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INSIGHTS INTO THE DIACHRONY OF THE EAST BALTIC SUBJUNCTIVE MOOD

Abstract. This article intends to shed light on the diachrony of the subjunctive mood (also labelled optative or conditional) in the two East Baltic languages Latvian and Lithuanian. It is demonstrated to what extent the subjunctive paradigms in both languages – especially Old Lithuanian, Old Latvian and modern Lithuanian dialects – reflect original source constructions based on infinitival verb-formations, namely the supine (e. g. Lith *dúo-tų*, Latv *duô-tu*, cf. Old Prussian *dā-tun*, OCS *da-tŭ*) and the infinitive (e. g. Lith *dúo-ti*, Latv *duô-t*, cf. OPr *dā-t*, OCS *da-ti*). The systematic comparison of Baltic and Slavic evidence indicates that most forms of the Lithuanian and Latvian subjunctive paradigms go back to two Proto-East-Baltic source constructions that both contained the supine of a respective verb and forms of the copula (Lith *bŭti*, Latv *bŭt*): (a) the supine joined with present tense forms of the copula, and (b) the supine joined with past tense forms of the copula. One remarkable exception is a heteroclitic 1sg. form in Lithuanian that is shown to share a common source construction with the Latvian debitive. The remainder of the article is dedicated to the emergence of secondary subjunctive forms in modern Lithuanian dialects (especially Aukštaitian dialects in the South and East of Lithuania). It is discussed to what extent these forms reflect the interplay of regular diachronic processes, namely (proportional) analogy and sound change. The findings presented in the discussion have interesting implications for the common morphological and phonological prehistory of both East Baltic languages.

Keywords: Indo-European linguistics; East Baltic; Lithuanian; Latvian; historical phonology; historical morphology; comparative dialectology; grammaticalization; infinitive-based mood; subjunctive.

1. Introduction: the East Baltic subjunctive as an infinitive-based mood*

The East Baltic languages Lithuanian and Latvian feature two verbal formations that are of special relevance and interest to the diachronic study of these languages in particular and language typology in general, because they must be conceived of as having originated in non-verbal nominal formations. The first of these formations is the *subjunctive* mood (also termed *conditional*, *optative* or *irrealis*) encountered in both Lithuanian and Latvian and denoting volition, counter-factuality and potentiality (cf. Brudzyński 2020; Petit 2018, 212–216; Ambrazas 2006, 255, 258–261; Senn 1966, 460–464). The second formation is the *debitive* mood which is only featured as such in Latvian and expresses necessity (cf. Kalnača, Lokmane 2014; Holvoet 2001 and 1997 with a different morphological classification, earlier Endzelin 1923, 752–754). (1) illustrates the use of the subjunctive by the example of 3SG. Lith *būtu*, Latv *būtu* ‘be’. (2) illustrates the use of the debitive by the example of Latv *jā-nopērk* ‘buy’.

(1) use of the *subjunctive* (SUBJ.)

(1a) Lith *Kād būtu šėkszta, tai būtu šakos apgenėtos* (Garliava near Kaunas, West Aukštaitian)

‘Wenn das ein gerodeter Baumstumpf **wäre**, so **wären** doch die Äste abgeschnitten!’ (cf. Brugmann 1882, 211, 352)

(1b) Latv *Ja man viens tuo būtu teicis, es nebūtu ticējis* (Curonian from the region around the middle course of the river Apava, Central Latvian)

‘[W]enn mir jemand das gesagt **hätte**, ich **hätte** (es) nicht geglaubt’ (cf. Endzelin 1923, 356; Lautenbach 1891, 283)

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- (2) use of the *debitive* (DEB.)

Latv *Mums jānopērk maize* (Standard Latvian)

‘We **have to buy** bread.’ (Holvoet 2001, 230)

Comparative evidence from the related Indo-European languages suggests that these two formations, which on the synchronic level must undoubtedly be analysed as moods of the verb, were not verbal in nature from the outset and inherited as such from the Indo-European proto-language, but that they are rather founded on more original nominal formations and thus reflect a diachronic process of grammaticalisation. Both the subjunctive and the debitive share the non-trivial commonality that they are *infinitive-based* moods. In diachronic terms, infinitive-based moods are here understood as grammatical moods of the verb constituted by a paradigm with finite verb-forms that wholly or partly originate in infinitival verb-forms, i. e. nominal case-forms of deverbal nouns with abstract semantics (cf. García Ramón 1997; Gippert 1978; Stang 1966, 394–397; Brugmann 1916, 888–947; Brugmann 1906, 626–644; Delbrück 1897, 440–475). With regard to the East Baltic subjunctive and debitive, two infinitival formations are of concern:

- 1) the *infinitive* (INF.), originally the DAT.SG. of an abstract noun functioning as a *converb of purpose* as in ‘John prepares for work = *in order to work*’. This is the source of the prominent infinitive in Balto-Slavic: PIE **-tėj-* *eĭ* (cf. Ved *-táye*, Av *-taīiaē=ca*) > Proto-BSl **-tĩ* > OCS *-ti*, OPr *-t*, Lith *-t(i)*, Latv *-t* (cf. Villanueva Svensson 2019; Hill 2016; Ambrazas 2006, 372–376; Stang 1966, 471–473; Miklosich 1868–1874, 844–873).
- 2) the *supine* (SUP.), originally the ACC.SG. of an abstract noun functioning as a *converb of goal* as in ‘John went to work = *went working*’. This is also continued in Balto-Slavic: PIE **-tu-m* (cf. Ved, Lat *-tum*) > Proto-BSl **-tuñ* > OCS *-tŭ*, OPr *-tun*, *-ton*, Lith *-t(u)*, Latv *-tu* (cf. Stang 1966, 215, 473; Senn 1966, 254; Delbrück 1897, 475; Kurschat 1876, 380; Miklosich 1868–1874, 874–876).

The following table (3) provides examples of Balto-Slavic cognates illustrating the continuation of the infinitive and supine in Balto-Slavic in general and East Baltic in particular:

(3)	Proto-BSl	OCS	OPr	Lith	Latv	
INF.	*'dǫ-tĩ	<i>da-ti</i>	<i>dā-t</i>	<i>dúo-ti</i>	<i>duô-t</i>	'give'
	*'bũtĩ	> <i>by-ti</i>	<i>boũ-t</i>	~ <i>bũ-ti</i>	<i>bũ-t</i>	'be'
SUP.	*'dǫ-tuĩ	<i>da-tũ</i>	<i>dā-tun</i>	<i>dúo-tų</i>	<i>duô-tu</i>	'give'
	*'bũ-tuĩ	<i>by-tũ</i>	<i>bũ-ton</i>	<i>bũ-tų</i>	<i>bũ-tu</i>	'be'

The infinitive provided the basis of the Latvian debitive: the univerbation of the particle *jā=* < PEBalt **jǎ* (on which cf. the discussion below) with infinitives like Latv *iêt* 'go', *bũt* 'be' led to the creation of new debitive verb-forms such as *jā=iêt* 'must go', *jā=bũt* 'must be' (cf. Endzelin 1923, 684–686, 752–754). Other verbs like *duôt* 'give' followed a pattern provided by *iêt* 'go', where the third person present tense form *iêt* was identical with the infinitive *iêt*: like 3PRES. *iêt* : DEB. *jā=iêt* thus 3PRES. *duôd* : DEB. *jā=duôd* etc. were created. The generalisation of this tendency resulted in the morphological situation observed nowadays that the debitive form of most verbs is formed by prefixing the particle *jā=* to their third person present tense form, as the examples of *jā=duôd* 'must give' with 3PRES. *duôd* and *jā=nùopèrk* 'must buy' in (3) with 3PRES. *nùopèrk* illustrate.

Third person subjunctive forms like Lith *bũty*, Latv *bũtu* are identical with the supine and thereby show rather clearly that this is the source of the subjunctive. Quite interestingly, the subjunctive developed a full-fledged paradigm of finite verb-forms in both Lithuanian and Latvian. The Old Lithuanian and Old Latvian paradigms are given in (4).¹

¹ The Lithuanian paradigm is based on data provided by Mažvydas's *Catechism* (1547), his *Giesmės II* (1570), Vilentas's *Catechism* (1579), Daukša's *Postilla Catholica* (1599) and the Ledezma catechism from 1605, cf. Stang (1929, 150–151), Ford (1969, 103–104, 139–146). The Latvian forms are taken from Dressel's grammar (1685), the catechism from 1732 and the Gospel from 1753 as per Bielenstein (1864, 160) and Endzelin (1923, 691–693). Due to the fact that most Old Lithuanian and Old Latvian texts are unaccented, we provide the paradigmatic word-forms in an unaccented form here. Where the accentuation is of special interest, we will later take it into consideration in our discussion.

(4) Old Lith			Old Latv		
SG.	DU.	PL.	SG.	DU.	PL.
1	<i>bū-tum=biau,</i> <i>bū-čia,</i> <i>bū-čiau</i>	<i>bū-tum=biva</i>	<i>bū-tum=bime</i>	<i>koļpo-tu=b</i>	-- <i>buh-tu=bahm,</i> <i>bû-tu=bem</i>
2	<i>bū-tum=bei</i>	<i>bū-tum=bita</i>	<i>bū-tum=bite</i>	<i>dzwyiwa-</i> <i>tu=b</i>	-- <i>buh-tu=baht,</i> <i>bû-tu=bet</i>
3	<i>bū-tų</i>			<i>buh-tu</i>	

These paradigms underwent considerable changes in later times, as the modern dialectal as well as standard forms in (5) illustrate (on the forms cf. Stang 1966, 428; Senn 1966, 242–245, more recently Ambrazas 2006, 313–314).

(5) Modern Standard Lith			Modern Standard Latv		
SG.	DU.	PL.	SG.	DU.	PL.
1	<i>bū-čiau</i> , but <i>eitaũ</i> etc. in dialects	<i>(bū-tuva)</i>	<i>bū-tume</i>		
2	<i>bū-tum(ei)</i> , but <i>sùktai, eitaĩ</i> etc. in dialects	<i>(bū-tumèta)</i>	<i>bū-tumète</i>	<i>būtu</i> (generally)	
3	<i>bū-tų</i> , but <i>būt, (at-)eīt</i> etc. in dialects				

One can see that in older stages of Latvian and Lithuanian the third person directly continues the supine in PBSl *-tuñ, while the first and second person forms reflect a univerbation of this with a clitic auxiliary (Lith 1SG. =*biau*, 2SG. =*bei*, 1PL. =*bime*, 2PL. =*bite*, 1DU. =*biva*, 2DU. =*bita*; Latv 1/2SG. =*b*, 1PL. =*bahm*, =*bem*, 2PL. =*baht*, =*bet*). One exception is a heteroclitic 1SG. form in Lithuanian that ends in *-čia(u)*. In contrast to the older stages, the modern stages show a remodelled paradigm in both languages with innovated forms of the type 1SG. *eitaũ*, 2SG. *sùktai, eitaĩ* and shortened 3SG. forms like *būt, (at-)eīt* in some dialects in Lithuanian.

