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

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).

other categories, such as reflexivity and mood. Our discussion will start out from an idiosyncratic case, that of the verb *nešdintis* 'get away, take oneself off':

(1) Lithuanian (Petras Dirgėla, 1994, CCLL) Ei velniai. veskite lauk arklius jūs, hey devil.NOM.PL lead.IMP.2PL outside horse.ACC.PL 2PL.NOM ir neš-din-kitė-s. kur akvs mato! and carry-caus-imp.2pl-refl where eve.nom.pl see.PRS.3 'Hey you, devils, lead the horses out and take yourselves off where your eyes carry you.'

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 P).³ Actually the verb is intransitive, and its meaning involves only 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,]

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'.

taikuo greičiauneški-sišthenas.quickly.as.possiblecarry.IMP.2SG-REFLfromtomiestelio, ...tthat.GEN.SGtown.GEN.SG'[If you don't want to belong to the local trade union,] then you'd betterget 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 iš čia greičiau lauk. carry.IMP.2SG-REFL then 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.]"

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 transi-

⁵ http://www.draugas.org/archive/1912_reg/1912-10-10-DRAUGASw.pdf

⁶ Sic!

⁷ http://www.spauda.org/keleivis/archive/1918/1918-12-11-KELEIVIS.pdf

tive caused-motion verb *nešti*; true, the latter has no overt marking of its causative character. Two things are, however, unusual about *nešdintis*. 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)	Lithuania	n (Aidas Pele	enis, 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				
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)'
ii	ablaut	<i>kil-ti</i> 'rise'	<i>kel-ti</i> 'raise'
iii	intransitivisation	<i>iš-si-pil-ti</i> 'spill (INTR)'	<i>iš-pil-ti</i> 'spill (тк)'
iv	transitivisation	aug-ti 'grow (INTR)'	aug- in -ti 'grow (TR)'
v	equipollent	<i>iš-si-gąs-ti</i> 'get frightened'	<i>išgąs-din-ti</i> 'frighten'

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. 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 degančios šakos spraga ir crackle.prs.3 burn.ppra.nom.pl.f merrily twig.nom.pl and šyla suledijusios rankos get.warm.prs.3 turn.into.ice.PPA.NOM.PL.F hand.NOM.PL '...burning twigs crackle merrily and your hands, numb from the cold, get warm'
- (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 n	ny feet.'		

(7) Lithuanian (Bronius Kmitas, 1994, CCLL)

prie	spanguoli	ų	kero	ant
next.to.nom.sg	cranberry	.GEN.PL	bush.gen.sg	on
kelmo	saulėje	šildo-	si	
tree.stump.gen.sg	sun.loc	warm	.CAUS.PRS.3-RE	FL

kitagyvatė.other.NOM.SG.Fsnake.NOM.SG'Another snake is warming itself in the sun on a tree stump neara 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:

	REL.NOM.SG.M	NEG-PFX-REFL-small.CAUS.PRS.3			Heaven.INE.PL	
	kuris	ne-nu-fi-mazyna			Dangose	
	self.nom.pl.m	refl.dat make.imp.2pl t		treasure.ACC.SG		
	patis	fau	padarÿkite []	skorb	а	
(8)	Old Lithuanian (Lithuanian (Chyl nт, Luke 12.33)				

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.

'make yourself ... a treasure that does not diminish in Heaven' (Dutch: *eenen schat die niet af en neemt inde hemelen*)

(9)	Old Lithuanian (Chyl от, 1Sam 2.1)					
	nafrey	mano	pra-si-płatyno	and		
	mouth[pl].noм	my	PFX-REFL-broad.CAUS.PST.2	over		
	neprietelu	mano				
	enemy.gen.pl	my				
	'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 *imiklėjęs* '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

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 algą* 'cut one's (own) salary'.

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):

(10) Old Lithuanian (Chyl ot, Gen. 6.12) Regiejo tada Diewas źiamę, ó fztey, see.pst.3 then God.NOM earth.Acc and there pagiedo. be.corrupted.pst.3 'And God looked upon the earth, and, behold, it was corrupt.' (11) Old Lithuanian (Chyl ot, Gen. 6.12) wifokias nes kunas pagadyno all.kind.noм.sg.м corrupt[TR].PST.3 because body.nom.sg kiala źiames fawo and way.ACC.SG earth.GEN RPO on

'for all flesh had corrupted his way upon the earth.'

