, there was of course no suppression, just semantic reinterpretation of certain types of reflexive verbs as deobjective. The notion of suppression makes sense only synchronically as a means of formulating the difference between a deobjective and the corresponding transitive verb, like *stumdīties* as against *stumdīt* 'push', or *grābstīties* as against *grābstīt* 'grab'.

⁸ E.g. 'the patient is either inexpressible or optionally expressed' (Heaton 2017, 63)

ledu.

[*ja nevari pacelt servisu pēc tam!*] 'There is no point in grappling about with diesel vehicles [if you cannot assure proper service afterwards].'

A second reason for differences between the range of objects occurring in the deaccusative construction and that observed with the transitive verb is to be sought in variation in object assignment. The verbs of physical manipulation deriving antipassives often show alternations in argument realisation, and in such cases the deaccusative construction may pick out just one of the alternating patterns. This will never be the theme argument but the locative argument. This can be illustrated with *skrāpēt* 'scratch', a verb of the 'wipe' type in Levin's (1993, 125) classification:

(54)	<>7:0	o j	au	skrāpē	ju	ledu	
		8	already	scratch	PRS.1SG	ice.Acc.sg	
	no	1	mašīnas.				
	from	C	ar.gen.sg				
	'At 7 am	I am a	lready scr	atching	the ice from	1 my car.'	
(55)	<i>Kā</i> how	<i>ar</i> with	nagiem nail.dA		skrāpētie- scratch.in		pa about

ice.Acc.sg 'It's like scratching about with your nails on ice.'

While in (54) *ledus* 'ice' is a theme, in (55) it is a location. When the transitive verb shows an alternation in argument realisation, it is not always the case that only one of the alternating patterns is taken as a base for the deaccusative construction. The verb $kr\bar{a}m\bar{e}t$ 'arrange, stow', for instance, is a verb of the 'spray'/'load' type (Levin 1993, 117–118) and it can take not only the locative argument but also the theme as object. A specific feature of $kr\bar{a}m\bar{e}t$ (not shared by all 'load' verbs) is that it requires a composite theme argument expressed by a plural noun phrase. The set of theme objects can be conceptualised as defining a space through which one can move, and this is exploited in the deaccusative construction, which substitutes a locative expression with *ap* for the theme argument:

(56) Krāmējot somā mantas,
pack.cvB bag.LOC.SG thing.ACC.PL [kuras rīt no rīta jāņem līdzi, aizdomājos, kāpēc es to daru <...>]
'As I was packing things into the bag [that needed to be taken along in the morning, I paused to think why I was doing it <...>]'

(57) [Pirmām kārtām tiek atvilkta elpa, tad tiek izvilkti pāris aliņi,] nu un pēc tam pamazām tiek РТС and after that little.by.little get.PRS.3 sākts krāmētie-s аÞ mantām. rummage.INF-REFL about thing.DAT.PL start.ppp.nom.sg.m 'First a short rest is in order, then a couple of bottles of beer are produced, and then, little by little, one starts rummaging around with the things.'

Surface-impact verbs deserve a special mention here. Their semantics often involves an impact that is dispersed over a surface or space, so that the object can easily be reconceptualised as a location for the impact. This reconceptualisation is frequently exploited by the deaccusative construction. This is illustrated by $taust\bar{\iota}t$ 'feel, search by touch', which involves tactile contact dispersed over a surface (usually with the aim of assessing the physical properties of an object):

(58) Taustot diegu, tas bija biezs.
 feel.cvв thread.Acc.sg it.nom be.pst.3 thick.nom.sg.м
 'When one felt the thread, it felt thick.'

The reconceptualisation of the object of dispersed impact as a space opens the way for the introduction of new oblique objects not normally (or just rarely) occurring as objects of the transitive *taustīt*, like, e.g., *kabata* 'pocket', which defines the container searched for the presence of an object within it:

(59) Neikens taustījā-s pa kabatām,
PN.NOM feel.PST.3-REFL about pocket.DAT.PL
[jo tur noteikti kaut kam vajdzēja būt ieliktam <...>]
'Neikens felt in his pockets, [convinced that something must have been put in there].'

Apart from containers, this class of oblique objects also includes virtual locations like contents of a file that one physically manipulates with a keyboard or a mouse, as in (60).

(60) [Toreiz nedēļu sabiju aiz letes un ievilku tur portatīvo datoriņu,]
lai varētu bakstītie-s pa savām
so.as be.able.IRR prod.INF-REFL about RPO.DAT.PL.F
tabulām <...>
table.DAT.PL

'[I spent a week behind the counter at that time and I dragged my portable computer with me] so I could prod about in my tables.'

The asymmetry in the ranges of objects used in transitive and deaccusative constructions manifests itself in frequency as well—see Table 2. These facts taken together—object selection and relative frequencies show that within this lexical class the antipassive (both deobjective and deaccusative) is strongly lexical, having the characteristic properties of derivation rather than inflection.

10. Lexical sources for oblique object marking

The oblique object of the deaccusative construction is usually encoded with one of four prepositions: *pa* 'about', *ap* 'around', *gar* 'along', *ar* 'with', or with the locative case. *Pa* 'about', *ap* 'around', *gar* 'along' group with the locative under the locative subtype of the construction; *ar* 'with' alone represents the instrumental subtype (Holvoet 2020, 67–68). The two subtypes represent cross-linguistically attested strategies (Palmer 1994, 178). The coexistence of prepositions with locative and instrumental meaning as alternative markers of the oblique object has a parallel in Chibchan (Heaton 2017, 210–211).

Although the prepositions, as well as the locative, are also found within adverbial modifiers in the deobjective construction, they are regularly used for marking the oblique object of the deaccusative construction. Other prepositions, like *pie* 'to, at' in (61), can be occasionally employed by the deaccusative construction, but they normally introduce adverbial modifiers.

(61)	Vai	pie	jaunas	un	platas	trepju
	Q	at	new.gen.sg.f	and	wide.gen.sg.f	stair.gen.pl
	margas	6	ir	vieglāk	grābstītie-s?	
	railing.GEN.SG be.PRS.		be.prs.3	easier	grapple.INF-REFL	
	'Is it easier to grab onto a new and wide stair railing?'					

It is common for verbs to combine alternatively with more than one preposition and/or the locative, but only few verbs combine with all possible markers. The choice of the marker(s) is loosely associated with the meaning of a verb. Operations on amorphous substances frequently involve *pa* 'about' (63) or the locative (62).

(62)	Viņš	sēž,	lasa		avīzi	
	3.SG.NOM.M	sit.prs.3	read.prs	.3	newspaper	r.ACC.SG
	vai	rakņāja-s		grān	natās,	bet
	or	dig.around.prs.	3-REFL	book	LOC.PL	but
	es	rakstu.				
	1.SG.NOM	write.prs.1sg				
'He is sitting, reading a newspaper or digging around in his b						his books,
	but I'm writi	ng.'				

(63) Es sāku rakņātie-s tur ра 1SG.NOM there start.pst.1sg dig.around.INF-REFL about dažām grāmatām, some.DAT.PL book.dat.pl [kas istabas kaktā bija saliktas uz plaukta.] 'I have started digging among some books there [that were placed together on the shelf in the corner of the room].

Verbs of prehensile motion favour *pa* 'about' (64), *ap* 'around' (65) and *gar* 'along' (66).

- (64) Kad elektriķis sāka pa when electrician.NOM.SG start.PST.3 about vadiem grābstītie-s, cable.DAT.PL grapple.INF-REFL [izsita drošinātāju auto.]
 'When the electrician started grappling around the cables, [a fuse blew in the car].'
- (65) [Saprātīgs vecāks neļaus bērnam spēlēties ar pielādētu ieroci,] neļaus braukt ar motociklu vai NEG.allow.FUT.3 drive.INF with motorbike.ACC.SG or gramstītie-s ap elektrības vadiem.

grapple.INF-REFL **around** electricity.GEN.SG cable.DAT.PL '[Any reasonable parent will never allow their child to play with a loaded gun,] will never allow them to ride a motorbike or grapple around electric cables.'

(66)	Kāds		no	mājdz	īvnieki	em,	bet	varbūt
	some.non	I.SG.M	from	pet.da	T.PL		but	possibly
	pat	abi <>		ir	g	ramsti	jušie-s	
	even	both.no	M.PL	be.prs	.3 g	rapple	.PPA.NO	M.PL.M-REFL
	gar	vadiem		un	sagra	uzuši		Viasat
	along	cable.DA	AT.PL	and	chew.	PPA.NC	OM.PL.M	Viasat

kasteselektrībasvadu.box.GEN.SGelectricity.GEN.SGcable.Acc.sG'One of the pets, probably even both <...> have grappled around thecables and chewed the electric cable of the Viasat box.'

The preposition *ar* 'with', associated with the instrumental subtype of the deaccusative construction, combines with verbs referring to caused motion (67).

(67)	[Sākumā gan i	zlemjam nobāzētie.	s viesnīcā,]				
	lai nav jāstaipā-s apkārt						
	in.order.to	NEG.be.prs.3	deb.haul.prs.3-refl	around			
	ar	koferiem <>					
	with	suitcase.dat.pl					
	'[We decide to settle in the hotel for a start], so that we don't have to						
	haul around the suitcases <>.'						

But *ar* 'with' is also found with verbs with a meaning that involves rearranging and moving things around, and such verbs are also alternatively found with the markers of the locative subtype, which makes them similar to verbs of prehensile motion or those referring to operations on amorphous substances.

(68)	Ļoti	patīk	knibinātie-s	ar	
	very	please.prs.3	potter.about.inf-refl	with	
	dažādiem	!	rokdarbiem.		
	various.D 'I like ver		handicraft.dat.pl tter about with various hand	dicrafts.'	
(69)	Man	patīk	knibinātie-s	ар	

(69) Man patik knibinatie-s ap
 1SG.DAT please.PRS.3 potter.about.INF-REFL around maziem rokdarbiem.
 small.DAT.PL.M handicraft.DAT.PL
 'I like pottering about small handicrafts.'

Although sound-effect verbs favour the locative subtype, they are also sometimes found with *ar* 'with'.

(70)	[Laimīgā kārtā karti pieņēma]				
	un	nebūs	vajadzība	grabinātie-s	
	and	NEG.be.FUT.3	need.nom.sg	rattle.INF-REFL	
	<i>ar</i> with	sīceni. cash.Acc.sg			

'[Fortunately they accepted the card,] and there will be no need to jingle with cash.'

(71) [Pamostos no tā,]

ka	kāds	no	kolēģiem		
that	someone.NOM.SG.M	from	colleague.dat.pl		
jau	grabinā-s	gar	kastroļiem <>		
already	rattle.prs.3-refl	along	pot.dat.pl		
'[I was awakened by the sound of] some of my colleagues clattering					
with pots <>'					

11. The relationship between deobjectives and deaccusatives

The co-occurrence of deobjectives and deaccusatives within the class of physical manipulation affords the possibility of comparing the functions of the two constructions. Let it be repeated here that the deaccusative is not simply a deobjective expanded with an optional adverbial. Though deobjectives may undoubtedly be expanded with adverbials, they are also expanded with oblique phrases that can only be interpreted as complements, and it makes sense to restrict the notion of deaccusatives to the latter.

The two types of deobjectives described above—behaviour-characterising and activity deobjectives—have in common that their implicit objects are generic or potential. Deaccusatives, on the other hand, often have quite individualised and referential oblique objects. Let us repeat example (64) from above:

(72)	Kad	elektriķis	sāka	ра		
	when	electrician.NOM.SG	start.pst.3	about		
	vadiem	grābstītie-s,				
	cable.dat.	.PL grapple.INF-	REFL			
	[izsita droš	inātāju auto.]				
	When the electrician started grappling around the cables,					
	[a fuse blev	w in the car].'				

As mentioned above, incomplete affectedness of the object has often been invoked in the literature to characterise the semantic effect of the antipassive derivation. In (72) we are dealing with a surface impact that does not produce the desired effect although in this case it produces an undesirable side effect. It seems plausible, therefore, that low object affectedness is the antipassive feature that should be invoked here.

As pointed out in Holvoet (2017), the deaccusative construction often has, when compared to the original transitive construction, an atelicising effect. The transitive verb *taustīt* 'feel, probe' has a perfective counterpart *aptaustīt* 'feel, probe completely, from all sides', suggesting the whole surface of an object has been probed. The corresponding deaccusative construction, on the other hand, is atelic and can be perfectivised only through the addition of the delimitative prefix *pa*-, which expresses a limited temporal quantum of an atelic situation:

(73) Viņš ap-taustīja krēslu no he.NOM TEL-feel.PST.3 chair.ACC.SG from visām pusēm all.DAT.PL.F side.DAT.PL
[un secināja, ka šis nav krēsls ar sviru, ar kuru var regulēt krēsla augstumu.] 'He probed the chair from all sides [and concluded it was not a chair with a lever enabling regulation of the seat height.]'

(74) Pa-meklēju internetos, pa-taustījo-s
 DELIM-search.PST.1SG internet.LOC.SG DELIM-feel.PST.1SG-REFL
 ap trenažieri
 about training.machine.ACC.SG
 [un aizdomas apstiprinās: manam CycleOps Fluid2 ir iztecējis

šķidrums] <...>

'I checked on the internet, probed my training machine here and there [and my suspicions were confirmed: the liquid had leaked from my CycleOps Fluid2.]'

It would be an oversimplification, however, to say that low prominence is the defining feature of deobjectives whereas in the deaccusative construction it is replaced with low object affectedness. We also find uses of the deobjective in which the implicit object is not generic or potential but contextually retrievable. Let us consider (75) and (76), which contain the recent borrowing *skrollēt* (from English *scroll*). (75) shows the transitive construction:

(75)	Vienīgā	acīm	redzamā	
	only.nom.sg.f.def	eye.dat.pl	visible.nom.sg.f	.DEF
	problēma	bija	skrollējot	ekrānu
	problem.noм.sg	be.pst.3	scroll.cvb	screen.ACC.SG

[ar daudzām horizontālām un ļoti kontrastainām līnijām kalendāra sadaļā <...>] 'The only obvious problem was with scrolling down a screen [with many starkly contrasting horizontal lines in the calendar field].'

This verb occurs in a deobjective construction in (76):

 (76) <...> [un lai tiktu no saraksta viena gala uz otru,] anāk pamatīgi skrollētie-s. be.needed.PRS.3 thoroughly scroll.INF-REFL '[And in order to get from the top of the list to the bottom,] one has to do a lot of scrolling.'

This means many screens have to be scrolled down, but this is not an instance of the generic activity of scrolling down screens, even though in the modern world 'scrolling' could be recognised as a socially well-established type of activity like reading, painting, fishing etc. What is referred to is the scrolling down of the number of screens needed to reach the bottom of the list, which is basically a telic event. There is no suggestion that the scrolling is ineffectual or leads nowhere. In other words, neither the feature of genericity nor that of cancellation of causative entailment will help us out here. A similar situation is found in (78), though here the meaning of the verb is more abstract. However, we could still treat the verbs *lutināt* 'indulge, pamper' and *auklēt* 'nurse, act nurturingly or protectively' as a kind of manipulation verbs if we start out from an original meaning 'handle with care':

(77) [Un piekrītu, ka dvīņu gadījumā jo sevišķi vajag režīmu ...] vēl vairāk vienu var ar with one.Acc.sg still be.able.prs.3 more lutinātie-s auklētie-s. un indulge.INF-REFL and nurse.INF-REFL [bet ar diviem vienkārši, tas ir ļoti grūti, gandrīz neiespējami!] '[And I agree that especially in the case of twins a regimen is needed...] with one child you can engage in pampering and caring, [but with two it's simply too difficult, almost impossible.]

The object is, again, contextually retrievable: if you have one child, you can afford to pamper it. The purpose, which is that of rearing the child in a satisfactory manner, is, in this case, taken for granted. What (76) and (77) have in common is that there is a desirable change of state which is

not negated but known, or taken for granted. A final example of interest here is (78):

(78) Minūtes desmit rakāmie-s, minute.ACC.PL ten dig.PST.1PL-REFL
[kamēr dabūjam Foresteri no kupenas laukā.]
'We had to dig some ten minutes
[before we got the Forester out of the snowdrift.]'

To be noted here is the use of *rakt* 'dig' rather than *rakņāt* 'dig [ITER], turn up, root, rummage'. Whereas the iterative *rakņātie-s* is used for chaotic and ineffectual digging, and therefore particularly fit to be used in antipassive constructions conveying precisely this semantic feature (cf. examples (62) and (63) above), it is not used here because the agency is goal-directed and effective—the achievement of the goal is defocused but not negated.

These examples suggests that the feature of ineffectual agency or cancellation of the change-of-state implication is absent in the deobjective construction, but we can nevertheless detect a common feature: when the change-of-state is given or taken for granted, we can focus on the process leading to it and view it, so to speak, as a self-contained event, an effect similar to that achieved when the change of state is negated.

Assuming that there is a connection between the feature of incompleteness involved in deaccusatives and that of defocusing of a change of state that is taken for granted in the case of deobjectives, we could suggest a possible pathway for the rise of deaccusatives out of deobjectives. Deobjectives could, for instance, start out as a means of referring to events with non-prominent (generic or potential) objects. Then, in an extension, they could start denoting events whose implicit patients are not generic and unidentified but specific and known, without, however, ceasing to focus on the subject's agency because the change of state involving the patient is abstracted away from. This could pave the way for the introduction of oblique objects.

The idea, expressed in Holvoet (2017), that the constructional meaning of the deobjective is low object prominence whereas that of the deaccusative is low object affectedness is also not quite satisfactory in that there are obvious common features shared by the two constructions which could be formulated in terms of an inheritance relation. These common features cannot be restricted to 'low transitivity', though low semantic transitivity in the sense of Hopper & Thompson (1980) is undoubtedly a prototype underlying both low object prominence and low object affectedness, as already pointed out by Cooreman (1994). The common element is apparently that both antipassive constructions afford the possibility of focusing on the subject's agency as if it were a self-contained event, even though the presence of an object at which the agency is directed is often notionally indispensable. In the deobjective construction there is no single motivation for this conceptualisation of the subject's agency as a self-contained event: genericity of the object may be a reason, but defocusing of the change-of-state is also a possible motive. The deaccusative inherits this feature of self-containedness of the subject's agency but adds that of low affectedness of the patient.

12. Deaccusative constructions beyond the physical manipulation type

The class of physical manipulation is the likely source class of the deaccusative construction and, in a sense, has remained the class within which it is at home. Deaccusatives have, however, expanded beyond this class through processes of metaphorisation and also, to some extent, metonymy, which were already briefly mentioned in section 8. Processes of metaphorisation are also observed in the use of deobjectives from manipulation verbs, as mentioned above. In the case of deaccusatives these processes are reflected in lexical selection principles for oblique objects and thereby become grammatically relevant.

The targets of metaphorical extensions include:

(a) objects of mental activity, intentionality

(79)	Mums	nav	laika	grābstītie-s		
	1PL.DAT	be.prs.3.neg	time.gen.sg	grapple.INF-REFL		
	ар	kādiem	iedomu	tēliem,		
	about	some.dat.pl.m	phantasy.gen.pi	image.dat.pl		
	[lietas ir jā	sauc īstajos vārdos.]			
	'We have no time to grapple with some images of our phantasy,					
	[we have to call things by their real names.]'					

(b) loose engagement in a sphere of human activity

(80)	[Kādu laiku	atpakaļ]		
	es	nedaudz	pa-bakstījo-s	ar
	1SG.NOM	a.bit	DELIM-prod.PST.1SG-REFL	with

elektronisko apmācību materiālu electronic.ACC.SG.DEF teaching.GEN.PL material.GEN.PL veidošanu. design.ACN.ACC.SG '[Some time ago] I had a shot at designing electronic teaching aids.'

(c) inquisitive activity

(81) Tomēr, rakņājotie-s pa šiem sarakstiem, yet dig.cvb-refl about DEM.DAT.PL.M list.DAT.PL [es sapratu, ka ir pietiekami daudz grāmatu un autoru, par kurām neko nezinu.]

'Yet, while ploughing through these lists, [I understood there are more than enough books and authors about which I don't know anything.]

All these subtypes contain an evaluative element, usually suggesting that the activity referred to is futile, insignificant or not quite serious.

13. The antipassive constructions of Latvian: an overview

The aim of this article was to investigate a group of Latvian reflexivemarked verbs that can be characterised with the aid of the notion of antipassive, a voice operation that either suppresses or demotes the object.

Our corpus-based investigation was based on the working hypothesis that the deaccusative must have arisen from expansion of the deobjective construction with an oblique object, while the latter in its turn arose from semantic reinterpretation of a reflexive or reciprocal construction with reflexive marking. The notions of suppression and demotion are therefore diachronically misleading as they make sense only in a synchronic comparison of the deobjective and deaccusative construction with the corresponding transitive construction. This hypothesis was based on notional necessity: it is hardly possible to imagine a single historical process in which the reflexive marking is introduced in the transitive construction and the accusatival object is at the same time replaced with an oblique object. These diachronic assumptions determine the structure of the article and inform the systematisation of the corpus material.

The analysis of the corpus material has substantially improved our knowledge concerning the lexical input and the productivity of the two constructions. The corpus data confirms the existence of two subtypes of deobjectives: the behaviour-characterising subtype, which is more entrenched in usage but low in productivity, and the activity subtype, which is weakly entrenched but freely produced online, so that only corpus data reveal their existence. The status of the class of physical manipulation verbs as the source class for the rise of deaccusative reflexives from deobjective ones, as hypothesised in Holvoet (2017), is confirmed by the corpus material, which shows systematic coexistence of deobjective and deaccusative constructions for verbal stems within this class. Both deobjectives and deaccusatives within this class are strongly entrenched, and their frequency often exceeds that of the corresponding transitive constructions. Finally, we find a number of extensions beyond the physical manipulation type, resulting from various types of metaphorisation. These seem to be productive in the informal spoken language and in the language of the internet.

Among the Balto-Slavonic languages, Latvian stands out by the widespread and productive use of antipassive—both deobjective and deaccusative—reflexive constructions. The activity type of deobjectives seems to have no counterparts in Lithuanian and Slavonic. The robust development of deaccusative constructions (only rudimentarily developed in Lithuanian and Slavonic) is an exception to the general tendency (noted by Heaton 2017, 217) for languages where the antipassive has semantic-pragmatic rather than realigning functions to have only or mainly patientless antipassives.

Abbreviations

ABS — absolutive, ACC — accusative, ACN — action noun, ANTIP — antipassive, AOR — aorist, CAUS — causative, COMP — comparative, CVB — converb, DAT — dative, DEB — debitive, DEF — definite, DELIM — delimitative prefix, DEM — demonstrative, DIM — diminutive, ERG — ergative, F — feminine, FUT — future, GEN — genitive, IMP — imperative, INF — infinitive, INS instrumental, IRR — irrealis, ITER — iterative, LOC — locative, M — masculine, NANTIP — non-antipassive, NEG — negative, NOM — nominative, NREFL — nonreflexive, OBJ — object, PL — plural, PN — personal name, POSS — possessive, PPA — past participle active, PPRA — present participle active, PPP — past participle passive, PRS — present, PST — past, PTC — particle, Q — question marker, REFL — reflexive, REL — relative pronoun, RPO — reflexive possessive, SG — singular, SUBJ — subject, TEL — telicising prefix

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The facilitative middle in Baltic and North Slavonic: An overview of its variation

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The article deals with the facilitative middle, a gram often simply referred to (especially in literature of the formal persuasion) as 'the middle' (e.g., The bread cuts easily). While in the Western European languages this gram is nearly exclusively generic or individual-level (kind-level) and has no explicit agent (these features are correspondingly often regarded as definitional for 'middles'), the Baltic and Slavonic languages have constructions that arguably belong to the same gram-type but often represent stage-level predications, with a non-generic agent that is optionally expressed by an oblique noun phrase or prepositional phrase, or is contextually retrievable. The article gives an overview of the parameters of variation in the facilitative constructions of a number of Baltic and Slavonic languages (individual- or kind-level and stage-level readings, aspect, transitivity, expression of the agent, presence or absence of adverbial modifiers etc.). The semantics of the different varieties is discussed, as well as their lexical input. Attention is given to the grammaticalisation path and to what made the Balto-Slavonic type of facilitatives so markedly different from their counterparts in Western European languages.

Keywords: middle, facilitative, reflexive, Lithuanian, Latvian, Russian, Slavonic

1. Introduction¹

The term 'facilitative middle' is taken over from Kemmer (1993), who has it from Faltz (1977). It is also used in Holvoet, Grzybowska & Rembiałkowska (2015) and Holvoet (2020), but is not otherwise widely used in the literature. In literature of the formal persuasion, which often focuses on English

¹ We thank Peter Arkadiev, Wayles Browne and two anonymous reviewers for insightful and constructive comments. For the remaining shortcomings of the article we are solely responsible. This research has recieved funding from the European Social Fund (project No. 09.3.3-LMT-K-712-01-0071) under grant agreement with the Research Council of Lithuania (LMTLT).

and the Germanic languages, Romance and Greek (e.g., Condoravdi 1989, Fagan 1992, Steinbach 2002, Ackema & Schoorlemmer 2003, Lekakou 2006, Stroik 2006 etc.) this construction is often simply called 'middle', which is an arbitrary narrowing of the meaning this term has in the grammatical terminology of the Classical languages, in that of comparative Indo-European linguistics (Delbrück 1897, 425–432) and in work of the functional-typological orientation such as Kemmer (1993). In its narrowed sense, 'middle' refers to English constructions like (1); in its traditional, broader meaning, 'middle' can also refer to (2) and (3):²

- (1) The bread cuts easily.
- (2) The door closed.
- (3) They washed in the river.

Also to be noted is that in the narrowed sense in which the term 'middle' is used by authors of the formal persuasion, it abstracts away from exponency. What is traditionally called the middle voice is a value of the category of voice, which is usually understood as valency-changing morphology,³ and this would apply to the counterparts of (1)-(3) in German, the Romance languages, Slavonic and Baltic, which use a marker of reflexive origin here, or to Greek, ancient and modern, which uses a special series of endings. The English constructions, on the other hand, have no marking on the verb, so that it is doubtful whether they can be assigned to the domain of grammatical voice. In this article we will sidestep this problem, not only because we will be dealing mainly with Baltic and Slavonic but also because we will be discussing functional types; functionally the English constructions are close to the German or Romance ones with reflexive marking, and together they show important semantic differences when compared to the corresponding reflexive-marked constructions of Baltic and Slavonic. It is these differences we will focus on.

As the term 'middle' in its traditional sense refers to a whole family of syntactically and semantically distinct constructions (of which examples

² At least one study in the formal tradition, Alexiadou & Doron (2012), shows a return to the broader meaning of 'middle' as a category also comprising natural reflexives, anticausatives etc. As the notion of middle in its traditional sense inherited from Classical and Indo-European grammar has proved to be still viable, it deserves to retain its primacy vis-à-vis the narrowed sense in which it is now often used.

³ Cf. Zuñiga & Kittilä's (2019, 4) definition of voice as "...a grammatical category whose values correspond to particular diatheses marked on the form of predicates".

(1)–(3) represent but part), more precise terms are needed to refer to the individual constructions. We use 'facilitative' for (1), while constructions as in (2) are now usually called 'anticausative', and those like (3) could be termed 'naturally reflexive'. Constructions as in (1) have also been referred to as 'potential passive' (Geniušienė 1987), and alongside this we find the term 'modal passive' (used, e.g., in Letučij 2014, 2016), but we regard these terms as not quite felicitous because it is, on the one hand, important to emphasise that our construction is (despite certain similarities) not a subtype of the passive,⁴ and, on the other, 'potential' and 'modal' cover only part of the uses of our construction. We therefore prefer Faltz's and Kemmer's term 'facilitative', though it is basically a mnemonic label rather than a description.

The Baltic facilitatives are dealt with (against the background of Slavonic) in Holvoet, Grzybowska & Rembiałkowska (2015) and Holvoet (2020), where two aspects of this construction are highlighted: first, the co-existence of generic and non-generic uses of the facilitative (mainly in the sense of the genericity of the agent); and, secondly, the possible overt syntactic realisation of the agent in those cases where it is non-generic. These features contrast with the western-type (Romance and Germanic) facilitative, which is (almost) always generic and agentless. The aim of the present article is to discuss a number of important parameters of variation in the corresponding constructions of Baltic and Slavonic. For one Baltic language (Latvian) and one Slavonic language (Russian) we have looked at the facilitatives represented in the corpora, their subtypes and their relative frequencies. The counts based on the corpora are somewhat approximate, as manually filtering out facilitatives from among other types of reflexives sometimes involved subjective decisions, and the same can be said about the process of setting apart semantic subtypes of facilitatives especially in cases where their agent is implicit and only contextually retrievable.

The structure of the article is as follows. After introductory sections on notional matters, demarcation and lexical input, we will discuss, one

⁴ The question is, to a certain extent, terminological, but the passive is usually associated with the pragmatic functions of agent backgrounding and patient foregrounding (cf. Keenan & Dryer 325–328), without the semantic modifications characteristic of the constructions dealt with here. See the discussion in section 8 below.

by one, the parameters of variation opposing subtypes of facilitatives. We will then present some corpus-based quantitative data for two languages (Latvian and Russian), and in the concluding sections we will discuss some aspects of diachrony as well as the place of the facilitative among middle-voice constructions.

2. Definition and demarcation

Formally, a facilitative is a subtype of the middle, marked by whatever means a language uses to express middle meanings, which may be zero marking, as in (4), a reflexive marker that has lost its properly reflexive function, as in (5), or a set of (mediopassive) endings, as in (6):

- (4) This bread cuts well.
- (5) Lithuanian

Ši	skarda	lengvai	karpo-si.
this	tin.noм.sg	easily	cut.prs.3-refl
'This ti	n sheet cuts well.'		

(6) Modern Greek (example from Alexiadou 2014, 22)

Afto	to	vivlio
this.nom.n.sg	DEF.NOM.N.SG	book.nom.sg
diavaz-ete	efkola.	
read-prs.3sg.mpass	easily	
'This book reads we	ell.'	

These markers are also used to convey anticausative and, in some languages, passive meanings, so that we will have to deal with a problem of demarcation.

Syntactically, the facilitative construction is characterised by promotion of the original object, if present, to subject position, as shown in (4)–(6);⁵ and optionally, in certain languages, by the appearance of the original agent (we will refer to it as the quasi-agent, as a true agent is not always involved in terms of semantic roles) in the form of an oblique expression. In the Baltic languages and in most Slavonic languages (with the exception of East Slavonic) this oblique phrase will always be in the

⁵ Polish has a non-promoting facilitative, about which more below.

dative. Russian has a split, marking the oblique agent either with a dative or with a prepositional phrase with *u*; this will be touched upon in 4.4.

The facilitative construction has a constructional meaning that can undergo different modifications depending on the verbal semantics and aspect but can be generalised in the following way: the facilitative is a construction presenting human agency or at least volitionality as a necessary but insufficient condition for the realisation of a type of events or an individualised event. The course of the event is ultimately determined by various factors not dependent on human volition, such as the properties of the patient, the instrument, external circumstances or the agent's psycho-physical state. So, for instance, the determining factor may be:

(i) the design properties of the patient

(7)	Latvian			
	Durvis	vera-s	uz	iekšu.
	door[pl].nom	open.prs.3-refl	to	inside.Acc
	'The door opens inv	ward.'		

(ii) an accidental property of the patient, instrument, location, or external circumstances revealed during agency as a factor affecting the course of the process set in motion by this agency:

(8)	Latvian						
	Šis	audums	man	labi			
	DEM.NOM.SG.M	fabric.nom.sg	1SG.DAT	well			
	krāsoja-s.						
	dye.prs.3-refl						
'I find this fabric easy to dye.'							

(iii) the agent's physical or mental state as a factor affecting the course of the process set in motion by the agency:

(9)	Latvian			
	Viņam	brokastis	ne-ēdā-s.	
	3.DAT.SG.M	breakfast[pl].noм	NEG-eat.pst.3-refl	
	'He ate his breakfast without relish.'			

Historically, facilitatives develop from anticausatives through a process of lexical extension. A type of marking originally applying to events that can be viewed as self-contained and occurring spontaneously extends to verbs denoting processes that notionally necessitate an external agent causing the event, the agency being, however, represented as in some way insufficient to produce the event. As in all such cases of lexical extension, a group of verbs can be identified that may refer to both types of events (necessitating agency or not) and that therefore may be assumed to have been the source group from which the facilitative type expanded. A verb straddling the borderline between the two types is shown in examples (10) and (11):

- (10) Lithuanian (constructed)
 Bato raišteliai at-si-rišo. (anticausative)
 shoe.GEN.SG lace.NOM.PL un-REFL-tie.PST.3
 'The shoelaces came loose (got untied).'
- (11) Bato raišteliai (lengvai) at-si-rišo. (facilitative) shoe.GEN.SG lace.NOM.PL (easily) un-REFL-tie.PST.3
 'The shoelaces untied easily.' (e.g., some agent easily managed to untie the shoelaces)

While (10) describes an instance of the action of the laws of mechanics, (11) presupposes human agency. In many cases an adverbial like 'easily' will enable the identification of the facilitative construction, but this will not always be the case; when no identifying elements are present, we will say the sentence is ambiguous rather than vague between an anticausative interpretation (on which the shoelaces untie without human interference) and a facilitative one (where conscious agency is presupposed).

Part of the Slavonic languages, such as Russian, have not only reflexivemarked anticausatives and facilitatives, but also a reflexive-marked passive, nonexistent in Baltic.⁶ In syntactically and contextually minimally differentiated cases, a Russian reflexive form can have as many as three interpretations—anticausative, facilitative and passive:

⁶ As Geniušienė (1987) shows, reflexives may develop passive meanings, passing through the 'potential passive' (in our terminology, facilitative) stage. The Baltic languages, like German, have stopped at the facilitative stage, while all Slavonic languages have developed a reflexive-marked passive (this apparently happened already in the Proto-Slavonic period). Polish has, however, lost it in the course of the 18th century through syntactic reanalysis as an impersonal, a development that appears to have taken place in colloquial Croatian and Slovenian as well (Uhlik & Žele 2018, 103). In Polish this impersonal has, in its turn, influenced the facilitative construction, which is now usually non-promoting, that is, does not advance the original object to subject position; see subsection 4.7.

(12)	Russian (constructed)		
	Okn	а	otkryvajut-sja.
	wine	dow.nom.pl	open[IPFV].PRS.3PL-REFL
	(i)	'the windows (fly) open' (anticausative)
	(ii)	'the windows c	can be opened' (facilitative)
	(iii)	'the windows a	re (being) opened' (passive)

This threefold interpretation is, however, basically restricted to imperfective verbs like *otkryvat*' in (12), as the reflexive marker is used for passivisation mainly in the case of imperfective verbs; perfective reflexivemarked passives also exist but are infrequent. In a Russian text, deciding which of the three meanings is involved is often difficult without a broader context, which makes corpus searches complicated.