This article intends to shed light on the diachronic development of the East Baltic subjunctive mood. Following this introduction, section 2 will see a discussion of the morphology and etymology of the auxiliary which together with the supine constitutes the source formation of the subjunctive. In this section we will focus on the East Baltic and Slavic comparative

evidence and will attempt to reconstruct the morphological prehistory of the subjunctive formation in Lithuanian and Latvian. Section 3 will deal with the origin of the heteroclitc 1SG. in Lithuanian and examine to what extent this relates to the debitive mood in Latvian. The discussion in section 4 will focus on addressing in how far innovated subjunctive paradigms with forms like 1SG. *eitaũ*, 2SG. *sùktai*, *eitaĩ* and short 3SG. forms like *bùt*, (*at-*)*ėit* attested in modern Lithuanian dialects – especially South and East Aukštaitian – reflect regular sound change and proportional analogy. The findings of our investigation are summarised in section 5.

2. The morphology and etymology of the clitic auxiliary

It has already been noted above that the first and second person forms of the Old Lithuanian and Old Latvian subjunctive paradigm feature the univerbation of the supine with the finite verb-form of a clitic auxiliary. The respective forms of the subjunctive are therefore marked for both person and number in accordance with the morphological classification of the underlying auxiliary, cf. the paradigm in (6) repeated from (4).

(6) Old Lith			Old Latv		
SG.	DU.	PL.	SG.	DU.	PL.
1 <i>bū-tum=biau</i> , <i>bū-čia(u)</i>	<i>bū-tum=biva</i>	<i>bū-tum=bime</i>	<i>koļpo-tu=b</i>	--	<i>buh-tu=bahm</i> , <i>bū-tu=bem</i>
2 <i>bū-tum=bei</i>	<i>bū-tum=bita</i>	<i>bū-tum=bite</i>	<i>dzwyiwa-tu=b</i>	--	<i>buh-tu=baht</i> , <i>bū-tu=bet</i>
3 <i>bū-tų</i>			<i>buh-tu</i>		

It is to be assumed that the forms of the type OLith 1SG. *būtum=biau*, DU. *būtum=biva*, PL. *būtum=bime*, 2SG. *būtum=bei*, DU. *būtum=bita*, PL. *būtum=bite* came into being, when forms of the supine like pre-Lith **bū-tuñ* (> *bū-tų*) or **turė-tuñ* (> *turė-tų* with the effects of Saussure's Law) were prosodically and morphologically joined with enclitic finite verb-forms immediately following them. We would thus have to presuppose a process like **turė-tuñ=bime* > 1PL. *turėtumbime* <*turėtumbime*> (Daukša). One further phonological development one has to assume in this scenario is a rather trivial assimilation of the final nasal of the supine to the labial onset of the clitic that must have occurred prior to the apocope of final nasals in Lithuanian. It finds further supportive evidence in plural allatives like OLith *kunigump*, *iufump* (Mažvydas), *gērūmp*, *darbūmp*, *muŃ(f)ūmp* (Daukša) or dialectal *mūsuṃp*, *jūsuṃp* (e. g. in the South-Eastern dialects of Zietela

and Dieveniškės, cf. Arumaa 1930, 63; Stang 1966, 257, 292) that reflect the univerbation of the genitive plural in pre-Lith *-uñ (> Lith -ų) with the clitic =p(i) (e. g. *darb'uñ=pi > *darbuñp*).²

The allative shares one further remarkable commonality with the subjunctive, namely an unexpected progressive accent shift in some forms. While the modern standard language features subjunctive forms with an accentuation that matches that of the corresponding infinitives (cf. INF. *būti* vs. 3SG./DU./PL. *būty*, 1PL. *būtume*), Old Lithuanian and some modern dialectal – especially East and South Aukštaitian – varieties show an interesting mismatch between the accentuation of the subjunctive and the corresponding infinitive in some forms: for instance, in Daukša’s writings OLith 1PL. *turétumbime*, *darítumbime* with their third person counterparts *turétu/turétų*, *darítu* show the expected accentuation that matches the corresponding infinitives *turėti*, *daríti*, but forms like *butúmbime*, *dútúmbime* with third person forms like *butú/butų*, *dútú/dútų* show an utterly unexpected progressive accent on the second syllable that does not match the corresponding infinitives *būti/būti*, *dúti* on the basis of which we would expect forms with an accent on the first syllable like *†bútu/†bútų*, *†dútu/†dútų*. While the Old Lithuanian spelling is inconclusive with regard to the exact quality of the accent in forms like *butúmbime*, *butú* – i. e. whether it is acute or circumflex – the dialects that attest these forms unambiguously point to the fact that the intonation was circumflex (cf. LKA 3, 107–113; 2, 128): e. g. the East Aukštaitian dialect of Lazūnai attests forms like 3SUBJ. *augtų*, 1PL. *keltūmēm* (cf. Vidugiris 2014, 210–213; Senkus 1959) as against Modern Standard Lithuanian 3SUBJ. *áugty*, *kéltume*.

A similar development can be observed in the allatives. The allative is formed by univerbation of the GEN.PL. form with the clitic =p(i) so that the expectation would be that the accent in the allative has the same position as in the GEN.PL. This is, indeed, the case in many forms such as OLith *gérūmp*, *darbúmp* (Daukša) as against GEN.PL. *gerú*, *darbú/darbų*, but the pronominal

² Pronominal singular adessives like OLith *tamp(i)*, *jamp(i)* and dialectal *kámp*, *jámp* (Zietela, Lazūnai) do not reflect the same assimilation, because they are based on the apocopated forms of the LOC.SG. PBSl *tami, *jami, *kami (cf. Latv *kam*, *tam*, OCS *komī*) that continue an original bilabial nasal *m: PBSl *kami, Young Avestan *kahmi* < PIE *k^hósmi (cf. Hill 2016, 224–227; slightly differently Stang 1966, 241, 246f.). Something similar holds true for forms like OLith *tamimp*, *manimp*, dialectal *maniñp*, *taviñp* (Zietela), because these seem to be based on the apocopated forms of the original INSTR.SG. like *manimi*, *tavimi* > *maniñ*, *taviñ* (cf. differently Stang 1966, 247 with lit.).

allatives *mûfumþ*, *iûfumþ* show unexpected by-forms *muf(f)úmp*, *iufúmp* with a progressive accent which does not match the original accentuation of the GEN.PL. forms and is confirmed by the dialects to have been circumflex (cf. LKA 3, 77–78): e. g. we encounter *mūsuñþ*, *jūsuñþ* in the South-Eastern dialects of Zietela and Dieveniškės (cf. Arumaa 1930, 63; Stang 1966, 257, 292). While a detailed discussion and explanation of this rather problematic accentuation are beyond the scope of this paper,³ it still illustrates that the allative and subjunctive were to some degree characterised by the same prosodic behaviour so that the phonological changes they display were most probably regular.

This leads us back to the discussion of the origin and etymological background of the clitic auxiliary with which the subjunctive was originally formed (in the following cf. differently Petit 2018; Smoczyński 2001, 224–229; Stang 1966, 428–432; Kazlauskas 1961; Stang 1970, 153–159; Brugmann 1912, 348–349). The comparison of the respective Lithuanian and Latvian forms confronts us with an interesting mismatch between the two languages. While the third person form of the subjunctive is identical in both languages as illustrated by Lith *būty* and OLatv *buhtu* < PEBalt *'būtuñ, the first and second person forms differ considerably, as the following juxtaposition of their respective desinences shows: 1SG. OLith =*biau* vs. OLatv =*b*, 2SG. OLith =*bei* as against OLatv =*b*, 1PL. OLith =*bime* vs. OLatv =*bahm*, =*bem*, 2PL. OLith =*bite* vs. OLatv =*baht*, =*bet*. It becomes clear that the clitic forms with which the supine is unverbated in the subjunctive are different in the two languages: Old Latvian attests 1/2SG. =*b*, 1PL. =*bahm*, =*bem* and 2PL. =*baht*, =*bet*, while Lithuanian attests 1SG. =*biau*, 2SG. =*bei*, 1PL. =*bime* and 2PL. =*bite*.

The Latvian forms 1PL. =*bem* and 2PL. =*bet* are reminiscent of preterites like 1PL. *vedēm*, 2PL. *vedēt* attested in Old Latvian texts and dialects (cf. Endzelin 1909, esp. 35–38; Endzelin 1923, 667–671). It seems that they reflect original *=*béme* and *=*béte* with the well-known Latvian apocope of final short vowels and a secondary shortening of the stem vowel by which many preterite forms in the dialects are characterised (cf. Endzelin 1909, 1–6; Endzelin 1923, 683f., 692f.). Most probably, *=*béme*, *=*béte* were

³ Stang (1966, 292) believes that the accent variation of *mūsuñþ*, *jūsuñþ*, OLith *mufúmp*, *iufúmp* as against OLith *mûfumþ*, *iûfumþ* might be owed to the prosodic status of the respective word-forms. This could also be assumed for 3SUBJ. *būty*, *augty* versus *būtj*, *augtj*.

first apocopated to *=bēm, *=bēt. Evidence from the dialects indicates that in a second step *=bēm was shortened to =*bem* due to a regular shortening of long vowels preceding word-final *-m, and that subsequently =*bet* was analogically modelled on =*bem* following the productive pattern of most present or future tense forms (e. g. like 1PL.PRES. *sita-m*, dial. *turi-m* : 2PL. *sita-t*, dial. *turi-t* thus 1PL. =*be-m* : 2PL. =*be-t*).

This scenario is suggested by the morphological situation in High Latvian dialects that usually retain long vowels in final syllables: e. g. the dialects of Kaunata, Vārkava and Rēzekne attest verb-forms like 1PL.PRET. *veḑem* (Vārkava), *ševom* (with open *ɛ* from *ě and *o* from *ā under specific conditions on which cf. Endzelin 1923, 61–88, esp. 70, 72–84, 85–86), 2PL. *veḑet* (Vārkava), 1PL.PRES. *skaitom*, 2PL. *skaitot'*⁴ and nominal forms such as DAT. PL.F. *rūkom*, *drēbēm* (Vārkava) with a short vowel in the final syllable alongside forms like LOC.SG.F. *gubā*, LOC.PL.F. *gubuôs* < **gubās* that must reflect a long vowel in the final syllable (cf. Endzelin 1909, 5–6; Endzelin 1923, 87). In light of the parallel behaviour of 1PL. verb-forms like *veḑem*, *skaitom* on the one side and DAT.PL.F. forms such as *drēbēm*, *rūkom* on the other side, the most natural conclusion is that in the respective High Latvian dialects long vowels in polysyllabic word-forms were regularly shortened before word-final *-m (following the general Latvian loss of word-final short vowels): e. g. DAT. PL.F. **rūokām*, **drēbēm* > **rūkōm*, **drēbēm* > *rūkom*, *drēbēm* just like 1PL. **skaitām*, **vedēm* > **skaitōm*, **veḑēm* > *skaitom*, *veḑem* in Vārkava. It is thus most easily conceived that the short vowel came up in 1PL. forms like *skaitom*, *veḑem* first, and that the 2PL. forms such as *skaitot'*, *veḑet* were created in analogy with these. This assumption is directly confirmed by the dialect of Kaunata, where 1PL.PRET. forms like *skaitom* with a short vowel are not only encountered alongside 2PL.PRET. forms such as *skaitot'* featuring a short vowel as well, but also have 2PL.PRET. counterparts such as *sytuot'* < **sitōt'* < **sitāte* that must reflect a long vowel (cf. Endzelin 1909, 6; Endzelin 1923, 87). It seems that this exactly mirrors the original situation.⁴