(12)	Old Lithuanian (Chyl от, Gen. 6:11)				
	źiame	ne pa-fi-gadyno			
	earth.nom PFX-REFL-be.corrupted.cAUS.PST.3		under		
	weydu Diewo				
	face.ins.sg God.gen				
	'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 -*ė*-, such as *krutėti*:¹⁰

(13)	Old Lithuanian (Chyl от, Gen. 9.3)						
	Wis	tey	kas	kruta,	kas		ira
	all.N	that	what.nom	move.prs.3	wha	t.nom	be.prs.3
	giwu,		t'eft	jumus	and	pena.	
	alive.ins.sg hort.be.prs.3		2PL.DAT	for	food.o	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 от, Ex. 11.7)						
	Bet	wifofe	waykofe		Izr	aelaus	
	but	all.ine.pl.m	child.INE.PL		Israel.gen		
	ne-pakrutins			fzuo		lieźuwia	fawo.
	NEG-PFX.move.CAUS.FUT.3 dog			dog.nom	.SG	tongue.gen.sg	RPO
	'But amongst the children of Israel not a dog shall move his tongue.'					igue.'	

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 nт, Rev. 6.14)				
	kałney ir iwos				
	mountain.NOM.PL	island.nom.pl			
	pa-fi-krutyno		isz	fawo	wietu
	PFX-REFL-move.CAU	out.of	RPO	place.gen.pl	
	'And every mountain and island were moved out of their places.				f their places.'

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').

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).

(16)	Old Lithuanian (Chyl ot, 2Sam 22.8)				
	[Trefzejo tada ir drebejo źiame,]				
	fundamentey	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 m				

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':

- (17) Old Lithuanian (Chyl ot, Lev. 7.30) wifkamos-12 wiſkint and ją swing.CAUS.INF 3.ACC.SG.F for swing.pprp.gen.sg.f afieros Wieszpaties. ÐО wevdu offering.GEN.SG under face.INS.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)
 teyp jog pamatey kalines
 so that foundation.NOM.PL prison.GEN.SG
 pa-fi-wifkino
 PFX-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):

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).

¹³Interestingly, 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.

(19) Old Latvian (Glück or, Gen. 9.3) Wifs kas dfihws kuſt un all.nom.sg.m that.NOM move.prs.3 and alive.nom.sg.m irr laid irr iums bar Barribu. food.Acc.sg be.prs.3 HORT be.prs.3 2PL.DAT for 'Every moving thing that liveth shall be meat for you.' (20) Old Latvian (Glück or, Gen. 7.22) [*Tad islaide to Dfihwibu*] wiffa Meefa/ kas Semmes wirs flesh.NOM.SG all.nom.sg.f that earth.GEN on 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 winfch gull,] kustinajeet ne ne weens NEG move.CAUS.IMP.2PL NEG one.NOM.SG.M Kaulus. winna bone.ACC.PL 3.GEN.SG.M '[Let him alone;] let no man move his bones.' (22) Old Latvian (Glück's OT, 1Sam. 1.13) [Jo Anna runnaja fawâ firdî] Luhpas tikkai un winnas lip.nom.pl only and 3.GEN.SG.F kustinajah-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 от, Gen. 1.2)					
	ó	Dwafia	krutejo			
	and	Spirit.nom.sg	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 от, Gen. 7.21) [Ir atadawe dwafiq,]				
	wifokias kunas kurfey				krutejo
	all.nom.sg.m		body.nom.sg	that.nom.sg.м	move.pst.3
	and źiames		es		
	on 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	ney	pa-fi-krutyno	
	that NEG-REFL-raise.PST.3 nor			PFX-REFL-move.CAUS.PST.3	
	prieſz	ghi,			
	before	3.ACC.SG.M			
	'that he stood not up, nor moved for him'				

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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 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	t is ticking—	Tamošiūnas urged him on.'	