3. The facilitative across verbal classes

Facilitatives develop out of anticausatives, which describe a process involving an object as a self-contained event conceptualised without the participation of an agent; this does not exclude the actual involvement of agency, e.g., *the door opened* may refer to a situation in which somebody is opening the door. This agency is, however, ignored. The typical anticausative is therefore a change-of-state (inchoative) predicate, as a change-ofstate has most chances of being conceptualised as a self-contained event, even if this event has external causes.

Facilitatives do not ignore agency; they presuppose it. *The door opened easily* presupposes that human agency was applied with the aim of getting the door open. *The door opens inward* represents human agency as a necessary condition for the opening of the door, though its opening inward is a result of its constructional properties. The result is ultimately ascribed not to human agency but to factors independent of it. The development from anticausative to facilitative thus involves a reinterpretation of the concept of 'self-contained process': while in the anticausative this self-containedness does not exclude agency as a crucial causal factor (it simply ignores this possible aspect of the event), the facilitative represents agency as a necessary condition while denying it is the crucial causal factor for the process. There is thus a shift from 'abstracting away from possible agency' to '(at least partial) independence from (necessary and presupposed) agency'.

The example of *The door opens easily*, which illustrates how the same lexical item can underlie both an anticausative and a facilitative construction, gives an idea of the putative source class of facilitatives: that of causative verbs occurring in regular pairs characterised as 'inchoative : causative alternations' in Haspelmath (1993), such as open, burn, break etc. Apart from this source class, however, we can identify a core class which is broader than that of verbs participating in 'inchoative : causative' alternations, namely the class that Levin and Rappaport Hovav (in a series of publications, e.g., Rappaport-Hovav & Levin 1998) call 'result verbs' as opposed to 'manner verbs'. Result verbs typically refer to some type of human activity directed toward the achievement of a specific type of result, such as *clean*, fasten, cut, extract etc.; they do not, however, lexically specify the manner in which this result is achieved. Manner verbs, such as wipe or dig, lexically specify manner, and are moreover often associated with a typical result, but they do not lexically specify it. Result verbs are the prototypical input verbs for facilitatives, as, on the one hand, this construction presupposes human agency and, on the other hand, the lexically specified result component allows the achievement of the result to be dissociated from the agency applied to achieve it and on which it is implied to be only incompletely dependent (the tablecloth washes well). Manner verbs, however, also qualify as input for the facilitative construction because of their frequent association with a typical result (*The cat's fur brushes easily*). When a manner verb has no clear association with a certain type of result, a facilitative middle is difficult to derive (??The cat's tail pulls easily). In Baltic and Slavonic, however, the result component can be strengthened by telicising prefixes, e.g. Lithuanian trinti 'rub' is a manner verb, but *i-trinti* 'apply (ointment, shampoo etc.)' has a result component introduced by the prefix and therefore provides suitable input for a facilitative derivation:

(13) Lithuanian

[Šampūn	as labai labai sk	aniai k	vepia,]	
lengvai	įsitrina		į	plaukus
easily	in-refl-rub.f	PRS.3	into	hair.ACC.PL
ir	nedaug	jo		reikia.
and	not.much	3.GE	N.SG.M	be.needed.prs.3
'[The shampoo has a very nice smell,] it is easy to apply to the hair and				

you don't need a lot of it.'⁷

⁷ https://harmonylife.lt/index.php?route=product/product/review&product_id=386&page=3

A further class of telic verbs is not associated with a change of state. They include, for instance, verbs of mental processing, which are telicised by the conventional conceptualisation of a certain quantum of event units as a discrete object (*read a book, watch a film, listen to the Queen's speech*), see example (14). And we could add the creation or reproduction of objects like literary works or musical works as instances where an accumulation of event units is also conventionally viewed as a discrete object (*write a novel, play a sonata*).

(14) Russian (ruTenTen11) *Takie* stat'i legko čitajut-sja, such.NOM.PL article.NOM.PL easily read.PRS.3PL-REFL [daže esli oni dovol'no bol'šogo ob"ema.] 'Such articles read easily, [even if they are rather bulky.]'

A further shift in the development of facilitatives is from telic to atelic verbs. These may be transitive (15) or intransitive (16):

(15) Latvian

nav		īpaši	jāgludina	un
be.prs.3	3.NEG	particularly	DEB.iron	and
labi	nēsāj	ia-s.		
well	wear	.PRS.3-REFL		
'[My pa	rents ch	ose the fabric—sp	andex; it is easi	ly washable],
		۔ much ironing and		-

(16) Latvian

Nuforšiizskatās,labistaigāja-s,PTCnicelylook.PRS.3wellwalk.PRS.3-REFL[feini atpūsties un nekad nav bijis domas ka ir kas nelabi izdarīts.]'Well, it looks fine, it's nice to walk there, [a nice place to relax, and ithas never occurred to me something was wrong.']⁸

The shift from transitive to intransitive can be explained by a shift from patients to other arguments as factors facilitating a process. In (17) this is an instrument:

⁸ https://iecava.lv/lv/zinas/pasvaldiba/16010-aptauja-vai-atbalstat-ieceri-veidot-piedzivojumu-parku-iecavas-parka (accessed 10-7-2020)

(17)	Russian			
	Perom	pišet-sja	gladko,	
	pen.ins.sg	write.prs.3-refl	smoothly	
	bez	naprjagov,		
	without	effort.gen.pl		
[počti ne otryvajas' ot lista.]				
	'With a pen one writes smoothly and effortlessly, [almost without lifti			
	one's hand from the sheet.]'			

Though 'write' is potentially telic, it is here intransitivised and atelicised by the absence of a syntactically expressed patient and the way is now open for the extension to intransitive verbs, for instance, when location is the facilitative factor. (18) has an atelicised and intransitivised transitive verb, while the verb in (19) is inherently atelic and intransitive:

(18) Latvian (Imants Ziedonis)

Teļotilabirakstā-s.hereverywellwrite.PRS.3-REFL[Te ir tāda ilūzija, ka aiz loga ir mežs.]'It's very good to write here. [One has the illusion that there's a forestoutside the window.]'9

(19) Latvian

[Ja kādus gribi saukt par vergiem, tad sauc viņus, jo]					
viņi		ne.spēj		tikt	prom
3.NOM.PL	.M	NEG.be.abl	e.prs.3	get.INF	away
no	tām		vietām,		kurās
from	DEM.D	AT.PL.F	place.dat	ſ.PL	REL.DAT.PL.F
labi	sēža-s	3.			
well	sit.pr	S.3-REFL			

'[If you want to call anybody a slave, you could call them slaves, because] they cannot get away from the places where they sit so comfortably.'¹⁰

These extensions to new lexical classes are accompanied by shifts in the syntactic, morphosyntactic and semantic properties of the construction. Within the core class of telic verbs the emphasis is on result. When we

⁹ https://www.ziedonamuzejs.lv/lv/events/kadas-ir-radosas-rezidences/97 (accessed 2020-07-20)

¹⁰ https://nra.lv/viedokli/arno-jundze/208377-praviesi-un-zivis.htm/komentari (accessed 2020-07-20)

say a shirt washes well we usually mean it is easy to get clean, though we may also find the process enjoyable. In the class of mental processing the first shift occurs: when a book reads well, the focus is on the properties of the process (enjoyment, effortlessness etc.) rather than on the attainment of the result, i.e. reading the book to the end. Besides, as noted above, the facilitating factor shifts from object to instrument, location and finally to external circumstances in general. From circumstances it is but a small step to a person's mood or psychophysical state—here we reach the dispositional reading, on which an event is or is not successfully realised because of the presence or absence of a certain predisposing mental state of the agent—or, let us say, quasi-agent.

(20) Lithuanian

[Manau jei es	ate didelis žūk	:lės fanatikas]	
ir	jums	sunkiai	sėdi-si
and	2PL.DAT	with.difficulty	sit.prs.3-refl
savaitgaliais	nan	iuose	
weekend.ins	PL at.h	ome	
[tai tikrai ver	tėtų pabandyt	i laimę prie vandens.]	
'[I think that	if you're a grea	t angling fan] and you fi	ind it difficult to sit at
home in the v	veekend [then	you should try your luc	k at the waterside.]'11

The above-mentioned shifts in syntactic, morphosyntactic and semantic properties lead to a considerable amount of variation within the facilitative construction. In the following section, we discuss each of the parameters of variation separately.

4. Parameters of variation in the facilitative construction4.1. Individual level (kind level) vs. stage level

This distinction, based on Carlson (1977), is between a reading on which whatever is expressed by the verbal form is an inherent property of some entity (or type of entities, on the kind-level reading) involved in the situation, the agent being generic and basically irrelevant, and one on which this property manifests itself in a particular situation (or set of situa-

¹¹ http://www.zvejokliai.lt/index.php/straipsniai/reportazai/5416-lapkricio-zuvys (accessed 10-7-2020)

tions), and the agent is specific. The entity whose properties are at stake on the individual level is often the patient (the grammatical object of the transitive verb), but it may be a location or another element involved in the situation. Example (21) is individual-level and refers to the inherent properties of a house, regardless of the occupant, while (22) refers to conditions prevailing in a particular country as determining the well-being of one specific person at a specific time:

(21) Latvian

·				
	Labi	dzīvoja-s	šajā	mājā
	well	live.prs.3-refl	DEM.LOC.SG	house.loc.sg
	un	nav	nekādu	problēmu.
	and	be.prs.3.neg	no.gen.pl	problem.gen.pl
	'This hous	se is good to live in a	and there are no	problems with it.'

(22) Latvian

[Taču tad, kad tur pārcēlās mans brālis, bija skaidrs, ka jābrauc ciemos pārbaudīt,]

kā	tad	viņam	tur	dzīvoja-s—
how	PTC	3.DAT.SG.M	there	live.prs.3-refl
Г <i>1</i>	1	···· = • • • * · * = · · • • 1. =	n 1. = 01	

[*vai dzīve pasaku zemē patiešām ir kā pasakā?*] '[But when my brother settled over there, it was clear I had to visit him

to see] what his life there was like, [and if life in fairy land is really as in a fairy tale.]'

A formal difference associated with this distinction is the frequent presence of an oblique agent in the stage-level construction. If the agent is generic, as is always the case in the kind-level and individual-level varieties, it is basically not expressed.¹² If it is specific, it is either overtly expressed, as in (22) above, or contextually retrievable, as in (23):

(23)	Latvian			
	Kā	dzīvoja-s	nelikumīgi	uzbūvētajā
	how	live.prs.3-refl	illegally	build.ppp.loc.sg.def

¹² A reviewer draws our attention to the fact that in the South Slavonic desiderative middle a generic quasi-agent may appear in a datival form because the construction requires an explicit datival quasi-agent, as in Serbo-Croatian Živite, kako vam se živi 'Live as you like', where the second-person plural pronoun has a generic meaning.

mājā,Riekstiņ?house.LOC.SGPN.VOC'How's life in your illegally built house, Mr Riekstiņš?'13

An oblique quasi-agent (*jums* 'you.DAT.PL') could be added in this sentence, but one could also interpret (23) as inviting an individual-level statement about the house based on the quasi-agent's personal experience, so that (23) is ultimately vague between an individual-level and a stagelevel reading. Situations of this type are actually frequent, but they do not invalidate the distinction itself, which is important cross-linguistically, as we will see presently.

It is important to note that a sentence with an explicit datival quasiagent, as in (22), may still be individual-level or kind-level, but it will then be the quasi-agent that receives an individual-level or kind-level reading; more on this in 4.4.

Many languages—Germanic, Romance and Greek—have practically no stage-level uses of facilitatives. Indeed, the lack of such uses has been cited as a definitional feature of the 'middle', as our facilitatives are usually called, cf. Ackema & Schoorlemmer (2003, 132). Steinbach (2002, 39), while rejecting the interpretation of middles as individual-level, regards them as inherently generic. The difference consists in that the notion of individual-level predication involves a certain type of interpretation of a NP (as referring to an individual throughout its existence rather than to an individual at a certain stage *t*), whereas the alternative account invokes the action of a generic operator at clausal level without any specific type of reading being imposed on any NP. However, even a rather superficial internet search shows the existence of middles that cannot be considered either individual-level or generic. Here is one from English:

(24) Bathroom fitter very impressed with these tiles, they have cut easily and there are no breakages.¹⁴

¹³ https://www.diena.lv/raksts/latvija/politika/papildinata-riekstins-neredz-iespejas-turpmakiem-samazinajumiem-diplomatiska-dienesta-budzeta-685958/comments/ (accessed 10-7-2020)

¹⁴ https://www.tilemountain.co.uk (accessed 10-7-2020)

And for German, Steinbach (2002, 39) cites the following:

(25)	German				
	Der	Bach	hat	sich	gestern
	DEF.NOM.SG.M	PN	have.prs.3sg	REFL	yesterday
	Abend	ausnahmsweise	mal	ganz	gut
	evening	exceptionally	PTC	quite	well
	gespielt.				
	play.pp				
	'Exceptionally, this piece by Bach played well last night.'				

We assume both these examples are stage-level uses. Steinbach (*ibid.*) while citing this as an example of a stage-level use, uses it as evidence for the claim that middles are in fact never individual-level, their characteristic generalising effect being due to the presence of a generic operator at clausal level. He adds, however, on the basis of (24), that this genericity can be restricted to a very short time frame. This attempt to force a generic interpretation on (24) is rather counterintuitive and far-fetched. But the idea of the gradual reduction of the time frame of a generic or even individual-level statement should not be rejected. A Google search for *is cutting very well* yields mostly sentences characterising instruments, but quite a few characterising patients. Here is one of them:

(26) The paper is cutting very well, nice for a print that is probably 30 years old.¹⁵

The progressive form used here is not stage-level—it refers to a collection of prints and is, within certain temporal boundaries, individual-level. However, when the time frame of validity of the statement is further reduced, one ultimately arrives at cases like (25), where there is no longer any point in using the notion of individual-level or generic meaning.

The fact that stage-level facilitatives are rare in English and German shows that in some languages there is at least a strong tendency for facilitatives to be kind-level or individual-level only. There must be a good reason for this restriction. Slavonic and Baltic facilitatives, however, are neither consistently individual-level, nor can they be described as consistently generic at clause level. They do have individual-level readings, and

¹⁵ https://custompuzzlecraft.com/Evolve/puzzle648.html (accessed 10-7-2020)

on those readings the agent is generic in the sense that the properties ascribed to the patient, instrument etc. determine the course of the event for any arbitrary agent. The genericity of the agent is, in most cases, a concomitant of the individual-level reading of the patient, instrument etc.

4.2. Aspect

Both Slavonic and Baltic languages have developed derivational aspect systems, characterised by Dahl (1985, 89) as systems of 'grammaticalised lexical classes', or, to put it in a different way, grammaticalised lexical aspect. The degree of grammaticalisation is decidedly higher in Slavonic, where aspect crucially affects the structure of the inflectional paradigm and the grammatical selection features of the verb (cf. Arkadiev 2011); still, the difference is one of degree rather than of principle, and aspectual distinctions are grammatically relevant in many domains in Baltic as well, as shown, e.g., in Holvoet (2014). In Baltic, as in Slavonic, a verbal prefix normally perfectivises a verb, e.g. Latvian būvēt 'build' (IPFV) vs. uz-būvēt 'build' (PFV). In Latvian, if a spatial meaning has to be conveyed without perfectivising the verb, a verbal particle can be used instead of the prefix, e.g., *iz-nemt* 'extract, take out' (PFV) vs. *nemt ārā* 'extract, take out' (IPFV). In Slavonic, and to a lesser extent in Lithuanian, suffixation is used to provide prefixed perfective verbs with imperfective counterparts, cf. Russian vy-tjag-ivat' 'pull out, extract', imperfective partner of vy-tjanut'. For further details on the Latvian aspect system see Holvoet (2001, 132–145); on the typology of derivational aspect systems see Arkadiev (2014, 2015).

When a telic verb involving an incremental theme (an object affected by the event in successive stages till complete affectedness) is used in the facilitative construction, it usually occurs in two varieties, perfective and imperfective. The difference is between the (un)successful achievement of a resulting state and the generally (un)satisfactory course of the process leading up to the change of state. What is described here as the (un)satisfactory course may consist in the process advancing in a way promising to guarantee the successful achievement of the change of state, but it may also be subjectively (un)satisfactory from the quasi-agent's point of view. The opposition is partly dependent on the opposition between individual-level (or kind-level) and stage level use, as in part of the Slavonic languages (mainly East Slavonic; on divisions within Slavonic in this domain cf. Mønnesland 1984 and Dickey 2000) individual-level meaning automatically imposes imperfective aspect. In the following examples, (27) is individual-level (kind-level?) and (28) is stage-level:

(27)	Latvian				
	[Var atšķirti	es pusasu fla	ınči. Bet tā nav liela nelaim	e.]	
	Viņi	viegli	ņemā-s	ārā	un
	3.NOM.PL.M	easily	take.prs.3-refl	out	and
	ir	viegli	apmaināmi.		
	be.prs.3	easily	replaceable.noм.pl.м		
	'[The flange	s of the axle	shafts may get loose. But t	hat's not a	a big deal.]
	They let the	mselves be t	taken out easily and are eas	sily replac	ceable.'16
(28)	Latvian				

[Kad mainīju antifrīzu, noskrūvēju korpusu ...,] termostats **iz-ņēmā-s** viegli laukā. thermostat.NOM.SG **out-take.PST.3-REFL** easily out '[When I changed the antifreeze, I screwed off the housing, and] the thermostat allowed itself to be taken out easily.'¹⁷

While the imperfective variety of the facilitative derived from telic verbs has basically one interpretation, the perfective variety may often have more than one interpretation. One variety of the perfective facilitative refers to the (un)successful complete realisation of an event depending on factors other than the agent's agency. This is illustrated in (28). In this variety the patient is usually definite and topical. Apart from this type there is also a type apparently differing from the first by a reversal of information structure. In this type, the object affected or created as a result of the agency is not the one intended by the agent. Here we use simplified examples to show the contrast:

(29)	Latvian (cons	structed)		
	vāks	man	no-ņēmā-s	(viegli)
	lid.nom.sg	1SG.DAT	off-take.pst.3-refl	easily
	'the lid came	off (easily)'		
(30)	Latvian (cons	structed)		
	man	(nejauši)	no-ņēmā-s	vāks
	1SG.DAT	accidentally	off-take.pst.3-refl	lid.nom.sg
	'I accidentall	y took off the lid	,	

¹⁶ http://audi-style.lv/forum/topic/41475-ātrumkārbu-atšíirîbas/page-12 (accessed 7-9-2020)

¹⁷ https://iauto.lv/forums/topic/25095-castrol-edge-sport-10w-60?pnr=5 (accessed 7-9-2020)

In (30) as well as in (29), the outcome of the agency is not quite controllable; as a result, the object actually affected is different from what was intended. The patient-subject is non-topical in this variety. We now give authentic examples illustrating the opposition shown in a simplified way in (29), (30):

(31) Latvian (lvTenTen14)

[Tā nu sanāca, ka] rokās grāmata tika manās hand.loc.pl book.nom.sg get.pst.3 my.loc.pl.f loti raiti izlasījā-s. un and verv smoothly read.pst.3-REFL '[It somehow came about that] the book came into my hands and it read very quickly.'

(32) [*Grāmatu biju pasūtinājis jau pirms tās iznākšanas, centos nemaz* nelasīt par to, kas tur būs, lai būtu interesantāk. Diemžēl nesanāca,] un nejauši izlasījā-s šī inadvertently read[PFV].PST.3-REFL and DEM.NOM.SG.F atsauksme lasītājas piezīmēs. opinion.NOM.SG reader[F].GEN.SG comment.LOC.SG '[I had ordered the book before it came out and tried not to read about what was in it, so as to keep the interest up. Unfortunately it didn't work] and I inadvertently read this critical opinion in a reader's comments.'

While the variety in (30), (32) could appear to be derived from that in (29), (31) through a reversal of information structure, it is by no means obvious that such a derivational relationship actually exists. Assuming that perfective facilitatives like (29) and (30) arise diachronically from perfective anticausatives, it is perfectly plausible that facilitatives as in (30) could have arisen directly from anticausatives with subjects in focal position, as in (33):

(33)	1915.	gadā		atlūza	un
	1915	year.loc	.SG	break.off.pst.3	and
	nogāzās		vēl	viens	Staburaga
	tumble.рsт.	3-REFL	yet	one.NOM.SG.M	PN.GEN
	klints	gał	oals.		
	rock.gen.sg	; pie	ce.nom.	SG	

'In 1915 one more piece of the Staburags rock broke off and tumbled down.'18

¹⁸ https://lv.wikipedia.org/wiki/Staburags (accessed 7-7-2020)

The rise of the facilitative construction out of the anticausative construction is a problem to which we will return in section 7. There is some cross-linguistic variation as to the degree of inherent telicity required to licence the derivation of a perfective facilitative. As mentioned in the preceding section, 'read' is not inherently telic as there is no change of state in the object, but it is telicised by singling out a certain quantum of mental impulses. Latvian freely allows perfective facilitatives derived from *iz-lasīt* 'read through':

Pirmās nodalas izlasījās man first.nom.pl.f.def chapter.NOM.PL 1SG.DAT read[PFV].PST.3-REFL tik tik viegli, ātri, so easily so quickly [bet nodaļu par Sirds ceļu lasīju kādu nedēļu.] 'The first chapters read so easily, so quickly, [but it took me about a week to read the chapter The way of the heart.]'

But there is evidence that such cases of extended telicity are worse in deriving perfective facilitatives. In Polish, for example, analogous sentences are not accepted, or evaluated as rather bad:

(35)	Polish				
	??Pierwszy	,	rozdział	mi	się
	first.nom.s	G.M	chapter.noм.sg	1SG.DAT	REFL
	dobrze	prze-c	zytał.		
	well	PFX-re	ead[pfv].pst.m.sg		
	Intended n	neaning	: 'I found the first o	chapter easy t	to read through.

How far perfective facilitatives extend beyond the core class of inherently telic verbs appears therefore to be subject to cross-linguistic variation. Latvian has occasional extensions of the facilitative construction to perfectives with intransitive bases. These are mostly motion verbs that have been transitivised by the addition of a telicising prefix that expresses the coverage of a distance (as opposed to prefixes denoting a change in the location of the agent-theme). The active transitivised construction and its facilitative counterpart are shown in (36) and (37):

(36)	Latvian			
	Kad	noskrēju	pirmos	2
	when	PFX.run.PST.1SG	first.acc.pl.m.def	two

km,parādījāsjocīgadoma [...].kmappear.PST.3funny.NOM.SG.Fthought.NOM.SG'When I had run the first two kilometers, a funny thought occurredto me [...].'

(37)	Pirmie	divi	apļi		
	first.nom.pl.m.def	two.nom	circle.nom.pl		
	noskrējās	bez	bēdām <>		
	PFX.run.PST.3-REFL	without	trouble.dat.pl		
	'I ran the first two rounds without difficulties.'				

Strictly translocational intransitive motion verbs, that is, motion verbs whose prefixes denote a change in the location of the agent-theme, cannot underlie a facilitative construction:

(38)	Latvian			
	*Man	viegli	iz-lēcā-s	no
	1SG.DAT	easily	out-jump.pst.3-refl	from
	autobusa.			
	bus.gen.sg			
	Intended mea	aning: 'I eas	ily managed to jump off th	e bus.'

One instance where an apparently translocational prefix appears on a motion verb in the facilitative construction is that of *aiz*-, which denotes motion away from the deictic centre but also the point of reaching an outlying goal. In the latter case the verb is followed by the preposition $l\bar{l}dz$ 'up to', but it can also combine with an object denoting the length of path moved through:

(39)	Latvian
(39)	Latvian

[Izbraucu pavizināties pa Rīgu,]

nejauši aiz-braucā-s līdz Rāmavai. suddenly **PFX-drive.PST.3-REFL** up.to PLN.DAT '[I set out for a drive about Riga and] before I noticed I ended up in Rāmava.'

(40) Un skrējiens tiešām aiz-skrējā-s and race.NOM.SG really PFX-run.PST.3-REFL tik nemanīti, so unnoticed [ka jau pāris minūtes pēc 10 bijām finišā!]
'And indeed the race was run so quickly [that a few minutes past ten

we were already at the finish'.

This would suggest that *aiz*- is, in this sense, not translocational but quantifying in that it focuses on the stretch of trajectory covered. That is, the perfective facilitative construction extends to a group of motion verbs that emulate prototypically transitive verbs by combining with a spatial 'quasi-object' measuring out the motion event (an incremental path). As in the case of canonical transitive verbs (as in (29)), the object actually affected differs from what was intended or anticipated.

4.3. Transitivity

Transitivity is not a necessary condition for the derivation of a facilitative: intransitive activity and state verbs can underlie them as well:

(41) Lithuanian

Kaipjums,how2PL.DAT[dėl asmeninių pražangų nebegalinčiam tęsti rungtynių,]sėdėjo-siantsuoliuko?sit.PST.3-REFLonbench.GEN.SG'How did you feel sitting there on the [penalty] bench [being unableto stay in the match because of individual fouls]?'19

The restriction to atelic (activity and state) verbs is a consequence of the historical development of facilitatives (an overview of this development is given in the schema at the end of section 7). The source class for facilitatives consists of transitive verbs, occurring with an object that is promoted to subject in the facilitative construction. When emphasis shifts from the patient-subject to another argument—instrument or location—as being responsible for the successful realisation of the event, the verb is used without an object, functioning as it were as an activity verb, and the road is free for the introduction of intransitive activity or state verbs, which are always imperfective. The association of the facilitative with transitivity having been shed, presumably through intransitive and atelicised use in constructions...) are stated to be responsible for successful realisation of the event, the way is open for the introduction of other, also

¹⁹ https://www.delfi.lt/krepsinis/herojai/ukrainieciai-nepamirsta-kaip-per-nakti-reikalavo-atimti-is-zalgirio-nepelnyta-pergale.d?id=76501355 (accessed 10-7-2020)

telic, intransitive verbs. These may be agentive, like body motion verbs; they sometimes occur in the facilitative construction in atelic use, as in (42), but telic constructions can also occasionally be found, as in (43):

(42) Latvian

Sākumā	skreja-s	labi,	tiešām,		
beginning.LOC.SG	run.prs.3-refl	well	really		
[negaidīti labi noskrieti pirmie 2 km, tālāk tik jautri nebija.]					
'At first the run is fine, really, [the first 2 km went off unexpectedly					
well further on it was not as nice any more.]'					

(43) Latvian

Kā	tad	skrējā-s	uz	Valmieru?
how	PTC	run.pst.3-refl	to	PLN.ACC
'How v	was the r			

And one also finds extensions to change-of-state verbs without an agentive component, like Lith. *senti* 'get old' in the following example:

/						
	Kaip	sensta-si?		Ar	vis dar	toks
	how	age.prs.3-F	REFL	Q	still	such.NOM.PL.M
	aršus,		ar	jau		dantys
	frisky.no	M.PL.M	or	alrea	ady	tooth.nom.pl
	kiek	atšipo	o?			
	somewha	it grow.	blunt.	PST.3		
	'How are	you ageing	g? Are	you as	frisky a	as ever, or have your teeth
	grown bl	unt a bit?'²º				

Moreover, as we saw above, some intransitive verbs of motion emulate transitive verbs by adding a spatial expression functioning as a pseudoobject.

4.4. The agent and its encoding

In those languages where the facilitative is exclusively, or almost always, individual-level there is no possibility of expressing the agent. There is, indeed, no need to express it, so that the restriction to individual-level use could explain why no strategy for expressing the agent was developed. On the other hand, the lack of such a strategy could also have blocked

²⁰ https://banga.tv3.lt/lt/2forum.showPosts/878550.121.1-=(993078179 (accessed 9-7-2020)

the development of a stage-level type with specific agents. Which of the two was decisive is hard to tell. What we can say with certainly is that in Baltic and Slavonic,²¹ where the means for syntactically encoding the agent were created, its non-expression in the case of a generic agent is no longer due to a syntactic restriction: an agent phrase of the type 'for any possible agent' would simply be pragmatically odd.

When a quasi-agent is expressed or situationally retrievable, the individual-level (kind-level) or stage-level reading of the clause is often determined by the interpretation of the agent, not the patient. (45), for instance, is about the reading preferences of an individual, whereas (46) is about a reader's experience at a specific time, while reading a specific book.

(45) Latvian

Man	labi	lasā-s	vēl	daudzi
1SG.DAT	well	read.prs.3-re	FL also	many.nom.pl.m
citi		darbi,	piemēram,	
other.noм.	.PL.M	work.nom.pl	for.instance	
Vizma	Be	lševica.		
PN.NOM	PN	.NOM		
'I also enjoy reading many other [literary] works, e.g., Vizma Belševica.'				

(46) [Man patīk distopiskie romāni]

un	šis	arī	diezgan
and	this.nom.sg.m	also	quite
labi	lasījā-s.		
well	read.pst.3-refl		
(FT 1·1 1		1.0 1	.1

[I like dystopian novels] and found this one quite good to read as well.

Whether the reference of the patient determines the reference of the agent or the other way round is basically determined by information structure. The patient must be in topic position for the clause to be an individual-level statement:

(47)	Latvian		
	Amerikāņu	grāmatas	interesantas,
	American.gen.pl	book.nom.pl	interesting.NOM.PL.F

²¹ The extent to which quasi-agents may be expressed in the facilitative construction in the individual Slavonic languages is subject to variation. In Russian, explicit oblique agents as in (48) are infrequent, whereas in South Slavonic datival quasi-agents are restricted to the desiderative middle mentioned in 4.6 below.

tāslabilasā-s.3.NOM.PL.Fwellread.PRS.3-REFL'American books are interesting, they read well.'

Where the agent is expressed, it is not an optional modifier, but a semantic argument. Whether it is also a syntactic argument is a different question, but facilitatives based on intransitive verbs, as illustrated in (21) and (22), suggest an answer in the affirmative, otherwise we would have to say $dz\bar{i}vojas$ is a zero-place predication that can be optionally expanded with an experiencer modifier. We must, of course, assume that historically the agent complement probably arises from a modifier or other optional constituent. In Baltic, the datival agent has developed from the dative of beneficiary and the closely related dative of external possessor; but these datives have undergone a reinterpretation, and a sentence like (48) is now clearly ambiguous between a reading on which the dative is not necessarily the agent but is the interested person, most likely the possessor, and a reading on which the dative is the agent but not necessarily the possessor or even an interested person:

(48) Lithuanian

Man	batų	raišteliai	at-si-rišo.
1SG.DAT	shoe.gen.pl	lace.nom.pl	un-refl-tie.pst.3
(i) 'My sho	elaces came loose.	,	

(ii) 'I managed to undo the (my) shoelaces.'

In Russian, the encoding of the agent correlates more or less with transitivity: when the verb has an object that is promoted to subject in the facilitative construction, the agent is encoded with u + genitive (49), whereas if the verb is intransitive, or if the facilitative construction is derived from a transitive verb in intransitive use, so that no object is promoted to subject, it is encoded with the dative (50):

(49) Russian (ruTenTen11)

[Tol'ko menja volnuet vopros, počemu]

u at	menja 18G.GEN	<i>stat'i</i> article	e.NOM.PL	<i>lučše</i> better	-	it-sja Te.PRS.3PL-REFL
tol'ko	ро	utram,		а	и	drugix
only	on	mornin	g.dat.pl	but	at	other.gen.pl
ро	nočam		S	čaškoj		kofe
on	night.D	AT.PL	with	cup.in:	s.sg	coffee[gen]
ʻ[I'm ju	st wonderi	ng why]	I find it eas	sier to wri	te artic	les in the morning
			_		-	

whereas others [find it easier] at night with a cup of coffee...'

(50)	Russian ((Ėmma Ger	rštejn, 1985–20	002, RNC)	
	[A to zap	oiralsja v ko	abinete, vyxodi	il proglotit' stakan čaja,	prigovarival:]
	Kak	xorošo	mne	pišetsja,	uže
	how	well	1SG.DAT	write.prs.3sg-refl	already
	celyj		list	nakatal.	
	whole.ac	C.SG.M	sheet.acc.sg	реп.рѕт.м	
	'[At othe	r times he	would lock hin	nself up in his study, wh	ence he would
	emerge to swallow a glass of tea and say:] "How well my writing is				
	going—I've scribbled down a whole page already".				

While the dative used for encoding the agent is in origin a dative of beneficiary, the prepositional phrase with u in Russian is originally an external possessor—prepositional phrases with u + genitive being one of the two ways of encoding external possessors in Russian (see Garde 1985). As in the case of the datival agents discussed above, Russian sentences may be ambiguous between an anticausative expanded with an external possessor and a facilitative (on such cases of ambiguity cf. Letučij 2014, 373):

(51) Russian (constructed)

\boldsymbol{U}	menja	dver'	ne	otkryvaet-sja.
at	1SG.GEN	door.nom.sg	NEG	open.prs.3sg-refl
(i)	'My door wo	n't open.'		

(ii) 'I can't manage to open the door.'

The possessive origin of the prepositional phrase explains why it is basically restricted to facilitatives from transitive verbs: in the anticausative source construction, it is licenced by an original object promoted to subject. However, one also finds occasional instances where, though the verb is basically transitive, the construction is intransitive and no object promoted to subject appears:

(52) Russian (cited from Letučij 2016, 298) Počemu-to i u menja for.some.reason also at 1SG.GEN tak napisalo-s', no write[PFV].PST.N-REFL so but duši točno ot really from soul.gen.sg

'For some reason I put it like that as well, and it really came from my soul.'

As the construction is intransitive, why don't we have the dative here, as in (50)? Examples like this suggest that the rationale for the use of the

dative and the prepositional phrase is perhaps not purely syntactic any more, and that a certain constructionalisation associated with types of meaning has occurred. We will return to this below in 4.6.

If we recognise that the oblique agent in facilitative constructions is an argument, the next question that poses itself is that of its grammatical function. The oblique agent is, wherever it occurs, usually topical and clause-initial, and appears to be a good candidate for non-canonical subjecthood (for a recent discussion see Zimmerling 2012). But the question is probably undecidable, as the nominative-marked patient is as good a candidate when it is topicalised and clause-initial, as, for instance, in (45).