⁴ The shortening of long vowels preceding *-m must predate the emergence of secondary 1PL.PRET. forms like *grib'ēm* 'want' in the respective dialects (i. a. Kaunata, Ludza). These forms are most probably analogically based on shortened 3PRET. forms like **grib'ē* 'want' (cf. *gribē* in the dialect of Drusti, Central Latvian) < **gribēja* and seem to reflect the same morphological process as 1PL.PRES. *gūom* 'go' (Raipol near Ludza) created to 3PRES. *gūo* (i. a. Kaunata, Dagda) < **gāja* (cf. Endzelin 1923, 106–108, 150f., 677–679, 682f.): e. g. like 3PRET. *aud'ē* : 1PL. *aud'ēm* (Bērži) thus 3PRET. **grib'ē*, *gūo* : 1PL. *grib'ēm*, *gūom* could be created. It seems that this process presupposes the

OLatv 1PL. =*bem* and 2PL. =*bet* might very well have developed in the same way as forms like 1PL.PRET. *veḑem*, *ševom*, 2PL. *veḑet* in High Latvian dialects such as the ones spoken in Kaunata, Vārkava and Rēzekne. As discussed above, we would have to assume in this case that 1PL. *=béme > *=bēm was first regularly shortened to =*bem* and that 2PL. =*bet* was created to this analogically. This would presuppose, of course, that 1PL. =*bem* and 2PL. =*bet* stem from a Latvian idiom that was close to the dialects attesting the developments sketched out above, i. e. that they are of High Latvian origin. As a matter of fact, the assumption that 1PL. =*bem* and 2PL. =*bet* stem from a High Latvian idiom finds confirmation in the fact that subjunctives with =*bem* and =*bet* occur in Old Latvian texts that are well-known to at least partly feature a High Latvian idiom or reflect High Latvian influence, namely the anonymous gospel translation *Evangelia Toto Anno* from 1753 (Stafecka 2004) and the grammar *Dispositio Imperfecti ad Optimum* from 1732 (Bezzenberger 1887) attributed to the Jesuit Georg Szpungianski (on the High Latvian element of both texts cf. Stafecka 2004, 316–324; on the specific attestations of subjunctives with =*bem*, =*bet* cf. Endzelin 1923, 692 with lit.). In light of this rather curious observation we may conclude that 1PL. =*bem* and 2PL. =*bet* are essentially High Latvian, that they show the same development as forms like 1PL.PRET. *veḑem*, *ševom*, 2PL. *veḑet* in modern High Latvian dialects, and that consequently they reflect 1PL. *=béme and 2PL. PRET. *=béte, i. e. original *ē*-stem past tense (aorist) forms of the auxiliary.

If we are, in fact, dealing with original *ē*-past tense forms, subjunctive forms in 1PL. =*bahm* and 2PL. =*baht* that are attested in 17th century grammars (cf. Dressel 1685, 24 apud Bielenstein 1864, 160) can be understood to reflect the same diachronic tendency that we observe in the preterites, namely that *ē*-preterites tend to become *ā*-preterites in Latvian. This latter development mirrors the successive replacement of *ē*-preterite forms with *ā*-preterite forms through analogical interference induced by pivotal 1SG. and 2SG. forms of verbs in which the original *ē*-preterite and *ā*-preterite 1SG. and 2SG. underwent the same phonological development (cf. Endzelin 1909, 6–37; Endzelin 1923, 667–671, 692f.). As it seems, however, no such forms of the clitic auxiliary are attested. The only form that could in theory have functioned as the relevant pivot would have been the 2SG. Latv

shortening of long vowels preceding *-m that led to forms like *skaitom*, *veḑem* (Vārkava), because otherwise the language would have lacked the required analogical pattern.

†=*bi* < PEBalt 2SG. *=*bĕ-ĕj̄*/*=*bā-ĕj̄* which is not attested. Instead, singular subjunctives like OLatv 1SG. *koļpotu*=**b**, 2SG. *dzwyiwatu*=**b** point to the fact that in the first and second person singular of the subjunctive in Latvian the supine was univerbated with another clitic form =*b* that never exhibits the final vowel *-i* that one would expect if it continued PEBalt 2SG. *=*bĕ-ĕj̄*/*=*bā-ĕj̄* so that it must reflect a different formation (on which cf. the discussion below).⁵

In light of the lack of forms like Latv †=*bi* < PEBalt 2SG. *=*bĕ-ĕj̄*/*=*bā-ĕj̄* the most plausible explanation of 1PL. =*bahm* and 2PL. =*baht* seems to be the following. It is to be expected that the coalescence of *ē*-preterite and *ā*-preterite forms in the 1SG. and 2SG. enabled the analogical introduction of *ā*-preterite forms into paradigms that were originally completely composed of *ē*-preterite forms and vice versa. It is, therefore, sensible to assume that, at some point in the history of the Old Latvian verbal system, mixed paradigms arose in which *ē*-preterite forms alternated with *ā*-preterite forms. Such a paradigm is, indeed, attested for the dialect of Alūksne, where 1PL.PRET. *-am* < **-āme* is found alongside 2PL.PRET. *-et* (cf. Endzelin 1923, 669). It is conceivable that in some Old Latvian dialects on which the reports in the early grammars lack more detailed information the subjunctive followed the model pattern of mixed-paradigm preterites as in Alūksne so that it obtained a mixed paradigm analogically: e. g. like 2PL.PRET. **lik-ēt* (cf. dialectal *liket*) : 1PL.PRET. **lik-ām* (> *likam*) thus 2PL.SUBJ. **būtu-bēt* (cf. OLatv *būtubet*) : 1PL.SUBJ. **būtu-bām* could be created. In a second step, the remaining subjunctive forms that were based on original *ē*-past tense forms like **būtu-bēt* could be completely ousted by forms such as **būtu-bām* following a pattern provided by the *ā*-preterites or verbs where the replacement of *ē*-preterite forms with *ā*-preterite ones was more advanced. This explains the occurrence of the desinences 1PL. *-bahm* and 2PL. *-baht* and further supports the notion that 1PL. =*bem* and 2PL. =*bet* reflect more original preterites.

⁵ Note that 3PRET. *bi* in Old Latvian and dialectal Latvian texts is most likely shortened from the more original *j*-preterite *bija* (cf. Endzelin 1923, 677). The clitic =*bi* in 2SG. subjunctive forms such as OLith *butum=bi*, *dūtum=bi* (Mažvydas) and dialectal Lithuanian *padētum=bi* (e. g. Apsas, cf. Zinkevičius 1966, 364–365) was most probably secondarily created to the more original 3SG.AOR.INJ.ACT. PBSl **bēt* > =*be* in forms such as 3SUBJ. *dirbtum=be*, 3SUBJ. *būtū=be* in East Aukštaitian dialects that are discussed below.

This leads us to the Lithuanian situation which seems to provide a more transparent diachronic picture and essentially confirms the assumption that the subjunctive is at least partly based on a construction constituted by the supine and past tense forms of the auxiliary. Old Lithuanian singular forms of the type 1SG. *būtum=biau*, 2SG. *būtum=bei* point to the fact that the singular forms of the clitic verb-forms that the supine was unverbated with were, indeed, \bar{e} -stem past tense forms (aorists): the original clitic finite verb-forms 1SG. =*biau*, 2SG. =*bei* that we can abstract from these subjunctive forms find exact morphological matches in historically attested Lithuanian \bar{e} -preterites like 1SG. *láukiaiu*, 2SG. *láukei*. In light of the fact that OLatv 1PL. =*bem* and 2PL. =*bet* most probably reflect original plural \bar{e} -past tense forms as well, it seems sensible to assume that OLith 1SG. =*biau*, 2SG. =*bei* also go back to original singular \bar{e} -past tense forms of the same verb, and that consequently the Old Latvian and Old Lithuanian clitic auxiliary forms reflect a common Proto-East-Baltic paradigm with the forms PEBalt 1SG. *=bé-ó (> OLith =*biau*), 2SG. *=bé-éĭ (> OLith =*bei*), 1PL. *=bé-me (> OLatv =*bem*) and 2PL. *=bé-te (> OLatv =*bet*).

This scenario would find definitive confirmation if the plural counterparts of OLith 1SG. =*biau*, 2SG. =*bei* also reflected the expected \bar{e} -past tense forms, i. e. PEBalt 1PL. *=béme > Lith \dagger =*bēm(e)* (cf. *láuķēm(e)*) and PEBalt 2SG. *=béte > Lith \dagger =*bèt(e)* (cf. *láuķēt(e)*), but to complicate matters they do not. Quite interestingly, subjunctive forms like OLith 1PL. *bū-tum=bime*, 2PL. *bū-tum=bite* point to the clitic auxiliary forms 1PL. =*bime*, 2PL. =*bite*, and similarly their dual counterparts like 1DU. *bū-tum=biva*, 2DU. *bū-tum=bita* point to 1DU. =*biva*, 2DU. =*bita* that are most probably analogically modelled on the basis of the plural. The forms 1PL. =*bime*, 2PL. =*bite* can hardly reflect \bar{e} -stem past tense forms but find a perfect morphological match in *i*-presents like 1PL. *tūrime*, 2PL. *tūrīte*. They are, therefore, best conceived of as reflexes of present tense forms.

This raises the question how the Lithuanian plural forms OLith 1PL. =*bime*, 2PL. =*bite* relate to the singular forms OLith 1SG. =*biau*, 2SG. =*bei*, because the morphological characterisation of both types of forms presupposes that the Old Lithuanian subjunctive reflects the unverbation of the supine with present tense forms of the auxiliary in the plural and past tense forms of the auxiliary in the singular. We would thus have to assume a conflation or coalescence of the present tense and past tense paradigms of the auxiliary in the prehistory of the Lithuanian subjunctive.

Indeed, comparative evidence from Baltic and Slavic suggests that originally *i*-present tense forms were paradigmatically coordinated with \bar{e} -past tense forms and that they could thus constitute a common paradigm (here and in the following cf. Hill 2012; Hock 1995 with lit.; earlier Stang 1966, 429–430; Stang 1970, 153–159; Brugmann 1912, 348–349). It is a well-known fact that in Baltic and Slavic verbs forming their presents with *-i-* have a second stem formed with $-\bar{e}-$. With regard to Baltic this can be illustrated by the example of forms such as 3SG./PL.PRES. Lith *tùri*, Latv *tur* (< PEBalt *'turi), 2PL. Lith *tùrite*, Latv (dialectal) *ne=turít* with *-i-* as against INF. Lith *turėti*, Latv *turēt* (< PEBalt *'turėti) with $-\bar{e}-$. This suggests that in the common prehistory of both East Baltic languages \bar{e} -stem formations were paradigmatically coordinated with *i*-present tense forms. The very same is indicated by the closely related Slavic languages that show *i*-present tense forms alongside second stem \bar{e} -forms in some verbs and thus mirror the same relation that we find in OLith 1SG. =*biau*, 2SG. =*bei* as against OLith 1PL. =*bime*, 2PL. =*bite*: e. g. verbs like OCS INF. *viděti* with *i*-present tense forms such as 2PL.PRES. *vidite* have \bar{e} -past tense forms like 3SG.AOR. *vidě*. This also applies to the copula OCS *byti* (< PBSl *'bútĩ > Lith *búti*, Latv *būt*) which shows *i*-present tense forms alongside \bar{e} -past tense forms in periphrastic constructions such as the Old Church Slavonic subjunctive (or conditional) which is formed with the NOM.SG. of the *l*-participle of a respective verb and a finite form of the copula as illustrated in (7) (cf. also Aitzetmüller 1991, 196–198).