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.

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.

(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		
	į traukinį.					
	into train.Acc.sg					
	'[I told you there would be [free seats] O, what a nice little plac					
	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*).

(28) Modern Lithuanian (Dalia Grinkevičiūtė, 1997, CCLL) Vėl sugrūda vagonus, užrakina. i pack.together.prs.3 into carriage.ACC.PL lock.prs.3 again Iudinamė-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) Akimirka. judina-si ir rogės 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) Arklvs tyliai sužvengė ir. nė softly not.even horse.NOM.SG neigh.pst.3 and nemanydamas judinti-s. atsigulė NEG.think.CVB.M.SG move.CAUS.INF-REFL lie.down.pst.3 smėlio. ant 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.] Ŧis pakrutėjo. Šiluma nuo jo PFX.move.PST.3 warmth.NOM from 3.NOM.SG.M 3.GEN.SG.M pasklido rankomis iki pat gerklės. spread.pst.3 arm.INS.PL up.to verv throat.gen.sg '[She brought the bundle over to the table and put it into my hands.] It moved. [Warmth spread from it through my arms up to my throat.' (33) Modern Lithuanian (Romualdas Granauskas, 2006, CCLL) [O Milda Marija narsiai atžygiavo žvyrkeliu, pasižvalgė jėjusi ir klestelėjo į patį pirmąjį suolą priešais mokytojos stalą,]

pa-si-krutino		į	šonus,	geriau
PFX-REFL-move	e.CAUS.PS	5т.3 to	side.ACC.PL	better
įsitaisydama,	ir	garsiai	pareiškė	[]
settle.cvb.sg.f	and	loudly	declare.pst	.3
'[But Milda Mar	ija energ	getically trod	down the gr	avel path, looked
about on enterin	g, threw	herself into t	he very first l	bench right across
the teacher's tabl	le,] made	a few sidewa	ys thrusts to i	nstall 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	orbita, panašia į	ištemptą apskritimą.]
	'The Earth moves	around the Sun	[not circularly, but along an orbit
	resembling an elo	ongated circle.'] ¹⁷	

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:

¹⁷ http://gamta5-6.mkp.emokykla.lt/lt/mo/zinynas/kodel_keiciasi_metu_laikai

(35) Lithuanian (Leonardas Gutauskas, 2008, CCLL) tegu panelė mokytoja nešdina-si. teacher[F].NOM.SG HORT Miss.nom.sg carry.CAUS.PRS.3-REFL iš kur atėius where from 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 į
Bermontian.NOM.PL carry.CAUS.PST.3-REFL toward Rytų Prūsiją.
East.GEN.PL Prussia.ACC.SG [Pasitraukimui vadovavo gen. V. Eberhardtas.]
'The Bermontians evacuated toward East Prussia. [Their retreat 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.]
 lowa, patałas kuriami fwetimi
 bed.NOM.SG litter.NOM.SG REL.INE.SG.M foreign.NOM.PL.M
 nefzdina-fi
 carry.CAUS.PRS.3-REFL

'[Lectica, vehiculum pensile.] Bed, litter in which for eigners 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) Lithuanian (Jonas Avyžius, LKŽ)
Ilgakojis sartis nešė-si
long.legged.NOM.SG.M bay.horse.NOM.SG carry.PST.3-REFL
kaip vėjas,
like wind.NOM
[lenkdamas iš bažnyčios grįžtančius valstiečius.]
'The long-legged bay horse dashed forward like the wind, [overtaking the 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 (*Lietuva*, 11–10–1901)

Koks	zokonas	neiszsi	dirbo
which.nom.sg.м	order.nom.sg	NEG.ac	quire.pst.3
valdžių	daleidimo,		turi
authority.gen.pl	permission.ge	N.SG	have.to.prs.3

neszdintie-silaukan.18carry.CAUS.INF-REFLout'Those religious orders that have not been granted permission by
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 instances 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

¹⁸ http://www.spauda.org/lietuva/archive/1901/1901-10-11-LIETUVA.pdf

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 contexts1, 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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