4.5. Facilitative adverbials

This term is not meant to refer to an independently motivated class of adverbs; we just mean adverbials that, in a facilitative construction, express certain aspects of a process or the achievement of a result that are independent of human volition, such as 'easily', 'with difficulty', or 'well', 'badly'. In the case of change-of-state verbs the presence of such adverbs, which suggest agentivity, is necessary to set apart a facilitative from an anticausative reading (The door opens : The door opens easily); in the case of result and manner verbs the clause is often ungrammatical without an adverb (*The cat's fur brushes : The cat's fur brushes well). In the light of such facts it has been suggested that the task of the adverbial is to make the implicit agent recoverable in some way. Even within the Minimalist tradition, accounts vary with regard to whether the motivation is semantic, pragmatic or syntactic (for an overview and further discussion see Lekakou 2006). We assume the requirement for adverbial modification to be semantically and/or pragmatically motivated, but will not attempt a detailed answer here. The literature on this question focuses on the western-type middle, and a special investigation would be needed for the Balto-Slavonic facilitative. Without entering into the details, we should mention that, for instance, perfective facilitatives may occur with adverbials that are not specifically agentive, like those denoting the time span in which an event is completed:

(53) Latvian (lvTenTen14)

[Salda, rūgt	ta, smeldzīga un pacilājošā f	basaka,]	
kas	iz-lasā-s	tik	īsā
that.noм	PFX-read.PRS.3-REFL	so	short.loc.sg

laikasprīdi,time.GENspan.LOC.SG[ka negribas grāmatu nolikt malā.]'[A bitter-sweet, poignant and elevating fairy-tale] which one reads insuch a short span of time [one doesn't want to put the book down.]'

The verb *izlasīties* is not susceptible of an anticausative reading, so the adverbial is not needed semantically to make the quasi-agent recoverable; but there must be some element non-controllable by the agent to justify the use of the facilitative construction, which is, in this case, the speed of reading as determined by the quality of the tale. Adverbials denoting involuntary action are often required in 'non-volitional' facilitatives:

(54) Latvian

 [Tas kurš man rakstīja par to krūzīšu apdruku uzraksti man vēlreiz,]

 man
 nejauši
 izdzēsā-s
 tava

 ISG.DAT
 accidentally
 delete.PST.3-REFL
 your.NOM.SG.F

 vēstule
 etter.NOM.SG
 [un neuzspēju atcerēties tavu vārdu.]
 '[Could the person who wrote me about printings on mugs please write to me once more?] I accidentally deleted your message [and I can't remember your name.]'²²

On the whole, such adverbials seem to be concerned with agency and controllability. It has also been noted in the literature that the presence of a negation can make a facilitative adverbial superfluous; this is quite frequent in Baltic and Slavonic, as seen in (55) (where *vienkārši* 'simply' is a speech-act adverb referring to the formulation used, not a facilitative adverb):

(55)	Latvian						
	[Vai ir kāda grāmata, ko esi sākusi lasīt,]						
	bet tā		vienkārši	ne-lasā-s?			
	but	3.NOM.SG.F	simply	NEG-read-prs.3-refl			
	'[Is there a book which you have begun to read] but it simply doesn't read?'23						

²² https://lv-lv.facebook.com/pesacustoms/posts/611984998989723 (accessed 9-7-2020)

²³ https://issuu.com/lu_biblioteka/docs/lub-jaunumi-12/50 (accessed 9-7-2020)

4.6. From patient-oriented to dispositional uses

The extension of facilitatives starting out from the source class of changeof-state verbs has several dimensions. One is extension to new aspectual classes, another is a gradual shift in the factor viewed as deciding about the course of the event in view of the insufficiency of agency. In the core class—telic verbs—the facilitative is patient-oriented in both its varieties—imperfective and perfective. Then the imperfective variety undergoes a series of shifts, other arguments than the patient being viewed as determining the course of the event. With a simplified example:

(56)	56) Latvian (constructed)					
	miza	labi	grieža-s			
	bark.noм.sg	well	cut.prs.3-refl			
	'the bark cut	s well'				
(57)	ar	šīm	šķērēm			
	with	DEM.DAT.PL.F	scissors[pl].dat			
labi grieža-s						
	well	cut.prs.3-refl				
	'these scissor	ıt with'				

Emphasis may shift to location and external circumstances. The construction is thereby often (if the patient is backgrounded and omitted) intransitivised and the verb atelicised.

Together with those changes another shift takes place, viz., towards increasing relevance of the agent's mental disposition, that is, a mental state favourably or unfavourably affecting the realisation of the event denoted by the verb. The 'circumstances' determining the course of the event are often not purely external but include the agent's internal situation, i.e. the agent's psycho-physical state.

In the literature we find the notion of dispositional readings (Fici 2011), referring to situations where the agent's disposition (psycho-physical state) is viewed as the factor determining the realisation of the event. The most conspicuous formal features accompanying the dispositional reading are the lack of reference to an external situational element determining the course of the event, such as instrument or location, and the absence of a facilitative adverb. These features can be seen in (58):

(58)	Latvian						
	[Vienu novembri mēģināju šūt,]						
	bet	nešuvā-s	; —	likās,	ka		
	but	NEG-sew	.PST.3-REFL	seem.pst.3	that		
	vajag		aiz	loga	vasaru,		
	be.needed.	PRS.3	behind	window.gen	summer.ACC		
	lai		šūto-s.				
	in.order.that		SEW.IRR-REFL				
	'[One day in November I tried to sew,] but I didn't feel like sewin						

'[One day in November I tried to sew,] but I didn't feel like sewing, it seemed as if one needed the summer outside the window in order to feel like sewing.'

The notion of a dispositional subtype is a convenient way of labelling the uses showing the formal features mentioned above, but semantically there is no sharp line of division between the uses referred to here and those where a situational element is mentioned that can be viewed as the facilitating factor. What is involved is obviously often the agent's disposition as influenced by external factors.

Dispositional facilitatives also have individual-level and stage-level readings, but in this case the individual thus characterised is the quasiagent rather than an object, location or element of external circumstances. Both the individual-level variety and the stage-level variety may contain a datival quasi-agent, as can be seen in (59) and (60) respectively:

(59) Russian (Elena Kolesničenko, 2003, RNC) [«Xarakter u menja nespokojnyj, neusidčivyj, — govorit ona —] vot i ne sidit-sja mne sit.prs.3-refl PTC PTC NEG 1SG.DAT na meste. place.LOC.SG on [xočetsja vse uspet'.»] '[I have got a restless and fidgety character, she said,] I cannot sit quiet in one place [and want to be everywhere.]'

(60) Russian (Andrej Volos, 2001, RNC)
Zato Konopljannikovu ne sidit-sja —
but PN.DAT NEG sit.PRS.3-REFL
[to i delo vskakivaet i nenadolgo uxodit.]
'But Konoplyannikov cannot sit quiet: [every now and then he jumps to his feet and disappears for a while.]'

In connection with this, dispositional facilitatives are never generic in the sense of applying to any conceivable quasi-agent, as in the case of individual-level facilitatives describing an inherent property of an object, instrument etc.; they can only be generic in the sense of a kind-level predication, if a kind-referring NP occurs in the position of quasi-agent:

(61) Russian (Nina Voronel', 1975–2003, RNC) Mužčinam nikogda sidit-sja ne man.DAT.PL never NEG sit.prs.3-refl na meste. on spot.LOC.SG [*i* nam, mnogostradal'nym ix podrugam, prixoditsja s ėtim smirjat'sja.] 'Men can never sit quiet in one place, [and we, their much-afflicted girlfriends, have to put up with it.]'

In modern Russian we could speak of a dispositional subtype with specific formal features: it contains an intransitive verb or a transitive verb in intransitive use, and the quasi-agent is in the dative. In 19th-century Russian this construction extended to at least two transitive verbs in transitive use (that is, with an explicit patient promoted to subject), viz. the ingestive verbs *est* 'eat' and *pit* 'drink'. Compare the following example with a datival agent instead of the construction u + GEN otherwise used in the facilitative construction from transitive verbs:

(62) Russian (Mamin-Sibirjak, 1890, RNC) No i pil-sja čai ne but also drink.pst.m-refl tea.NOM.SG NEG Efimu Andreiču. PN.DAT PN.DAT [a posle čaja on sejčas že uvel Petra Eliseiča v kabinet i tam ob"jasnil vse delo.] 'But Efim Andreich had no taste for tea either, [and as soon as tea was over, he took Pyotr Eliseich to his study to explain the whole matter.]'

Such instances of the ingestive verbs siding with intransitives are crosslinguistically well attested; in view of the affectedness of the agent such verbs diverge from the prototype of transitivity (cf. Næss 2007, 52–77). In modern Russian, constructions like (62) are no longer used, but even now the selection of the encoding for the agent—dative or prepositional phrase with *u*—does not seem to depend exclusively on whether the construction is transitive or intransitive; (52) has an intransitive construction, so that it is probably still possible to speak of a result-oriented construction with u + GEN and a dispositional construction with the dative. Their boundaries are apparently being redrawn.

Apart from Russian, where the distinction correlates with a type of encoding for the agent, there is no reason for setting apart a dispositional subtype. In Latvian, for instance, dispositional facilitatives based on transitive ingestive verbs, with objects promoted to subjects, are used as well (63), but in this case it is hard to set them apart from other facilitative constructions based on transitive verbs, as the agent is always marked in the same way, viz. with the dative:

(63) Latvian

[Nezinu, kā lai to negaršu apraksta – itkā nav ļoti pretīga,]						
bet	nu	ne-dzera-s				
but	PTC	NEG-drink.prs.3-refl				
tas		brūvējums.				
this.no	this.nom.sg.m brew.nom.sg					
'[I don't know how to describe this dismal taste—it is not downright						
filthy,] but you don't really want to drink this brew.'						

Dispositional facilitatives originate from intransitive state and activity facilitatives that are always imperfective because of the nature of the aspectual classes in which the shift from agent-external to dispositional reading occurs. They are therefore originally consistently imperfective. The desiderative middle, which has developed out of the dispositional facilitative in South Slavonic (on which cf. Marušič & Žaucer 2014, Mitkovska 2019), is still basically imperfective:

(64) Serbo-Croatian

[Probud	ila sam se u mr	ačnoj tišini i otvorila oči,	,]
pila		(*popila)	mi
drink[1F	FV].PST.F.SG	drink[pfv].pst.f.sg	1SG.DAT
se	kava.		
REFL	coffee.nom.s	G	
'[I woke	e up in a dark s	ilence and opened my e	yes,] and I felt I wanted
some co	ffee.'24		

²⁴ https://hrvatskodrustvopisaca.hr/hr/novosti/dnevnik-iz-karantene-stanislava-nikolic-aras (accessed 2020-07-07)

This restriction is easily explained by the fact that desideratives are state predicates: they refer to a state of volition clearly distinguished from the event constituting the object of volition. In Baltic, the dispositional facilitative is also always imperfective, perhaps because this aspectual value was inherited from the agent-external uses of the facilitative construction. In Russian, however, an extension to perfective verbs has occurred:

- (65) Russian (V. V. Krestovskij, RNC, cited after Letučij 2014, 367)
 [Ja xotel sprosit',]
 no kak-to ne sprosilo-s'.
 but somehow NEG ask[PFV].PST.N-REFL
 '[I wanted to ask] but somehow couldn't bring myself to ask.'
- (66) Russian (G. E. Nikolaeva, RNC)

[Po k	akoj že [sc. doroge] n	ny pojdei	n, mama? —]
Po	kakoj	pojdet	r-sja,
by	which.dat.sg.f	go[pf	v].fut.3sg-refl
ро	toj	i	pojdem.
by	that.dat.sg.f	PTC	g0[PFV].FUT.1PL
'[Wh	ich road shall we take	e, mum?]] The road we'll feel like taking, that's

the one we'll take.'

4.7. Personal and impersonal

Some authors set impersonal facilitatives apart as a separate subtype (Gerritsen 1992, Letučij 2016). For most Baltic and Slavonic languages the difference between personal and impersonal facilitative constructions is derivative: facilitatives derived from intransitives are automatically impersonal. However, as we have noted above, in Russian this rule allows for occasional exceptions, illustrated in (52), so that the borderlines between transitive vs. intransitive and between personal and impersonal do not quite coincide here. An opposition between a personal and an impersonal type has moreover developed in Polish. This language now has a non-promoting facilitative construction, i.e., a construction in which the original object is not promoted to subject and the construction is consequently impersonal:

(67) Polish (NCP)

Dobrze	się	czyta	tę
well	REFL	read.prs.3sG	this.ACC.SG.F

nową "Gazetę", new.ACC.SG.F PN.ACC [zresztą jakichś zasadniczych zmian nie zauważyłem.] 'This new Gazeta is nice to read, [though I didn't notice any major changes.]'

This construction has been introduced in the place of an older objectpromoting construction that is still retained alongside the new one, though gradually being ousted by it:

(68)	Polish (<i>Polityka</i> , NCP)						
	Jak	dziś	czytają	się	wiersze		
	how	today	read.prs.3pl	REFL	verse.nom.pl		
	ostatnie last.nom.pl.nvir		<i>Starego</i> old.gen.sg.м	Poety?			
				poet.gen.sg			
	'How d	o the last ve	erses of the Old Po	et read to	oday?'		

The distribution of the two constructions has never been investigated in detail, but it seems that the object has most chances to be promoted to subject when it is topical and when it is the inherent properties of the patient that are at stake, not, for instance, external circumstances. In (69), for instance, where location and circumstances are held responsible for optimal realisation of the event, the use of the nominative would hardly be possible:

(69)	Polish	(NCP)
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Moim	zdanie	m	najleį	biej	się	ogląda	
mu.INS.SG.M	opinio	n.INS.SG	best		REFL	watch.prs.3sG	
mecze	w	domu		w	gro	nie	
match.ACC.PL	in	home.Lo	OC.SG	in	con	npany.loc.sg	
przyjaciół	i	rodzii	ny.				
friend.gen.pl	and	famil	y.gen.sg				
'In my opinion the best place to watch matches is at home with friends							
and family.'							

There is, however, no functional difference between the two constructions, and they can actually be described as varieties of the same facilitative construction.

While these parameters of variation, which account for the almost protean versatility of the facilitative construction, can to a certain extent be viewed independently of each other, as was done for practical purposes of exposition in this section, they are also interconnected and reflect different aspects of the construction's diachronic development. Stage-level facilitatives owe their origin at least in part to extensions from original individual-level constructions; facilitatives from intransitive verbs are secondary with regard to those with transitive verbs; the explicit expression of the quasi-agent is a secondary feature in the sense that it could not have been inherited from the anticausative source construction; and dispositional uses are secondary with regard to those presenting the facilitating factor as agent-external (originally the facilitating factor was the inherent properties of the patient). We will once more return to these diachronic aspects in section 7.

5. A look at the Latvian corpus

Facilitatives are not easily extractable from a corpus, as the contextual elements that should make them more easily identifiable, viz. facilitative adverbials and datival quasi-agents, are not constant features; when they occur, their position with respect to the verb form is also subject to variation dependent on information structure. Manual selection among samples of reflexive forms reflecting all possible categories was therefore the only option.

The annotated lvTenTen14 corpus (about 658 mln tokens) shows that, though productive, facilitatives are not very frequent in Latvian, more common uses being anticausative, natural reflexive and reciprocal. Out of 10,000 randomly selected 3rd person reflexive forms (present and past tense), only about 20 were genuine facilitatives involving events that are normally controlled by the agent but are presented as only partially controllable (*lasīt* 'read', *mazgāt* 'wash', *spiest* 'press', *slēgt* 'switch', *regulēt* 'regulate', *rakstīt* 'write', *ņemt* 'take' and several others). The exact numbers of examples with each of the verbs and the type of the facilitative construction they represent are hardly informative because of the small size of the sample. We didn't perform a similar research on Russian but, according to Say & Goto (2008), the number of reflexives that roughly correspond to our definition of facilitatives is more than 100 out of 10,000 reflexives selected from RNC.

A separate group of reflexives in Latvian, much higher in frequency (about 130 tokens) consists of non-agentive verbs like *gribet* 'want', *karot*

'desire', *ticēt* 'believe', and *aizmirst* or *piemirst* 'forget', referring to inherently uncontrollable emotions and mental processes. While such uses are related to the facilitatives, they clearly represent a lexicalised extension in that the constructional meaning cannot really manifest itself here: the reflexive marking can just additionally emphasise the uncontrollable character of the state expressed by the verbal stem.

As the sample of 10 000 verbs yielded but small numbers of facilitatives, we looked separately at *rakstīt* 'write' and its prefixal derivatives (3rd person forms, past and present) as found in the corpus. This search yielded more than 300 instances showing quite some variation within the facilitative construction with regard to aspect and transitivity. While the parameters involved must be relevant for all Latvian facilitatives, the exact numbers remain peculiar to *rakstīt*.

Several prefixal derivatives of *rakstīt* are, in some or all of their meanings, always reflexive (e.g. *sarakstīties* 'correspond, exchange letters', *parakstīties* 'appose one's signature', *pārrakstīties* 'make a mistake in writing'), and they do not derive facilitatives. Facilitative meaning is found in nearly all reflexive uses of *uzrakstīt* 'write', which can be regarded as the perfective counterpart of *rakstīt* (the prefix having a basically perfectivising function), and in some reflexive uses of *sarakstīt* 'write up, compile', *pierakstīt* 'register', *ierakstīt* 'record', *izrakstīt* 'write out' and *aprakstīt* 'describe'. The vast majority of facilitatives is, however, based on the imperfective *rakstīt* (though the latter is also used as imperfective counterpart of those prefixal derivatives that don't have facilitative meanings).

	facilitative	other	sum
rakstīties	203	320	523
uzrakstīties	85	7	92
sarakstīties	9	424	433
pierakstīties	8	305	313
izrakstīties	5	84	89
ierakstīties	5	591	596

Table 1. Relative frequencies of facilitatives: rakstīt and its derivatives(affirmative and negative uses)

	facilitative	other	sum
aprakstīties	2	2	4
aizrakstīties	0	7	7
atrakstīties	0	127	127
norakstīties	0	25	25
parakstīties	0	2415	2415
pārrakstīties	0	17	17
sum	317	4324	4641

Out of 317 facilitative examples with *rakstīt* found in the corpus, 75% are stage-level uses, and the rest is the sum of individual-level uses, kind-level uses and those examples that are not clear. The kind-level uses refer to a kind of patients:

(70) Latvian
Dzejoļi visvairāk rakstā-s jaunībā
poem.NOM.PL most write.PRS.3-REFL youth.LOC
[un tad, kad ir nelaimīga mīlestība.]
'Poems are something one feels like writing mostly in one's youth
[or when one is unhappily in love.]'

But kind-level uses also refer to types of external circumstances:

(71) Latvian	ian	Latvi	(71)	
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Vislabāk	rakstā-s,	kad	notikumi
best	write.prs.3-refl	when	event.nom.pl
ir	svaigi.		
be.prs.3	fresh.nom.pl.м		
'The best tin	ne to write is when ever	nts are still	fresh.'

Individual-level uses with topical patients are extremely rare for *rakstīt* because a text has one author (it is common to say a book reads well, but if one says it writes well, this is likely to be a stage-level statement). The only exception is statements relating to the spelling of a word:

 (72) Baigi grūti šitas vārds terribly hard DEM.NOM.SG.M word.NOM.SG
 rakstā-s, pamēģini.
 write.PRS.3-REFL try.IMP.2SG 'This word is terribly hard to spell, just try.' Thus, with $rakst\bar{t}$, individual-level statements will usually be about properties ascribed to the agent as an individual; the agent is then in topical position:

(73) Laiviņam labi rakstā-s!
 PN.DAT well write.PRS.3-REFL
 'Laiviņš writes with ease.'

More in general, when an agent is present, it is usually the interpretation of the agent that decides whether the sentence is to be interpreted as a kind-level, individual-level or stage-level statement. But the agent is often implicit, and the sentence may then be vague between an interpretation with a generic and one with a specific agent—vague rather than ambiguous because it is impossible to establish whether a statement about the agent or a generalising statement based on the agent's experience is involved, both amounting more or less to the same:

(74)	Ir	lietas,		kuras	rakstā-s
	be.prs.3	thing.N	OM.PL	REL.NOM.PL.F	write.prs.3-refl
	viegli	un	raiti,		
	easily	and	smooth	ly	
	[es, cīrulis l	būdams,	ceļos sešo	os no rīta, tad jau l	īdz divpadsmitiem var
	daudz pavei	kt.]			
	'Some thing	s write e	asily and	smoothly; [being a	an early bird I get up at
	six in the m	orning, s	o I can ge	et a lot of things do	ne by twelve o'clock.]'
	or: 'Some th	ings I m	anage to	write easily and qu	uckly' (with
	contextually	v retrieva	able agen	t)	

In view of the interpretational difficulties illustrated by examples like (74), it is clear that a count of kind-level, individual-level and stage-level readings among facilitatives of the Baltic and Slavonic type is difficult to carry out; it involves lots of subjective interpretations. But as genericity, or consistent individual/kind-level readings, are regarded as definitional for the western-type 'middle', we have, for comparative purposes, attempted a rough count of the different types in Latvian and Russian, to be presented in the next section.

6. Latvian and Russian corpus data compared

We analysed facilitative uses of the verb 'write' in the Latvian and Russian internet-based annotated corpora lvTenTen14 (about 658 mln tokens) and ruTenTen11 (about 18,300 mln tokens). Two samples were selected from each of the corpora representing reflexive uses of the imperfective (*rakstīt / pisat*') and the perfective (*uzrakstīt / napisat*') version of the verb for 'writing'. Facilitative examples were manually selected from each of the samples.

	Rus	sian	Latvian		
	IPFV	PFV	IPFV	PFV	
corpus	180,575	2,749	523	92	
sample	1,000	100	523	92	
facilitatives	35	59	203	85	

Table 2. Reflexives, and among them facilitatives, in a Latvianand a Russian corpus

The frequencies of imperfective vs. perfective instances of 'write' in the corpora, as well as the frequencies of facilitatives in the samples, reflect the well-known differences between Baltic and East-Slavonic verbal aspect, such as the association of the perfective with the future and the use of imperfective reflexives as a passive form in Russian. In both languages imperfectives are more frequent than perfectives, but in Latvian they are six times more frequent, and in Russian 66 times more frequent. The share of facilitatives among imperfective reflexives derived from 'write' is 0.4 in Latvian and 0.04 in Russian, other reflexives being mainly represented by reciprocals and anticausatives²⁵ in Latvian and by passives in Russian. Since perfective reflexives are not normally used as passives in Russian, the shares of facilitatives in the perfective samples show more similarity between the languages.

²⁵ Anticausative uses of 'write' in both Latvian and Russian mainly refer to recording of information by electronic devices.

	Russian	Latvian
IPFV/PFV	66	6
facilitatives/ IPFV sample	0.04	0.4
facilitatives/ PFV sample	0.06	0.9

Table 3. Imperfective and perfective facilitatives in Latvian and Russian

The majority of facilitative uses, either perfective or imperfective, have a specific agent in both languages. For the most part it remains unexpressed but can be easily recovered from the context. An agent overtly expressed by the dative or a prepositional phrase (the latter only in Russian) is far less common, although the percentages differ for Latvian and Russian. Besides, the choice between the dative and the prepositional phrase in Russian seems to show correlation with aspect. This correlation is secondary with respect to the main factor behind the distribution of the two expressions. The dative is found with intransitive verbs common in dispositional uses that tend to be expressed with imperfectives. In comparison with specific agents, generic agents are in the minority in both languages. In addition, generic agents show a strong preference for imperfective aspect in Russian.

	Russian			Latvian				
	IPFV		PI	PFV		IPFV		FV
covert: generic	9	26%	1	2%	21	10%	6	7%
dative	3	8%	0	0%	54	27%	13	15%
prepositional phrase	1	3%	9	15%	0	0%	0	0%
covert: contextually retrievable	22	63%	49	83%	128	63%	66	78%
sum	35	100%	59	100%	203	100%	85	100%

Table 4. Expression of the agent in Latvian and Russian

The difficulties with assigning the examples found in the corpora to kind-level, individual-level and stage-level uses were already pointed out

above. The table below therefore represents a rather rough count; nevertheless, it clearly shows the predominance of stage-level uses.

		Russian				Latvian			
	IP	FV	PFV		IPFV		PFV		
kind-level	9	26%	0	0%	19	8%	4	5%	
individual-level	1	3%	0	0%	11	5%	o	0%	
stage-level	22	63%	59	100%	141	74%	72	85%	
kind-level/ individual-level	3	9%	0	0%	29	13%	9	11%	
unclear	9	26%	0	0%	3	1%	o	0%	
sum	35	100%	59	100%	203	100%	85	100%	

Table 5. Kind-level, individual-level and stage-level uses of facilitativesin Latvian and Russian

This look at the Latvian and Russian corpora shows a clear difference with regard to the western-type 'middle': facilitatives are predominantly stage-level. This does not quite correlate with the occurrence of agent phrases, because a specific, referential agent may be implicit and contextually retrievable.

7. A broader outlook

The Baltic and Slavonic facilitatives seem to exist in two varieties, individual-level/kind-level and stage-level, rather than one, like those of the Germanic languages. Authors writing on the western-style 'middles' are generally unaware of the Slavonic and Baltic facts. Apart from this, a number of further differences can be observed between the western type and the Balto-Slavonic type; they are shown in Table 6.

Western-type	Balto-Slavonic type
basically kind-level and individual-level	both individual/kind-level and stage level
basically imperfective ²⁶	imperfective/perfective
no expression of the agent	agent often expressed
only facilitative readings ²⁷	facilitative and non-volitional readings
agent-external	agent-external and dispositional

 Table 6. Western-type and Balto-Slavonic facilitative middles

Geniušienė (1987), who is aware of the Baltic and Slavonic facts, treats the perfective facilitatives as a distinct type of reflexive verbs—we would now say: a distinct construction. She sets the 'perfective passive' apart from the 'potential passive'. Her notion of potential passive would thus coincide with that of the western-style middle. The 'perfective passive' would then be a construction known to the Baltic and Slavonic languages but not to Germanic, Romance etc. This is a possible view, though Baltic and Slavic also have imperfective facilitatives that are demonstrably stagelevel, that is, not 'potential' in Geniušiene's terminology. The distinction is therefore not between 'potential' and 'perfective', even though this is a salient distinction. Individual-level (kind-level) vs. stage level and imperfective-perfective are, in principle, distinct parameters.

As facilitatives arise from anticausatives, we must allow for the possibility that western-type facilitatives arise from an individual-level subtype of anticausatives. Let us assume, for the sake of exposition, that the shift could occur in the presence of adverbs like *easily*, which (as noted by Fellbaum 1985), have a twofold meaning, one denoting inherent likelihood ('at the slightest provocation') and therefore associated with

²⁶ This characterisation should not be taken quite literally: only Baltic and Slavonic have consistent derivational marking of aspect throughout the paradigm. With regard to Romance and Greek we should say the aspect is imperfective where it can manifest itself, cf. the imperfect in French *L'article se lisait bien* 'The article read well'.

²⁷ Here we use the term 'facilitative' in a somewhat narrowed meaning, as referring to the (not quite controllable) successful achievement of an intended result, and excluding the 'non-volitional use', where an unintended result is achieved.

anticausatives, while the other is associated with agency ('without difficulty'). We can contrast (75) and (76):

- (75) The child easily catches cold.
- (76) ?The child has easily caught a cold.

(76) is pragmatically odd because it suggests the child caught a cold on purpose and did so without difficulty; the perfective use of the verb rules out the likelihood reading. Assuming a lexical extension from change-ofstate verbs to result verbs we get

- (77) The door opens easily.
- (78) The door has opened easily.

In both cases there is no problem with the interpretation of *easily* as agency is involved in both cases, but taking into account that the facilitative arises from the anticausative, there clearly is a source construction for (76) while there is none for (78), as (76) does not occur. We thus get entrenched uses of the type (77) and just occasional extensions in the form of stage-level uses like (78). This account need not be essentially reformulated if we do not assume the presence of a facilitative adverb: as anticausatives basically refer to uncontrollable processes or processes conceptualised as uncontrolled (possible agency behind them being ignored), imperfective (present-tense) uses are less likely to be progressive (referring to processes in progress) or habitual (scheduled to occur at regular intervals) and more likely to refer to basically unpredictable events of which individuals are susceptible. The 'susceptibility uses' could then extend from inchoative verbs to result verbs.

As the discussion of the English and German middles in 4.1 suggests, the stage-level uses of facilitatives can be explained by a process of gradual narrowing of the temporal frame over which an individual-level or generic statement is valid. In English and German this process is sufficiently infrequent for researchers writing on middles to accept the assumption of the inherently generic nature of middles as obvious and uncontroversial. One could assume that in Baltic and Slavonic this process of extension of originally individual-level facilitatives, for which the rudiments are present everywhere, somehow assumed massive proportions. While this is conceivable, such a process would not explain the whole extent of variation which we find in the Baltic and Slavonic languages. Within the general assumption that the facilitative construction arises out of the anticausative one, we need not commit ourselves to the view that there can have been only one single pathway leading from anticausative to facilitative. There could have been a second pathway explaining developments within the facilitative for which extension from the individual-level facilitative does not account very well.

What the assumption of extension from the individual-level type does not account for very well is the fact that the Slavonic and Baltic facilitatives have, in their perfective varieties, two interpretations: one is properly facilitative in the sense applicable to the western-style middle, the other expresses unexpected result. This contrast was already shown in (31) and (32), and is shown once more in (79), (80):

(79) Latvian

Plāns	izveidojās		viegli,	scenārijs		
plan.noм.sg	shape[pfv].	PST.3-REFL	easily	scenario.NOM.SG		
uzrakstījā-s	Į.	pats	no	sevis,		
write[pfv].pst	.3-REFL S	elf.nom.sg.m	from	REFL.GEN		
[man īpaši nepiepūloties.]						
'The plan took shape easily and the scenario got written all by itself,						
[without any special effort of mine.]'						

(80) [Atvaino, gribēju rakstīt Ziemeļkurzemes, bet] steigā uzrakstījā-s pavisam haste.LOC.SG write[PFV].PST.3-REFL completely cits reģions. other.NOM.SG.M region.NOM.SG '[Sorry, I wanted to write 'Northern Kurzeme', but] in my haste I wrote [the name of] a completely different region.'

The distinction involves a difference in information structure, but there are further differences that cannot be reduced to information structure. For the sake of simplicity, let us once more consider the constructed examples (29) and (30), which we will here repeat as (80) and (81):

(81)) Latvian (constructed)						
	vāks	(viegli)					
	lid.nom.sg	1SG.DAT	off-take.pst.3-refl	easily			
	'the lid came o	off (easily)'					

(82)	Latvian (constructed)						
	man	(nejauši)	no-ņēmā-s	vāks			
	1SG.DAT	accidentally	off-take.pst.3-refl	lid.nom.sg			
	'I accidentall	y took off the lid.'					

(81), with stress on $non, \bar{e}m\bar{a}s$, presupposes that the agent wanted to remove the lid, whereas (82), with stress on $v\bar{a}ks$, presupposes the opposite. While it is imaginable that (82) arose from (81) through a reversal of information structure, we could also derive (82) directly from the anticausative. That is, we could assume a shift from type (i) to type (ii) in example (83):

(83)	Lithuanian (constructed)				
	Man	at-si-vėrė	durys.		
	1SG.DAT	PFX-REFL-open.PST	door[pl].nom		
	(i) 'a door opened before me'				
	(ii) 'I accio	lentally opened a door'			

This shift could be motivated by the very feature that makes the imperfective variety of the anticausative susceptible of 'potential', hence individual-level, readings: it is the feature of uncontrollability of the event. Following this line of reasoning, we could venture that in Baltic and Slavonic two different contexts for the use of anticausatives led to facilitative extensions: the properly 'facilitative' one in imperfective (basically present-tense) contexts, and the 'non-volitional' one in perfective (basically past-tense) contexts. Subsequently a series of extensions must, of course, have occurred.

This assumption would account for the existence of non-volitional readings in Baltic and Slavonic and would also provide an additional possible source for perfective and stage-level facilitatives, which, as we saw, are but marginally represented in the western type of 'middle'. Of course, in assuming an additional pathway of development for facilitatives in Baltic and Slavonic, we have to pose the question why it was not available in western-style middles.

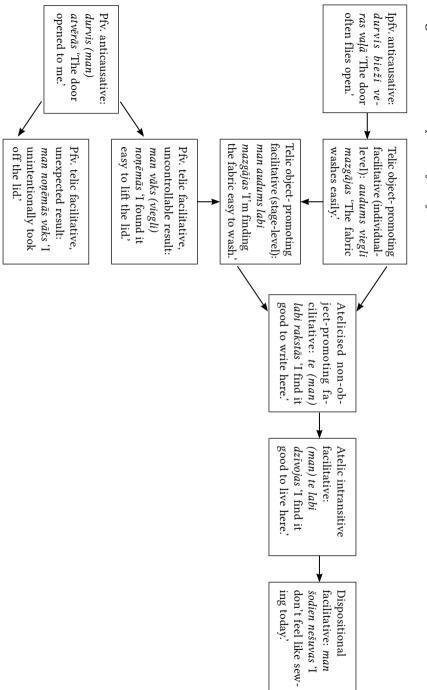
A possible answer would be that the difference consists in the nature of verbal aspect in Baltic and Slavonic. As mentioned above, the Slavonic and Baltic languages have a system of aspect oppositions expressed by derivational means, perfectivity being associated with prefixation. A perfective verb like Latvian *iz-vilkt*, Russian *vy-tjanut* 'pull out' refers to the removal of an object as a result of the action of pulling. In most cases there is an implicature to the effect that the result expressed by *iz-vilka*, *vytjanul(a)* 'pulled out' resulted from conscious agency with the purpose of removing an object, but this implicature is cancelled in a number of grammatical contexts. One of them is the negated imperative:

(84)	 Russian (constructed) 			
	Ne	vytjani	štepsel'.	
	NEG	pull[pfv].imp.2sg	plug.Acc.sg	
	'Don't (accidentally) pull the plug.'			
(85)	Ne	vytjagivaj	štepsel'.	
	NEG	pull[ipfv].imp.2sg	plug.Acc.sg	
	'Don't pu	ll the plug.'		

While (85) is an appeal not to undertake the agency that would lead to the removal of the plug, (84) does not assume such agency and is just an appeal to counteract the undesirable change of state (on this distinction cf. Bogusławski 1985). In speech-act terms, (85) is usually described as a prohibition while (84) is a cautioning. We would suggest that another grammatical context eliminating the implicature of goal-directed agency is the facilitative construction. The result focus of the perfective verb interacts with the constructional meaning of the facilitative in a twofold way: (81) conveys that the change of state was achieved despite the insufficiency of agency, whereas (82) conveys that the change of state was achieved in spite of the agency being directed at another kind of change of state.

The existence of these derivational though grammaticalised aspectual oppositions may have rendered possible the rise and subsequent entrenchment of two subtypes of facilitatives differentiated with regard to aspect. Alongside an imperfective subtype concentrated around 'susceptibility uses' that were basically individual-level (or kind-level), there was a perfective subtype that in virtue of its aspectual specialisation developed a non-volitional value that could assume two readings: unexpected result or non-controllable attainment of a result.