(7)	INF.		3SG.SUBJ.PRES.F.		3SG.SUBJ.AOR.F.
	<i>nes-ti</i>	‘to carry’	<i>nes-la bi</i>		<i>nes-la by/bě</i>
	<i>da-ti</i>	‘to give’	→ <i>da-la bi</i>		<i>da-la by/bě</i>
	<i>by-ti</i>	‘to be’	<i>by-la bi</i>		<i>by-la by/bě</i>

Here, *i*-present tense forms of the copula such as 3SG.PRES. *bi* are encountered alongside \bar{e} -past tense forms such as 3SG.AOR. *bě*. This relation essentially corresponds to the one observed in verbs such as OCS 2PL.PRES. *vidite* : 3SG.AOR. *vidě*, where an *i*-present tense form (3SG.PRES. *bi*) occurs alongside an \bar{e} -past tense form (3SG.AOR. *bě*), and suggests that originally the copula also had *i*-present tense forms paradigmatically coordinated with \bar{e} -past tense forms. In light of the co-occurrence of the clitic auxiliary forms OLith 1SG. =*biau*, 2SG. =*bei*, OLatv 1PL. =*bem*, 2PL. =*bet* as against OLith

1PL. =*bime*, 2PL. =*bite* in the East Baltic subjunctive, it is natural to assume that the same paradigmatic association of *i*-present tense forms of the copula and \bar{e} -past tense forms of the copula that we observe in Slavic was also present in East Baltic at some point. As a matter of fact, it seems that the Slavic situation parallels the Baltic one not only structurally but also etymologically. The relevant comparative evidence and exact matches between Baltic and Slavic suggest unambiguously that the clitic auxiliary which the supine was univerbated with in the East Baltic subjunctive mood must be identified as the copula Lith *būti*, Latv *būt*, and that consequently the subjunctive came into being via univerbation of the supine with either present tense forms of the copula or past tense forms of the copula. This assumption can be substantiated by comparison of the Slavic findings with evidence from Baltic, namely (a) 3_{PRET.} OPr *bē* ‘was’ and dialectal Lithuanian subjunctive forms like 3_{SUBJ.} *būtu*=**be** (Linkmenys), (b) 3_{PRET.} OLith *bit(i)*, dialectal *bīt* (Zietela) ‘was, were’ and (c) the clitic =*b* that we find in Old Latvian subjunctive forms such as 1_{SG.} *kolpotu*=**b**, 2_{SG.} *dzwyiwatu*=**b**, dialectal Lithuanian subjunctive forms like 3_{SG./PL.} *būtu*=**p** (Zietela, with secondary devoicing) and the Lithuanian connector *jėi*=**b**.

OCS 3_{SG.AOR.} *bě* finds an exact match in OPr 3_{PRT.} *bē* and together with it leads to 3_{SG.AOR.INJ.ACT.} PBSl **bét* > PEBalt **bé* (via regular loss of the final dental in both Slavic and Baltic, cf. OPr, Latv *ka* < PIE **k^uód*). Most probably, this original 3_{SG.AOR.INJ.ACT.} PBSl **bét* is also continued as =*be* in subjunctive forms such as 2_{SG.SUBJ.} *dīrbtum*=**be**, 3_{SUBJ.} *būtū*=**be** in East Aukštaitian dialects of Lithuanian (cf. LKA 2 107, 109, 111). This may reflect the well-known regular shortening of acute final vowels known as Leskien’s Law (cf. differently Stang 1966, 431). The comparison of the Slavic and Baltic findings thus essentially confirms the assumption that the copula had \bar{e} -past tense forms in the common prehistory of both branches. OLith 1_{SG.} =*biau*, 2_{SG.} =*bei*, OLatv 1_{PL.} =*bem*, 2_{PL.} =*bet* are thus also best conceived of as clitic past tense forms of the copula, for they are most easily analysed as the 1_{SG.}, 2_{SG.}, 1_{PL.} and 2_{PL.} counterparts of OPr 3_{PRT.} *bē*, dialectal Lithuanian =*be*.

The existence of *i*-present tense forms of the copula in East Baltic is furthermore strongly indicated by OLith 3_{PRET.} *bit(i)*, dialectal *bīt* ‘was, were’ which is most probably the regular reflex of an original 3_{SG.PRES.} form of the copula. By a series of regular sound changes (on which cf. Hill 2012; Hock 1995) 3_{SG.PRES.IND.ACT.} PIE **b^huHjéti* ‘become’ (> OE *bið*, Lat *fit*) became

PBSl *'bīti > PBalt *'bīti > OLith *biti*, *bit*, dialectal *bit*. This reconstruction is supported by 3SG.PRES. OCS *bi* which due to its reflex of a long vowel is best regarded as the successor of 3SG.PRES.INJ.ACT. PBSl *'bīt < PIE *b^huHjēt, i. e. the present injunctive counterpart of the original present indicative PIE *b^huHjēti > PBSl *'bīti > PBalt *'bīti > OLith *biti*, *bit*, dialectal *bit*. It seems that this original injunctive PBSl *'bīt was not only continued in Slavic but also in Baltic. The clitic =*b* attested in Old Latvian subjunctive forms such as 1SG. *koļpotu*=*b*, 2SG. *dzwyiwatu*=*b*, dialectal Lithuanian subjunctive forms like 3SG./PL. *būtu*=*p* and the connector *jēi*=*b* (on the relation of Lith *jēib* with the subjunctive cf. Petit 2018; Stang 1966, 429–431; Stang 1970, 153–159) points to PBalt *'=*bī* with a short vowel. Via loss of the final dental and the regular shortening of circumflected **ī* in unstressed position,⁶ PBSl *'bīt became PBalt *'=*bī* > Lith, Latv =*b*. It thus seems that Lith, Latv =*b* is an exact match of 3SG.PRES. OCS *bi*. In accordance with this, OLith 1PL. =*bime*, 2PL. =*bite* are most adequately analysed as clitic present tense forms of the copula as well, because they can simply reflect the plural counterparts of Lith, Latv =*b* < PBalt *'=*bī*.

Our comparative findings show that both the Slavic *i*-present tense forms of the copula such as 3SG.PRES. *bi* and the *ē*-past tense forms such as 3SG. AOR. *bě* find exact matches in Baltic: OCS *bi* finds a match in the clitic auxiliary =*b* attested in Old Latvian and dialectal Lithuanian subjunctive forms, while OCS *bě* corresponds to OPr *bē* and the clitic =*be* featured in third person subjunctive forms in Lithuanian dialects. It thus seems that the paradigmatic relation OCS PRES. *bi* : AOR. *bě* is exactly mirrored in the relation Lith, Latv =*b* : OPr *bē*, Lith =*be*. This essentially corresponds to the relation between *i*-presents and their second stem *ē*-formations as in cases such as 3SG./PL.PRES. Lith *tūri*, Latv *tur* (< PEBalt *'turi), 2PL. Lith *tūrite*, dialectal Latv *ne=turit* : INF. Lith *turėti*, Latv *turēt* (< PEBalt *'turėti) and OCS 2PL. PRES. *vidite* : INF. *viděti*, 3SG.AOR. *vidě*. This structural parallelism suggests that Lith, Latv =*b* < PBalt *'=*bī* and OCS 3SG. *bi* reflect an *i*-present tense form PBSl *'bīt that was originally paradigmatically coordinated with the *ē*-stem past tense form PBSl *'bēt that is continued in OCS *bě*, OPr *bē*, Lith =*be*. The Slavic and Baltic findings are, therefore, best understood as reflexes of an original Proto-Balto-Slavic system in which *i*-present tense forms of the

⁶ This is especially indicated by the development of the infinitive: **-tī* > Latv *-t*, Lith *-t(i)* (cf. Villanueva Svensson 2019; Hill 2016; Hill 2012 on the details).

copula were in paradigmatic coordination with \bar{e} -past tense forms (aorists): 2SG.PRES.INJ.ACT. PBSl * $b\bar{i}s$ (> OCS *bi*), 3SG.PRES.INJ.ACT. PBSl * $b\bar{i}t$ (> OCS *bi*, Lith, Latv =*b*), 1PL.PRES.INJ.ACT. PBSl * $b\bar{i}me$ (> PEBalt *= $b\bar{i}me$ > OLith =*bime*), 2PL.PRES.INJ.ACT. PBSl * $b\bar{i}te$ (> PEBalt *= $b\bar{i}te$ > OLith =*bite*), 3SG.PRES.IND.ACT. PBSl * $b\bar{i}ti$ (> Olith *biti*, *bit*, dialectal Lith *bit*) as against 3SG.AOR.INJ.ACT. PBSl * $b\bar{e}t$ (> OCS *bě*, OPr *bē*, dialectal Lith =*be*), 1PL.AOR.INJ.ACT. PBSl * $b\bar{e}me$ (> PEBalt *= $b\bar{e}me$ > OLatv =*bem*), 2PL.AOR.INJ.ACT. PBSl * $b\bar{e}te$ (> PEBalt *= $b\bar{e}te$, cf. OLatv =*bet*).

It thus seems that the forms of both the Old Latvian and Old Lithuanian subjunctive paradigms can be accounted for if they are regarded as reflecting this original Proto-Balto-Slavic system. Our findings so far allow for the well-founded conclusion that in the common prehistory of the East Baltic languages there were originally two distinct subjunctive formations constituted by the supine and present or past tense forms of the copula, and that these two formations were later conflated in the individual languages Lithuanian and Latvian and joined into one formation with only one paradigm:⁷

- (a) SUP. + \bar{e} -past tense form of the copula: PEBalt 1SG. *= $b\bar{e}ó$ > OLith =*biau*, PEBalt 2SG. *= $b\bar{e}éj$ > OLith =*bei*, PEBalt 3SG./DU./PL. *= $b\bar{e}$ > dialectal Lithuanian =*be*, PEBalt 1PL. *= $b\bar{e}me$ > OLatv =*bem*, PEBalt 2PL. *= $b\bar{e}te$ (cf. OLatv =*bet*);

⁷ This account is at variance with Petit's (2018) recent treatment of the development of the subjunctive. While it may certainly be acknowledged that his treatment presents interesting typological parallels from the Slavic languages for the over-all structure and functionality of the East Baltic subjunctive, it seems that his account can explain the syntactic and morphological development of the subjunctive in the East Baltic languages only very imperfectly. One reason for this is that it only operates with standardised paradigms and does not account for the wealth of dialectal subjunctive forms that the Lithuanian and Latvian dialects attest. This neglect of dialectal evidence leads to diachronic conclusions that are hardly compatible with the actual morphological situation that we encounter in the two East Baltic languages: e. g. it is very doubtful that at an early prehistoric stage of Latvian the clitic auxiliary of the subjunctive lost all of its inflexion, as Petit (2018, 240–241) assumes. Some Latvian dialects – especially High Latvian ones – attest subjunctive forms that reflect finite verb-forms of the clitic auxiliary, and as we have seen in our discussion, some of these even find exact matches in Lithuanian (cf. Lith, Latv =*b* < PEBalt *= $b\bar{i}$ < PBSl * $b\bar{i}t$) or can be connected with Lithuanian forms systematically (cf. Lith =*be*, OLatv =*bem*, =*bet*). With regard to the actual evidence, it is, therefore, more adequately concluded that the clitic auxiliary did not lose its inflexion in the prehistory of Latvian.