The further development of the facilitative middle in Baltic and Slavonic involved a number of extensions. There was now a twofold input for imperfective stage-level facilitatives: on the one hand, individual-level facilitatives can occasionally undergo extensions and develop stage-level counterparts, as shown for Germanic above. In Balto-Slavonic, however, they were fed by a second source, viz. perfective non-volitional middles that could also develop imperfective counterparts, as verbs usually exist in aspectual pairs.





The synthesis of the imperfective, individual- and kind-level 'susceptibility uses' and the perfective, stage-level 'non-volitional uses' could have given rise to the widely ramified Balto-Slavonic facilitative as we know it now.

It is conceivable that a better explanation could be found for the rise of imperfective stage-level and perfective facilitatives, but the assumption that the Balto-Slavonic facilitatives owe their much more differentiated character to the existence of more than one anticausative source context would help us understand the difference between the western-type and the Balto-Slavonic type facilitative, and the character of the Balto-Slavonic aspect system would provide an independent rationale for the specific features of the Balto-Slavonic facilitative.

The schema on p. 335 shows the putative development of the different varieties of the facilitative construction in Balto-Slavonic. The schema gives only the main lines of development, without the smaller subtypes and extensions.

8. The facilitative among middle-voice constructions

The middle voice, in the broader sense which we envisage here, is a family of constructions widely differing in productivity and grammatical characteristics. Some affect argument structure and are, in that sense, more derivational in character; this could be said of the anticausative, which eliminates the agent from argument structure. Others preserve argument structure, and are thereby more inflectional (for a discussion of voice operations from this point of view cf. Spencer 2013, 90–109). Facilitatives clearly belong to the second group; it is broadly recognised as one of the definitional features of the 'middle' (facilitative) that the agent is part of its argument structure (e.g., Ackema & Schoorlemmer 2002, 138), and in this sense facilitatives are similar to typical voice constructions like the passive, which reshuffle grammatical relations but do not modify argument structure. There is, in some languages, no way of syntactically expressing the agent that is present in argument structure (as in many languages the agent cannot be expressed in the passive construction), but in Baltic and Slavonic the agent does appear in syntax as well.

But the 'derivational : inflectional' divide has also other aspects, like whether the operation crucially changes meaning or not. This problem does not reduce to argument structure, though the addition or subtraction of an argument is obviously relevant to meaning. The passive is an example of a 'pure' voice operation, modifying prominence relations but not affecting meaning. But it might well be the only one. So, for instance, antipassives, which are in many respects a mirror image of the passive, are known to have (both semantic and pragmatic) constructional meanings, discussed for Latvian in Holvoet & Daugavet (2020). The facilitative is not different: it reshuffles grammatical relations like the passive (which is evidently the reason why it is often referred to by terms containing the notion of passive, like 'potential passive' or 'modal passive'), but it also has a clear constructional meaning. Comparing the facilitative with the passive, we can say that they both reflect a change in the status of the agent, but in different ways: while the prototypical passive reduces the agent in prominence (typically eliminating it from the syntax), the facilitative reduces it in agency by presenting the agent's agency as a necessary but insufficient condition for the (successful) realisation of the event described. The constructional meanings of the facilitative constructions are regular and predictable.

Productivity is a third important aspect, as we tend to think of those operations that are performed 'online' rather than being stocked in the lexicon as inflectional. Middle-voice constructions show wide variation in this respect, and even (lexically determined) subtypes within one construction show considerable differences in productivity, as noted for deobjective antipassive reflexives in Holvoet & Daugavet's study of Latvian antipassives (Holvoet & Daugavet 2020).

Facilitatives are, on the whole, freely produced 'online', though a certain number of instances are certainly strongly entrenched. Russian dictionaries regularly list, as fully-fledged lexical items, such reflexive forms as *(ne) spitsja* '(somebody) cannot fall asleep', *(ne) rabotaetsja* '(somebody) does not feel like working' or *(ne) siditsja* '(somebody) cannot sit quiet in one place'. But most facilitatives of this type are too low in frequency to make it to the dictionaries.²⁸

²⁸ As Peter Arkadiev kindly pointed out to me, constructions like *ne spitsja*, *ne rabotaetjsa* etc. have no complete tense paradigms and hardly derive non-finite forms in Russian, which strengthens the impression that they are not separate lexemes but are instances of the corresponding lexemes *spat*', *rabotat*' etc. used in voice constructions with limited morphosyntactic variability.

The productivity of the facilitative construction can be shown with examples like the following, where a facilitative is derived 'online' from a technical term not used in everyday language, so that the form has little chance to become lexically entrenched:

(86) Latvian (lvTenTen14)
Eksperimentāli iegūtie dati
experimentally obtain.PPP.NOM.PL.M.DEF data.NOM.PL
labi aproksimēja-s
well approximate.PRS.3-REFL
[ar Bolcmana sadalījumam raksturīgo eksponenciālo funkciju.]
'The experimental data can be nicely approximated [with the exponential function characteristic of a Boltzmann distribution.]'

All properties listed here—productivity, regularity and predictability of meaning, preservation of the argument structure of the verb—can be adduced as arguments in favour of the treatment of the facilitative as a productive, inflectional rather than derivational, voice construction.

9. In conclusion

In this article we have discussed the facilitative middle as a cross-linguistically identifiable construction type, of which we have studied in greater detail (partly with the aid of corpus data) the Baltic and Slavonic instantiations. These differ from what, in studies of Western European languages, especially in those authored by linguists of the formal persuasion, is often referred to as 'the middle' *tout court* by their frequent nongeneric (stage-level) readings and by the possibility of overtly expressing the agent. We have assumed that in both cases the same construction type is involved, and have attempted to account for the cross-linguistic variation by invoking partly divergent diachronic scenarios starting out from the anticausative construction. Whether or not our hypothesis is accepted, it is to be hoped that the relevant Slavonic and Baltic constructions and their counterparts in the Western European languages will henceforth be considered in closer connection.

Abbreviations

ACC — accusative, DAT — dative, DEB — debitive, DEF — definite, DEM — demonstrative, F — feminine, FUT — future, GEN — genitive, IMP — imperative, INF — infinitive, INS — instrumental, IPFV — imperfective, IRR — irrealis, LOC — locative, M — masculine, MPASS — mediopassive, N — neuter, NEG — negation, NOM — nominative, NVIR — non-virile, PFV — perfective, PFX — prefix, PL — plural, PLN — place name, PN — personal name, PP — past participle, PPP — past passive participle, PRS — present, PST — past, PTC — particle, Q — question marker, REFL — reflexive, REL — relative pronoun, SG — singular, VOC — vocative

Sources

NCP = National Corpus of Polish at http://nkjp.pl RNC = Russian National Corpus at https://ruscorpora.ru lvTenTen14 = Latvian Internet Corpus at https://www.sketchengine.eu ruTenTen11 = Russian Internet Corpus at https://www.sketchengine.eu

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Exploring the asymmetric coding of autobenefactive in Lithuanian and beyond

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In this paper, I investigate a group of semantically close functions marked by the Reflexive marker in Lithuanian, which I address as autobenefactive. I provide a classification of these functions and then turn to a marking asymmetry which is characteristic of them, namely the tendency to occur in perfective contexts and not to occur in progressive contexts. On the basis of a questionnaire, I show that this tendency indeed exists, although different verbs are involved to different degrees, and we are presumably witnessing an ongoing grammaticalization process. I then compare the Lithuanian marking asymmetry to a phenomenon in Georgian, in which the use of 'subjective version' exhibits a similar kind of asymmetry with some groups of verbs. In the concluding section, I propose a typological explanation of the observed asymmetry, hypothesizing that the markers of both languages function in a way parallel to so-called 'bounders'—telicizers with primary spatial meanings.

Keywords: reflexive, middle, autobenefactive, aspect, Lithuanian, Georgian

1. Introduction¹

The research idea for this paper was originally driven by one observation on everyday Lithuanian speech. When speaking of buying things in the past, one usually (in fact, obligatorily) uses the Reflexive² marker *si* when one buys things for oneself (1):

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² I follow Croft (2001) in capitalizing language-particular categories, as opposed to typological comparative concepts, which are not capitalized.

(1)	Aš	nu-si-pirk-au	obuoli-ų.
	I.nom	PVB-REFL-buy-1SG.PST	apple-gen.pl
	'I bought so	ome apples for myself.'	

In contrast, when speaking of the ongoing process of buying (2), one normally doesn't use the Reflexive (a), and its use would be very awkward if possible at all (b):

(2)	(a)	Aš		perk-u	obuoli-us	s. ³
		I.noм 'I am bu	buy-1sg.prs ying apples for my	apple-ACC.PL /self.'		
	(b)	*Aš		perk-uo-	si	obuoli-us.
		I.nom	buy-1sg.prs-refi	2 apple-Ac	CC.PL	
		ʻI am bu	ying apples for my	/self.'		

As will be shown, this kind of asymmetry extends beyond the Lithuanian verb *pirkti* 'buy' and also beyond the Lithuanian language. Hence the goal of the paper: step-by-step, I will explore the mechanisms behind this marking asymmetry in Lithuanian. In doing so, I will invoke languageinternal, theoretical (conceptual-semantic), and typological perspectives.

In section 2, I analyse the domain of the indirect middle/reflexive in Lithuanian. I propose an internal classification based on semantic and formal criteria (2.1), and briefly discuss its typological and areal context (2.2). In section 3, I address the main question of the paper, namely, the coding asymmetry presented in the introduction. Section 4 is dedicated to the search for an explanation of the asymmetry in question; it discusses methodological issues (4.1) and the cross-linguistic aspect of the problem (4.2). I summarize the results in the Conclusion (5). The Appendix presents the questionnaire used for the present study.

³ The examples (1) and (2a), apart from the TAM differences and the presence/absence of a reflexive marker, also differ with respect to the case marking of the object. In these examples, aspect also correlates with the type of definiteness and quantification. In telic contexts such as (1), indefinite quantity is marked by the partitive Genitive in Lithuanian. By contrast, in progressive contexts (with verbs not denoting states) the object is normally the incremental theme (an entity incrementally affected by the action). This role is marked by the Accusative case. In (2a), the object of the verb *pirkti* 'buy'—obuolius 'apples'—is interpreted (in a somewhat generalized manner) as the incremental theme.

2. Indirect middle, indirect reflexive, and autobenefactive

2.1. Lithuanian

Let us continue with the example of the Lithuanian verb *pirkti* 'buy'. As shown in (1) and (2), it is often used with the Reflexive marker *si*. Its use is close to obligatory (in some TAM forms) in cases where the buyer and the person for whose benefit the act of buying is carried out are one and the same person. The condition of coreference of agent and beneficiary is the only one that triggers the use of *si* in such cases, and it is used with all three persons:

(3)	(a)	Aš	nu-si-pirk-au	obuoli-ų.	
		I.nom	PVB-REFL-buy-PST.1SG	apple-gen.pl	
		ʻI bough	'I bought some apples (for myself).'		
	(b)	Ти	nu-si-pirk-ai	obuoli-ų.	
		you.non	и pvb-refl-buy-pst.250	д apple-gen.pl	
		'You bought some apples (for yourself).'			
	(c)	Jie	nu-si-pirk-o	obuoli-ų.	
		they	PVB-REFL-buy-PST.3	apple-gen.pl	
		'They bought some apples (for themselves).'			

The absence of *si* in any of these cases results in a different reading of each sentence, namely, the beneficiary and the agent are inherently distinct:

(4)	Aš	nu-pirk-au	obuoli-ų.		
	I.nom	рvв-buy-pst.1sg	apple-gen.pl		
	'I bought some apples (for someone else).'				

In cases like (4), the beneficiary can be implicit or explicit (expressed by a full pronoun or a noun phrase). By contrast, whenever the Reflexive marker is present as in (3), the addition of a beneficiary argument noncoreferential with the agent is blocked:

(5)	*Aš	nu-si-pirk-au	tau	obuoli-ų.
	I.nom	pvb-refl-buy-pst.1sg	you.sg.dat	apple-gen.pl
	ʻI bought y	vou some apples.'		

Summing up, in Lithuanian, the *coreference of the agent-subject and the beneficiary* is obligatorily marked by the Reflexive marker, at least in certain TAM forms. The converse is also true: non-coreferential agent-subject and

beneficiary cannot induce Reflexive marking. Following Kulikov (2013), I call this meaning *autobenefactive*.

In Lithuanian and cross-linguistically, the autobenefactive belongs to a broader domain which is best referred to as the continuum between the *indirect reflexive* and the *indirect middle*. These are terms used by Kemmer (1993), but terminology in this domain is not quite established. In Kemmer's version, the crucial difference between the middle and the reflexive is the degree of *naturalness of the coreferentiality*. *Break an arm* is not naturally reflexive—one can break one's own arm as easily as someone else's arm. In contrast, the situations of *washing* or *buying* normally presuppose that the object—either direct or indirect—coincides with the agent-subject. Kemmer applies the label *reflexive* to the former kind of situations, whereas the label *middle* is reserved for the latter.

Cross-linguistically, however, more semantic factors are at play in reflexive-middle marking. Another dimension is the type of coreferentiality of the agent-subject and the object. While the agents of a reflexive and middle constructions are normally human beings or at least animate beings, their 'self' may be interpreted by a language in different ways: as the motor centre, as the body, as part of the body, as the personality and as the body-soul composite. Along this axis, situations like 'see oneself in the mirror' or 'cut one's finger' may behave differently in terms of reflexive/middle marking cross-linguistically and language-internally.

The third axis relates to the issue of *transitivity* reflected in the very terms *direct/indirect* middle/reflexive. Transitivity can best be viewed as a multifactorial phenomenon combining different semantic parameters that tend to co-occur. The more parameters show up together, the more transitive a construction is; conversely, the fewer parameters converge, the less transitive a construction is. This 'prototype' approach is applied in the classical papers by Hopper & Thompson (1980) and Tsunoda (1981) and elaborated in subsequent work. Different languages have different transitivity marking strategies: the same situations can be marked as transitive or intransitive, and different languages exhibit various kinds of transitivity splits, e.g., TAM-splits.

Lithuanian does not formally distinguish between transitive (direct) and intransitive (indirect) reflexive/middle marking on the verb form (in

Kemmer's terminology).⁴ So how can one distinguish between direct/ transitive and indirect/intransitive Reflexives? Does this distinction make sense at all? The distinction between the direct and the indirect Reflexive is primarily semantic, i.e., these are two groups of functions expressed by the same marker which can be distinguished for the convenience of linguists and grammar readers. However, there are still some formal distinctions between the two groups that are not immediately visible. I suggest three definitions, which may apply to Reflexive-marked constructions either jointly or separately and thus allow us to classify each construction as a direct or an indirect one.

(i) A Reflexive construction is a direct one if, when the condition of subject-agent and object coreferentiality is changed, the Reflexive marker obligatorily disappears, and the new object is in the Accusative case (6).

(6)	(a)	Aš	už- si -registrav-au		rengin-yje.	
		Ι	PVB- REFL -register-PST.1SG		event-sg.loc	
		'I registered (myself) for an event.'				
	(b)	Aš	už-registravau	tave		renginyje.
		I.nom	рvв-register-рsт.1sG	you.sg.	ACC	event-sg.loc
		'I regis	tered you for an/the eve	nt.'		

If the aforementioned twofold condition is not satisfied, then the construction is to be interpreted as an Indirect Reflexive construction. In this case, the new object is normally in the Dative Case form which can, however, have different functions such as benefactive (7) or external possessor (8):

(7)	(a)	Aš І.пом 'I got sor	<i>pa-si-ėmi-au</i> PVB-REFL-take-PST.1SG me water for myself.'		vandens. water.gen.sg	
	(b)	Aš І.nom 'I got sor	<i>pa-ėmi-au</i> pvB-take-pst.1sg me water for you.'	tau you.	SG.DAT	vandens. water.gen.sg

⁴ Naturally, this only applies to 'light' (bound) markers. 'Heavy' (non-bound) markers do distinguish between accusative forms (*matau save veidrodyje* 'I see myself in a mirror') and dative forms (*perku mašiną sau* 'I am buying myself a car'). More about the 'light' and 'heavy' Reflexive forms in Lithuanian see Holvoet (2020).

(8)	(a)	Aš	už- si -dėj-au	ke	pur-ę.	
		I.noм 'I put m	PVB- REFL -put_on-PST.18 y cap on.'	G caj	p-acc.so	3
	(b)	Aš I.nom	už-dėj-au PVB-put_on-PST.1SG	<i>vaik-ui</i> child-da'	Г.SG	<i>kepur-ę.</i> cap-ACC.SG
		I put the	e child's cap on.'			

Describing Lithuanian, I will call contexts like (7) *Strong Autobenefactive*, following partly Kulikov (2013) and Holvoet (2020). These are contrasted to *Weak Autobenefactives* (see below). I preserve Geniušiene's term *Reflexive Recipient* for contexts like (8a), capitalizing it as a language-particular descriptive category of Lithuanian.

Their very close relatives are 'possessive reflexives' (in Geniušienė's terminology) as in (9), which have the same formal properties as Reflexive Recipient constructions.

(9)	Jis	su- si -lauž-ė	rank-ą.
	he.noм	рvв- REFL -break-psт.3	hand-Acc.sg
	'He broke hi		

(ii) If a Reflexive construction contains an object in the Accusative or partitive/negative Genitive Case, then it is an indirect reflexive/middle construction. Actually, both examples (7b) and (8b) contain such objects. In some cases, Reflexive forms that otherwise seem identical can differ in meaning depending on the presence of a free direct object. In (10), the Reflexive is clearly a direct one, as it can be substituted by a free noun phrase. By contrast, in (11) we are dealing with an Indirect Reflexive. In this semantic type, the Reflexive marker refers to the recipient argument, as Geniušienė (1987, 128) argues.

- (10) (a) Aš ap-si-rengi-au. I.NOM PVB-**REFL**-dress-PST.1SG 'I dressed myself.'
 - (b) Aš ap-rengi-au vaik-q. I.NOM PVB-dress-PST.1SG child-ACC.SG 'I dressed the child.'
- (11) Aš ap-si-rengi-au palt-q. I.NOM PVB-REFL-dress-PST.1SG coat-ACC.SG 'I put my coat on.'

(iii) Reflexive-marked constructions in which the Reflexive marker cannot be replaced with a noun phrase or a full stressed pronominal phrase can also be considered Indirect Reflexive constructions. In such cases, the Reflexive marker provides a 'weak' reference to the subject-agent argument. It indicates that the agent somehow, although less immediately than in typical Strong Autobenefactives, benefits from the action, or is affected by the action in another way. I will call this group of constructions *Weak Autobenefactives*. Unlike the Strong Autobenefactive, it is often non-obligatory, and the Reflexive marker can be omitted without major consequences in the reading of a sentence.

Weak Autobenefactives can be subdivided into several formally distinguishable groups, according to the verb's valence and semantics. The first group includes verbs with more than one argument, the non-subject being an argument in the Dative or a prepositional phrase. Normally, verbs of talking and communication belong to this class, and the non-agent indirect argument refers to the second speech participant, whose agency is perceived as not much lower than that of the agent. These contexts are semantically close to reciprocals but are formally not identical to them (12):

(12)	(a) <i>Aš</i>	vakar	pa- si -kalbe	pa- si -kalbėj-au				
	I.nom	yesterday	PVB-REFL-	talk-pst.1sg	with			
	ses-e.							
	sister-INS.SG							
	'Yester	day I talked to	my sister.'					
	(b) <i>Aš</i>	pa- si -pasako	o-si-u	jam.				
	I.nom	PVB-REFL-te		he.dat				

'I will tell him (my story).'

Semantically, Weak Autobenefactive communication constructions are distinct from reciprocals in that in the former case, one speech participant is the prominent one, to whom attention is drawn, whereas in the latter case both participants are viewed as equal.

In the second formally definable group, the verb has only one subject argument:

(13)Ašbuv-aupa-si-vaikščio-timišk-e.I.NOMbe-PST.1SGPVB-REFL-walk-INFforest-sG.LOC'I went for a walk to the forest.'

In (13) the action of going for a walk is conceptualized as healthy or pleasant for the walker. Finally, the same function can be posited for transitive reflexive perception verbs such as *pa-si-klausyti* 'listen to', *pa-si-žiūrėti* 'watch', *pa-si-grožėti* 'marvel at', where Non-Reflexive Dative paraphrase is also hardly possible (14b):

(14)	(a) <i>Aš</i> І.noм 'I watch	<i>pa-si-žiūrėj-au</i> pvB- REFL -watch-pst.1sg ed "Vikings".		"Viking-us". Viking-pl.ACC	
	(b) *Aš І.пом 'I watch	<i>pa-žiūrėj-au</i> pvB-watch-pst.1sG ed "Vikings" for you.'	<i>tau</i> you.dat	"Viking-us". Viking-pl.acc	

It is hard to imagine watching a TV show for someone else. However, one can imagine a situation in which one asks a friend to watch an episode of *Vikings* (and then retell its plot) because s/he is busy but wants to keep track of the story. This relation cannot be rendered by a Dative complement.

Let us summarize the proposed classification. Although Lithuanian does not formally distinguish between the transitive and the intransitive reflexive/middle by means of verbal morphology (there is only one Reflexive marker), one can distinguish between different constructions along the direct > indirect reflexive/middle scale on the basis of syntactic and semantic criteria. First, one can distinguish between the (i) Direct Reflexive (ex. 6), (ii) Indirect Reflexive (ex. 7b, 8b, 11–14). Second, in the Indirect domain, one can distinguish between the (a) Strong Autobenefactive (7), (b) Weak Autobenefactive (ex. 12–14), (c) Possessive Reflexive ('grooming' & 'injury' verbs, ex. 9), (d) Reflexive Recipient ('dressing' verbs, ex. 11).

The classification provided above has proven useful in explaining asymmetries provided in the beginning of this paper such as in ex. (2).

2.2. The cross-linguistic dimension and the context of the region

The morphological marking of indirect reflexive and middle is well attested cross-linguistically in different genera and regions, e.g. in Japhug Rgyalrong, Kiranti, Sino-Tibetan (Jacques 2015), in various Bantu languages (Dom, Kulikov & Bostoen 2016), Georgian (Boeder 1968; Harris 1981; Gurevich 2006). In Indo-European, it is typical of the older languages that had preserved the Proto-Indo-European inflectional middle voice morphology, such as Ancient Greek (Allan 2003; Willi 2018) and Sanskrit (Kulikov 2013). However, in its contemporary regional and genealogical context, Lithuanian is unique with respect to the extent to which this domain is central to its grammar.⁵

3. Autobenefactive in Lithuanian: coding asymmetries

3.1. Pirkti 'buy'

Let us take a look at the examples from the beginning of this paper again:

(15)	(a)	Aš I.nom 'Lbough	M PVB- REFL -buy-1SG.PST ught some apples for myself." <i>perk-u obuoli-</i>		<i>obuoli-ų.</i> apple-gen.pl
	(b)	Аš І.пом			
	(c)	*Aš І.noм 'I am buy	<i>perk-uo-si</i> buy-prs.1sG- RE ying apples for m	FL app	<i>uoli-us.</i> ple-ACC.PL

Here, we are clearly dealing with the function of the Reflexive marker I previously defined as Strong Autobenefactive. This can be seen if one applies our test:

(16)			obuoli-ų		
			apple-gen.pl		
	(b) <i>Aš</i>	nu-*si-pirk-au	jam	obuoli-ų	
	I.nom	PVB-REFL-buy-PST.1SG.	he.dat	apple-gen.pl	
	'I bought	t apples for myself for him'			

Our main observation here is that the use of the Reflexive marker is blocked in the Present Tense, although it is obligatory in the Past Tense whenever the agent and the beneficiary are coreferential. Therefore, we

⁵ This is true with regard to the standard languages. However, as Paweł Brudzyński (personal communication) reports, colloquial Polish makes an extensive use of the abbreviated form of the dative Reflexive Pronoun se < sobie in indirect middle/reflexive functions.</p>

are dealing with a marking asymmetry. There is an immediate temptation to claim that the Strong Autobenefactive Reflexive is used in the Past Tense and is blocked in the Present, that is, there seems to be a tense-based coding asymmetry. However, let us check more constructions and find out where the Strong Autobenefactive Reflexive is used or blocked with the verb *pirkti* 'buy' (again, under the condition of agent-beneficiary coreference). Here is the picture we get.

(17)		li-ų. e-gen.pl	<i>kasdien</i> every_day es every day.'	nu- si- perk-1 pvB- REFL -b		
	(b) Aš I.nom 'I wil	<i>tuoj</i> A presen ll now buy s	•	irk-si-u FL-buy-FUT-1S	<i>obuoli-ų.</i> G apple-gen.p	L
	(c) Aš I.nom 'I wa	<i>nori-u</i> 4 want-1 nt to buy so	PRS.1SG PVH	- si- pirk-ti 3- refl -buy-in	obuoli-ų. F apple-gen.p	L
	U	<i>nu-si</i> лр рvв- в and buy som	ЕFL- buy.imp	<i>obuoli-ų.</i> apple-gen.н	Ľ	
		e-GEN.PL	kasdien every_da 19 apples every	y PVB- RE	irk-dav-au FL-buy-нав-рsт.1	SG
(18)	PVB-	<i>cambin-ai.</i> call-pst.2sG	* <i>pirk-au-s</i> buy-pst.1 ing apples, you	sg-refl ap	uoli-us, tu ple-ACC.PL yc	ı ou
	PVB-	cambin-k. call-імр	*pirk-si-u buy-fUT- ring apples, call	1SG-REFL a	obuoli-us, apple-ACC.PL	
		IMP-REFL	<i>obuol-ius</i> apple-ACC.PL at the market.'	<i>tik</i> only	<i>turg-uje.</i> market-sG.LOC	

(d) <i>Aš</i>	planuoj-u	*pirk-ti-s	obuoli-us	tik		
I.nom	plan-prs.1sG	buy-inf-refl	apple-ACC.PL	only		
turg-uj	е.					
market	market-sg.loc					
'My plan is to buy apples only at the market.'						

The first obvious observation one can make is that whenever the Reflexive marker is used, it *co-occurs with a preverb*. As is widely known, preverbs telicize verbs in Lithuanian (e.g. Arkadiev 2011), and, more widely, influence their *actionality* characteristics. The degree of grammaticalization of the preverb-based telicity does not reach that of Slavic languages, i.e., does not result in a clear-cut binary aspectual system, being, however, close enough to the latter type.

Therefore, the Strong Autobenefactive Reflexive of the verb *pirkti* is only possible (and obligatory) in telic contexts, where the telicity is marked by the preverb *nu*- 'down'). Besides the telic Past, it occurs in the habitual Present (17a) and the habitual Past (17e), but not in the progressive Present (15c) and the progressive Past (18a), in the telic Future (17b), the Infinitive (17c), and the Imperative (17d), but not in the cases when the same inflectional forms have progressive readings (18b-d).

3.2. Other verbs

Given that there is no morphological differentiation between direct and indirect reflexive/middle forms in Lithuanian—all are expressed by the Reflexive marker—there is no obvious way of conducting a corpus-based analysis, at least, starting research with one. Therefore my primary data—a list of recurrent indirect middle/reflexive verbs—have been collected during a short-term 'participant observation' study.⁶ I established

⁶ The participant observation method is the main method in social anthropology, but it is less accepted as legitimate in linguistics. Field linguists usually rely on questionnaires and spontaneous speech recordings. However, there are types of tasks for which participant observation appears a suitable method. So is our case of indirect reflexive/middle verbs. These verbs are not very frequent forms in speech, therefore, establishing frequently used verbs of these types in traditional ways would require many hours of recording of spontaneous speech and its transcription. However, if the goal is only to establish relevant lexical units, participant observation is a legitimate shortcut. During this study, whenever it was possible, I regularly made notes when participating myself in everyday speech situations for a month-long period. I registered indirect reflexive/middle forms repeatedly used by my speech partners, all native speakers. This resulted in a list of verbs that cannot be treated as accurately representing the actual frequency distributions in the colloquial speech; however, there is no doubt that this list can be used as a foundation for a preliminary study of the verbs of these classes.

44 commonly used lexical items, excluding variants without or with preverbs with no significant difference in meaning, which are used with the Reflexive marker in indirect middle/reflexive functions. After identifying indirect middle/reflexive verbs commonly used in colloquial speech, I asked five native speakers of Lithuanian of different ages and genders living in Vilnius for an extended period to fill in a questionnaire, asking them whether they would use each verb in a present progressive context (in constructed sentences).⁷ There were three possible answers: 'I would definitely say this', 'This is not very natural' and 'I would never say this'. The questionnaire with the results is provided in the Appendix. If a certain answer was marked as possible by at least one informant, I provide the number of informants (<5) who have chosen this particular answer.

The results of the participant observation and questionnaire-based investigation can be summarized as follows. Although most speakers report that they would use most verbs in their reflexive forms in present progressive contexts, there are a few constructions which are consistently ruled out by all or most speakers. Here, the convergence of the speaker's intuitions is very high. These include *pirkti duonq* 'to buy bread', *imti puodukq iš spintos* 'to take a cup from the cupboard', *žiūrėti filmq* 'to watch a movie', *užmiršti tas laimingas dienas* 'to forget these happy days', *jungti kolegą prie videokonferencijos* 'to make a colleague join the online conference', *vaikščioti po parkq* 'go for a walk in a park', *eiti per parka* 'walk across a park', *skaityti knygq* 'read a book'.

The second group includes constructions on which speakers demonstrate a large extent of hesitation and non-convergence of answers. Among such constructions are the 'cooking' constructions *gaminti pietus* 'cook lunch' and *ruošti pietus* 'prepare lunch', *virti kiaušinius* 'boil eggs', *kepti kiaušinienę* 'fry eggs', where different speakers' intuitions vary along the whole scale of possible answers from absolute allowance to an absolute ban. For the rest of the constructions of the list, my informants demonstrate highly divergent results ranging from 'I would definitely say that' to 'This is not

⁷ I did not check other atelic contexts, which I investigated above for the verb *pirkti* 'buy'. Filling such a questionnaire would require too much time resources from my informants. However, testing three more verbs—*imti* 'take', *žiūrėti* 'watch', and *skaityti* 'read'—has shown that the inability to occur as a Reflexive in the continuous Present entails the impossibility of Reflexive marking in other atelic contexts as well.

very natural' in evaluating certain forms, and different speakers rule out various amounts of Reflexive Present progressive constructions.

Both groups are heterogeneous in terms of the classification of indirect middle/reflexive forms of Lithuanian proposed in Section 2.1.

All speakers agree on their intuitions about the constructions with body-position change verbs *stoti-s* 'stand up', *sėsti-s* 'sit down', *gulti-s* 'lay down'. These verbs fall into the category of Weak Autobenefactive of my classification. All speakers allow Reflexive marking in the continuous Present in the versions of the verbs without a preverb, but their answers diverge when a form with preverb is proposed. For instance, my informants disagree on the possibility of the construction *Aš* **at-si-***stoju iš lovos* 'I am standing up (**PvB-REFL**-stand_up-PRS.1SG) from a bed'.

A large and open group of verbs, of which only a handful are present in my survey, are the verbs with the delimitative *pa*- such as *pa-si-vaikščioti* 'go for a walk', *pa-si-žiūrėti* 'watch' or *pa-si-skaityti* 'read'. This is a productive model in Lithuanian, and it appears that whenever the animate referent of the subject carries out the action for him/herself, which is normally the case, a weak autobenefactive Reflexive is possible (although not obligatory). Not surprisingly, both the Reflexive marker and the preverb are consistently dropped in progressive contexts.

Finally, I have found very few examples of present progressive uses of any verb from my questionnaire the National Corpus of Lithuanian.⁸ This may be due to various reasons. First, it might be the case that present progressive uses of the majority of indirect middle/reflexive verbs do not occur in practice, although such uses are usually not perceived by native speakers as ungrammatical. A second option is the limited volume of texts contained in the corpus. Finally, there is a possibility that the corpus data are skewed in favor of normative uses. Nevertheless, I have not been able to find any prescriptive rules regarding the use of such forms on the website of the State Commission of the Lithuanian Language.⁹

⁸ http://tekstynas.vdu.lt/tekstynas/index.jsp

⁹ http://www.vlkk.lt/en/

4. An attempt at an explanation

4.1. Language-particular vs. universal

The participant observation and questionnaire investigation results presented in the previous section allow us to conclude that the use of indirect middle/reflexive forms demonstrate a bias toward incompatibility with progressive contexts. However, given that the answers provided by Lithuanian native speakers exhibit a large extent of non-convergence, one can conclude that we are dealing only with a tendency, not with a rigid rule. This means that we are most probably witnessing an ongoing process in its evolution, with various verbs and constructions involved to a different extent. This process can lead to various and hardly predictable results in the future.

Given that we are dealing with a *weak tendency in the asymmetry of coding*, one can ask a *why*-question: what are the reasons for a seemingly restricted compatibility of indirect reflexive/middle verbs with present progressive contexts? In this piece of research, I investigate one single language—Lithuanian. Why-questions on the structural idiosyncrasies of particular languages are a controversial issue: after all, language-particular structures are results of historical accident. In other words, particular languages are the way they are because they happen to have come to be this way. The tendency observed in the present study may easily be this kind of historical idiosyncrasy. In the research in linguistic typology and usage-based linguistics, there had always been a tacit assumption, which was recently made more explicit (Schmidtke-Bode et al., eds., 2019), to the effect that explanation is only possible for cross-linguistic tendencies (universals), not language-particular structures.¹⁰ By only looking at cross-linguistic regularities, one can express enlightening hypotheses about their motivation, whereas language-particular data are to a large extent accidental and thus insufficient for building an explanatory theory of language. The opposite is not true: language-particular structures can reflect universal tendencies, but this is not necessary.

Does this mean that in our case, which is language-particular, one should give up any attempt of explanation? I do not think so for two

¹⁰ This is also the core argument of most recent work by Martin Haspelmath (2010; 2018 etc.).

reasons. First, in Lithuanian, we are dealing with a systematic, although weak, coding asymmetry, which involves verbs of a particular semantic rather than formally distinguished class: it is only one particular group of Reflexive-marked verbs which exhibits the described asymmetric behavior. Semantics are widely assumed to be more universal than language-particular formal categories (Croft 2001); this makes our observed phenomenon less dependent on language-particular formal idiosyncrasies and gives it a universal dimension. Secondly, one can preliminarily claim that the coding tendency described here for Lithuanian is not unique to this language (see below), although much more cross-linguistic research is needed.

4.2. Autobenefactive and там beyond Lithuanian

In the present stage, I have found at least one language exhibiting a coding asymmetry somewhat parallel to that of Lithuanian, which has been described at least to some extent.

Georgian is well known for its aspect marking which is strikingly similar to that of Slavic or Lithuanian (Tomelleri 2009; Tomelleri & Gäumann 2015). Georgian, as well as the other Kartvelian languages, uses spatial preverbs as telicizers, and the vast majority of its verbs exhibit PFV—IPFV aspectual pairs in the 'Slavic' spirit. Another remarkable parallel between Georgian and East and West Slavic, also shared with its neighboring Ossetic (East Iranian), is that the present tense forms with telicizing preverbs have future tense reference. On the other hand, very much like Bulgarian and Macedonian, Georgian exhibits a complex semantic interplay between the preverb-based derivational aspect and the inflectional aspect, the latter being manifested by an opposition between the 'present' and the 'aoristic' stems and two sets of inflectional paradigms in the past tense.

Another prominent structural feature of Georgian and Kartvelian in general is the morphological category traditionally addressed as *version* (a Latinate translation of the Georgian term *kceva*). Formally, the markers of version are manifest as a set of pre-radical vowels (*-a-*, *-i-*, *-u-*, *-e-*). All the version markers are remarkably polysemous; however, the functional domain of version can be roughly defined as valence-changing or, more generally, as the degree and type of affectedness of various participants (Gurevich 2006, 121).

Of our interest here is the co-called *Subject(ive) Version -i-*, which is used whenever it is the subject of the sentence which is somehow affected by the action (Gurevich 2006, 134), or as Hewitt (1995, 170) puts it, "When the subject is acting upon himself or in his own interests, the context is such as to trigger the Subjective Version." In typological terms, the core meaning of the Subject Version corresponds quite well to what has been described as the indirect middle/reflexive in the previous sections, including the corresponding functions of the Lithuanian Reflexive marker. Unlike the Lithuanian Reflexive marker, the Georgian Subject Version cannot occur as a direct reflexive/middle marker when used alone, though it can co-occur with the reflexive marker *tavs* 'oneself'. The most typical use of the subjective version marker looks as follows:

(19)	Me	saxl-s	v- i -šen-eb.
	I.nom	house-dat	1subj- vers -build-тнем
	ʻI build a ho	Gurevich 2006, 135)	

In this sentence, by adding the *-i*- to the verb, the speaker marks the action as being conducted to his/her own benefit. However, what interests us about the behavior of the Georgian *-i*- is that with some verbs, the use of *-i*- in the Aorist (= perfective past), the Future (always marked as perfective in Georgian), and the Optative¹¹ is obligatory, whereas it is omitted in the present (in the cases of agent—beneficiary co-reference). I am not aware of studies dedicated specifically to this issue. Grammars of Georgian such as Hewitt (1995, 339–363) mention the so-called 'middle/medial verbs'. This is a big class of mostly intransitive verbs which build the aforementioned forms by means of adding a subjective version marker without a preverb. A typical example of such verb is *-t'ir*- 'cry':

(20)	- <i>t'ir</i> - 'cry': version				
	PRS:	<i>v</i> -	t'ir-	i	
		1SG.SUBJ- 'I am crying'	cry-	THEM	
	IMPF:	v- 1sg.subj- 'I was crying'	t'ir - cry-	<i>0-</i> ТНЕМ	di IMPF

¹¹ The "optative" of the traditional Georgian grammar corresponds to the subjunctive of the typological use. Its main function is the marking of complement verbs of volitional, deontic, and phase-marking verbs.

FUT:	<i>v</i> -	i-	t'ir-	eb
	1SG.SUBJ- 'I will cry'	VERS	cry-	THEM
AOR:	<i>v</i> -	i-	t'ir-	е
	1SG.SUBJ- 'I cried'	VERS	cry-	AOR
OPT:	m-i-nda		v- i- t'ir-o	
	1SG.OBJ-VERS-want		1SG.SUBJ- VERS -Cry-OPT	
	'I want to cr	y'		

The explanation typically proposed for such use of the subjective series marker is purely diachronic (paradigm merger), which I will not discuss in detail here (see Hewitt 1995, 240). However, one can argue that verbs like 'cry', as well as many others such as *-cek'v-* 'dance' or *-cux-* 'be upset', which also belong to this category, presuppose a degree of affectedness of the subject, which is strengthened by the subjective version marker in the listed forms.

Besides the 'medial' verbs, there is a number of transitive verbs exhibiting a similar pattern, in which, however, the marker of version in the same forms co-occurs with preverbs. The formation of the corresponding TAM forms of such verbs belongs to the lexical information about them and is mentioned in dictionaries. Examples of such verbs are -k'itx- 'read' and -qid- 'buy':

(21)) - <i>k'itx</i> - 'read': preverb + version					
	PRS:	<i>v</i> -	k'itx-	ul-ob		
		1SG.SUBJ-	read-	THEM-THE	м	
		'I am reading'				
	IMPF:	<i>v</i> -	k'itx-	ul-ob-		di
		1SG.SUBJ-	read-	тнем-тнем імри		IMPF
		'I was reading	,			
	FUT:	c'a-	<i>v</i> -	i-	k'itx-	av
		PVB-	1SG.SUBJ-	VERS	read-	THEM
		'I will read'				
	AOR:	c'a-	<i>v</i> -	i-	k'itx-	е
		PVB-	1SG.SUBJ-	VERS	read-	AOR
	'I read (I finished reading)'					

	OPT:	<i>m-i-nda</i> 1SG.OBJ-VE 'I want to r		с'а- РVВ-	v- i- k'itx- 1sg.subj	-0 - VERS- rea	d-opt
(22)	-q'id- 'b	uy': version	only				
	PRS:	v- 1sG.subj- 'I am buyir	<i>q'id-</i> buy- ng'	ul-ob тнем-т	HEM		
	IMPF:	v- 1sg.subj- 'I was buyi	q'id- buy- ng'	ul-ob- тнем-т		di Impf	
	FUT:	v- 1sG.suBJ- 'I will buy'	i- vers	q'id- buy-			
	AOR:	v- 1sG.suBJ- 'I bought'	i- vers	q'id- buy-	e Aor		
	OPT:		i- nda vers- want buy'		i- - vers-	q'id- - buy-	<i>0</i> ОРТ

Note that the corresponding verbs in Lithuanian also exhibit a Reflexive autobenefactive marking which is asymmetrical and is blocked in progressive contexts:

(23)	(a) <i>Aš</i>	skait-au-*si	knyg-ą			
	I.nom	read-prs.1SG-*REFL	book-sg.acc			
	'I am rea	ding a book'				
	(b) <i>Aš</i>	pa-si-skaiči-au	knyg-ą			
	I.nom	PVB-REFL-read-PST.1SG	book-sg.acc			
	'I read a book (a fragment thereof / for a while)'					

For examples with *pirkti* 'buy', see section 3.1. The Intransitive verb *verkti* 'cry' can have a Reflexive marker in its inchoative, thus perfective forms (*ap-si-verkti* etc.), and the Georgian verb *-cek'v-* 'dance' finds its indirect parallel in *pa-si-vaikščioti* 'go for a walk': both verbs denote a non-directional motion which affects the subject to a certain degree. Note that as in Lithuanian, in Georgian a telic stem is often formed by adding a spatial preverb as in (20), which co-occurs with the subjective

version marker. The Future stem is always marked as telic in Georgian, i.e., a preverb is added whenever lexically possible, which obligatorily co-occurs with the subject version in some verbs. Summing up, the coding of indirect middle/reflexive meanings in Georgian exhibits striking parallels with Lithuanian regarding actionality-related asymmetries, at least with some verbs.

Although the present comparison with Georgian is very rough and preliminary, the provided data appear sufficient to claim that Lithuanian coding asymmetry is not typologically unique, although parallel phenomena, to my knowledge, have not yet been consistently described for other languages.

4.3. Indirect middle/reflexive markers as bounders

In this final section, I propose a preliminary hypothesis about the causes of the phenomenon described above for Lithuanian, which apparently has a cross-linguistic manifestation as well. In the vast field of studies of aspect and actionality/Aktionsart, especially in Slavic, Baltic, and Germanic languages, scholars have long observed that the telic meaning of attainment of a limit¹² is closely related to spatial semantics, namely, to the meaning of attainment of a physical boundary in the process of motion. That is why such elements as bound preverbs or free spatial adverbs come to function as markers of telicity and, ultimately, perfective aspect in many languages. In their influential work (1989), Bybee and Dahl propose a cover term 'bounders' to define all elements of this type; however, they do not provide a precise definition thereof. They describe the phenomenon as follows:

Adding a bounder to a verb often has effects both on its syntactic valency and its aspectual potential or Aktionsart. Thus, *eat up* in English differs from the simple *eat* both by being more clearly transitive and by implying a definite limit or end-state of the process (the total consumption of the object). (Bybee & Dahl 1989, 86)

The notion of 'bounders' roughly corresponds to Talmy's (1991) notion of 'satellites'. Bounders or satellites, which function primarily with motion verbs, where they exhibit their original *path* meanings, start to be used

¹² A term due to Bybee *et al.* (1994, 87).

with a broader set of verbs. During the course of this process, events in time come to be conceptualized as motion in space, and the former marker of a physical boundary starts to code the limit in time, thus contributing to the event's telicization.

My argument here is that the markers of indirect middle/reflexive in different languages are not unlike bounders and satellites. Though in their original meaning they are devices coding argument structure, the beneficiary or recipient argument they mark (which coincides with the agent) is very much like the endpoint marked by bounders/satellites. Thus, in a situation of buying, *the beneficiary/recipient of the action is also a sort of physical endpoint*: buying entails taking an object and displacing it toward the point where the buyer is physically located.

The relationship between spatial categories, especially deixis, and argument marking, pronouns in particular, is well known in typology and grammaticalization studies, although, to my knowledge, no overview work on this topic exists.¹³ For instance, the origin of the Italian clitic object pronouns *ci* 'us' and *vi* 'you.PL' is widely agreed to be the deictic adverbs meaning 'here' and 'there', respectively.¹⁴ In colloquial Russian, the deictic adverb 'here' often functions in a way reminiscent of a 15G pronoun:

(24) *Daj* sjuda! give.IMP.2SG here 'Give it (to me)!'

Interestingly, the only possible reading of (24) is the one provided here; readings with a 3rd or 2nd person recipient are excluded.

Thus, the hypothesis of the pseudo-spatial conceptualization of the indirect middle/reflexive in Lithuanian, which results in actionality-related restrictions and is reminiscent of the functioning of preverbs, is in agreement with well-known general tendencies of grammaticalization. The crucial peculiarity of the phenomenon under discussion is that in our case, spatial meanings seem to derive from the meaning of beneficiary/ recipient argument rather than vice versa. Another example to support this hypothesis is the Lithuanian verb *pa-si-kviesti* 'invite to one's place',

¹³ However, see Heine & Song (2011).

¹⁴ https://www.etimo.it

as well as its Georgian structural counterpart -*i*-*c'vev*-,¹⁵ which is marked by a subjective version prefix: in both cases, the readings of the indirect Middle/Reflexive markers are clearly spatial.

This is a preliminary hypothesis, grounded in a relatively modest set of empirical data. Its more solid verification needs further large-scale cross-linguistic investigation.

5. Conclusion

In this paper, I have investigated the domain of the indirect reflexive/ middle in Lithuanian. I have proposed a classification of semantic types occurring in this domain. I argue that it makes sense to distinguish between the Strong Autobenefactive, the Weak Autobenefactive, the Possessive Reflexive, and the Reflexive Recipient (Section 2) based on compatibility properties of the verbs. Additionally, I show that in the whole domain of indirect middle/reflexive, there is a weak tendency for verbs marked in this way to occur in telic contexts exclusively, e.g., being ungrammatical in the progressive Present; this is an ongoing grammaticalization process in contemporary Lithuanian, and grammaticality judgements for different verbs vary between speakers. However, some verbs exhibit a relatively consistent behavior in this respect. This coding asymmetry is not unique to Lithuanian: a very similar phenomenon occurs in Georgian. I propose an explanatory hypothesis for this asymmetry. In my view, the markers of indirect middle/reflexive in Lithuanian and other languages function in a way similar to preverbs and other kinds of 'bounders' or 'satellites' with respect to the effect they have upon the actionality characteristics of a situation. Like the latter, the beneficiary or recipient argument is conceptualized as a physical endpoint of the action, which sometimes presupposes a physical displacement of objects, as in the case of the verb 'buy'.

Verifying the proposed hypothesis requires a large-scale cross-linguistic investigation of the coding asymmetry in question.

¹⁵ I wish to thank thank an anonymous reviewer for this example.

Abbreviations

ACC — accusative, AOR — aorist, NOM — nominative, DAT — dative, FUT future, GEN — genitive, HAB — habitual, IMP — imperative, IMPF — imperfect, INF — infinitive, INS — instrumental, IPFV — imperfective, LOC — locative, OBJ — object, OPT — optative, PFV — perfective, PL — plural, PRS — present, PVB — preverb, PST — past, REFL — reflexive, SG — singular, SUBJ — subject, THEM — thematic extension, VERS — version

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Appendix: the Questionnaire

The questionnaire contains indirect middle/reflexive verbs established in the stage of participant observation. My informants were asked the question: would you use the constructions given below with the adverb *dabar* 'now'? Verbs are given with and without a Reflexive marker, some are also given in a form with a preverb and without. When there is no significant difference in meaning, only one translation is provided. Every English translation implies that the action is performed for the benefit of the speaker. For each verb, the number of informants who gave each kind of answer is indicated; empty cells are to be interpreted as 'zero'.

	I would definitely say this	I could probably say this, but it is unlikely	I would definitely not say this
perkuosi duoną / duonos		1	4
<i>perku (sau) duoną / duonos</i> 'I am buying bread'	5		
imuosi puoduką iš spintos			5
<i>imu (sau) puoduką iš spintos</i> 'I am taking a cup from the cupboard'	5		
deduosi butelį į kuprinę	5		
<i>dedu butelį (sau) į kuprinę</i> 'I am putting a bottle into (my) rucksack'	3	1	1
deduosi (savo) tušinuką ant stalo	1	2	2
<i>dedu (savo) tušinuką ant stalo</i> 'I am putting the pencil on the table'	5		
darausi pietus	4	1	
<i>darau (sau) pietus</i> 'I am making lunch'	2	1	2
gaminuosi pietus	3	2	

	I would definitely say this	I could probably say this, but it is unlikely	I would definitely not say this
g <i>aminu (sau) pietus</i> 'I am cooking lunch'	4		1
ruošiuosi pietus	1	4	
<i>ruošiu sau pietus</i> 'I am preparing lunch'	4		1
kepuosi kiaušinienę	4	1	
kepu (sau) kiaušinienę 'I am frying eggs'	4		1
verduosi kiaušinius	4	1	
<i>verdu (sau) kiaušinius</i> 'I am boiling eggs'	5		
nešuosi produktus namo	5		
<i>nešu (savo) produktus namo</i> 'I am carrying foodstuffs home'	3		2
nešuosi savo daiktus kuprinėj	5		
<i>nešu savo daiktus kuprinėj</i> 'I am carrying my stuff in a bag'			5
siunčiuosi filmą	5		
<i>siunčiu (sau) filmą</i> 'I am downloading a movie'			5
jungiuosi savo kolegą prie videokonferencijos			5
jungiu savo kolegą prie videokonferencijos	5		
prijunginėju savo kolegą prie videokonferencijos	3	1	1

	I would definitely say this	I could probably say this, but it is unlikely	I would definitely not say this
prisiunginėju savo kolegą prie videokon- ferencijos 'I am making my colleague join the video conference'			5
nusiraš-au/-inėju nuo suolo draugo	5		
<i>nurašau/nurašinėju nuo suolo draugo</i> 'I am copying from my desk mate'			5
ieškausi buto	5		
<i>ieškau (sau) buto</i> 'I am looking for a flat'	3		2
deduosi daiktus į kelionę	5		
<i>dedu daiktus į kelionę (važiuoju pats)</i> 'I am packing stuff for a journey'		2	3
pasižymiu svarbius punktus	5		
žymiuosi svarbius punktus	4	1	
<i>pažymiu (sau) svarbius punktus</i> 'I am marking important points'	4	1	
vežuosi daug savo daiktų namo	5		
<i>vežu daug savo daiktų namo</i> 'I am taking a lot of my stuff home (by car)'	4		1
kalbuosi su draugu	5		
<i>kalbu su draugu</i> 'I am talking to a friend'	4		1
<i>tariuosi su draugu</i> 'I am getting advice from my friend'	5		
vaikščiojuosi po parka			5

	I would definitely say this	I could probably say this, but it is unlikely	I would definitely not say this
<i>vaikščioju po parka</i> 'I am walking through a park (for pleasure)'	5		
einuosi per parka			5
<i>einu per parka</i> 'I am going through a park'	5		
važinėjuosi dviračiu	5		
<i>važinėju dviračiu</i> 'I am cycling'	5		
klausausi paskaitos	5		
<i>klausau paskaitos</i> 'I am listening to a lecture'			5
žiūriuosi filmą			5
žiūriu filmą 'I am watching a movie'	5		
skaitausi knygą			5
<i>skaitau knygą</i> 'I am reading a book'	5		
pamažu užsimirštu tas laimingas dienas			5
<i>pamažu užmirštu tas laimingas dienas</i> 'I am forgetting these happy days'	5		
prisimenu to žmogaus vardą 'I can remember this person's name'	5		
pasisakau šiuo klausimu	5		
pasisakinėju šiuo klausimu	3	1	1
<i>sakausi šiuo klausimu</i> 'I am expressing my opinion regarding this topic'			5

	I would definitely say this	I could probably say this, but it is unlikely	I would definitely not say this
plaunuosi rankas	5		
<i>plaunu rankas (sau)</i> 'I am washing my hands'	4	1	
skutuosi galvą	5		
<i>skutu sau galvą</i> 'I am shaving my head'	3	1	1
kerpuosi nagus	5		
<i>kerpu (sau) nagus</i> 'I am cutting my nails'	3	1	1
valausi veidą	5		
<i>valau (sau) veidą</i> 'I am washing my face'	3	1	1
laužausi ranką (e.g., kad išvengčiau kariuomenės šaukimo) 'I am breaking my arm (e.g., to avoid military service)'	5		
kasausi ranką	5		
<i>kasau (sau) ranką</i> 'I am scratching my arm'	3	1	1
gadinuosi notaiką (pvz., skaitydama(s) per daug naujienų)	5		
gadinu sau nuotaiktą 'I am spoiling my mood (e.g., by reading the news)'	3	2	
rengiuosi marškinius	5		
<i>rengiu (sau) marškinius</i> 'I am putting on my shirt'			5

	I would definitely say this	I could probably say this, but it is unlikely	I would definitely not say this
deduosi kepurę	5		
<i>dedu (sau) kepurę</i> 'I am putting on my hat'			5
aunuosi batus	5		
<i>aunu (sau) batus</i> 'I am putting on my shoes'			5
maunuosi pirštines	5		
<i>maunu (sau) pirštines</i> 'I am putting on gloves'			5
velkuosi paltą	5		
<i>velku (sau) paltą</i> 'I am putting on a coat'			5
atsigulu į lovą	5		
<i>guluosi į lovą</i> 'I am lying down on the bed'	5		
atsisėdu į kėdę	4		1
<i>sėduosi į kėdę</i> 'I am sitting down in /on the chair'	5		
atsistoju iš kėdės	5		
<i>stojuosi iš kėdės</i> 'I am standing up from the chair'	4		1

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The rise of the affixal reflexive in Baltic and its consequences: Morphology, syntax and semantics

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The article deals with the consequences of the affixalisation of the formerly enclitic reflexive pronoun in the Baltic languages. This affixalisation caused a reorganisation in the system of reflexive marking, as the new affixal forms became restricted to middle-voice meanings. The Old Lithuanian and Old Latvian texts reflect a transitional stage in this process. Oscillations in the choice of a verbal form to which an affixalising reflexive pronoun could accrete led to the rise of interesting morphosyntactic patterns with double or varying placement of the affixal marker. The disappearance of the reflexive marker from the syntax furthermore caused syntactic changes leading to the rise of new grammatical constructions. This is discussed in the article for permissive constructions as well as for raising constructions with verbs of saying and propositional attitude. The emphasis on the affixalisation process and on the semantic, morphosyntactic and syntactic processes it set in motion provides a common thread linking a number of seemingly unconnected changes. Though occurring in the prehistory of the Baltic languages, the affixalisation led to a chain of diachronic processes extending to the early 21th century.

Keywords: affixation, clitic, reflexivity, middle voice, Baltic, Lithuanian, Latvian

1. Introduction¹

In Lithuanian and Latvian, as in (most of) East Slavonic (Kiparsky 1967, 196–197) and North Germanic (Haugen 1984, 391–393), an originally enclitic reflexive marker has become an affix. This process occurred in the prehis-

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tory of Baltic, and the oldest extant Baltic texts already reflect a situation in which it has basically been completed. In Old Lithuanian a few examples are attested in which the reflexive marker seems not yet to have become part of the verbal form and apparently behaves as a Wackernagel clitic:

(1) Old Lithuanian (KN, 1653, 117.1; cf. Bezzenberger 1877, 165, 231)
o dumoghimay wissi // neżiń
and thought.NOM.PL all.NOM.PL.M unknown
kur=si=desti=si
where=REFL=put.PRS.3=REFL
'and no one knows whither all his thoughts go'

A similar pattern seems to have existed in Old Prussian:

(2) Old Prussian (Enchiridion 55.25 in Trautmann 1910)
 [kai stai quai stan Ebangelion pogerdawie]
 Turei sien esse.stan Ebangelion maitātun-sin.
 must.PRS.3 REFL from.DEF.ACC.SG Gospel[ACC] nourish.INF-REFL
 '[that those who preach the Gospel] should sustain themselves from the Gospel'
 (Cormon das dia das Eugngelium predigen sollan sich nom Eugngelia negrap)

(German das die das Euangelium predigen sollen sich vom Euangelio neeren)

In Latvian folk songs, under the fossilising influence of the metre, we sometimes find clusters of verbal prefix and reflexive clitic separated by one or more words from the verbal form:

(3) Latvian (BW 205, cited by Endzelin 1922, 480) *iz=sa* gauži raudājuo-s
out=REFL sorely weep.PST.1SG-REFL
'I wept my eyes out sorely.'

In all examples cited above, the reflexive marker is added a second time at the end of the verbal form, a feature also observed within verbal forms: when the verb is prefixed, the reflexive marker is now inserted after the prefix, which was originally an independent particle, but in Old Lithuanian texts it is often repeated at the end of the verbal form. In fact, we find three placements of the reflexive marker: after the prefix (4), word-finally (5) and in both positions simultaneously (6):

(4) Old Lithuanian (Bretke's OT, Ruth 3.7)
[Jr kaip Boas walgens bei gierens buwa]
pa-fsi-linksmina jo Schirdis
PFX-REFL-make.merry.PST.3 3.GEN.SG.M heart.NOM.SG
'[And when Boaz had eaten and drunk,] his heart was merry.'

(5) Old Lithuanian (Bretke's ot, 1 Sam. 20.18, cited from Bezzenberger 1877, 230)

nefapa-gefi-stawęs,kurfedetipaiukaiforPFX-miss.FUT.3-REFL2SG.GENwheresit.INFget.used.PST.2SG'and thou shalt be missed, because thy seat will be empty'(Luther: Denn man wird dein vermissen / da du zu sitzen pflegest.)

(6) Old Lithuanian (Bretke's OT, 2 Kings 14.8, cited from Bezzenberger 1877, 231)
 Ateik fu-fsi-regetun-fe fu manimi.
 come.IMP.2SG PFX-REFL-see.SUP-REFL with 1SG.INS
 'Come, let us look one another in the face'

This shows a certain hesitation as to the position in which the reflexive enclitic could possibly affixalise. Further on we will discuss situations where a similar hesitation can be observed, but in a syntactic construction rather than within the same verbal form.

In this article we will be concerned with the consequences of the affixalisation process. These were of several types. First, the affixalisation of the reflexive marker brought about a change in its functional scope. This is not immediately obvious because the same function can often be performed by a clitic and an affix. However, we may assume that as long as the reflexive marker was a clitic, it could perform a twofold role: it could function either as an unstressed variety of an orthotonic reflexive pronoun, or as a grammatical marker. This can be seen in those Slavonic languages where the reflexive marker is still a clitic, e.g., Polish:

(7)	Polish			
	Widzę	się/siebie	w	lustrze.
	see.PRS.1SG	refl/refl.orth	in	mirror.loc.sg
	'I see myself in t	he mirror.'		
(8)	Polish			
	Lustro	się/*siebie	stłukło).
	mirror.nom.sg	REFL/REFL.ORTH	break.	pst.n.sg[3]
	'The mirror brok	xe.'		

In (7), the enclitic reflexive pronoun *się* is used almost interchangeably with the orthotonic pronoun *siebie* (though only the latter could be used with contrastive stress); *się* could be argued to occupy a syntactic argument position in the same way as *siebie*. In (8), on the other hand, *się* has become a grammatical marker characterising the anticausative construction; as we are dealing with a one-place predicate, *się* clearly does not occupy a syntactic argument position here.

As it affixalised, the reflexive marker lost the ability to function as an unstressed variety of the reflexive pronoun, and it correspondingly lost its properly reflexive function. In the modern Baltic languages, verbs with morphological reflexive markers are restricted to situations of natural reflexivity and reciprocity-situations where the coincidence of agent and patient, or the reciprocal character of the relationship between two agents-patients, is a default whereas non-coincidence or non-reciprocity is a marked option (on this cf. Kemmer 1993, 58, 78). They are furthermore used in encoding anticausative situations (the type illustrated by (9)) as well as in facilitative constructions (on which see Holvoet & Daugavet 2020b), and thus extend to a functional domain that is traditionally referred to as the middle voice (for a recent overview of the middle-voice grams of Baltic see Holvoet 2020). Canonical reflexive and reciprocal situations, on the other hand, can be rendered only by the use of the reflexive pronoun. By 'canonical' we mean that the function of the reflexive marker is to mark the coincidence of normally distinct A and P (in reflexive situations), or the coincidence of two normally distinct events in which two participants figure alternately as A and P (in reciprocal situations). In naturally reflexive situations A and P are insufficiently differentiated (they refer, for instance, to the psychomotor centre and the body of the same person), while a naturally reciprocal situation involves a single event notionally requiring reciprocity, like 'meeting', 'quarrelling' etc. Compare the following examples, with a 'canonical reflexive' and a 'naturally reflexive' construction respectively:

(9) Lithuanian

Onamatosaveveidrodyje.PN.NOMsee.PRS.3REFL.ACCmirror.LOC.SG'Ann sees herself in the mirror.'

(10) Jonas skuta-si. PN.NOM shave.PRS.3-REFL 'John is shaving.'

Like the affixalisation process itself, the functional reassignment that went hand in hand with it may be assumed to have been a gradual process. As the Old Lithuanian and Old Latvian texts reflect, in some respects, the final stage in the formal process of affixalisation, we want to examine whether they also reflect the final stage in the functional redistribution of reflexive markers. Apart from these shifts in semantic functions, the process of affixalisation had some unexpected consequences in morphosyntax. As it turns out, it was by no means always clear which verb the affixalising reflexive marker should select as a host to which it could attach. This was the case when a relationship close to that of auxiliation arose between two verbs, as in the case of modal verbs; such situations gave rise to interesting marking patterns.

The affixalisation of the reflexive marker furthermore had consequences in which syntax played a more prominent role. In some cases the disappearance of the reflexive marker from syntax and its passage to morphology required a syntactic reorganisation of the sentence. This occurred in complex sentences, where the morphologisation of the reflexive marker induced changes across the clausal boundary. The situations referred to involve long-distance reflexivisation and raising.

The first situation is represented in complex sentences with permissive complement-taking verbs. These can be illustrated with the following example from Lithuanian:

(11) Lithuanian (CCLL)

Jis	leidžia	save	tapyti	šiuolaikiniams		
3.NOM.SG.M	allow.prs.3	REFL.ACC	paint.1NF	modern.dat.pl.m		
dailininkams.						
artist.dat.pl						
'He lets himself be portrayed by contemporary artists.'						
(lit. 'He lets contemporary artists paint himself.')						

This is an instance of long-distance reflexivisation, a reflexive pronoun in the embedded clause being controlled by a main-clause subject. If, in a structure of this type, the reflexive pronoun affixalises and disappears from the syntax, a reorganisation of syntactic structure is required. The processes resulting from this will be discussed in section 4.

A similar situation obtains when a reflexive pronoun is raised to mainclause object. This can be illustrated with the following example from Old Lithuanian:

(12) Old Lithuanian (Bretke's OT, 2 Chron. 6.1)

[Tadda	biloia	Salomonas,]		
PONAS	fake	fawe	norinti	giwenti
Lord.noм <i>tamfumoie.</i> darkness.lo	say.pst.3 oc.sg	REFL.ACC	want.ppra.acc.sg.m	live.inf

'[Then said Solomon,] The LORD hath said that he would dwell in the thick darkness.'

Again, the affixalisation of the reflexive pronoun in structures like this must lead to a syntactic reorganisation. We will discuss the processes resulting from this in section 5.

The syntactic and morphosyntactic processes with permissive verbs and speech-act verbs have been the object of special investigation; for the permissive constructions see Holvoet (2016) and Holvoet (2020, 83–113), and on the constructions with speech-act verbs see Holvoet (2020, 203–224).

In this article, we will attempt to give an overall view of the whole complex of processes set in motion by the affixalisation of the reflexive marker, including an approximate chronology for the individual stages. The article will show that the affixalisation of the reflexive marker necessitated or induced further changes in different domains of the grammar, leading to a chain of changes spanning a period from the pre-attestation stage of Baltic to the 21st century.

The subject-matter of the article is necessarily somewhat heterogeneous, as the processes directly or indirectly conditioned by the affixalisation belong to different levels. Section 2 deals with the direct consequences: affixalisation causes the enclitic reflexive marker to lose its original function of unstressed reflexive pronoun, which forces the gradual retreat of the new affixal reflexives from the domain of canonical (as opposed to natural) reflexivity/reciprocity. Section 3 deals with morphosyntax: the oscillation with regard to a potential host for the affixalising reflexive marker leads to the spread of reflexivity marking over the complex of modal verb and infinitive. Section 4 deals with both morphosyntax and syntax: in addition to the pattern of spread marking of reflexivity, the disappearance of the affixalising reflexive marker from the syntax induces a syntactic reorganisation of the sentence. In section 5, the emphasis is again on the syntax, where the loss of the syntactic position occupied by a raised reflexive pronoun transforms the raising construction into a control construction, with further consequences for the function of the reflexive marker. The justification for including phenomena from widely different domains of grammar and the lexicon into one article lies in the fact that all the processes discussed here are part of one single causal chain, albeit one that is not immediately obvious and that has, in fact, not been noticed until now in the literature.

2. The loss of other than naturally reflexive and reciprocal meanings

As stated above, the affixalisation of the reflexive marker may be assumed to have brought about a redistribution of the functions of heavy and light reflexive markers, as we will call the orthotonic and enclitic/affixal markers respectively, adopting the terms used by Kemmer (1993). The newly affixalised marker became restricted to the domain of natural reflexivity and reciprocity. We assume this must have been a gradual process, just as the formal process of affixalisation was. The question is therefore whether the process of semantic reorganisation was already completed when the first Lithuanian and Latvian texts appeared in the 16th century, or whether traces of a situation predating the restriction of affixal reflexives to the sphere of natural reflexivity and reciprocity can be detected.

It seems that Old Lithuanian and Old Latvian do indeed present us with instances of verbal forms with affixal reflexive markers but residually retaining the properly reflexive use of the constructions with enclitic reflexive marker from which they evolved. What we mean is that when the enclitic reflexive marker affixalised, those of its uses that did not conform to the prototype of natural reflexivity/reciprocity were in course of time eliminated, but this did not happen in one fell swoop, and affixal reflexives in the sphere of canonical reflexivity/reciprocity continued to be used for some time. When we compare Bretke's translation of the New Testament (completed in 1590) with that of Chyliński, separated from Bretke's by a period of about seventy years (the Old Testament was partly printed in 1660), we do see, in a number of instances, a shift from the use of affixal reflexive forms to constructions with the orthotonic reflexive pronoun. This can be seen from parallel passages like the following:

(13)	13) Old Lithuanian (Bretke's NT, Mark 5.5) [Ir wifsadais buwo [] ant kalnu ir Grabofų,]					
	fchauke	ir	muschie-s	akmeneis		
	cry.pst.3	and	hit.pst.3-refl	stone.INS.PL		
(14)			ski's nт, Mark 5.5))		
	[Wifadoσ []	buwo kałi	10fe ir kopofe]			
	eta aukdama σ	ir	pats	fawe	muzdama σ	
	cry.cvb.m.sg	and	EMPH.NOM.SG.M	REFL.ACC	hit.cvв.м.sg	
	akmenimi σ					
	stone.INS.PL					

'[And always [...], he was in the mountains, and in the tombs,] crying, and cutting himself with stones.'²

(15)	iei po if EN nieks	aanian (Bretke' ats мрн.nom.sg.m ira. nom be.p	g <i>arbino-</i> honour.1	S,	mana my	garbe honour.nom.sg
(16)	<i>jeygu</i> if <i>mano</i> my	anian (Chyliń garbinu honour.prs.: nieku nothing.INS ur myself, my	pats ISG EMPI ira. be.prs	H.NOM.SG.M	fawe, REFL.ACC	garbe с honour.nom.sg
(17)	Old Lithu	anian (Bretke'	s nт, Mark	15.30)		
	gielbeke-s save.IMP.2 nog from	s nu 2SG-REFL no <i>Krißaus</i> cross.GEN	I ,	H.NOM.SG.M	ir and	nukop descend.IMP.2SG
(18)	Old Lithu	anian (Chyliń	ski's nт, Ma	ark 15.30)		
	Giałbek	$pat\sigma$		fawe,	ir	nuzęng
	save.IMP.2	2SG EMPH.I	NOM.SG.M	REFL.ACC	and	descend. IMP.2SG
	no	krÿziauσ				
	from	cross.gen				
	'Save thy	self, and come	down from	the cross.'3		

The only affixal reflexive consistently showing properly reflexive rather than middle meaning in Old Lithuanian is darytis, used in the meaning 'make oneself' (with a secondary predicate, as in 'make oneself known') rather than in the modern sense 'become'. This is noted by Mikulskas (2020, 17–20), who states that throughout the Old Lithuanian period darytis has only the original agentive meaning, never that of an inceptive copula:

² In modern Lithuanian, *muštis* can mean only 'fight'.

³ Modern Lithuanian has both *išgelbėti save* (with orthotonic reflexive pronoun) and *iš-si-gelbėti* (with affixal reflexive marker), but the latter seems to be mainly non-agentive, in the meaning 'survive' (a calamity, crash etc.).

(19)	Old Lithuanian (Bretke's NT, John 10.33)						
	iog Szmogus budams, pats darai-s						
	that	man.NOM.SG	be.cvв.м.sg	EMPH.NOM.SG.M	make.prs.2sg-refl		
	Diewu.						
	God.ins.sg						

(20) Old Lithuanian (Chyliński's NT, John 10.33)
 jog budamaσ 3mogumi dareÿ-s Diewu.
 that be.cvb.M.sG man.INS.SG make.PRS.2SG-REFL God.INS.SG
 'that thou, being a man, makest thyself God.'