- (b) SUP. + *i*-present tense form of the copula: PEbalt 3SG./PL. (also DU.?) *=bi > OLatv, OLith and dialectal Lith =*b*, PEbalt 1PL. *=bime > OLith =*bime*, PEbalt 2PL. *=bite > OLith =*bite*.

The functional characteristics and differentiation of these two formations (present irrealis vs. past irrealis?) remain unclear and will have to be the object of future studies on the topic. In any case, it seems that the two original formations collapsed into one in both Lithuanian and Latvian, and that in the newly arisen formation the subjunctive forms were complementarily redistributed according to grammatical number. However, for an unknown reason this redistribution must have proceeded from two different directions in the two East Baltic languages, as it resulted in a mirror image relation between the Lithuanian and Latvian subjunctive paradigms: in Lithuanian the \bar{e} -past tense forms of the copula were used for the singular (cf. 1SG. OLith =*biau*, 2SG. =*bei*, 3SG./PL. dialectal Lithuanian =*be*) and the *i*-present tense forms were used for the plural and dual (cf. 1PL. OLith =*bime*, 1DU. =*biva*, 2PL. =*bite*, 2DU. =*bita*), while in Latvian the *i*-present tense forms were used for the singular (cf. 1/2.SG. OLatv =*b*) and the \bar{e} -past tense forms were used for the plural (cf. 1PL. OLatv =*bem*, 2PL. OLatv =*bet*).⁸ However, the exact causal factors and motivation of this mirror image distribution remain unclear. In general, we can thus account rather well for most forms in the paradigm of the subjunctive in Lithuanian and Latvian as given in (6) above, while some morphological details still call for clarification which, for the time being, must remain the object of future research. Moreover, one rather intriguing and problematic form has not been discussed yet: the Lithuanian heteroclitic 1SG. of the type *būčia(u)* that we shall now turn to.

3. The origin of the heteroclitic 1SG. form in Lithuanian

The paradigm in (8) repeated from (4) shows that in Old Lithuanian we do not only encounter first person singular subjunctive forms like *būtumbiau* as discussed above, but also forms such as *būčia*, *būčiau* that find no explanation within the framework discussed above:

⁸ The occurrence of =*b* < PEbalt *=bī < 3SG.PRES.INJ.ACT. PBSl *bī̃ in the singular of the subjunctive in both Old Latvian as well as dialectal Lithuanian indicates that the paradigmatic mirror image redistribution of the subjunctive forms was due to a relatively recent process in the history of the two languages.

(8)	Old Lith		
	SG.	DU.	PL.
1	<i>bū-tum=biau,</i> <i>bū-čia, bū-čiau</i>	<i>bū-tum=biva</i>	<i>bū-tum=bime</i>
2	<i>bū-tum=bei</i>	<i>bū-tum=bita</i>	<i>bū-tum=bite</i>
3	<i>bū-tų</i>		

These forms of the type 1SG. *būčia, būčiau* are not only attested in Old Lithuanian texts but also occur in modern dialects and the standard variety of present-day Lithuanian (cf. Ambrazas 2006, 313–314; Senn 1966, 242–245; LKA 3, 107–108). Forms such as 1SG.SUBJ. *būčio* attested in Žemaitian dialects are essentially based on forms of the type *būčia* in that they are secondarily abstracted from their reflexive forms, most probably following a pattern provided by third person forms (e. g. like 3PRES.REFL. *láuķias(i)* : 3PRES. *láuķia* thus 1SG.SUBJ.REFL. *būčios(i)* : 1SG.SUBJ. *būčio*; cf. already Stang 1970, 150–152; 1942, 251; 1966, 432).⁹ They are of special interest in the context of the diachrony of the East Baltic subjunctive mood, because they cannot reflect the univerbation of the supine with a specific form of the copula as in the other forms but must have a different origin. As there is no inner-Lithuanian development by which the ultimate origin of these forms could be explained, it seems promising to search for comparative evidence in other closely related languages that might shed light on their history.

This is where the Latvian debitive comes in. Mathiassen (1993) has already argued tentatively that the proclitic *jā=* which marks the debitive mood in Latvian might also be reflected in Lithuanian 1SG. subjunctive forms such as *būčia* (on the origin of this form cf. also differently Petit 2018, 220–221; Mańczak 1995; Zinkevičius 2001; Stang 1966, 432–434; Kazlauskas 1968, 385–404; Kazlauskas 1961). It has already been noted above that originally the debitive was formed by univerbation of the proclitic particle *jā=* with the infinitive leading to forms such as DEB. *jā=iēt* ‘must go’ with INF. *iēt*, DEB. *jā=būt* ‘must be’ with INF. *būt*, and that the generalisation of the pattern 3PRES. *iēt* : DEB. *jā=iēt* resulted in forms of the usual type DEB. *jā=duôd* with 3PRES. *duôd*, where the debitive is formed by univerbation of *jā=* with the respective 3PRES. form. As Latv *jā=* was originally univerbated

⁹ Reflexive 1SG.SUBJ. forms like *būcias(i)* are modelled on the reverse pattern: e. g. like 3PRES. *láuķia* : REFL. *láuķias(i)* thus 1SG. *būčia* : 1SG.REFL. *būcias(i)*.

with the infinitive, it seems sensible to hypothesise that, if Latv *jà=* had a Lithuanian counterpart, this was also univerbated with the infinitive.

This assumption is almost perfectly supported by 1SG. subjunctive forms such as *bū́čia*, because these can be the phonetically regular outcome of a univerbation of the infinitive with an enclitic particle **=jǎ*: e. g. INF. **'búti + *=jǎ > *'búti=jǎ > bū́čia*. The only difference between the Latvian and Lithuanian construction would be that in Latvian *jà=* obviously preceded the infinitive as a proclitic, while its Lithuanian counterpart **=jǎ* would have had to succeed the infinitive as an enclitic. This mirror image distribution can be understood rather well if the common predecessor of both Latv *jà=* and Lith **=jǎ* is taken to have been a ditropic clitic originally, i. e. a clitic prosodically attached to the preceding word but forming a semantic unit with the succeeding word (cf. Himmelman 2014). It has been shown for Baltic and other branches of the Indo-European language family that ditropic clitics can evolve into proclitics by getting attached prosodically to the word that follows them and forms a semantic unit with them (cf. Hill et al. 2019 on Baltic, Germanic and Armenian, esp. the case of the East Baltic preverbs). This allows for the assumption that the common predecessor of Latv *jà=* and Lith **=jǎ* was a ditropic clitic PEBalt **jǎ* attached to the infinitive that remained enclitic in Lithuanian but was secondarily procliticised in Latvian, cf. (9):

(9)	Proto-East-Baltic		Latv		Lith
	<i>*jǎ='bú-ti</i>	>	<i>jà=bû-t</i>	--	
	<i>*'bú-ti=jǎ</i>		--		<i>bú-čia</i>

This account regarding PEBalt **jǎ* as a ditropic clitic has the major advantage over purely syntactic and other alternative accounts that it can explain both the prosodic and syntactic behaviour of **=jǎ* in Lithuanian forms such as 1SG.SUBJ. *bū́čia* and of *jà=* in the Latvian debitive. In particular, it can explain why forms like *bū́čia* reflect the univerbation of the infinitive with a succeeding, postponed enclitic **=jǎ*, while the Latvian debitive reflects the univerbation of the infinitive with a prefixed proclitic *jà=*. As a ditropic clitic, PEBalt **jǎ* was by default syntactically and prosodically attached to the word preceding it so that its enclitic behaviour in forms such as PEBalt **'búti=jǎ > Lith bū́čia* conforms to the theoretical expectation. However, it could change its original prosodic status and become a prefixed proclitic

prosodically attached to the word following it, when this functioned as its semantic host and formed a coherent semantic unit/construction with it, i. e. as a ditropic clitic PEBalt *jǎ́ could prosodically shift towards its semantic host. It is conceivable that in the prehistory of Latvian, PEBalt *jǎ́ became procliticised in the source-construction of what would later become the debitive. In such a construction it was syntactically followed by the infinitive with which it constituted a semantically and morphosyntactically coherent expression and which functioned as the semantic host of this expression. Therefore, PEBalt *jǎ́ was semantically and prosodically attracted by the infinitive following it so that it shifted towards it prosodically thus becoming procliticised and ending up as the prefixed proclitic Latv *jà=*.

This process must be assumed to account for the intonation of *jà=*. Quite interestingly, Latv *jà=* features a falling tone instead of the broken or sustained tone that one would expect as the reflex of the original acute intonation of PEBalt *jǎ́, almost as if it continued an original word with circumflex intonation. This deviant prosodic behaviour of *jà=* finds a natural explanation in the account presented here. It is a well-known fact that the intonational reflexes of the original acute and circumflex merged in unstressed syllables in Latvian resulting in falling tone reflexes of original acutes (cf. Seržants 2004, 118–119; Seržants 2003, 95; Young 2000, 199–200; Endzelin 1923, 23, 27). In light of this, the falling tone in Latv *jà=* is most aptly regarded as the reflex of an original acute in an unstressed syllable. This suggests, of course, that in debitive forms, *jà=* was originally unaccented and did thus not carry the wordstress, although it constituted the first syllable of the forms which is usually accented in Latvian. Regarding *jà=* as the successor of a ditropic clitic PEBalt *jǎ́ allows for an explanation of this rather untypical accentuation: this can be attributed to the proclitic character of PEBalt *jǎ́ > *jǎ́= > Latv *jà=* that it acquired in the source-construction of the debitive, when it shifted towards the infinitive following it and was prosodically attached to it thus forming one word with it. In this newly arisen word, the wordstress did not rest on the initial syllable constituted by *jǎ́= but rather fell on the first syllable of the original infinitive – i. e. the second syllable of the word – so that *jǎ́= was unstressed: *jǎ́='búti. As a consequence, *jǎ́= underwent the intonational merger in unstressed syllables so that it acquired its falling tone and became Latv *jà=*: *jǎ́='búti > *jà=bút*. As nowadays *jà=* bears the wordstress in debitive forms (cf. Endzelin 1923, 685–686), this merger must have taken place prior to the general accent

retraction in Latvian. In summary, the Lithuanian and Latvian evidence thus points to the fact that PEBalt *já was a ditropic clitic.

For the time being, the original semantics and etymology of PEBalt *já must remain unclear (cf. Mathiassen 1993 and Endzelin 1923, 685–686 for some speculations on this), but it is to be assumed that it had a meaning that complemented and supported the semantics of the construction that it originally constituted together with the infinitive. As it evolved into the Latvian debitive with a necessitative function and provided the 1sg. form of the Lithuanian subjunctive expressing volition, counter-factuality and potentiality, it is likely that the original construction had a non-factual, most probably deontic meaning which *já intensified, supported or complemented in some way. Be that as it may, the match between Latvian and Lithuanian indicates that the Lithuanian 1sg. subjunctive forms of the type *būčia* were not finite verb-forms originally, but that they were infinite verbal formations that acquired their function as 1sg. finite verb-forms secondarily, just like the supine acquired its function as the third person subjunctive form secondarily. Stang (1966, 432–434), drawing on Fraenkel (1950, 112–118), suggested that originally forms like *būčia* were used in impersonal constructions with unreal or rather non-factual semantics lacking a specific characterisation for the verbal category of person. This is indicated by very rare Old Lithuanian and dialectal Lithuanian findings, cf. (10).

(10) use of *būčia* in Old and dialectal Lithuanian

(10a) [...] *kuris buczia žeminaš: o widurei io // pilní yrá wílaus* (DP 517, 52f.)
 '[...] der sich *scheinbar* demütigt, aber sein Inneres ist voller Trug' (Fraenkel 1950, 114)

(10b) *Rado ragana parugėj močekos dukteri vaikq, supa i gieda: a a* (Adučiškis, East Aukštaitian)
a būčia pamirštas vaikas
 '[D]ie Hexe fand am Roggenfelde das kleine Töchterchen der Stiefmutter, schaukelte es und sang dazu: a-a-a, das ist wohl ein vergessenes Kind' (Stang 1966, 433)

In these two examples, *būčia* does not function as a first person singular form but rather constitutes a predicative expression with other nominals modifying a third person subject (*žėminas* and *pamirštas*) and expressing some kind of non-factuality/irreality. In our view this characterisation of the

original function of forms like *būčia* paves the way for an account of other 1SG. SUBJ. forms that have not received an adequate explanation yet, namely *būčiau* featured in Žemaitian and West Aukštaitian dialects as well as *būčiu*, *būčiuo* featured in Žemaitian dialects (cf. LKA 3, 107). Stang (1942, 250; 1966, 432) rightly remarks that forms like *būčiau* are “offenbar dem *ē*-Prät[eritum] nachgebildet,” but he does not specify how exactly this came about.

It seems that such forms reflect the same innovation tendency that we can observe in forms like *būčiu*, *būčiuo* attested in Žemaitian dialects. These forms are reminiscent of first person singular present tense forms like *láukiu*, reflexive *láukiuos(i)*, and it is most naturally conceived that they are thus modelled on the pattern of these present tense forms. Forms like *būčiuo* are then easily explained as having been abstracted from the reflexive counterparts of forms like *būčiu* (e. g. like 3PRES.REFL. *láuvias(i)* : 3PRES. *láukia* thus 1SG.SUBJ.REFL. *būčiuos(i)* : 1SG.SUBJ. *būčiuo*), just as the other prominent Žemaitian 1SG.SUBJ. forms of the type *būčio* were abstracted from the reflexive counterparts of forms like *būčia*. This assumption is especially supported by the fact that forms like *būčio*, *būčiuo* and *būčiu* exist side by side in the North Žemaitian dialects around Telšiai (esp. Vismaldai, Lauko Soda, Eidžiotai). The assumption that forms like *būčiau* are secondarily modelled on preterites and forms like *būčiu* are modelled on presents perfectly fits our observation made in the previous section that there were originally two subjunctive constructions in East Baltic, one of which was constituted by the supine and present tense forms of the copula, while the other one was formed with the supine and past tense forms of the copula. This observation allows for inferences regarding the motivation for creating forms like *būčiau*, *būčiu*: it is conceivable now that forms of the type *būčiau* were created to fill the paradigmatic slot of the 1SG. of the subjunctive formation with past tense forms, while forms like *būčiu* were modelled to fill the paradigmatic slot of the 1SG. of the subjunctive formation with present tense forms.

This does, however, not explain how exactly these forms came into being, as the specific morphological process leading to their creation remains unclear. If one resorts to the most natural presumption that they are the result of analogical innovation, one has to search for a paradigmatic pattern that might have provided the model for their creation. Such a pattern is not easy to come by, because on the synchronic level forms like *būčiau*, *būčiu* are suppletive and thus paradigmatically isolated. However, it seems possible to identify the required pattern if we take into consideration that forms such as

būčiau, *būčiu* might not have been paradigmatically isolated at an earlier stage in the history of Lithuanian.

In our view, the form *būčia* provides the crucial missing link for establishing such a pattern. The examples in (10) above show that prior to becoming a 1SG.SUBJ. form *būčia* could constitute predicative expressions together with additional nominals that referred to third person subjects. It is likely that in this syntactic context *būčia* was secondarily taken as a predicative form of the copula denoting some kind of non-factuality/irreality, and that it was thus reanalysed as a third person present finite verb-form, because its phonological makeup matched that of more original third person present verb-forms such as *lūkia*. In a second step, forms like *būčiau*, *būčiu* were created to *būčia* in analogy with one of two patterns: (1) forms like *būčiau* followed a pattern provided by third person present tense forms and the corresponding first person preterite forms (e. g. like 3PRES. *lūkia* : 1SG.PRET. *lūkiu* thus 3PRES. *būčia* : 1SG.PRET. *būčiau*); (2) forms such as *būčiu* (with *būčiuo* abstracted from its reflexive counterpart) were created following the pre-established pattern of third person present tense forms and the corresponding first person singular forms (e. g. like 3PRES. *lūkia* : 1SG.PRES. *lūkiu*, REFL. *lūkiuos(i)*, thus 3PRES. *būčia* : 1SG.PRES. *būčiu*, REFL. *būčiuos(i)*, whence *būčiuo*). Due to the non-factual/irreal semantics they received from their basis *būčia* and the concomitant functional affinity with the subjunctive as a verbal category, these newly created forms of the type *būčiau*, *būčiu* were integrated into the subjunctive paradigm as first person singular forms. Although forms like *būčiau*, *būčiu* can thus be explained rather faithfully on the morphological level, it still remains unclear how exactly their basis *būčia* came to be used as a first person singular subjunctive form itself in later times. Answering this question must, for the time being, remain a task for future research. In any case, our discussion so far has shown that analogy provides a reliable means to account for the emergence of dialectal 1SG.SUBJ. forms like *būčiau*, *būčiu*, and it seems that this also applies to other paradigmatic word-forms of the subjunctive mood that are attested in modern dialects of Lithuanian. The following section will be dedicated to the explanation of some of these.

4. From Old Lithuanian to present-day Lithuanian

We have already seen in the introduction above that the subjunctive paradigm underwent considerable changes between Old Lithuanian and the present-day modern dialects, cf. the contrast between the Old Lithuanian and modern paradigms in (11) (repeated from (5) and (6) above).

(11) The contrast between the Old and modern Lithuanian subjunctive paradigm

(11a) Old Lithuanian

	SG.	DU.	PL.
1	<i>bū-tum=biau,</i> <i>bū-čia, bū-čiau</i>	<i>bū-tum=biva</i>	<i>bū-tum=bime</i>
2	<i>bū-tum=bei</i>	<i>bū-tum=bita</i>	<i>bū-tum=bite</i>
3	<i>bū-ty</i>		

(11b) Modern Standard Lithuanian

	SG.	DU.	PL.
1	<i>bū́-čiau</i> , but <i>eitaũ</i> etc. in dialects	<i>(bū́-tuva)</i>	<i>bū́-tume</i>
2	<i>bū́-tum(ei)</i> , but <i>sùktai, eitaĩ</i> etc. in dialects	<i>(bū́-tumėta)</i>	<i>bū́-tumėte</i>
3	<i>bū́-ty</i> , but <i>bū́t, (at-)eĩt</i> etc. in dialects		

One can observe that the original system with forms created by univerbation of the supine with *ē*-past tense forms of the copula in the singular and *i*-present tense forms of the copula in the plural was given up and that many of the original forms were ousted by less transparent new forms. Striking deviances include the replacement of 2SG. forms like *būtumbei* with forms such as *bū́tum, bū́tumei* or even forms like *sùktai, gautái* in dialects, the use of 1PL. forms such as *bū́tume* instead of *būtumbime* and the occurrence of short third person forms like *bū́t, (at-)eĩt* alongside expected long forms such as *bū́ty, eĩty* in dialects.

Some of these changes were already observed by Daniel Klein in the middle of the 17th century. A regularised paradigm of subjunctive forms mentioned in Klein's grammar is depicted in (12) (based on Klein 1653, 93, 109, 115–116, 118, 122, 124, 126; Klein 1654, 58, 74, 84–85, 88–89; cf. similarly Schleicher 1856, 229; Kurschat 1876, 271, 275, 283):

(12)	SG.	DU.	PL.
1	<i>regė́cia, -čiau</i>	<i>regė́tum=biwa</i>	<i>regė́tum=bime</i>
2	<i>regė́tum=bei</i>	<i>regė́tum=bita</i>	<i>regė́tum=bite</i>
3	<i>regė́tu</i>		

One can see that Klein's paradigm essentially corresponds to the Old Lithuanian paradigm depicted in (4). However, with regard to the 1PL.SUBJ. Klein remarks: "De Subjunctivo obſervabis; qvod Pluralis Numerus à qvibusdam Litvanis, præfertim Magni Ducatus, ita varietur: Plur. *galetume/galetumb'* pro *galetumbim/galetumbit* [...] Et abjecto *e/galetum'* [...]" (Klein 1653, 86; emphasis in boldface added by the authors). The same observation is made in the German edition of his grammar: "Nur iſt dieſes anzumerken, [...] daſſ die erſte und andere Perſon Pluralis Numeri im Subjunctivo nicht allenthalben ſo völlig ausgeſprochen, auch nicht ausgeſchrieben werden, wie ſie wol in den geſetzten Exempeln zu befinden ſind. Denn an ſtat *dirptumbim*, wir würden arbeiten, *dirptumbit*, ihr würdet arbeiten [...] ſagen und ſchreiben andere, ſonderlich in groß Littauen, *dirptume, dirptumb* [...]" (Klein 1654, 54f.).

We may thus infer that Klein already knew 1PL.SUBJ. forms of the type *būtume* that stood beside forms like *būtumbime*. The simultaneous co-existence of both types of forms makes it improbable that forms like *būtume* are somehow derived from forms like *būtumbime*, especially given the fact that there is no regular phonological development known by which forms of the type *būtumbime* could have become forms like *būtume*. While a diachronic account of the evolution of forms such as *būtume* is beyond the scope of this paper, it is of interest to note here that after Klein such forms are consistently mentioned in grammatical descriptions of Lithuanian. For instance, Schleicher (1856, 229) remarks with reference to Klein: "1pl. *sùktumbime, sùktumbim, gewöhnl. sùktum*, ältere Drucke (1653) *-tume, -tumim, Szyrwid -tumem* [...] 2sg. *sùktumbei, abgekürzt sùktum* (so auch Szyrwid), **gewöhnlich aber -tai, sùktai** [emphasis in boldface added by the authors]; ältere Drucke (1653) *-tumei, neuere auch -tumi*)."

Quite interestingly, Schleicher's account deviates from Klein's account in some aspects. While he mentions 1PL.SUBJ. forms of the type *būtume*, he states that the usual form of the 1PL.SUBJ. is of the type *sùktum*, i. e. lacking the final vowel. Similarly, he mentions that there are 2SG.SUBJ. forms like *sùktumbei, sùktum* (the latter of unclear origin, but obviously homophonous with the corresponding 1PL. forms), but that the most common 2SG.SUBJ. forms are of the type *sùktai* which Klein does not mention in his grammar. This implies that by Schleicher's time new 2SG.SUBJ. forms like *sùktai* had arisen that were not yet present in Klein's time, i. e. that forms like *sùktai* emerged sometime between the middle of the 17th century and the middle of the 19th century.