The situation is basically similar in Old Latvian, but here the ousting of affixal markers by the orthotonic reflexive pronoun outside the sphere of natural reflexivity seems slightly to lag behind the corresponding process in Lithuanian. Even towards the end of the 17th century we find a small number of clear instances with affixal reflexives used in situations where nowadays only the orthotonic reflexive pronoun would be possible:

(21) Old Latvian (Glück's ot, Gen. 16.5)						
	nu	redfah-s	wiņņa	gŗuhta		effoti/
	now	see.prs.3-refl	3.NOM.SG.F	pregnant.N	OM.SG.F	be.ppra.nom.sg.f
	tad	tohpu	es	nizzinata		wiņņas
	so	become.prs.1sg	1SG.NOM	despise.pp1	P.NOM.SG.F	3.GEN.SG.F
	Azzîs					
	eye.loc	C.PL				
	'Now s	he sees herself (b	eing) pregna	nt and I am	despised i	n her eyes.'4
(22)	Old Lat	vian (Glück's от	, Wisdom of S	Solomon 2.1	3)	
	un	nofauzah-s	par w	eenu	Dehlu	ta
	and	call.prs.3-refl	for or	ne.ACC.SG	son.ACC.So	G DEM.GEN.SG.M
	and <i>Kunga</i>	call.prs.3-refl	for 01	ne.ACC.SG	son.ACC.SC	G DEM.GEN.SG.M
		5	for or	ie.ACC.SG	son.ACC.SC	G DEM.GEN.SG.M
	<i>Kunga</i> Lord.GE	5			son.ACC.So	G DEM.GEN.SG.M

 $^{^4}$ In modern Latvian, $\mathit{redz\bar{e}ties}$ is used only as a natural reciprocal verb meaning 'see each other, meet'.

⁵ The reflexive *saukties* is still used in modern Latvian in the meaning 'be called, bear a name', cf. Lithuanian *vadintis*, Russian *nazyvat'sja* etc.

(23)	Old Lat	Old Latvian (Mancelius, LLP i 116.16)							
	Tad	Wings	patz		mums	dohdah-ß			
	then	3.NOM.SG.M	EMPH.NOM.SG.M		1PL.DAT	give.prs.3-refl			
	par	Barribu	und	Dfe	hren.				
	for	food.acc.sg	and	drin	ık.acc.sg				
	'Then He gives himself to us for food and drink.'6								

For some verbs affixal marking and a combination with an orthotonic reflexive pronoun are used side by side, which points to synonymous use:

(24) Old Latvian (Glück's NT, Mark 8.34)								
	[Kas mannim gribb pakkaļ nahkt]							
	tas	lai	pats		aislee	edfah-s []		
	that.nom.sg.м	HORT	EMPH.NOM.	SG.M	deny.	PRS.3-REFL		
(25)	Old Latvian (Glü	ick's nт, Mat	thew 16.24)					
	[Ja kaslabban m	annim grib p	akkaļ nahkt]					
	tam	buhs	aisleegt	fewi		pafchu		
	that.dat.sg.m	be.fut.3	deny.INF	REFL.A	CC	EMPH.ACC.SG		
	'[If any <i>man</i> will	l come after i	me,] let him d	env him	self'			

Another feature that seems to point to a transitional situation is double marking, that is, the occurrence of an affixal reflexive marker alongside an orthotonic reflexive pronoun. This is frequent in Old Latvian:

(26)	Old Latvian (Mancelius, LLP ii 327.1)							
	Tu	föw	paffchu		mielojee-ß	nhe		
	2SG.NOM	REFL.ACC	EMPH.ACC.SG		love.prs.2sg-refl	NEG		
	arr	willtighu		firdi				
	with	deceitful.Acc	C.SG	heart.Acc	C.SG			
	'You love you	urself not with	ı deceitfu	ıl heart.'				

Here the process of renewal of the reflexive construction has already been completed: there is an orthotonic reflexive pronoun occupying a syntactic argument position, but the old affixal marking is added redundantly.

In Old Latvian, as in Old Lithuanian, $dar\bar{\iota}ties$ has agentive meaning and means 'make oneself' (with a secondary predicate):⁷

⁶ In modern Latvian *doties* is a motion middle meaning 'betake oneself, go to some place'.

⁷ In fact, this verb never acquired the meaning 'become', observed in Lithuanian darytis, Russian delat'sja etc. It did acquire middle-voice meaning, but as an antipassive, see Holvoet & Daugavet (2020a), this volume. In John 10.33 the revised 1965 Latvian Bible translation (https://www.bible.com/versions/488-rt65-1965-gada-bibleles-izdevuma-revidetais-teksts) has tāpēc ka Tu, cilvēks būdams, dari Sevi par Dievu.

(27)	Old Latvian (Gli	ück's от, chapter sun	nmary for C	Gen. 45)		
	Jahfeps	darrah-s	pehz	faweem		
	Joseph.noм	make.prs.3-refl	after	RPO.DAT.PL.M		
	Brahļeem	finnamu.				
	brother.dat.pl	known.Acc.sg				
	'Joseph makes himself known after his brothers.'					

This last example also retains the original syntax associated with the properly reflexive use: the resultative secondary predicate *zināmu* is in the accusative singular as if agreeing with an accusative reflexive pronoun *sevi*; this pronoun is, however, absent from the syntax.⁸

What was discussed here for reflexive uses of the reflexive marker has a certain parallel in the domain of reciprocity. In the modern Baltic languages the affixal reflexive marker is used not only for naturally reflexive but also for naturally reciprocal situations, that is, situations in which the participation and interaction of at least two persons is notionally required, such as 'meet', 'quarrel', 'make love' etc. Situations like that of mutual liking, love, hatred etc., not being reciprocal by necessity, are expressed by means of a 'heavy marker', a dedicated reciprocal pronoun not used in reflexive function:

(28) Modern Lithuanian (Peter Lauster, Gyvenk lengvai ir laisvai, 2002, CCLL)
[Taigu jūs remiatės idealia prielaida, kad] abu sutuoktiniai myli vienas both.NOM.M spouse.NOM.PL love.PRS.3 one.NOM.SG.M kitą. other.ACC.SG '[So you start out from the ideal assumption that] the two spouses love one another.'

The situation is thus different from that of reflexive marking in that the strong (orthotonic) marker is not based on the same stem as the weak (enclitic) one, and they may well have differed in prehistoric Baltic as well.⁹ But whatever the situation was, it is almost certain that the weak

⁸ Compare this with the emphatic pronoun *pats* in (23), which agrees with the subject though semantically it should agree rather with the implicit object, as it does with the overt object in (25).

⁹ Note, however, the reciprocal function of the orthotonic pronoun in *tarp saves* in example (31) below, now obsolete but retained in modern Lithuanian *tarpusavy(je)* 'mutually'.

form of the reflexive pronoun performed a twofold role in this case as well: it was used in cases of natural reciprocity but also as an unstressed reciprocal pronoun in cases of canonical reciprocity, as we can see, again, in present-day Polish:

(29)	Polish			
	Małżonkowie	spotykają	się	rzadko.
	spouse.nom.pl	meet.prs.3pl	REFL	rarely
	'The spouses mee	t rarely.'		
(30)	Małżonkowie	oskarżają	się	(nawzajem)
	spouse.NOM.PL	accuse.PRS.3PL	REFL	(mutually)
	o zdradę.			
	of unfaith	fulness.Acc.sg		
	'The spouses accu	se each other of ι	unfaithful	ness.'

We can reconstruct a similar situation for prehistoric Baltic on the basis of examples attested in the oldest Lithuanian and Latvian texts, e.g.,

(31)	Old Lithua	Old Lithuanian (Willent, EE, 125.19 = 1Thess 4.18)							
	Α	taip	linxminkete-fi	tarp	fawęs				
	and	so	comfort.IMP.2PL-REFL	among	REFL.GEN				
	tais		ßodzeis.						
	this.INS.PL.M word.INS.PL								
	'Wherefor	e con	fort one another with these	e words.'					

In this case as well, the affixalisation of the reflexive-reciprocal marker changed its status: it continued to be used as a grammatical marker for natural reciprocity, but could no longer serve as an unstressed variety of the reciprocal pronoun. Some eighty years later, Chyliński has only the orthotonic reciprocal pronoun:

(32) Old Lithuanian (Chyliński's NT, 1 Thess 4.18)

Tevp	tada	tieszykite	wieni	kitus
тсур		2		
SO	then	comfort.IMP.2PL	one.NOM.PL.M	other.ACC.PL.M
teys		zodzieys.		
this.11	IS.PL.M	word.ins.pl		
'Whe	efore com	fort one another wit	h these words.'	

The so-called Bythner New Testament (1701) has the same verb *linksminti* for 'comfort' as in Willent and Bretke (as against Chyliński's Slavonic loanword *tieszyti*), but the reciprocal pronoun rather than the affixal marker is used:

(33)	Old Lithuanian (Bythner's NT, 1701, <i>ibid</i> .)						
	Togidel	linkſminkite	kits	kitą			
	therefore	comfort.IMP.2PL	other.nom.sg.m	other.Acc.sg			
	tais	zodzieys.					
	this.ins.pl.m	word.ins.pl					
	'Wherefore co	vith these words.'					

But Bible translations sometimes retain archaic forms, especially in Gospel pericopes, which passed from one translator to another, starting with Willent and Bretke. So for instance, Chyliński, who was not dependent on the translations from Prussian Lithuania,¹⁰ has only *mylėti vienas kitą* in the sense of 'love one another':

(34) Old Lithuanian (Chyliński's NT, John 15.12)
[Taσ ira prifakimaσ mano,]
idand miłetumbite wieni kituσ,
that love.IRR.2PL one.NOM.PL.M other.ACC.PL.M
[kaypo aβ juσ numilejau.]
'[That is my commandment,] that you should love one another
[as I have loved you].'

The Bythner New Testament (1701) shows both forms side by side:

(35)	Old Lithua [<i>Tas ira pri</i>	· ·	ner's NT, Joh ano]	n 15.12)	
	<i>idant</i> that	<i>tarp</i> among	<i>fawęs</i> Refl.gen	<i>miłėtumbit</i> love.irr.2p	
(36)	Old Lithua [<i>TAtai jum</i>	· · ·	ner's мт, Joh]	in 15.17)	
	idänt	wienas	ai	ntrą	miłėtumbit.
	that	one.nom.	sg.м ot	ther.Acc.sg	love.irr.2pl

Either the translator of this fragment still had a choice between the two constructions, or the one with the affixal marker is carried over from some earlier translation. This would be unexpected in the immediate

¹⁰ A written tradition in Lithuanian, associated with the spread of Lutheranism, existed in Ducal Prussia from the 16th century onward. The Reformation literature of the Grand Duchy of Lithuania, represented by Chyliński, was inspired by Calvinism. The two traditions interacted but remained separate. Instead of following Luther and the Lutheran Lithuanian authors of Ducal Prussia, Chyliński took the Calvinist Dutch *Statenvertaling* as the basis for his Bible translation (see Kavaliūnaitė 2008, cvii–cxiii).

vicinity of the newer construction (only a few lines separate (35) and (36) in Bythner's New Testament), but it seems less odd when one sees exactly the same rendering of John 15.12 appear in Giedraitis' New Testament from 1816, with a just slightly modernised irrealis ending:

(37) Early modern Lithuanian (Giedraitis, John 15.12)
[Tas ira prisakimas mano,]
idant tarp sawęs miłetumete-s.
that among REFL.GEN love.IRR.2PL-REFL
'[That is my commandment,] that you should love one another.'

It is hardly likely that the properly reflexive affixal form should have been retained in the living language until the 19th century. We may assume the canonically reciprocal function of the affixal reflexive marker went out of use in the course of the 17th century. The same might apply to Latvian. At the end of the 17th century, Glück still has the affixal form:

(38)	Old Latv	ian (Glüc	k's nт, 1 Thess 4.18)		
	Tad	nu	eepreezinajeetee-s	fawâ ftarpâ	ar
	then	now	comfort.IMP.2PL-REFL	mutually	with
	fcheem		Wahrdeem.		
	this.dat.	PL.M	word.dat.pl		
	'Wherefo	ore comfo	ort one another with these	e words.'	

But in Latvian as well, these were going out of use, and if the affixal marker is found it is normally redundant use alongside a reciprocal pronoun occupying the position of direct object:

(39) Old Latvian (Mancelius, LLP ii 327.18–19)
[Taß gir manns Baußliß] ka juhs weens ohtru that 2PL.NOM one.NOM.SG.M other.ACC.SG mielojetee-β love.PRS/IMP.2PL-REFL
'[That is my commandment,] that you should love one another.'

And there are constructions with only the orthotonic reciprocal pronoun:

(40) Old Latvian (Mancelius, LLP i 529.3–4) fohlah-ß Labbi Draughi weens friend.NOM.SG good.nom.pl.m promise.PRS.3-REFL ONE.NOM.SG.M Śwähtkeem. ohtru apluhkoht par other.Acc.sg visit.INF for holiday.DAT.PL 'Good friends promise to visit each other over the holidays.'

We must remember, however, that the evidence of the Old Latvian texts is reliable only to a limited extent, as the linguistic competence of the translators was far from perfect. In many respects its authenticity is confirmed by the facts of the modern language; this holds, for instance, for the non-trivial patterns of use of reflexive markers in permissive constructions, to be discussed in the following sections. In the case of residual properly reflexive and reciprocal uses of reflexive verb forms in Old Latvian there is nothing the evidence of the modern language could confirm; the evidence for such uses in Old Latvian is not abundant, and the question whether it can be taken at face value is probably undecidable. The Old Lithuanian authors' linguistic competence was much superior to that of their Latvian counterparts (they were mostly native speakers of the language), but their language also shows the influence of the source texts, and their translations (e.g., of Bible texts) often underwent the influence of older translations that represented, in many respects, older stages of language development. An additional problem is that the borderline between canonical and natural reflexivity or reciprocity is not clear-cut, and there are transitional cases. So, for instance, 'understand each other, have a good mutual understanding' is *saprasties* (with affixal marker) in Latvian but suprasti vienas kitą (with heavy marker) in Lithuanian; 'be acquainted' is now only pažinti vienas kitam (with heavy marker) in Lithuanian, but pa-si-žinti (with affixal marker) was still possible in the 1st half of the 2oth century. While it is easy to point out the prototypical cases, like 'see oneself" for a canonically reflexive situation and 'see each other, meet' for a naturally reciprocal situation, the typical borderline cases between the two have not been cross-linguistically identified. For the verbs selected above as examples for the transition from light to heavy markers the contemporary Baltic languages were taken as a point of reference, but this is, of course, but a makeshift.

To sum up the findings of this section: the affixalisation of the reflexive marker had certain consequences driven by grammatical semantics. As the reflexive marker lost the function of unstressed reflexive pronoun, it was gradually ousted from the sphere of canonical reflexivity and restricted to middle-voice functions. Though the reflexive marker disappeared from

¹¹ 'See oneself' is already used as an example of a crosslinguistically canonical reflexive (rather than middle) verb in Faltz (1977).

the syntax, this had no further syntactic consequences as the process occurred clause-internally. The changes dealt with in the following sections occurred in syntactically more complex contexts.

3. Traces of former mobility of the reflexive marker: Constructions with modals

Apart from the functional shift accompanying the affixalisation of the reflexive marker, this process also had certain consequences in morphosyntax. The affixalisation process is described above in the context of the nuclear clause, where there is only one verb assigning a semantic role to what is originally the reflexive pronoun, and therefore naturally becoming the host for the affixalising reflexive marker. The situation was more complex in complementation constructions, where two verbs were involved. This can be seen in Old Latvian texts, where we sometimes find verb phrases in which the modal verbs *varēt* 'be able' and *gribēt* 'want to' assume a reflexive marker when their complement contains a reflexive verb:

(41) Old Latvian (Glück's OT, Deut. 28.68)

Un	tur	tu	gribbefee-s	taweem	
and	there	2SG.NOM	want.FUT.2SG-REFL	your.dat	ſ.PL.M
Eenaidnee	ekeem	par	Kalpeem	un	par
enemy.DA	T.PL	as	bondsman.dat.pl	and	as
Kalponeh	т	pahrde	otee-s.		
bondswoi	man.dat.	pl sell.in	F-REFL		
'and there	e you wil	want to sell	vourselves to your ene	mies as be	onds-

and there you will want to sell yourselves to your enemies as bondsmen and bondswomen.'

(42) Old Latvian (Glück's OT, 2 Kings 5.12)

[Neģģi Amana un Warwara tahs Uppes no Damaskus irr labbakas ne kà Ifraëļa Uhdens]

neģģi	es	tur	warretoh-s	masgatee-s	ka
QNEG	1SG.NOM	there	may.IRR-REFL	wash.INF-REFL	that
es	fchķihsts	5	taptu?		
1SG.NOM	clean.мс	M.SG.M	become.IRR		
'[Are not Abana and Pharpar, rivers of Damascus, better than all					
the waters of Israel?] May I not wash in them, and be clean?'					

The reflexive marker is associated grammatically with the embedded infinitive, not with the modal verb, so that we expect no reflexive marker on the modal. Indeed, we find none in (43):

(43) Old Latvian (Glück's NT, Luke 13.11) [un ta bija lihka] un warreia wiff uszeltee-s ne ne and NEG be.able.pst.3 NEG at.all raise.INF-REFL 'and [the old woman] was bowed together, and could in no wise lift up herself.

As the embedded infinitive had no overt subject, the reference of the reflexive marker was, for all practical purposes, controlled by the mainclause verb, so that the clitic could easily climb above the complement and end up being attached to the modal verb. This use is not very frequent, e.g. out of 9 instances where *varēt* and *gribēt* have reflexive complements in Glück's Gospels only one has the reflexive marker on the modal verb (this count does not include impersonal uses of *gribēties* with dative subjects, where the reflexive marker has a different function, on which see Holvoet 2020, 178–179). In all, there seem to be only 8 instances in the whole of Glück's Bible.¹² But Glück's testimony is corroborated by that of Mancelius, whose *Langgewünschte lettische Postill* (LLP, vols. i–iii) contains 32 instances, 26 with *gribēties* and 6 with *varēties*:

(44)	Old Latvian (Mancelius, LLP i 64.7-8)				
	beß	winja	Dohfchanas	nhe	warrah-ß
	without	3.GEN.SG.M	giving.GEN.SG	NEG	be.able.prs.3-refl
	nhe	weens	ko		jemmtee-ß
	NEG	one.NOM.SG.M	anything.Acc		take.INF-REFL
	'No one can take anything without his giving.'				

Moreover, Mancelius' Postil also contains a few instances with a reflexive marker on the modal verb only instead of on the embedded verb:¹³

(45)	Old Latvian (Mancelius, LLP i 365.10–11)						
	Ja	tad	nu	taß		Zillw	vähx
	if	then	now	that.now	4.SG.M	man.	NOM.SG
	gribbal	h-ß	fawu		pirrmu		wätzu
	want.P	RS.3-REFL	RPO.A	CC.SG	first.ACC.	SG	old.Acc.sg

¹² Deut. 28.68, 2Kgs. 5.12, Ps. 55.13, Ps. 89.47, Prov. 8.11, Jer. 4.0 (chapter summary), Judith 1.2 and Matt. 5.39 (marginal note).

¹³ The other instances are i 137.27-28, i 230.21-22, iii 162.26.

Ghohdu attkal dabbuit... glory.ACC.SG again obtain.INF 'If, then, man wants to recover his former glory...'

In all these examples the reflexive marker belongs semantically to the embedded verb.¹⁴ Its occurrence on the higher verb or on both verbs probably reflects a hesitation as to which verb should serve as a host for the affixalising reflexive marker. This situation is reminiscent of the hesitation we noted in the placement of the reflexive marker within verbal forms, as illustrated in examples (4)–(6) above, The difference is that in this case the hesitation manifests itself in a syntactic construction rather than within a word.

Through their association with modal verbs, the constructions discussed here are reminiscent of Romance constructions with so-called clitic climbing (Rizzi 1978), and this process provides a plausible historical explanation for the phenomenon involved here. However, the simultaneous placement of the reflexive marker on the complement-taking and the embedded verb (also observable in the case of the permissive constructions, which we will discuss below) seems to be specifically connected with the process of affixalisation. As long as the reflexive marker was a clitic, the process of clitic climbing could probably lead to duplication of the clitic, that is, the occurrence of a reflexive marker in the vicinity of both modal verb and embedded verb, but this situation would not have been stable. Double clitics are amenable to clitic haplology even if the clitics belong grammatically to different words. We can see this in those Slavonic languages where the reflexive marker is still a clitic. In Polish example (46) we should have two instances of the enclitic reflexive marker się, one belonging to bać się 'be afraid' and the other to spóźnić się 'be late', but only one can surface in actual usage:

¹⁴ It should be noted that Old Latvian also had an autobenefactive reflexive verb *gribēties* 'want for oneself', used with object noun phrases, as in *ja tee nhe ghribbahß ihten tahdu Allghu* Mancelius, LLP i, 181.6–7 'if they don't want for themselves such a reward'. We must therefore pose the question whether this reflexive verb could not also take clausal complements, and whether sentences like (45) could not be instances of this. However, it would be difficult to explain why this reflexive *gribēties* should overwhelmingly combine with reflexive infinitives, as is shown by the proportion of 32 instances to 4. This suggests the reflexive marking on the modal verb is not a lexical feature of this verb but a feature of the whole construction.

(46)	Polish			
	Boję	się	spóźnić	(* <i>się</i>).
	be.afraid.prs.1sg	REFL	be.late.inf	REFL
	'I'm afraid of being	late.'		

There is no reason to expect double clitics to behave differently when their duplication is redundant, resulting from clitic climbing, as in the constructions with modal verbs under discussion here. When the clitic affixalises, however, it is no longer accessible to syntactic mechanisms, and there is consequently no 'affix haplology' in constructions like (41) and (42).¹⁵ This is the crucial argument for our assumption that the double reflexive marking in the constructions under discussion here is a consequence of the process of affixalisation of the reflexive marker.

Though well attested in 17th century Latvian texts, the double affixation observed in constructions like (41) and (42) has disappeared without trace. Old Lithuanian shows no trace of it at all. The reason for the ultimate loss of the clitic duplication in Latvian might be sought in the fact that the reflexive marking was semantically associated only with the embedded infinitive, not with the modal verb. In the following section we will note a similar case of double reflexive marking, occurring, however, in a slightly different syntactic configuration that was more favourable to the retention of the double or oscillating affixation described here.

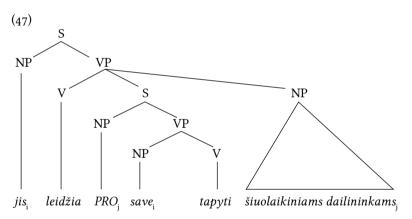
While section 2 dealt with a local (clause-internal) consequence of the affixalisation, what is described in this section results from the movement of the reflexive marker beyond clausal boundaries, which leads to the appearance of a new potential host for the affixalising marker. The processes discussed here involve syntax and morphosyntax, but not semantics, although they do manifest themselves within a specific lexical group, that of modal verbs. It was probably the high frequency of embedded infinitives with these verbs that determined the fossilisation, in morphology, of the syntactic process of clitic climbing.

¹⁵ This, among other facts, is evidence against the interpretation of Lithuanian -*si*- as a clitic, for which see, e.g., Korostenskienė (2014). For other types of evidence see Nevis & Joseph (1992).

4. Traces of former mobility: Reflexive permissive constructions

4.1. Reflexive marking in permissive constructions

The construction dealt with in this section contains a verb meaning 'allow' (less frequently 'order') and a clausal complement with the infinitive. The permissive verbs involved in Lithuanian are *leisti* 'allow' and *duoti* 'give, allow'; the more active verb is *liepti* 'bid, order'. In Old Latvian the construction involves mainly *likt* 'order; allow'; in modern Latvian it is *laut* 'allow', whereas *likt* now has only the more active meaning 'order'. 'Reflexive' means here, semantically, that the permitter (the main clause subject) coincides with the patient of the embedded predication, so that the general meaning is 'allow oneself to be (persuaded, deceived etc.)'. The constructions we are dealing with have a putative syntactic structure as shown in (47), which repeats example (11) with added syntactic representation:



Here the reflexive pronoun in the position of embedded clause object is controlled, across clause boundaries, by the main clause subject rather than by the implicit subject of the embedded clause. Configurations like this have been referred to as 'long distance anaphora' (cf. Reuland & Koster 1991).

If a structure of this type contained an enclitic reflexive pronoun, it had to affixalise as in other instances. In this case, however, affixalisation was not straightforward: there were two verbs qualifying as possible hosts—the main clause verb and the infinitive. The pronoun stood in a syntactic relationship to both—to the infinitive in virtue of being assigned a semantic role by it, and to the main clause verb in virtue of being controlled by its subject. The presence of two potential hosts led to an oscillation reminiscent of what we have observed in constructions with modal verbs in Old Latvian: in Old Lithuanian and Old Latvian texts the reflexive marker can attach both to the main clause verb and to the infinitive; often it attaches to both at the same time. This last option is illustrated in (48) and (49):

(48) Old Lithuanian (KN SE 192.11)
o niekám nuo tiefos át-fi-wefti and nobody.DAT from truth.GEN away-REFL-lead.INF ne-fi-duok NEG-REFL-give.IMP.2SG 'and do not let yourself be led astray from truth by anybody.'
(49) Old Latvian (Mancelius, LLP i 33.18)

//		(- 55,	
	labbahk	wings	leekah-ß	Zeetumà
	better	3.NOM.SG.M	let.prs.3-refl	prison.loc.sg
	meßtee-ß			
	throw.INF-R	EFL		
	'He would ra	ather let himsel	f be thrown in pri	son.'

Alongside such constructions with double marking, there are also those with reflexive marking on the main clause verb only (50), or on the infinitive only (51):

(50)	Old Lithuanian (KN SE 76.21–22)				
	źiednam	weiuj []	ne	tur	
	no.dat.sg.m	wind.dat.sg	NEG	have.to.prs.3	
	duoti-s	pałánkt			
	give.INF-REFL	bend.INF			
	'[this tree] shou	ld not let itself b	e bent by	y any wind.'	

(51) Old Lithuanian (KN SE 200.11-12)
Ponop áteyk ir jám
Lord.ALL.SG come.IMP.2SG and 3.DAT.SG.M *àt-fi-ráfti duok*.
PFX-REFL-find.INF give.IMP.2SG
'Come to the Lord and let yourself be found by Him.'

The threefold marking pattern was also characteristic of Old Latvian, though the 17th-century texts attest mainly instances with double mark-

ing as in (49). Moreover, modern Latvian (unlike modern Lithuanian) still has the constructions with all three patterns of marking, as illustrated in the following examples:

(52) Latvian

Izstudēlikumdošanuunstudy.IMP.2SGlegislation.ACC.SGandneļaujie-siebiedētie-s!NEG-allow.IMP.2SG-REFLintimidate.INF-REFL'Study the law and don't allow yourself to be intimidated!'16

(53) Latvian

Nevajadzējaļautiebiedētie-s,NEG.be.needed.PST.3allow.INFintimidate.INF-REFL[reāli Tev ir fiziski uzbrukts un izteikti nopietni draudi.]'You shouldn't have allowed yourself to be intimidated, [in fact youhave been physically attacked and seriously threatened].''7

(54) Latvian

[Citādi būs kā manam draugam, tagad nožēlo, ka]				
ne-ļāvās	pierunāt	nopirkt		
NEG-allow.pst.3-refl	persuade.1NF	buy.inf		
dārgāku	modeli.			
expensive.coмp.acc.sg	model.Acc.sg			
'[Otherwise you'll be in the same situation as my friend, who now regrets				
that] he didn't let himself be persuaded to buy a more expensive model. ¹⁸				

The pattern of reflexive marking in this permissive construction is interesting in that it cannot be associated with either of the verbs involved but has to be recognised as a feature of the construction as a whole. The reflexive marking can surface on either of the verbs, or on both, without any difference in meaning. Of course, in all these cases the function of the reflexive marker cannot be properly reflexive any more in the sense that the reflexive pronoun in (47) is reflexive. The coincidence of main clause subject and embedded clause patient is encoded in another way, by the

¹⁶ http://pajauta.draugiem.lv/question/list/50/38148/kreditsaistibas-ar-ge-money/

¹⁷ http://cosmo.lv/forums/topic/182172-/?sort=desc&pnr=2#postid-2167291

¹⁸ http://www.xc.lv/mtb/forums/viewtopic.php?pid=251513

construction as a whole. It is clear that when in a structure like (47) the reflexive pronoun affixalises and disappears from the syntax, the syntactic structure cannot remain unchanged. We shall now attempt to characterise the syntactic change.

4.2. Changes in syntactic structure

To begin with, let us note that though structures like (50) are now rare in Lithuanian and those shown in (48) and (51) have ceased to exist, this language has a perfectly productive pattern similar to (50) but with a participial instead of an infinitival complement. The main clause verb has an affixal reflexive marker and the complement is expressed by a present passive participle:

(55)	Modern Lithuanian		
	Klaipėdiečiai	ir toliau	leidžia-si
	Klaipedian.noм.pl	further	allow.prs.3-refl
	apgaunami	sukčių.	
	deceive.pprp.nom.pl.m	impostor.GE	EN.PL
	'The Klaipedians continu	e to let thems	selves be deceived by impostors. ¹⁹

Worth noting is that this construction has no counterpart with an orthotonic reflexive pronoun, and has no non-reflexive counterpart. There are therefore no structures like

(56)	* <i>jie</i>	<i>leidžia</i>	<i>save</i>	apgaunami
	3.NOM.PL.M	allow.prs.3	REFL.ACC	deceive.pprp.nom.sg.m
	Intended mear	ning: 'they allo	w themselves to b	be deceived'
(57)	* <i>jie</i>	<i>leidžia</i>	<i>žmones</i>	<i>apgaunamus</i>
	3.NOM.PL.M	allow.prs.3	people.ACC.PL	deceive.pprp.acc.pl.м
	Intended mear	ning: 'they allo	w people to be de	ceived'

Also worth noting is the replacement of the dative encoding the permittee in (50) with the genitive $suk\ddot{c}iu$ in (55). The genitive is the standard way of encoding the agent phrase with passive participles in Lithuanian, which suggests that the NP $suk\ddot{c}iu$ in (55) is no longer a complement of the main-clause verb but is in the embedded participial phrase, where it

¹⁹ https://www.15min.lt/naujiena/aktualu/lietuva/vel-patikejo-sukciais-56-47863

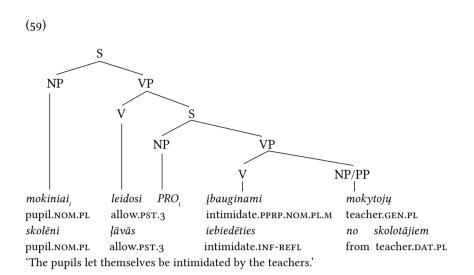
receives its case from the passive participle. Interestingly, a similar shift seems to have occurred in Latvian, where alongside the dative we find also prepositional phrases with *no*, which are used to encode agent phrases:

(58) Latvian
Neļaujietie-s iebiedētie-s no
NEG-allow.IMP.2PL-REFL intimidate.INF-REFL from
skolotājiem
teacher.DAT.PL
[par ĻOOOTI grūtajiem eksāmeniem.]
'Don't let yourselves be intimidated by teachers [about those SOOO very difficult exams.]'²⁰

Agent phrases introduced by *no* have a somewhat special status in Latvian grammar, as their use in the passive construction is proscribed in modern standard Latvian. They were regularly used in Latvian writings until the early 20th century, having probably originated under the influence of German agent phrases with *von*, but as the Latvian popular language—as reflected, e.g., in the Latvian folk songs—has only an agentless passive, they were ousted from Standard Latvian by purist grammarians in the 20th century. But agent phrases occur not only in the passive; and while proscribed in the passive, Latvian agent phrases with *no* are still widely used in permissive constructions like (58).

The introduction of passive participles instead of the original infinitive in the Lithuanian construction and of agent phrases also characteristic of passive constructions in both languages are clearly related phenomena attesting to a syntactic restructuring that occurred as a result of the loss of the distantly controlled reflexive pronoun from syntactic structure. The result can be formulated as a process of intransitivisation of the infinitive that caused it to behave as syntactically passive. In Lithuanian this syntactic reinterpretation was reflected in the morphosyntax by the introduction of a passive participle, whereas in Latvian it manifests itself only in the syntax. We propose that the syntactic structure of (55) and (58) is identical and is as shown in (59):

²⁰ http://www.apocalypsex.com/forum/viewtopic/2930



The passive participles of Lithuanian were therefore introduced in a context that was already syntactically passive.

The details of the syntactic processes reflected in structures like (55) and (58) are open to discussion. We should ask, for instance, whether these structures are still biclausal (as assumed in the analysis presented in (59)) or whether a process of clausal union has occurred, with the permissive complement-taking verbs having become permissive auxiliaries. This is an interesting question, but not immediately relevant here: what stands beyond doubt is that a syntactic restructuring must have occurred, and that it was set in motion by the affixalisation of the reflexive pronoun.

The relevance of the process of affixalisation for the characteristic patterns of reflexive marking described in these sections and for the syntactic processes set in motion by it is confirmed by the evidence of another group of languages where the reflexive pronoun has affixalised, viz. East Slavonic. Though the East Slavonic facts have not been noted in Slavonic scholarship, the threefold pattern of marking illustrated in (48), (50), (51) and in (52)–(54) is also attested here; examples from the three East Slavonic languages are provided in Holvoet (2020, 102–106), so here it will suffice to give just one example of the double marking from modern Russian:

(60)	Russian (Nina Sadur, <i>Som-s-usom</i> , 1995, RNC)						
	[a ona naklonjalas' nad nim licom nejasnym, svetlovatym]						
	i	šeptala	čto-b	ne			
	and	whisper.pst.f.sg	COMPL-IRR	NEG			
	trepyxalsja,		dal-sja		vzvesit'-sja.		
	thrash.a	bout.lform.m.refl	give.lform.m	-REFL	weigh.INF-REFL		
	'[And sh	e inclined her blurred	and luminous	face ov	er it		
	[sc. the catfish]] and told it in a whisper not to thrash about						
	and to le	et itself be weighed.'					

The reason why constructions of this type have remained unnoticed is probably that they are obsolescent in modern Russian; many speakers of modern Russian judge them ungrammatical. Janko-Trinickaja (1962) and Letučij (2016) do not mention them at all. Nothing is therefore known about their history. Whether something comparable has taken place in North Germanic, where the formerly enclitic reflexive pronoun has also affixalised, is not known either.