The remainder of our discussion will be dedicated to the explanation of these forms.

It seems that, in the course of the development of the Lithuanian language, forms like *sùktai* did not oust the other 2SG.SUBJ. forms of the type *sùktum* and become the only 2SG.SUBJ. form in all of Lithuanian. As already noted by Senn (1966, 242–244), the 2SG.SUBJ. forms are complementarily distributed with forms of the type *sùktai* being confined to Aukštaitian dialects in South and East Lithuania, as the paradigms in (13) illustrate (cf. also LKA 3, 107–109).

(13) Differences between the standard and dialectal paradigms of the subjunctive

(13a) Modern Standard Lithuanian

	SG.	DU.	PL.
1	<i>gáu-čiau</i>	<i>gáu-tuva</i>	<i>gáu-tume</i>
2	<i>gáu-tum</i>	<i>gáu-tuta</i>	<i>gáu-tute</i>
3	<i>gáu-tų</i>		

(13b) Aukštaitian dialects in South and East Lithuania

	SG.	DU.	PL.
1	<i>gau-táu</i>	--	<i>gáu-tūme, gau-tūm</i>
2	<i>gau-tái</i>	--	<i>gáu-tūte, gau-tūt</i>
3	<i>gautỹ, -tũ</i>		

These paradigms show that the standard language based on West Aukštaitian varieties has 2SG.SUBJ. forms of the type *gáutum*, *sùktum* alongside 1SG. forms like *gáučiau*, *sùkčiau*, while the Aukštaitian dialects in the South and East feature forms like *gautái*, *sùktai* with corresponding 1SG. forms such as *gautáu*, *suktáu*. Another notable difference is the accent and intonation of the third person form: the standard language shows the accent and intonation as they correspond to the infinitive, while the Southern and Eastern dialects display oxytonesis of the forms on the final syllable with circumflex intonation. How are these deviances in the dialectal paradigms to be explained?

In our view, a more comprehensive survey of the Southern and Eastern varieties of Lithuanian will shed light on the diachrony of the subjunctive paradigms in these dialects. It seems that especially South and East Aukštaitian insular or peripheral dialects might be relevant for our investigation, because such dialects often preserve archaic linguistic features and may thus provide comparative data allowing for profound diachronic insights. And indeed, two

Aukštaitian dialects from the outer periphery of the Lithuanian language area provide insightful and revealing data. These dialects are (a) the peripheral South Aukštaitian dialect spoken in Punkskas (present-day Poland), and (b) the famous insular East Aukštaitian dialect spoken in Lazūnai (present-day Belarus). Apart from the forms also mentioned in (13b), the dialects of Punkskas and Lazūnai attest short third person subjunctive forms of the type *būt*, *turēt* lacking the final vowel expected to be featured by third person subjunctives, cf. the paradigms in (14).

(14) The contrast between the Old and modern Lithuanian subjunctive paradigm

(14a) the desinences of the subjunctive in Punkskas (cf. Smoczyński 2001, 297)

	SG.	PL.
1	-tau	-tum
2	-tai	-tut
3	-tū, -t, with forms such as <i>būt</i> , <i>ne-pa-pūlt</i> , <i>ne-važiuot</i> etc.	

(14b) a regularised paradigm of the subjunctive forms in Lazūnai (cf. Vidugiris 2014, 210–213)

	SG.	PL.
1	<i>keltáu</i> , <i>turétau</i>	<i>keltūmēm</i> , <i>turétumēm</i>
2	<i>keltái</i> , <i>turétai</i>	<i>keltūmēt</i> , <i>turétumēt</i>
3	<i>keltū</i> , <i>turétū</i> , but also forms such as <i>būt</i> , <i>ne-būt</i> , <i>iš-geřt</i> , <i>at-važuot</i> , <i>ne-galēt</i> etc.	

The depiction of the morphological situation in the dialect of Lazūnai as presented in (14b) can furthermore be substantiated with a survey of the relevant forms in the texts collected by Senkus (1959). The results of this are given in (15):

(15) subjunctive forms in the Lazūnai dialect texts collected by Senkus (1959; the line numbers only refer to lines with written text)

1SG.SUBJ.	2SG.SUBJ.	3SUBJ.	
<i>būtoū</i> 219,5	<i>pirktái</i> 217,11	<i>auktū</i> 217,27	<i>būt</i> 218,2; 225,4
<i>turétou</i> 221,26	<i>ap-si-outai</i> 217,18	<i>pa-mestū</i> 218,13f.	<i>gyvėnt</i> 220,9
	<i>ap-si-sektaĩ</i> 217,18	<i>žaištū</i> 218,26	<i>iĩnt</i> 220,26
	<i>eitai</i> 217,18	<i>auktū</i> 222,13	<i>at-aiĩt</i> 221,22
	<i>ganýtai</i> 221,25	<i>dúoty</i> 222,23	<i>pri-iĩnt</i> 221,23
	<i>pa-augtai</i> 221,25	<i>duotų</i> 223,38	<i>dúot</i> 221,34; 223,22

penėtai 221,26
klausytai 221,26

iš-augtai 221,28
austai 221,28

a(t)-dúot 221,34
ne-bút 220,26;
222,33

The survey shows rather clearly that in the dialect of Lazūnai third person subjunctive forms of the type *augtũ*, *žaištũ* with the expected final *-u* coexist with short forms of the type *a(t)-dúot*, *bút* without the expected final *-u*. Such forms were already reported for the dialect by Arumaa (1930, 31–40) who mentions 3SUBJ. *až-daũžt=si, iĩnt, iš-duõt, ne-bũt, žinõt*.¹⁰

In our view the existence of short 3SUBJ. forms like *bút* in the South and East Aukštaitian dialects provides an essential clue to the understanding of the occurrence of 2SG.SUBJ. forms in *-ai* like *turėtai* and 1SG.SUBJ. forms in *-au* such as *turėtau* in these dialects. Considering these short 3SUBJ. forms like *bút* together with the morphological effects of a characteristic sound change having affected the South Aukštaitian and Southern East Aukštaitian varieties allows for an analogical explanation of forms like 2SG.SUBJ. *turėtai*, 1SG.SUBJ. *turėtau*. As already noted by Zinkevičius (1966, 353), South Aukštaitian and Southern East Aukštaitian dialects are characterised by a specific sound change by which word-final *-o* is dropped in posttonic position after *-j-* in third person preterite forms such as *(at-)ėjo, jójo, turėjo* resulting in forms like *(at)ėj, jój, turėj* lacking the final vowel. Forms of this type are directly attested in the two dialects discussed above: the dialect of Punskaš features forms like 3PRET. *(at-)ėj, stój, norėj* instead of *(at-)ėjo, stójo, norėjo* (cf. Smoczyński 2001, 297), while the dialect in Lazūnai has forms such as 3PRET. *(at-)ėj, jój, stój, sėdėj* for *(at-)ėjo, jójo, stójo, sėdėjo* (cf. Vidugiris 2014, 208). As thus South Aukštaitian and East Aukštaitian dialects attesting short 3SUBJ. forms like *eĩt* alongside 2SG. forms such as *eitaĩ* and 1SG. forms like *eitaũ* also feature short 3PRET. forms of the type *(at-)ėj*, it seems plausible that the latter provided an analogical pattern on which the former could be modelled: e. g. like 3PRET. *ėj* : 1SG. *ėjaũ*, 2SG. *ėjaĩ* thus 3SUBJ. *eĩt* : 1SG. *eitaũ*, 2SG. *eitaĩ* could be formed, cf. the illustration in (16):

¹⁰ The circumflex intonation in forms like 3SUBJ. *bũt, iš-duõt* etc. is most probably due to metatony in monosyllables. Other forms such as *žinõt* are likely to have followed the pattern of the monosyllabic 3SUBJ. forms.

(16)	model pattern		
	3PRT.	1SG.PRET.	2SG.PRET.
	(at-)ēĵ	~ (at-)ėj-aũ	(at-)ėj-aĩ
	turėĵ	~ turėj-au	turėĵ-ai
		replica pattern	
	3SUBJ.	1SG.SUBJ.	2SG.SUBJ.
	ėĩt	~ eit-aũ	eit-aĩ
	turėt	~ turėt-au	turėt-ai

It seems that we can thus explain subjunctive forms of the type 1SG. *eitaũ*, 2SG. *eitaĩ* as secondary analogical creations based on short 3SUBJ. forms like *ėĩt*, *bũt* following a pattern provided by the preterite. But here the question arises how short 3SUBJ. forms such as *ėĩt*, *bũt* are to be explained in the first place, for the lack of the final *-y#* in these forms is rather unexpected. The most natural assumption would be that by a regular phonological development short 3SUBJ. forms evolved from long 3SUBJ. forms like *bũty*. In this case, word-final *-y#* would have had to be dropped regularly in some specific contexts in the dialects featuring short 3SUBJ. forms. However, apart from long 3SUBJ. forms of the type *auktũ* that occur alongside short 3SUBJ. forms in these dialects (cf. (14)–(16) above), ACC.SG. forms of *u*-stems like ACC.SG.M. *sũnũ* (Punskas) and GEN.PL. forms of all stem classes like GEN.PL.F. *galvũ* (Lazũnai) occurring in these varieties show that these usually retained final *-y#* > *-ũ#*, cf. (17):¹¹

(17)	<i>u</i> -stems ACC.SG.		GEN.PL. of all stems	
standard language	<i>sũny</i>	<i>lygy</i>	<i>galvũ</i>	<i>baltũ</i>
	<i>tuřgy</i>	<i>plātu</i>	<i>raņky</i>	<i>senũ</i>
Punskas	<i>sũnũ</i>	--	<i>vaikũ</i>	--
	<i>tuřgũ</i>	--	<i>liepũ</i>	--
Lazũnai	<i>sũnu</i>	<i>lygu</i>	<i>galvũ</i>	<i>baltũ</i>
	<i>tuřgu</i>	<i>plātu</i>	<i>ruņku</i>	<i>senũ</i>

¹¹ With regard to the forms presented in the following table cf. Ambrazas (2006, 110–121) and Senn (1966, 106–140) on the modern standard language; Smoczyński (2001, 285–292) on the dialect of Punskas; Vidugiris (2014, 121, 128–129, 152, 154–155) on the dialect of Lazũnai.