4.3. The rise of a permissive middle

The structure for which a putative syntactic structure is proposed in (59) can be characterised as a specific, morphologically and syntactically not quite transparent construction called the 'permissive middle' in Holvoet (2016). It is middle in the sense that the reflexive marker has lost its original function of marking a syntactic argument as coreferential with the main-clause subject. There is still a relation of argument sharing between the higher and the embedded predication, but it has become a feature of the construction as a whole, and the variation in the placement of the morphological marker (the former reflexive pronoun) shows that it is now construction-bound rather than governed by general rules of syntax. It is also middle in that it shows a certain conceptual affinity with the 'natural reflexives' mentioned above. Permissive constructions are, more generally speaking, a subtype of causative constructions. Whether the semantic relation is more active ('causative') or more passive ('permissive'), there is clearly a functional motivation for a special, structurally simpler type of marking for the frequent situation in which the caused or permitted situation involves the causer/permitter. In the case of properly causative constructions (involving an active role for the causer) this is reflected by the curative reflexives to be discussed below (the type apsikirpti 'have

one's hair cut' in (76)), which syntactically ignore a causee present in semantic structure.²¹ In the case of permissive situations, it is reflected in a special permissive construction whose place in the family of 'middle-voice' constructions consists in 'weak differentiation' of situations (the notion 'weak elaboration' is used in Kemmer 1993). Just as in naturally reciprocal situations two events are viewed as one, in the permissive situation causing and caused situations are indistinct through argument overlap: one and the same participant acts as both permitter and patient. Permissive situations are rendered by middle verb forms in other languages as well: Classical Greek has a permissive middle (briefly mentioned by Wackernagel 1920, 128) and so has Biblical Hebrew, whose middle voice is traditionally known as the *nif al*; its permissive use is known as the *nif al*; to permissive use is known as the *nif al*; to permissive use is known as the *nif al*; to permissive use is known as the *nif al*; to permissive use is known as the *nif al*; to permissive use is known as the *nif al*; to permissive use is known as the *nif al*; to permissive use is known as the *nif al*; to permissive use is known as the *nif al*; to permissive use is known as the *nif al*; to permissive use is known as the *nif al*; to permissive use is known as the *nif al*; to permissive use is known as the *nif al*; to permissive use is known as the *nif al*; to permissive use is known as the *nif al* to permissive use is known as the *nif al*; to permissive use is known as the *nif al*; to permissive use is known as the *nif al* to permissive use is known as the *nif al*; to permissive use is known as the *nif al* to permissive use is known as the *nif al*; to permissive use is known as the *nif al* to permissive use is known as the *nif al* to permissive use is known as the *nif al* to permissive use is known as the *nif al* to permissive use is known as the *nif al* to permissi

(61) Biblical Hebrew (Isaiah 65.1) nimşē-tî lə-lō' biqəš-ū-nî find.NI-PF.1SG.SUBJ to-NEG seek.PI-PF.3PL.SUBJ-1SG.OBJ 'I have allowed myself to be found by those who did not seek me.'²²

This shows that the rise of a permissive middle can be conditioned by a semantic shift involving a form that already has a middle-voice function; in the case of Baltic, however, it was due to an external stimulus—the affixalisation of the reflexive marker. The proof is, again, as in the constructions with modal verbs discussed in the preceding section, provided by the double reflexive marking, which is a trace of a hesitation in the search of the affixalising reflexive marking for a host.

4.4. Further developments

Whereas Old Lithuanian had a permissive construction with reflexive marking 'spread' over the whole construction (by means of double or mobile reflexive marking), modern Lithuanian has only residual uses of one of the three varieties attested in Old Lithuanian—the one with a reflexive marker on the main clause verb:

²¹ Cf. also Greek middles like *apographeïsthai* 'have oneself enrolled' (Wackernagel 1922, 128)

²² This function is not reflected in the Authorised Version, which consistently renders the *nif al* with the passive: *I am found of them that sought me not.*

(62) Lithuanian
[Kol kas dar nėra labai meili,] ne visada leidžia-si paglostyti.
NEG always allow.PRS.3-REFL stroke.INF
'[[The little cat] is not very friendly yet,] it does not always let itself be stroked.'²³

Such constructions are not accepted by all speakers of Lithuanian; many accept only the construction with an orthotonic reflexive pronoun:

(63) Lithuanian

[Buvo neįmanoma paimti ant rankų, dabar jau trumpam pabūna ant kelių,] leidžia save glostyti. allow.PRS.3 REFLACC stroke.INF '[It was impossible to take [the cat] in one's arms, but now it stays on your knees for some time and] allows itself to be stroked.'²⁴

This is the construction for which we give a syntactic analysis in (47). We can say that after more than four centuries, the last traces of the constructions illustrated in (48), (50) and (51) have finally been done away with. We will now briefly look into the history of the demise of these constructions, and into how the language reassigned new functions to the reflexive markers occurring in them.

When the threefold marking pattern fell into disuse is not exactly known, The 1727 New Testament still has instances of all three constructions; here we give shortened examples:

- (64) Old Lithuanian (NT 1727, Acts 2.40)
 důkitie-s gelbeti nů tû piktujû zmoniû give.IMP.2SG-REFL save.INF from these evil people
 'let yourself be saved from these evil people'
- (65) Old Lithuanian (NT 1727, Acts 18.8)
 ir dáwe ap-fi-krikβtiti-f' and give.PST.3 PFX-REFL-baptise.INF-REFL 'and let himself be baptised'

²³ https://www.15min.lt/ikrauk/naujiena/gyvunai/karalisko-grozio-katyte-iesko-namu-520-286970

²⁴ http://www.gyvunugloba.lt/lt/help/news.41452

(66) Old Lithuanian (NT 1727, Galatians 1.6)
 důdaties nu-ffi-kreipti nů to, kurfai jus pawaddinno give.PRS.2PL-REFL away-REFL-direct.INF from him that called you 'you let yourself be led away from him that called you'

In more recent times the construction with reflexive marking on the embedded infinitive only does not seem to be attested any more. Throughout the 19th century, the dominant construction is that of the type illustrated in (67), with affixal reflexive marking on the higher verb:

(67) Lithuanian (Vincas Kudirka, *Varpas*, 1898)

Ui,	pons		viršininl	ke []	иž	tokius	
INTERJ	Mr.no	M.SG	official.v	VOC.SG	for	such.acc.pl.m	
pinigus		tai	gera		karvé	5	
money[PL]].ACC	PTC	good.no	M.SG.F	cow.N	IOM.SG	
ni-si-duos			nė	pačiu	pinėti.		
NEG-REFL-	give.FU	т.3	even	feel.1	NF		
'How now, your grace, for such money a decent cow wouldn't as							
much as allow itself to be handled.							

However, the construction with double marking can occasionally be found as late as the final decades of the 19th century; it is found, e.g., in Maironis:

(68) Modern Lithuanian (Maironis, Lietuvos istorija, 3rd ed. 1906, written 1880 - 1886Antgalo davė-s per-si-kalbėti ir Jadvyga finally PN.NOM give.pst.3-refl PFX-REFL-talk.INF and prižadėjo tekėti иž Jagielos. promise.PST.3 marry.INF after PN.GEN

'Finally Jadvyga let herself be persuaded and agreed to marry Jagiela.'

The date of introduction of the participial construction is not exactly known. The oldest instances we have succeeded in finding are from the first half of the 20th century.

(69) Lithuanian (Vienybė 1924-04-24)
[Deja, lenkai-karštuoliai turėjo atvėsti, nes]
lietuviai ne-si-davė bauginami.
Lithuanian.NOM.SG NEG-REFL-give.PST.3 intimidate.PPRP.NOM.PL.M
'[Alas, the hot-headed Poles had to cool down,] for the Lithuanians
did not let themselves be intimidated.'²⁵

²⁵ https://www.epaveldas.lt/vbspi/showImage.do?id=DOC_O_98766_1&biRecordId=10036

Owing to the scarcity of data, it is impossible to reconstruct the exact process of demise of the affixally marked permissive construction and the rise of its participial construction. As the latter occurs in one variety only, with affixal reflexive marker on the main-clause verb and a nonreflexive participle, we may surmise it took the place of the infinitival construction illustrated in (62) after the reflexive marker had become immobilised on the main-clause verb.

Alongside the constructions with exclusively affixal marking which we have been discussing above, the orthotonic pronoun was already introduced in the Old Lithuanian and Old Latvian texts:

(70) Old Lithuanian (Willent, EE 141.10-12)
[Rachel apwerke waikus fawa ir] ne-dawe sawęs palinksminti nęfa
NEG-give.PST.3 REFL.GEN comfort.INF for nebebuwa
NEG.CNT.be.PST.3
'[Rachel was weeping for her children, and] would not be comforted, because they are not.'

(71) Old Latvian (Glück's NT, Matt. 23.10)

NeleezeetarrifewiMahzitajusfaukt.NEGbid.IMP.2PLalsoREFL.ACCteacher.ACC.PLcall.INF'And you should not have yourself called teachers.'Luther: Vnd jr solt euch nicht lassen Meister nennen

This construction interacts with the construction with affixal markers; the affixal marking is then added redundantly to a construction with an orthotonic reflexive pronoun:

(72)	Old Latvian (Glück's NT, Acts 23.21)						
	Tad	nu	tu		ne	leezee-s	few
	then	now	2SG.NO	М	NEG	let.IMP.2SG-REFL	REFL.ACC
	pahrrunnatee-s		no	teem			
	persuade.INF-REFL		by	these.dat.pl.m			
	'But do not thou yield unto them.'						

This construction need not be interpreted as a 'renewal' of the construction occurring after the affixal reflexive marker has lost its original reflexive function. The reflexive permissive construction probably existed in two varieties, one with the orthotonic and the other with the enclitic reflexive pronoun; after the affixalisation of the enclitic reflexive pronoun a situation arose in which there were two distinct constructions—the old reflexive construction and the new permissive middle.

While in Latvian the permissive middle, with its characteristic double or mobile reflexive marking associated with the construction as a whole, is still fully alive, Lithuanian has transformed it. Out of the three patterns coexisting as late as the early 18th century, only one survived. Whereas the reflexive marking was originally grammatical, being associated with a grammatical construction rather than with individual lexemes, it became lexicalised through its restriction to the complement-taking verbs. We will discuss this lexicalisation in the following section.

4.5. Lexicalisation of the reflexive marking

Though we cannot reconstruct the exact changes the permissive construction with 'dispersed' marking underwent after the early 18th century, we can characterise the general tendency at work: it was one of lexicalisation of the reflexive marking. What we see is the process of the rise of reflexive complement-taking permissive verbs *leistis* and *duotis* as separate lexical items. These lexemes have, in comparison with their non-reflexive counterparts, a lexical feature to the effect that what is expressed in the clausal complement somehow affects the participant expressed by the main clause subject. These lexicalised 'autopermissive' complement-taking verbs are now used not only with the above-mentioned infinitival or participial complements, but also with finite complements, as in (73):

(73)	Modern Lithuanian					
	[Gal turite patarimų tiems tėvams,]					
	kurių	ne-si-leidžia,	kad			
	REL.GEN.PL	little.one.nom.pl	NEG-REFL-allow.prs.3	that		
	tėvai	valytų	dantis?			
	parent.nom.sg	clean.1RR.3	tooth.acc.pl			
	'[Do you have any advice for parents] whose toddlers don't allow their parents to brush their teeth?' ²⁶					

In this example the only marker indicating that the children's teeth rather than their parents' are involved is the reflexive marker on the

²⁶ https://www.delfi.lt/seima/pirmieji-metai/odontologe-papasakojo-apie-klastingas-dantuligas-kuriu-tevai-iprastai-nepastebi.d?id=77355237

complement-taking verb identifying the subject as being affected. As we can see here, the reflexive marker, which initially, before its affixalisation, occupied a syntactic argument position in the embedded clause, subsequently became a grammatical marker associated with the permissive construction as a whole, and finally became a lexical feature of the complement-taking verb.

Another path of lexicalisation of reflexivity starting out from the constructions illustrated in (52) and (53), viz. lexicalisation of the reflexive marking on the embedded infinitive, appears to have occurred, to a limited extent, in Latvian. It is clear that in these constructions the reflexive marking on the infinitive cannot be described as lexical: any verb used in the permissive construction may optionally receive reflexive marking. But Latvian also has a small group of lexical permissive verbs, showing remarkable semantic homogeneity. It includes *vadīties* 'be guided', *ietekmēties* 'be influenced', *iedvesmoties* 'be inspired' and *iespaidoties* 'be impressed'. These verbs have complements introduced by the preposition *no*, a construction also mentioned above as expressing agent phrases in the construction with permissive complement-taking verbs:

(74) Latvian

Vai	ekonomika	ļauja-s	vadītie	2-S		
Q	есопоту. NOM	let.prs.3-refl	guide.	INF-REFL		
no	ētiskām	normām	un	vērtējumiem?		
from	ethical.dat.pl.м	norm.dat.pl	and	valuation.DAT.PL		
'Does the economy let itself be guided by ethical norms and valuations?' ²⁷						

(75) Latvian

[Tāpēc mūsu kā partijas priekšlikums un ieteikums ir]vadītie-snoaktuālāssituācijas.guide.INF-REFLfromcurrent.GEN.SG.F.DEFsituation.GEN.SG'[Therefore our proposal and recommendation as a party] is to letourselves be guided by the current situation.'28

This similarity in the encoding of the agent is striking. Also important is the meaning of the verbs involved here. As is known, in both Baltic and

²⁷ https://eng.atlants.lv/research-papers/etika-uznemejdarbiba/834757/

²⁸ https://www.delfi.lv/news/national/politics/varas-gaitenos-arkartejas-situacijas-iespejamaipagarinasanai- izskata-vairakas-iespejas.d?id=52022505

Slavonic reflexive verbs can often be used to refer to situations involving a causative element, which is, however, not linguistically encoded (for Russian cf., e.g., Toops 1987). This comprises cases like the following, where the agent can only be inferred from the location, the service-provider's establishment:

(76)	Modern Lithuanian (Gi	rigorijus Kanovičius	2004, CCLL)
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[]	trumpai,	greičiau	pagal	klimatą	negu		
	short.ADV	rather	according.to	climate.Acc	than		
pagal		madą,	ap-si-kirpo	pas			
accor	ding.to	fashion.ACC	PFX-REFL-cut.	рsт.3 at			
kirpėj	ią	Idą					
haird	resser.ACC.S	G PN.ACC					
'[] F	[] He had his hair cut short, more according to climate than to fashion,						
at hai	rdresser Ida	.'s.'					

In such situations the client is the active participant who commissions the service denoted by the verb; the service-provider, whose agency is taken for granted, is backgrounded. We will call reflexives of this type 'curative', borrowing a term used to refer to a particular type of causatives in Fennic scholarship (Pennanen 1986); another term used in the literature is 'reflexive-causative' (Letučij 2016, 293–294). The causative element not reflected in linguistic encoding but implied by the situation is, at any rate, one of active causation and not of permission. Verbs of the type vadīties 'be guided', on the other hand, imply a passive role of the subject referent, and the causative relationship, wherever it is explicitly referred to, is permissive ('let oneself be influenced' rather than 'have oneself be influenced'). This permissive meaning, not otherwise present in the lexical meanings of reflexive verbs, seems therefore to have been inherited from the permissive construction, and the coincidence in the encoding of the agent suggests that these lexical permissives were abstracted from the permissive complement-taking construction. This could have happened by way of an analogical proportion:

ļāvās apcirpties	:	apcirpās			
'let his hair be cut'		'had his hair cut'			
ļāvās vadīties no reālijām	:	x			
'let himself be guided by realities'					

where x = vadijas no reālijām 'let himself be guided by realities'. The analogical proportion is not perfect because reflexives like *apcirpties*

'have a haircut' are never accompanied by an agent phrase, but after all it belongs to the very essence of 'curative' reflexive constructions as in (76) that agency is ignored as it is taken for granted. Verbs like *vadīties*, on the other hand, are meaningless without their complements.

If such was indeed the origin of verbs like *vadīties*, it was another type of lexicalisation of the reflexive marking characteristic of the permissive construction, alongside that observed on the complement-taking verb. Verbs of the type *vadīties* are now fully-fledged verbal lexemes with a complete paradigm, including finite forms, as illustrated in (77):

(77) *Es vado-s no dzīves reālijām...* 1SG.NOM lead.PRS.1SG-REFL from life.GEN.SG reality.DAT.PL 'I let myself be guided by the realities of life...'²⁹

The form *iebiedēties* in (52), on the other hand, hardly entitles us to posit the existence of a lexeme *iebiedēties*, as it would exist only in the infinitive and only in the permissive construction. Here the reflexive marking is still constructional.

The processes discussed in section 4 are, like those described in section 3, driven by syntax rather than semantics. They took place in a context characterised by control of reflexivity across clause boundaries, and it was this cross-boundary control that gave rise to the characteristic morphosyntactic pattern that we find in permissive middle constructions, and also necessitated a syntactic reorganisation. The subsequent development of the constructions involved lost its syntactic motivation and led to processes of lexicalisation of the reflexive marking.

5. Raising constructions

Another case where the affixalisation of the reflexive marker had repercussions in interclausal syntax is that of raising constructions with verbs of saying and of propositional attitude. With these verbs the Baltic languages have the *accusativus cum participio*, the counterpart of other languages' *accusativus cum infinitivo*. These constructions have been dealt with in considerable depth by Vytautas Ambrazas (1979, 1990), and what is here discussed is based mainly on his research (cf. also Arkadiev 2012).

²⁹ http://kreisie.lv/?p=3236

Participial complementation is well represented in Baltic, not only with verbs of immediate perception (where it is typologically widespread, cf. Noonan 2007, 73) but also with other types of complement-taking predicates. In the case of speech-act verbs, verbs of knowledge and verbs of propositional attitude the participial construction might actually have spread from the immediate-perception type. Example (76) shows an *accusativus cum participio* with a verb of knowledge:

(78) Old Lithuanian (Willent, EE 89.33)
paßistam tawe wiffus daiktus know.PRS.1PL 2SG.ACC all.ACC.PL.M thing.ACC.PL
βinanti know.PPR.ACC.SG.M
'We know that thou knowest all things.'

When the raised subject is coreferential with the main-clause subject, it will be expressed by a reflexive pronoun, as illustrated in (79):

(79) Old Lithuanian (Willent, EE 174.6–7) iog ghis fakie fawe fanti that say.PST.3 3.NOM.SG.M REFL.ACC be.ppra.acc.sg.m Karaliumi Szidu King.INS.SG Iew.gen.sg 'that he said he was the King of the Jews.'

In constructions of this type a reflexive pronoun could affixalise, which gave rise to constructions as in (80):

(80)	Old Lithuanian (Willent, EE 174.29)						
	Nefa	ghys	fakie-fi	effas			
	for	3.NOM.SG.M	say.pst.3-refl	be.ppra.nom.sg.m			
	Sunumi	Diewa					
	son.INS.SG	God.gen					
	'For he said he is the Son of God.'						

In this example we see that the participle no longer has an accusatival raised subject to agree with; instead, it agrees with the main clause subject, by which it is now controlled. The raising construction has been replaced with a control construction. The transition was probably a gradual process; Ambrazas (1979, 122) cites a series of examples where the reflexive marker has affixalised but the participle is still in the accusative as if agreeing with the affixalised pronoun:

(81)	Old Lithuanian (Bretke's NT, Rev. 2.20)						
	[materifchkei Iefabel]						
	kuri	fako-fi	Pranafchienę				
	REL.NOM.SG.F e∫anczią	say.prs.3-refl	prophetess.Acc.sg				
	be.pprA.ACC.SG.F						
	'[the woman Jesabel] who says she is a prophetess.'						

The syntactic interpretation of this construction (analogous to that shown in (27) above) is not quite clear, but at any rate it shows the gradual nature of the process of syntactic transition associated with the affixalisation of the reflexive marker.

The rise of the control construction illustrated in (80) in the place of the raising construction in (79) is comparable to what we saw in permissive constructions in that the affixalisation necessitated a syntactic reorganisation of the complex sentence. The control construction has made it to contemporary Lithuanian, while the constructions with a raised orthotonic reflexive pronoun as shown in (79) are now stated to be rare (Ambrazas 1979, 123).

Not only did the affixalised reflexive marker disappear from the syntax, but it is no longer required. Already in Old Lithuanian, control constructions with participles also occur with the corresponding nonreflexive verbs, as in (82):

(82) Old Lithuanian (Willent, EE 59.9–10)
[moterifchkes ifch mufu ... ateia]
fakidamas Angelu weida regejufias
say.CVB.F.PL angel.GEN.SG vision.ACC.SG see.PPA.NOM.PL.F
'[certain women also of our company, came], saying, that they had
also seen a vision of angels...'

It is not clear whether such structures arose through the loss of a reflexive marker on the verb or whether the participial type of complementation spread from constructions with other, non-reflexive complement-taking verbs; for discussion see Ambrazas (1979, 115–117). At any rate it seems that where the affixal reflexive marker on the verb occurs, it now has a semantic function. The reflexive marker has spread to constructions with finite complements, as briefly mentioned by Ambrazas (1979, 125) and Arkadiev (2012). Frequently this occurs in situations where one of the arguments of the embedded clause is coreferential with the main clause subject:

(83)	Modern Lithuanian (Henrikas Algis Čigrėjus, 2007, CCLL)						
	Lengvai	apsivilkęs,		sako-si,	ka	d jam	
	lightly	dressed.nom.sg.м		say.prs.3-re	FL tha	at 3.DAT.SG.M	
	niekad	nešalta	ir	niekad	nekarši	ta.	
	never	NEG.cold.N	and	never	NEG.ho	ot.n	
	'Lightly dressed, he says he never feels cold and never feels hot.'						

But in many cases there is no coreference and the use of the reflexive particle seems to be motivated merely by the relevance of the content of the complement clause to the speaker, or perhaps it is just meant to reflect the subjectivity of the speaker's judgement:

(84) Modern Lithuanian (Verslo žinios, CCLL) [Ilgamečiu darbu subūrusi savų klientų ratą, šiemet didelės plėtros neplanuoja,] sako-si. išlaikyti kad geriau tai, kas say.PRS.3-REFL that better maintain.INF that what sukurta. jau already create.ppp.N

'[Having built up a body of customers over so many years, she is planning no big expansion this year–] she says it's better to maintain what has already been built up.'

The spread of the reflexive marking to finite complement clauses (including direct speech) is already apparent in Old Lithuanian:

(85)	Old Lithuanian (Chyliński's nт, John 19.21)						
	ne-raßyk	Karalu σ	Zydu,	bet	jog		
	NEG-write.IMP.2SG	king.noм.sg	Jew.gen.pl	but	that		
	fakie-σ,	Efmi	Karalu σ	Zydu.			
	say.pst.3-refl	be.prs.1sg	pe.prs.1sg king.nom.sg Jew.gen.pl				
	'Write not, The King of the Jews; but that he said, I am King of the Jews.'						

Reflexive marking of the type observed here has been described as logophoric (Kemmer 1993, 83), and to a certain extent this is correct, as the reflexive marking reflects the fact that the author of the verbal utterance or thought occurs as an argument in the embedded clause. However, the reflexive marking is not induced specifically by logophoricity, as what we observe with speech act verbs and verbs of propositional attitude is not different from the reflexive marking on the permissive verbs discussed in the preceding section. A more general term proposed in Holvoet (2002, 203–224) is 'coargumental middle'. In both cases of coargumental marking discussed here the rise of a specialised reflexive complement-taking verb marking affectedness of, or relevance to, the main clause subject is first of all a consequence of a syntactic process, viz. the demise of a raising type of participial complement clauses with subsequent reinterpretation and reappropriation of the reflexive marker (once a raised subject) in a new semantic function. The demise of the raising construction, which was a precondition for the spread of the reflexive marking to sentences with finite complements, was a consequence of the affixalisation.³⁰

Like the processes discussed in section 4, those dealt with in this section were initially syntactic in nature, but they occurred, in this case, in a syntactic context of cross-boundary raising rather than control. Here as well, the subsequent development of the constructions involved lost its syntactic motivation and led to lexicalisation of the reflexive marking.

6. In conclusion

The affixalisation of the originally enclitic reflexive marker, a process that occurred in the prehistory of the Baltic languages, set in motion a series of morphosyntactic and syntactic changes that has not yet run its full cycle in the early 21st century. The interest of the processes connected by this unifying thread consists, on the one hand, in what they reveal about the affixalisation process itself and, on the other, in what they tell us about diachronic processes in the domain of the middle voice. The affixalisation itself was not always a straightforward process because of its syntactic implications. In some cases there was no obvious host verb for the affixalising reflexive marker to accrete to, which led to a situation in which the reflexive affix is grammatically associated with a whole construction rather than with its host verb (as shown by the constructions with modal verbs discussed in section 3 and by the permissive middle discussed in section 4). In those instances where the original reflexive pronoun was controlled across clause boundaries, the affixalisation could moreover necessitate a

³⁰ Processes analogous to those of Baltic have been noted in East Slavonic (see Pičxadze 2017) and in Icelandic (see Anderson 1990).

radical syntactic restructuring. This is an interesting aspect of the diachrony of the middle voice. The rise of the middle voice as distinct from the reflexive has a partly conceptual basis, as shown by the distinction of 'canonical' reflexivity/reciprocity and 'natural' reflexivity/reciprocity discussed in the first section of the article. Its subsequent expansion and enrichment with new types crucially involves lexical extension, but the permissive and coargumental middle, discussed above, show the involvement of purely syntactic processes without conceptual motivation, put in motion by the affixalisation process occurring in Baltic and East Slavonic.

Abbreviations

ACC — accusative, ADV — adverb, ALL — allative, CNT — continuative, COMP — comparative, COMPL — complementiser, CVB — converb, DAT — dative, DEF — definite, DEM — demonstrative, EMPH — emphatic pronoun, F — feminine, FUT — future, GEN — genitive, IMP — imperative, INF — infinitive, INS — instrumental, INTERJ — interjection, IRR — irrealis, LFORM — the *l*-form of the Slavonic verb underlying the past tense and the subjunctive, LOC — locative, M — masculine, N — neuter, NEG — negation, NI — Hebrew *nif* al, NOM — nominative, OBJ — object marker, ORTH — orthotonic form, PF — perfect, PFX — prefix, PI — Hebrew *pi* el, PL — plural, PN — personal name, PPA — past active participle, PPRP — present passive participle, PPRA — present active participle, Q — question marker, QNEG — negative question marker, REFL — reflexive, REL — relative pronoun, RPO — reflexive possessive, SG — singular, SUBJ — subject marker, SUP — supine, VOC — vocative

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Lithuanian intensive causatives and their history

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The article deals with a small group of Lithuanian verbs in which causative morphology has acquired an intensive function. While causative-intensive polyfunctionality is well attested typologically, the Lithuanian instance is interesting in that the intensive function manifests itself in reflexivised causatives. This development seems to be a consequence of the co-occurrence of causative and reflexive derivation as devices for building transitivity pairs in Baltic. The combination of the two devices yields intransitivised causatives that become semantically differentiated from the corresponding primary intransitives through developing an intensive function.

Keywords: causative, reflexive, intensive, Lithuanian, Baltic

1. Introduction: the case of *nešdintis*¹

The non-causative functions of morphological markers with a primarily causative function are a well-established topic in the typological literature, starting with such classical publications as Nedjalkov & Sil'nickij (1969, 35–38); for newer studies see Kittilä (2009) and Aikhenvald (2018). For Baltic there is a study on extended uses of causative morphology in Latvian (Holvoet 2015), but it is far from exhausting the subject. The present article deals with what appears to be an 'intensive' extension of causative marking in a small group of verbs in Lithuanian. The phenomenon we will be discussing is of interest because of its interactions with other categories, such as reflexivity and mood. Our discussion will start

¹ I wish to thank Rolandas Mikulskas, Peter Arkadiev, Wayles Browne and two external reviewers for their constructive comments, which have led to substantial improvements in my text. For all remaining shortcomings of the article I remain solely responsible. This research has received funding from the European Social Fund (project No. 09.3.3-LMT-K-712-01-0071) under grant agreement with the Research Council of Lithuania (LMTLT).

out from an idiosyncratic case, that of the verb *nešdintis* 'get away, take oneself off':

(1) Lithuanian (Petras Dirgėla, 1994, CCLL) Ei jūs, velniai. veskite lauk arklius devil.NOM.PL lead.IMP.2PL outside horse.ACC.PL hev 2PL.NOM ir neš-din-kitė-s. kur akvs mato! carry-caus-imp.2pl-refl where and eve.nom.pl see.PRS.3 'Hey you, devils, lead the horses out and take yourselves off where vour eves carry vou.'

The meaning of *nešdintis* is defined in LKŽ as 'nieko nelaukiant eiti, bėgti, pasitraukti, sprukti' ('go, run, withdraw, escape without delay'). The verb is derived, with the causative suffix *-din-*, from the transitive *nešti* 'carry', and it moreover contains a reflexive marker. Assuming the derivational meaning to be compositional, and the causative and reflexive markers to have properly causative and reflexive functions respectively,² we would expect either a meaning of the type 'cause (force) oneself to carry something or somebody (somewhere)' (coreferentiality of causer and causee-A), or one of the type 'have oneself carried (somewhere)' (coreferentiality of causer and causee-A), or one of the subject's own motor control, so that there is no co-occurrence of causer and causee characteristic of causative constructions. Instead of this causative formation one would rather have expected a reflexive form of *nešti*, which is in itself a caused-motion verb, and indeed this is attested from the early 20th century, though apparently no longer used nowadays:⁴

(2) Lithuanian (Draugas, 10–10–1912)
 [Jeigu nenori prigulėt į vietinės kuopos uniją,]
 tai kuo greičiau neški-s iš
 then as.quickly.as.possible carry.IMP.2SG-REFL from

² In the case of the reflexive marker it is by no means obvious that the function should be properly reflexive, as the affixal reflexive marker has mainly middle-voice rather than reflexive functions, cf. Holvoet (2020). The assumption of a properly reflexive function is here made for purposes of exposition.

³ A reviewer suggests a kind of reflexive haplology could also be involved, i.e., *nešdinkitės* could be thought of as a reflexive relating to both the causee and the patient: 'make oneself carry oneself'. Though this is conceivable, there would be no parallel for it in Baltic.

⁴ To be more precise, *neštis* is frequently used but as a transitive verb meaning 'carry with one, carry along': *neškis savo daiktus* 'take your belongings with you'.

to miestelio, ... that.gen.sg town.gen.sg

'[If you don't want to belong to the local trade union,] then you'd better get out of that little town as quickly as possible.'5

(3) Lithuanian (*Keleivis*, 11–12–1918) [Tai tamsta socialistas!' — Įsikiša tūlas individiumas,⁶ įsiklausęs į mano klausinėjimą. — Taip! — atsakiau.] Tai neški-s čia greičiau iš lauk. then carry.IMP.2SG-REFL from here quickly out [nes žydberniams čia vietos nėra.] having listened for a while to my questioning. "Yes", I answered.] "Then get out of here quickly, [because there's no place for Jews here."]⁷⁷

What, then, is the function of the causative suffix in *nešdintis*? From the dictionary definition, which emphasises the sudden character of the motion as well as an element of external compulsion suggested by the explicans 'escape', we might surmise that it could perhaps be intensive. Causativity-intensivity polysemy is reported from many languages. This notion of intensivity is usually viewed as a cluster of meanings, partly qualitative—pertaining to the internal structure of an event—and partly quantitative—iterative and distributive (Kulikov 2001, 894); here only the former are involved. Dixon (2000, 71-72) formulates differences associated with intensivity in causatives in terms of naturalness and effort, and this applies readily to the verb under discussion here: the naturalness applies to the usual psychomotor control, or to natural motion determined by the laws of physics, while conscious, directed effort or external pressure diverge from the natural. The instances of 'intensive' meaning of causative morphology mentioned in the literature are mostly instances of causatives derived from verbs that are already transitive ('second causatives', i.e. causatives derived from causatives, may be involved, see Kulikov 1993), and this applies, in a sense, to nešdintis, which derives from the transitive caused-motion verb nešti; true, the latter has no overt marking of its causative character. Two things are, however, unusual about nešdintis.

⁵ http://www.draugas.org/archive/1912_reg/1912-10-10-DRAUGASw.pdf (accessed 10-07-2020)
⁶ Sic!

⁷ http://www.spauda.org/keleivis/archive/1918/1918-12-11-KELEIVIS.pdf (accessed 10-07-2020)

First, its putative intensive meaning appears only in the reflexive form: the non-reflexive form shows—to the extent that it is still used—the structural causative meaning 'have somebody carry, bring something', on which below. Secondly, there appear to be no other verbs in Lithuanian showing exactly the same meaning and derivational pattern.

In this article we will attempt to explain the origin of the intensivecausative reflexive verb *nešdintis*, the interest of which lies in the fact that it sheds more light on a somewhat broader development within verbs combining causative and reflexive marking in Baltic.

2. Other reflexive causatives in Lithuanian

The exact derivational pattern represented by the verb *nešdintis* is, as mentioned above, not found in other Lithuanian verbs. We can, however, find verbs with similar causative marking and similar meaning, but with a different derivation. An example would be *judintis* in (4):

(4) Lithuanian (Aidas Pelenis, Keturiolika Restitucijos dienų, 1997, CCLL) Tik sparčiau, judinki-s, only faster move.CAUS.IMP.2SG-REFL [tu juk nemanai, kad aš čia liksiu laukti savo draugų ...] 'Just hurry up, get moving, [or do you suppose I'm going to wait here for my friends...]'

As an imperative, this form *judinkis* is similar in function to *nešdinkis*: it is an appeal to quick and energetic action. In fact, 49 out of the 83 occurrences of the verb *judintis* attested in CCLL are imperatives. But the derivational history of the two verbs is different: whereas nešdintis derives from the transitive caused-motion verb nešti 'carry', judintis is the reflexive form of judinti, a causative derived from the intransitive motion verb judėti 'move'. Causative verbs are mostly derived from intransitive verbs in Baltic (see Arkadiev & Pakerys 2015, 51 and Nau 2015, 114), and part of these are intransitive motion verbs; judinti is therefore an instance of a widely represented derivational pattern. But again, two things attract our attention. First, the verb form here cited as a parallel for *nešdinkis* is a reflexive causative, that is, we are dealing with the outcome of a twofold operation—transitivisation by means of a causative affix and intransitivisation of this causative by means of the reflexive marker. The question arises, therefore, what the difference could be between the primary intransitive verb and the secondary intransitive arising from reflexivisation of the causative. And, secondly, if there is indeed a semantic similarity between nešdinkis and judinkis, and both are in some way 'intensive', then perhaps it is precisely the notion of 'intensity' that provides an answer to the question just raised, that is, that of the difference between the primary intransitive and the intransitivised causative. We will explore this in the following sections.

3. Transitivity pairs in Baltic

In patterns of morphological marking opposing processes and their causation, languages may show a preference for transitivisation or intransitivisation, as noted for causative vs. anticausative pairs in Haspelmath (1993). In pairs like The firewood was burning : They were burning the firewood either the form for *burn something* may be derived with a causative marker from the intransitive burn, or the latter may be derived from its transitive counterpart by means of an intransitivising marker. Baltic has both devices, combining productive processes of intransitivisation by means of the reflexive marker and causativisation by means of the affixes -(d)in- or -(d) y-, as recently noted by Nau & Pakerys (2016), who also pose the question which type of derivation is preferred for which types of lexical items. For the sake of completeness, let us add that Baltic has five strategies for opposing processes and their causation: (i) zero marking (the verb is labile), (ii) ablaut (with additional differences in conjugational class, cf. Arkadiev 2013 for a recent overview), (iii) intransitivisation with the aid of the reflexive marker, (iv) transitivisation with the aid of a causative affix, and (v) equipollent marking, combining (iii) and (iv). An overview is given in Table 1:

		intransitive	transitive				
i	zero (labile)	deg-ti 'burn (INTR)'	deg-ti 'burn (TR)'				

kil-ti 'rise'

ii

iii

iv

v

ablaut

intransitivisation

transitivisation equipollent

In what follows we will focus on (iii) and (iv), as in (ii) no direction of
derivation can be established (historically we are dealing here with a
reanalysis of ablaut grades whose motivation was originally different, cf.

iš-si-gqs-ti 'get frightened'

iš-si-pil-ti 'spill (INTR)'

aug-ti 'grow (INTR)'

kel-ti 'raise'

iš-pil-ti 'spill (TR)'

aug-in-ti 'grow (TR)'

išgąs-din-ti 'frighten'

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Stang 1966, 331–333, 356), and the same applies to (v), where the marking is equipollent.

Transitivising and intransitivising derivation are not always alternative and mutually exclusive devices for creating transitivity pairs. In a situation where both devices coexist, there is a possibility of their being applied cumulatively, a verb stem being first transitivised by causative derivation and then intransitivised by means of a reflexive marker. Examples of this are not difficult to find in the modern Baltic languages, but they often involve a certain lexical specialisation of the causative derivative which opens the way for the formation of a new intransitive differing in meaning from the primary intransitive. An example would be Lithuanian *šilti* 'get warm' $\rightarrow šildyti$ 'warm (up)' $\rightarrow šildytis$ 'warm oneself'. Here the reflexivised causative differs in meaning from the primary intransitive: it can be used of an animate being warming itself at a fire, in the sun etc. In this case the lexical specialisation provides a *raison d'être* for the coexistence of a causative and a reflexive derivation based on the same verbal root:

(5) Lithuanian (Vytautas Bubnys, 1997, CCLL)

 linksmai	spraga		degančios	šakos	ir
merrily	crackle.	PRS.3	burn.ppra.nom.pl.f	twig.nom.pl	and
šyla		suledi	jusios	rankos	
get.warm	.PRS.3	turn.iı	nto.ice.ppA.NOM.PL.F	hand.nom.pl	
ʻburning get warm'	0	ckle me	errily and your hands,	numb from the	cold,

(6) Lithuanian (Jaroslavas Melnikas, 2008, CCLL)

Man	patinka,	kai	ugnis	šildo				
1SG.DAT	please.prs.3	when	fire.nom.sg	warm.prs.3				
kojas.								
foot.acc.pl								
'I like the fire warming my feet.'								

(7) Lithuanian (Bronius Kmitas, 1994, CCLL)

prie	spanguolių		kero	ant
next.to.nom.sg	cranberry.c	GEN.PL	bush.gen.sg	on
kelmo	saulėje	šildo-s	si	
tree.stump.gen.sg	sun.loc	warm	CAUS.PRS.3-RE	FL
kita	gyvatė.			
other.nom.sg.f	snake.noм	.SG		

'Another snake is warming itself in the sun on a tree stump near a cranberry bush.'

But not always is there a process of lexicalisation differentiating the original and the derived intransitive. If the two devices coexist, there is, in principle, a possibility that their mere availability will lead to an overkill and that we will find triads where the successive operation of the causative and the intransitivising derivation leads to the coexistence of primary intransitive and derived intransitive verbs without a clear functional differentiation. This could lead, in principle, to three types of development: (i) coexistence of original and derived intransitives without difference in meaning, (ii) elimination of either the original or the derived intransitive, and (iii) creation of a semantic differentiation. In fact, all three situations are represented, to a certain extent, in Baltic. We will first give an overview of these three types of situations by looking at the situation in Old Lithuanian and comparing it with the modern language.

4. Reflexive causatives in the history of Baltic

Type (ii), involving loss of the intransitivised causative, is observed in a group of verbs that is not of immediate interest to us here; they are derived, with the aid of a causative suffix, from adjectives. Such verbs are traditionally known as factitives. In Chyliński⁸ we find *nusimažinti* 'become smaller, be diminished', *pasistiprinti* 'become stronger', *prasiplatinti* 'expand' and others:

(8)	Old Lithuanian (Chyl nт, Luke 12.33)						
	patis	fau	padarÿkite []	skorb	а		
	self.nom.pl.m	REFL.DAT	make.1MP.2PL	treasu	ire.ACC.SG		
	kuris	ne-nu-fi-n		Dangose			
	REL.NOM.SG.M	NEG-PFX-R	REFL-Small.CAUS.P	RS.3	Heaven.INE.PL		
	'make yourself a treasure that does not diminish in Heaven'						
	(Dutch: eenen schat die niet af en neemt inde hemelen)						

 (9) Old Lithuanian (Chyl ot, 1Sam 2.1) nafrey mano pra-si-platyno and mouth[pl].NOM my pFX-REFL-broad.CAUS.PST.2 over

⁸ Samuel Boguslaus Chyliński (†1666) was a Lithuanian Calvinist Bible translator who based himself mainly on the Dutch *Statenvertaling*, the Bible translation commissioned by the Estates General of the Netherlands. Chyliński's Old Testament was partly printed in London in 1660, while his New Testament is extant in the manuscript. His text is here chosen to represent Old Lithuanian because the narrative sections of the Bible contain a sufficient number of instances of the verbs relevant to our topic, including motion verbs.

neprietelumanoenemy.GEN.PLmy'my mouth is enlarged over mine enemies'

In modern Lithuanian these verbs have been ousted by primary intransitives in -*ėti* of the type sumažėti 'diminish, become smaller', sustiprėti 'gain strength'. Such intransitives must already have existed in Old Lithuanian: Otrębski (1965, 367) cites imiklėjes 'inveterate' (Pol. zatwardziały), the past active participle of a verbal derivative based on *miklas* 'hard', from Daukša's Postil, which implies the existence of an intransitive imikleti 'become hardened'. But they don't seem to have been highly frequent in Old Lithuanian, or at least they were much less frequent than the corresponding causative (factitive) derivation, so that the preferred strategy was to derive a factitive verb and then to intransitivise it by means of reflexivisation. The intransitives in -*ėti* seem to have achieved a greater productivity relatively recently, and their expansion was no doubt a factor in the demise of verbs like nusimažinti 'wane, diminish', pasistiprinti 'grow stronger' etc.9 In Latvian, the reflexivised factitive verbs have remained in use: 'diminish' (INTR) is still samazināties (karstums samazinājās 'the heat diminished'), and 'increase, gain strength' is pastiprināties (sāpes pastiprinājās 'the pain increased'), while Lithuanian would have sumažėjo and sustiprejo respectively. As said above, this group of verbs is not of interest to us here because a verb like Old Lithuanian nusimažinti 'wane, diminish' is not derived from an intransitive verb corresponding to modern Lithuanian *sumažėti*; the similarity of the Old Lithuanian situation to the other types of reflexive causatives discussed in the article consists only in that in Old Lithuanian we find a reflexive causative where from the point of view of the modern language we would expect a primary intransitive.

A development of type (i), involving the retention of an intransitivised causative alongside the primary intransitive, is represented by a group consisting of deverbal causatives with original intransitive counterparts, mostly also attested in the texts, the original intransitive and the intransitivised causative competing without any obvious difference in meaning. The examples below illustrate the primary intransitive (10), the derived causative (11), and the intransitivised causative (12):

⁹ They may, however, survive in agentive meaning, as in *pasistiprinti* 'refresh oneself with food'. A reflexive *susimažinti* still exists, but it is transitive, and its reflexive marker points to a possessive relationship between object and agent, as in *susimažinti algq* 'cut one's (own) salary'.

(10)	Old Lithuan	ian (Chyl o	от, Gen. 6.1	2)						
	Regiejo	tada	Diewas	źiamę,	ó	fztey,				
	see.pst.3	then	God.noм	earth.Acc	and	there				
	pagiedo.									
	be.corrupted.pst.3									
	'And God lo	oked upon	the earth,	and, behold, it	was cori	rupt.'				
(11)	Old Lithuan	ian (Chyl o	от, Gen. 6.1	2)						
	wifokias		nes	kunas	paga	dyno				
	all.kind.NOM	I.SG.M	because	body.noм.sg	corru	ipt[TR].PST.3				
	kialą	fawo	o and	źiames						
	way.ACC.SG	RPO	on	earth.gen						
	'for all flesh	had corru	pted his wa	y upon the ear	th.'					
(12)	12) Old Lithuanian (Chyl от, Gen. 6:11)									
	źiame pa-fi-gadyno po									
	earth.NOM	PFX-RE	FL-be.corr	upted.caus.ps	ST.3	under				
	weydu	Diewo		-	-					
	face.INS.SG	God.ge	N							

'the Earth was corrupt before God';

. . . .

.

Interestingly, both verbs still exist in modern Lithuanian, but *pasigadinti* is rare: CCLL has only 5 instances in the given sense as against 125 for *pagesti*. The reason for the retention of the reflexive causative *pasigadinti* alongside the original intransitive is unclear.

The third type of development, involving co-occurrence of an intransitivised causative and a primary intransitive but with a possible semantic difference, is observed in the case of a small group of motion verbs, and as these are immediately relevant to our topic, we will look at them in more detail. The base verbs for formally marked caused-motion verbs are verbs in $-\dot{e}$ -, such as *krutėti*:¹⁰

(13)	Old Lithı	ıanian (C	Chyl от, Gen. 9	.3)		
	Wis	tey	kas	kruta,	kas	ira
	all.n	that	what.noм	move.prs.3	what.noм	be.prs.3

¹⁰ In Chyliński *krut*- seems to be the basic lexical root for 'moving', not *jud*- as in modern Lithuanian. The root *jud*- has metaphorical meanings such as 'become agitated, agitate' (as in Num. 14.1 *sujudo tada wifas furynkimas*, which renders Dutch *doe verhief haer de geheele vergaderinge* 'then the whole congregation arose'), in the causative form also 'provoke (to anger etc.)' (as in Deut. 31.29 *kad pajudyntumite ghi ruftibefp darbu rąku jufu* 'to provoke him to anger through the work of your hands').

giwu, t'eft jumus and pena. alive.INS.SG HORT.be.PRS.3 2PL.DAT for food.GEN.SG 'Every moving thing that liveth shall be meat for you.'

This verb derives a causative with the productive causativising suffix -in-:

(14) Old Lithuanian (Chyl ot, Ex. 11.7) Bet wifofe wavkofe Izraelaus but child.INE.PL Israel.GEN all.ine.pl.m fzuo lieźuwia ne-pakrutins fawo. NEG-PFX.move.CAUS.FUT.3 dog.NOM.SG tongue.GEN.SG RPO 'But amongst the children of Israel not a dog shall move his tongue.'

This causative, in its turn, underlies a derived intransitive with a reflexive marker. In the following examples the perfective¹¹ forms with the prefix *pa*- are used, a fact which is not without importance, as we will see below:

- (15) Old Lithuanian (Chyl NT, Rev. 6.14) kałney ir iwos mountain.NOM.PL and island.NOM.PL pa-fi-krutyno isz fawo wietu PFX-REFL-move.CAUS.PST.3 out.of RPO place.GEN.PL 'And every mountain and island were moved out of their places.'
- (16) Old Lithuanian (Chyl от, 2Sam 22.8)
 [*Trefzejo tada ir drebejo źiame*,] *fundamentey dągaus pa-fi-krutyno...*foundation.NOM.PL
 heaven.GEN.SG **PFx-REFL-move.CAUS.PST.3**'[Then the earth shook and trembled;] the foundations of heaven moved.'

Another verb of motion showing the same pattern is *viskėti* 'swing (INTR)' \rightarrow *viskinti* 'swing (TR)' \rightarrow *viskintis*, usually *pa-si-viskinti* 'begin a swinging motion':

¹¹ As one of the reviewers points out, the existence of verbal aspect in Lithuanian, and in Baltic in general, is not generally recognised. My view (expounded in Holvoet 2014) is that Baltic, like Slavonic, has grammaticalised lexical aspect classes, the difference being that the degree of grammaticalisation is lesser in Baltic than in Slavonic. For a slightly different view, positing a more pronounced contrast between Baltic and Slavonic, see Arkadiev (2011).

(17) Old Lithuanian (Chyl ot, Lev. 7.30)

wiſkint	ją	and	wifkamos-12				
swing.CAUS.INF	3.ACC.SG.F	for	swing.pprp.gen.sg.f				
afieros	ро	weydu	Wieszpaties.				
offering.GEN.SG	under	face.1NS.SG	Lord.gen.sg				
'that [the breast] may be waved for a wave offering before the Lord'							

(18) Old Lithuanian (Chyl NT, Acts 16.26)

teypjogpamateykalinessothatfoundation.NOM.PLprison.GEN.SGpa-fi-wifkinoPFX-REFL-swing.CAUS.PST.3'so that the foundations of the prison were shaken'

The existence of reflexivised causatives as illustrated in (16) may be observed not only in Old Lithuanian but also in Old Latvian. The Old Latvian counterparts of *krutėti : krutinti : krutintis* are *kustēt(ies) : kustināt : kustināties. Kustēt* and *kustēties* do not seem to differ in meaning; the reflexive could be characterised as a 'motion middle' as it is not opposed to a transitive *kustēt.*¹³ The non-reflexive and reflexive forms of the same meaning are shown in (19) and (20):

(19)	Old Latvian (Glück от, Gen. 9.3)							
	Wifs kas		kuft		un	dfihws		
	all.nom.sg.м		that.	at.nom move.prs.		ove.prs.3	and	alive.nom.sg.м
	irr	laid		irr		jums	par	Barribu.
	be.prs.3	HOR	Т	be.prs	5.3	2PL.DAT	for	food.acc.sg
	'Every moving thing that liveth shall be meat for you.'							

(20) Old Latvian (Glück ot, Gen. 7.22)
 [Tad islaide to Dfihwibu]
 wiffa Meefa/ kas wirs Semmes
 all.NOM.SG.F flesh.NOM.SG that on earth.GEN

¹² Though referred to as as present passive participle, the form *viskamas* used here as well as in all other references to this type of offerings is, when used adnominally, actually neutral with respect to voice; here it is derived from the intransitive *viskėti* 'swing (INTR)', as modern Lithuanian *judamas* 'mobile' is from the intransitive *judėti* 'move'. More examples in Ambrazas (1979, 47).

¹³ Interestingly, we find *ne weens funs fawu Mehli kuftehs* 'not a dog shall move his tongue' in Ex. 11.7 rather than the expected *kuftinahs*. The suffix -ē- also derives causatives and alternates in this function with *-inā-* (cf. *dziedēt* alongside *dziedināt* 'heal'), but this transitive *kustēt* would be isolated and may simply be a mistake.

kuftah-s move.prs.3-refl 'And all flesh [died] that moved upon the earth.'

The following examples illustrate the causative *kustināt* and its intransitivised reflexive form *kustināties*:

(21) Old Latvian (Glück's ot, 2 Kings 23.18)
[Lai wiņfch gull,] ne kuftinajeet ne weens
NEG move.CAUS.IMP.2PL NEG one.NOM.SG.M wiņņa Kaulus.
3.GEN.SG.M bone.ACC.PL

'[Let him alone;] let no man move his bones.'

(22) Old Latvian (Glück's or, 1Sam. 1.13)
[Jo Anna runnaja fawâ firdî] un wiņņas Luhpas tikkai and 3.GEN.SG.F lip.NOM.PL only kuftinajah-s. move.CAUS.PST.3-REFL '[Now Hannah, she spake in her heart] and only her lips moved.'

Here we will concentrate on Lithuanian. What were the principles of use of the original intransitives and the intransitivised causatives in Old Lithuanian? Clearly no process of lexicalisation as illustrated above for *šildyti* was at work here. The subject of the intransitivised causative was not necessarily higher in agentivity than that of the original intransitive, as one might have expected in view of the causative character of the formation. The subject could be inanimate, as shown in (15) and (16). This does not exclude the relevance of agentivity, but shows it was not the only factor.

The interpretation of Old Lithuanian examples is always subjective, but the evidence of Chyliński's Bible translation seems to confirm the idea of an intensivity effect conveyed by the reflexive causatives. The primary intransitive *krutėti* is attested 8 times in Chyliński's Bible; in addition to the examples similar to (6), one example refers to the spirit of God:

(23) Old Lithuanian (Chyl or, Gen. 1.2)

ó	Dwafia	Diewo	krutejo				
and	Spirit.nom.sg	God.gen	move.pst.3				
and	wądeniu						
on water.GEN.PL							
'And the Spirit of God moved upon the face of the waters.'							

The remaining 6 instances refer to living creatures moving upon the earth or in the water (Gen. 7.21, Gen. 8.19, Gen. 9.2, Gen. 9.3, twice in Lev. 11.46), so that the interpretation is durative or iterative, e.g., (24) (the counterpart of Latvian ex. (20)):

(24)	Old Lithuanian (Chyl or, Gen. 7.21)							
	[Ir atadawe dwafiq,]							
	wifokias kunas kurfey k				krutejo			
	all.nom.sg.m		body.nom.sg	that.nom.sg.м	move.pst.3			
	and	źiam	źiames					
	on	earth	earth.gen					
	'And all flesh [died] that moved upon the earth.'							

In all these cases the meaning is durative and time-stable. The reflexive causative is represented by its perfective variety *pasikrutinti*, which refers to more forceful and dynamic processes such as natural elements being set in motion by Divine agency, illustrated by (8) and (9) above, and also by *pasiviskino* in (18). One instance has a human subject, referring to Mordechai's failing to rise before Haman:

(25)	Old Lithuanian (Chyl от, Esther 5.9)						
	jog	ne-fi-kiełe	pa-fi-krutyno				
	that NEG-REFL-raise.PST.3 nor			PFX-REFL-move.CAUS.PST.3			
	prieſz	ghi,					
	before з.асс.sg.м 'that he stood not up, nor moved for him'						

The meaning is, in all these instances, more punctual and dynamic than in the examples with *krutėti*, the animacy of the subject being apparently not decisive.¹⁴

5. Modern Lithuanian

In modern Lithuanian, verbs belonging to our group comprise *krutintis* 'budge, move', *judintis* 'move' and we could add *skubintis* 'haste', although the last is not a pure motion verb as it also means 'do something quickly'. *Viskinti* and *viskintis* have fallen out of use. Among these, *judintis* is particularly

¹⁴ We make no attempt to establish possible semantic differences between the reflexive causatives and the underlying original intransitives in Old Latvian, nor will we do this for Modern Latvian. It is possible that a difference exists, but our aim was to account for the Lithuanian facts.

frequent in the imperative: 49 out of 83 occurrences in CCLL are imperatives. For the perfective *pasijudinti* only 2 instances out of 105 are imperatives, but this is a matter of aspectual usage. Insistent exhortations to immediate action, with the result being defocused, are usually imperfective (this has been noted for Russian, cf. Rassudova 1968, 103–105, and it also holds for other Slavonic languages as well as for Baltic¹⁵); the low frequency of the perfective imperative *iš-si-nešdink* therefore reflects the aspectual features of the imperatival construction in which the verbs under discussion typically occur.¹⁶ Here we give examples with the imperfective *krutintis* and *skubintis*:

- (26) Lithuanian (Valdas Bartas, 2006, CCLL) *Krutinki-s,* Tadai, laikas move.CAUS.IMP.2SG-REFL PN.VOC time.NOM.SG bėga, — paragino Tamošiūnas. run.PRS.3 urge.PST.3 PN.NOM 'Get on with it, Tadas, the clock is ticking—Tamošiūnas urged him on.'
- (27) Lithuanian (Juozas Aputis, 1996, CCLL)
 [Sakiau, Rafaeli, kad bus... Oi, gera vietukė!]
 Skubinki-s, Rafaeli, skubinki-s
 hurry.CAUS.IMP.2SG-REFL PN.VOC hurry.IMP.2SG-REFL *i* traukinį.
 into train.ACC.SG
 '[I told you there would be [free seats]... O, what a nice little place!]
 Hurry up, Raphael, get onto the train!'

What seems to be characteristic of the reflexive causatives is that they are dynamic and, even in their imperfective form and in non-imperatival uses, refer to the initial stage of a motion event. This can be seen in (28), which has a historical present (the equivalent in the past tense would be perfective: *pasijudino*).

¹⁵ As the Baltic aspect system, like that of Slavonic (see fn. 9), rests on the grammaticalisation of oppositions in lexical aspect expressed in different verbal stems, both Slavonic and Baltic can oppose perfective and imperfective imperatives, while in languages where aspect is more closely bound up with tense, like Romance, this is impossible.

¹⁶ The clear predominance of the imperfective imperative is also noted for *nešdintis*: CCLL contains 161 instances of the imperfective *nešdinkis* (*nešdinkimės, nešdinkitės*) and only 5 for *išsinešdink* (*išsinešdinkime, išsinešdinkite*). This use of the imperfective imperative is also reflected in the use of *veskite lauk* rather than *išveskite* in example (1). The Slavonic counterparts of such imperatives of motion verbs are mainly imperfective, cf. Russian *ubirajsja* 'off with you', Polish *wynoś się* 'get out of here' and the like.

- (28) Modern Lithuanian (Dalia Grinkevičiūtė, 1997, CCLL) Vėl sugrūda vagonus, užrakina. i pack.together.prs.3 into carriage.ACC.PL lock.prs.3 again Judinamė-s. move.CAUS.PRS.3-REFL 'They pack [us] together into the carriages again and lock them. We jerk into motion.' (29) Modern Lithuanian (Dalia Grinkevičiūtė, 1997, CCLL)
- (29) Modern Lithuanian (Dalia Grinkeviciute, 1997, CCLL)
 Akimirka, ir rogės judina-si —
 moment.NOM.SG and sleigh.NOM.PL move.CAUS.PRS.3-REFL
 [važiuojam su visu vežimu prie barako.]
 'One moment and the sleigh slides into motion [We are heading with cart and all towards the barrack].'

Other present-tense uses are hortative; they could be replaced with the imperative and also refer to inceptive motion:

 (30) Lithuanian (Glen Cook, 2003, CCLL) *Nagi, judinamė-s. Kuriuo keliu?* PTC move.CAUS.PRS.1PL-REFL which.INS.SG.M way.INS.SG 'OK, off we go. Which road [shall we take]?'

In the infinitive, *judintis* is used in the CCLL contexts with desiderative verbs like *nenorėti* 'have no wish to', *neketinti* 'have no intention to', modals like *reikia* 'it is necessary', speech act verbs like *liepti* 'order' and *raginti* 'urge', as well as with *laikas* and *metas* 'it is time'. In all these cases conscious agency conditioned either by the agent's volition or an external stimulus is referred to, which justifies the choice of the reflexive causative verbs referring to inceptive motion requiring some effort:

(31)	Lithuanian (Vytautas Katilius, 1996, CCLL)					
	Arklys		tyliai	sužvengė	ir,	nė
	horse.N	IOM.SG	softly	neigh.pst.3	and	not.even
	nemanydamas		ju	judinti-s,		atsigulė
	NEG.think.cvв.м.		6G m o	G move.caus.inf-refi		lie.down.pst.3
	ant smėlio.					
	on	sand.gen				
	'The horse neighed softly and, without as much as considering to					
	budge, lay down in the sand.'					

The following pair of examples, with *pakrutėti* and *pasikrutinti*, oppose externally observed motion to a motion act explicitly characterised as volitional and energetic:

(32)	Modern Lithuanian (Herbjorg Wassmo, tr. by Eglė Išganaitytė-						
	Paulauskienė, 2000, CCLL)						
	[Ji atsinešė ryšulėlį prie stalo ir įdėjo man į rankas.]						
	Jis	Jis pakrutėjo . Šiluma nuo jo					
	3.NOM.SG.M	PFX.move.	PST.3	warmth.noм	from	3.GEN.SG.M	
	pasklido	rankomis	iki	pat	gerklės.		
	spread.pst.3	arm.INS.PL	up.t	o very	throat.c	GEN.SG	
	'[She brought the bundle over to the table and put it into my hands.]						
	It moved. Warr	nth spread fi	rom it th	rough my arm	s up to my	y throat.'	
(33)	Modern Lithua	nian (Romua	aldas Gra	anauskas, 2006	, ccll)		
	[O Milda Marija	a narsiai atžy	vgiavo žv	yrkeliu, pasižv	algė įėjusi	ir klestelėjo	
	į patį pirmąjį st	uolą priešais	mokytoj	os stalą,]			
	pa-si-krutino		į	šonus,	ge	riau	
	PFX-REFL-mo	ve.caus.pst	.3 to	side.Acc	.pl be	tter	
	įsitaisydama,	ir	garsiai	pareiškė	[]		
	settle.cvb.sg.f	and	loudly	declare.	ST.3		

'[But Milda Marija energetically trod down the gravel path, looked about on entering, threw herself into the very first bench right across the teacher's table,] made a few sideways thrusts to install herself more comfortably, and declared loudly [...]'

On the whole, then, the reflexive causatives *judintis* and *krutintis* seem to be volitional, inceptive and/or energetic. As noted above, in Chyliński the reflexive causative is attested mainly with the perfectivising prefix *pa*-, as in (15) and (16); this is also consonant with an inceptive and dynamic value. These features predispose the verbs in question for use with animate subjects. This is not a general rule, and (just as in the case of Old Lithuanian above), we find inanimate subjects, as in (29). But these also indirectly reflect human agency, and it would, for example, be impossible to use *judintis* for the natural motion of a physical object:

(34)	Žemė	juda	(*judina-si)			
	Earth.nom.sg	move.prs.3	(move.caus.prs.3-refl)			
	apie	Saulę				
	around	Sun.Acc.sg				
	[ne apskritimu, o	o orbita, panašia į ištemptą apskritimą.]				
	'The Earth moves	es around the Sun [not circularly, but along an orbit				
	resembling an elo	elongated circle.] ^{'17}				

¹⁷ http://gamta5-6.mkp.emokykla.lt/lt/mo/zinynas/kodel_keiciasi_metu_laikai (accessed 10-07-2020)

The unacceptability of (34) with the reflexive causative verb shows that all the factors that could induce the use of such a form are absent here: there is no human agency, no visible external coercion, no energetic agency aiming at overcoming inertia and setting an object in motion. The factors mentioned here explain, on the other hand, why these verbs are frequently used in the imperative or when referring to directive speech acts. These factors can all occur in conjunction, but a subset of them can also be sufficient to motivate the use of the reflexive causative.

6. The case of nešdintis again

Of course there is an element of subjectivity in the interpretation of such examples from texts. It is also not very revealing to say that the subject of a causative is higher in agentivity that than of the corresponding intransitive, also when this causative is reflexivised. A more telling piece of evidence is that the verbs under discussion here seem to have attracted one more non-causative verb with causative morphology, viz. *nešdintis* 'take oneself off'. It is relatively frequently used in the imperative (161 instances out of 408 in CCLL). Apart from imperatives proper, indicative uses of *nešdintis* occur with the hortative marker tegu(l) and are directive in function:

(35)	Lithuanian (Leonardas Gutauskas, 2008, CCLL)						
	tegu	panelė mokytoja			nešdina-si,		
	HORT	Miss.nom.sg		teacher[F].NOM.SG	carry.CAUS.PRS.3-REFL		
	iš	kur	ır atėjus				
	from	where	come.ppA.NOM.SG.F				
	'Let Miss teacher get herself back where she came from.'						

Non-directive uses also refer to motion enforced by external circumstances:

(36)	Lithuanian (Karys, 1995, CCLL)					
	Bermontininkai nešdino-si					
	Bermontian.nom.pl carry.caus.pst.3-refl					
	Rytų	tų Prūsiją.				
	East.gen.pl Prussia.acc.sg					
	[Pasitraukimui vadovavo gen. V. Eberhardtas.]					
	'The Bermontians evacuated toward East Prussia.					
	[Their retreat v	was led by	general W. von Eberhardt.]'			

The difference between the derivational histories of *nešdintis* and the type *krutintis* was already mentioned above: the derivational base of *nešdinti* is

transitive, and the causative marker has intensifying rather than causative function. The properly causative function of *nešdinti* is attested in Old Lithuanian:

(37) Old Lithuanian (Chyl or, Gen. 37.32)
[Ir nusiunte anq jupą tułu-forbu,]
ir nu-neź-dyno ją tewop
and PFX-bring-CAUS.PST.3 3.ACC.SG.F father.ALL.SG
fawo.
RPO

'[And they sent the coat of many colours], and had it brought to their father.' Dutch: *Ende sy sonden den veelverwigen rock, end deden hem tot haren vader brengen*.

And there was a corresponding reflexive use 'have oneself carried about', attested in Sirvydas' Polish-Latin-Lithuanian dictionary:

(38) Sirvydas, Dictionarium trium linguarum 1642, 97 (Pakalka, ed., 1979, 195)
 [Káretá, lektyká. Lectica, vehiculum penfile.]
 howa

łowa,	patałas	kuriami	Jwetimi
bed.noм.sg	litter.nom.sg	REL.INE.SG.M	foreign.NOM.PL.M
nefzdina-fi			
carry.CAUS.PF	RS.3-REFL		
(FT 1.	1	1 1	

'[Lectica, vehiculum pensile.] Bed, litter in which foreigners have themselves carried about.'

As shown by examples (2) and (3), *neštis* could once have the meaning 'take oneself off, escape', and in this meaning it was probably replaced by *nešdintis* as a means of rendering an (exhortation to) energetic motion after the model of *judintis*, *krutintis* etc. That is to say, we need not assume a semantic development from a causative *nešdintis* to an intensive *nešdintis*. Rather, the evidence of *neškis* 'get away, take yourself off' suggests that *nešdintis* replaced *neštis* on the analogy of *judintis*, *krutintis*, and the existence of a causative *nešdintis* was not a precondition for this. The intransitive *neštis* is relatively rare, and it has none of the meanings associated with *nešdintis*: it simply means quick and uniform motion in one direction (cf. Russian *nestis*'):

(39)	9) Lithuanian (Jonas Avyžius, lkž)						
	Ilgakojis	sartis	nešė-si				
	long.legged.nom.sg.м	bay.horse.nom.sg	carry.pst.3-refl				

kaipvėjas,likewind.NOM[lenkdamas iš bažnyčios grįžtančius valstiečius.]'The long-legged bay horse dashed forward like the wind, [overtakingthe peasants who were driving back from church].'

The specific meaning of *neštis* in *neškis* 'take oneself off, leave a place under external compulsion' as illustrated in (2) and (3) might have arisen in the imperative, where it underwent the influence of reflexive causative imperatives like *judinkis*, and assumed their causative marking. We cannot corroborate this hypothesis with detailed evidence, at least until a historical corpus is available, but even if this happens it might be problematic to pinpoint a process that presumably occurred in the spoken language. Examples (2) and (3) with *neškis* instead of the later *nešdinkis* are from the early 20th century, but we also find attestations of *nešdintis* in the present-day meaning slightly predating examples (2) and (3):

(40)	Lithuanian (<i>Lietuva</i> , 11–10–1901)						
	Koks	zokonas	neiszsia	lirbo			
	which.noм.sg.м	order.nom.sg	NEG.aco	quire.pst.3			
	valdžių	daleidimo,		turi			
authority.gen.pl		permission.GEI	N.SG	have.to.prs.3			
	neszdintie-si	laukan.18					
	carry.caus.inf-refl out						
	'Those religious orders that have not been granted permission by						
		1	F C 1				

the authorities [to stay] must get out [of the country.]'

This means that *nešdintis* was probably already in use at least in the late 19th century. A historical corpus covering the relevant period would yield a more accurate picture, but an exact chronology is not a necessary condition for establishing the derivational mechanisms at work.

7. In conclusion

Intensive functions of causative morphology are typologically well attested. Lithuanian has a small number of causative formations showing this semantic specialisation. What is specific about the Lithuanian in-

¹⁸ http://www.spauda.org/lietuva/archive/1901/1901-10-11-LIETUVA.pdf (accessed 10-07-2020)

stances is that the intensive function manifests itself only in the reflexive, intransitivised forms of a small group of verbs with causative markers. This was originally a consequence of the co-occurrence of causative (transitivising) and reflexive (detransitivising) markers as devices for deriving transitivity pairs. Transitivised verbs (with causative markers) could be in their turn detransitivised by reflexivisation, and a semantic differentiation arose between the primary intransitive and the derived (causative-reflexive) intransitive. This is illustrated by the derivational chain *judėti* 'move' \rightarrow *judinti* 'set in motion' \rightarrow *judinti*-s 'set oneself in motion'. The case of *nešdintis* is different in that it does not result from a derivational chain *nešti* 'carry' \rightarrow *nešdinti* 'have something carried' \rightarrow nešdinti-s 'take oneself off'. Indeed, nešdintis is, in its present-day meaning, not derived from nešdinti but from nešti-s, and the function of the causative derivation is here exclusively intensive. This instance of causative derivation with intensive function could arise only after the intensive meaning had established itself in *judintis* and the like. The cause for the rise of intensive meaning was apparently structural: the co-occurrence of reflexivisation and causativisation as devices for building transitivity pairs led to a semantic differentiation between primary and derived intransitive, which took the shape of intensive meaning. As a reviewer of this article points out, this could be characterised as an instance of exaptation as defined by Lass (1990). In view of the frequent use of the intensive reflexive causatives under discussion in the imperative and other hortative forms and contextsI, it deserves to be considered whether they do not centre around an imperatival construction.

Abbreviations

ACC — accusative, ALL — allative, CAUS — causative, CVB — converb, DAT dative, F — feminine, FUT — future, GEN — genitive, HORT — hortative, IMP imperative, INE — inessive, INF — infinitive, INS — instrumental, INTR intransitive, LOC — locative, M — masculine, N — neuter, NEG — negation, NOM — nominative, PFX — prefix, PL — plural, PN — personal name, PPA — past participle active, PPRA — present participle active, PPRP — present participle passive, PRS — present, PST — past, PTC — particle, REFL — reflexive, REL relative pronoun, RPO — reflexive possessive, SG — singular, TR — transitive, voc — vocative

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