Therefore, final *-u#* cannot have been apocopated generally in all contexts in these dialects. There is, however, one morphological position in which final *-u#* seems to have been lost, namely the GEN.PL. form of the first and second person pronouns. The dialects show an interesting variation between long GEN.PL. forms of these pronouns such as *mūsū* (Punskas), *jūsū* (Lazūnai) and short GEN.PL. forms like *mūs*, *jūs*, cf. (18):

(18)	standard language	Punskas	Lazūnai
GEN.PL.	<i>mūsų</i>	~ <i>mūs(ū)</i>	<i>mūsū, mūs</i>
	<i>jūsų</i>	~ <i>jūs(ū)</i>	<i>jūsū, jūs</i>

(cf. Smoczyński 2001, 295; Vidugiris 2014, 176–178)

It is probable that the short forms *mūs*, *jūs* evolved from the expected long forms *mūsų*, *jūsų* by a regular loss of the final *-u#*. This requires that the long and short forms were originally distributed complementarily with the short forms occurring in a specific context in which the final vowel was apocopated. The original variation and distribution ratio remains problematic, because the data provide no unquestionably clear picture, but it seems probable that originally the long forms *mūsų*, *jūsų* were the default stressed variants of the GEN.PL., while the short forms *mūs*, *jūs* occurred in unstressed adnominal position. This is indicated by the fact that these forms are frequently encountered as adnominal possessive attributes immediately preceding the referents they modify: for instance, in the dialect of Lazūnai we find expressions such as *mūs bāciuška* or *mūs vaikū* (on which cf. Senkus 1959, 217, 227) and *mūs bocià* or *jūs vaikai* (on which cf. Vidugiris 2014, 178; cf. Zinkevičius 1966, 302–303 on the comparable case of *mūs*, *jūs* in Garliava near Kaunas). We may thus tentatively conclude that in unstressed adnominal position word-final *-u#* was apocopated under conditions that still call for more detailed clarification.

In light of our findings so far, it is conceivable that the variation of the long and short GEN.PL. forms *mūsų*, *jūsų* ~ *mūs*, *jūs* parallels the variation of long and short 3SUBJ. forms such as *būtų* ~ *būt*, and that consequently short 3SUBJ. forms evolved from long 3SUBJ. forms by apocope of *-u#* < *-uñ# in the same prosodic context in which the short GEN.PL. forms *mūs*, *jūs* emerged from the long GEN.PL. forms *mūsų*, *jūsų*. This would, of course, presuppose that the short 3SUBJ. forms emerged in unstressed adnominal position which is unexpected given the fact that in East Baltic finite verb-forms are usually

accented and do not occur unaccented. However, there is one verb that is likely to have been the source of the short 3SUBJ. forms, because it had an unstressed variant that could occur in the context in which *-y#* was dropped. This is the verb *būti* which is well-known to function as the copula – i. e. the predicative auxiliary – in East Baltic and, in light of Balto-Slavic comparative evidence, is diachronically expected to have had unstressed variant forms. As a matter of fact, we came across unstressed forms of *būti* in section 2: the auxiliary verb-forms which together with the supine constituted the source formation of the subjunctive mood in East Baltic were in all likelihood clitic, unstressed forms of the copula. It is thus very probable that short 3SUBJ. forms came up in *būty* > *būt* first and that the pattern of *būti* was later generalised and extended to other verbs so that their short 3SUBJ. forms were modelled in analogy with *būt*. The development of 3SUBJ. *būty* to *būt* would accordingly have taken place, when the form occurred in unstressed adnominal position, i. e. in contexts where it constituted a predicative expression together with a nominal form immediately following it. Such contexts are, indeed, attested in the dialect records of the 19thth and 20th century, cf. (19) for examples from three East Aukštaitian varieties:

- (19) predicative *būt* in adnominal position
- (19a) East Aukštaitian near Biržai, ca. 1850 (cf. Specht 1922, 85)
kad jī ir biesas but pagavęs [...]
 ‘Even if the devil had got (hold of) it [...]
- (19b) East Aukštaitian of Buivydžiai near Vilnius, ca. 1900 (cf. Gauthiot 1903, 72)
kad būt nie-žadėjīs tāi būt nie-pa-láidīs
 ‘car s’il ne s’était pas engagé, on ne l’aurait pas lâché’
 but also
ja’igo būtū vīlkies pí’na, ta’tadū su-gič’a’
 ‘s’il y avait du lait de louve, alors je guérirais’
- (19c) East Aukštaitian of Lazūnai, ca. 1955 (cf. Senkus 1959, 221)
kad būt radnickai [...]
 ‘If there were relatives [...]

In (19a) the short 3SUBJ. *but* (with an unexplained short vowel) forms a predicative expression together with NOM.SG.M.PTCP.PRET. *pagavęs*, in (19b) *būt* constitutes such an expression with NOM.SG.M. *nie-žadėjīs*, and in (20c) *būt*

is construed with NOM.PL.M. *radnickai*. Given these findings, it seems likely that 3SUBJ. *búty* > *bút* came up in such contexts.

In any case, 2SG.SUBJ. *sùktai* mentioned by Schleicher (1856, 229) indicates that short 3SUBJ. forms were already in use in the middle of the 19th century, because 2SG.SUBJ. *sùktai* must have been modelled on a short 3SUBJ. *sùkt* as discussed above. Confirmation of this assumption can be found in the fact that Baranowski's collection of Lithuanian texts from around 1850 (as per Specht 1920; 1922) features several short 3SUBJ. forms such as *nu-něšt*, *ne-pa-lik̃t*, *ap-si-iĩnt*, *nu-piřkt* etc. This implies that by the middle of the 19th century the analogical generalisation of the 3SUBJ. type *bút* had already come to an end in some dialects, which raises the question if there is any further evidence that could support the presumption made above that the short 3SUBJ. forms came up in the copula first. Such evidence is, indeed, provided by the observation that between the middle of the 19th century and the beginning of the 20th century *búti* is the only verb with a short 3SUBJ. form in many dialects, especially West Aukštaitian, as the data in (20) show (cf. also Fraenkel 1950, 115).

(20) dialects with short 3SUBJ. forms of *búti*

(20a) West Aukštaitian

between Nemunas and Ariogala	3SUBJ. <i>-tu</i> but 1× <i>būt</i> and 1× <i>léist</i> , cf. also 2× <i>mūs</i> (Specht 1922, 406)
between Krakės near Kėdainiai and Joniškis	3SUBJ. <i>-tu</i> but 1× <i>būt</i> (Specht 1922, 374)
between Šiauliai and Ariogala	3SUBJ. <i>-tu</i> but 2× <i>būt</i> alongside <i>būtu</i> (Specht 1922, 435)
Garliava, near Kaunas	'Die 3. sg. opt. stets auf <i>-tū</i> , nur <i>bút</i> neben häufigerem <i>būtū</i> ' (Brugmann 1882, 316)
Matzutkehmen (Wellenhausen) near Goldap, on Šešupė	'Zu bemerken ist, dass das <i>-u</i> der 3. optat. ausfallen kann: <i>būt</i> 6.8.25 neben <i>liktu</i> 3.5.11' (Doritsch 1911, xlii)
Kepurdeggen (Kühlberg, now Łysogóra), near Goldap and Budweitschen	'Der Optativ hat die Endungen <i>czau</i> , <i>tum</i> , <i>tū</i> (aber häufig <i>bút</i>)' (Capeller 1915, 116)

(20b) Žemaitian

between Raseiniai and Telšiai	3SUBJ. <i>-tu</i> and <i>-tum</i> but <i>bút</i> , <i>būt</i> (Specht 1922, 481)
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In light of the fact that in most dialects the overwhelming majority of the 3SUBJ. forms reflect the expected word-final $-y\#$ and the only short 3SUBJ. form lacking a reflex of this vowel is the 3SUBJ. copula form $b\acute{u}t$, $b\tilde{u}t$ (with metatony in monosyllables), $b\grave{u}t$ (with an unclear short vowel),¹² it is most naturally concluded that $b\acute{u}ty > b\acute{u}t$ was the first 3SUBJ. form to have lost the final $-y\#$, and that the other short forms were created in analogy with it.

This is corroborated by the fact that in Kritijonas Donelaitis' corpus of writings dating from the middle of the 18th century and written in an essentially West Aukštaitian idiom, $b\acute{u}ti$ is the *only* verb with a short 3SUBJ. Our survey of Donelaitis' poetical works (the *Metai*, fragments of the *Metai* and narrative poems according to the edition provided by Vaicekauskas 2015–2019) has revealed that all in all 82 3SUBJ. forms are attested in the texts.¹³ 73 of these are long forms ($12 \times b\acute{u}tu$, the rest from other verbs), and 9 are short forms. *All* short forms are exclusively from $b\acute{u}ti$ (in the spelling variants $\langle bu't \rangle$, $\langle b\acute{u}t' \rangle$ and $\langle b\grave{u}t' \rangle$). One may, therefore, conclude that in Donelaitis's time and before there were no short 3SUBJ. forms apart from the short 3SUBJ. form of the copula, and that consequently the short 3SUBJ. forms of other verbs came into being after the time of creation of Donelaitis's works, i. e. between the second half of the 18th century and the first half of the 19th century.

It is of interest to our investigation that Donelaitis's corpus does not only attest the variation of 3SUBJ. $b\acute{u}ty \sim b\acute{u}t$ but also features the variation of GEN.PL. $m\acute{u}sy$ ($77 \times$) $\sim m\acute{u}s$ ($27 \times$) and $j\acute{u}sy$ ($27 \times$) $\sim j\acute{u}s$ ($7 \times$) (with varying spellings). It must, therefore, be concluded that the loss of final $-y\#$ in the short variants of the third person subjunctive form and the genitive plural form of the first and second person had already taken place by Donelaitis's time, i. e. that it had been lost by the middle of the 18th century. While we may thus determine the *terminus ante quem* of the loss of $-y\#$, the exact conditioning and dating thereof still remain to be established in more detail.

¹² Lith dialectal 3SUBJ. $b\grave{u}t$ that features an unexplained short root vowel has an exact match in Latvian, namely Latv 3SUBJ. *but* attested for Latvian dialects (cf. Endzeliņ 1923, 99, 691). It could be the case that the forms reflect a Proto-East-Baltic development, but this possibility needs further investigation.

¹³ Our analyses were considerably helped by *CorDon*, a digital online corpus of Kris-tijonas Donelaitis's works (accessible at <https://titus.fkidg1.uni-frankfurt.de/cordon/menu/eng/start.html>; last accessed 2022-02-19) that complements the printed edition (Vaicekauskas 2015–2019) very well.

Comparative evidence from Latvian suggests that the loss may not be an inner-Lithuanian innovation but rather a common innovation shared by both East Baltic languages alike. Endzelin (1923, 378, 434, 447, 691, 755f., 817f.) mentions short 3SUBJ. *bût* beside *bûtu* in the High Latvian dialect of Lizums and as a variant of *bûtu* in several dainas (BW 198, 286, 1464, 2595, 3115, 3801, 4510, 22448, always spelt <*buht'*> in the edition) and comments on the GEN.PL. forms *mūs*, *jūs* in the Central Latvian dialect of Blīdene which usually retains final vowels. Similarly, the GEN.PL. of the first and second person pronoun has a short variant *myus*, *jius* in varieties of High Latvian, especially Latgalian (cf. Nau 2011, 35).

Unexpected short variants of the 3SUBJ. form of the copula and the GEN.PL. form of the first and second person pronouns are thus also encountered in Latvian, and it is most easily assumed that they reflect the same loss of final *-uñ# that led to the emergence of their Lithuanian counterparts 3SUBJ. *būt*, GEN.PL. *mūs*, *jūs*. One may, of course, contend that the Latvian forms could have come into being independently of the Lithuanian forms so that they do not reflect the same development. This assumption, however, meets with considerable difficulty. Firstly, it is rather uneconomical in that it presupposes two independent developments where only one would suffice to account for the evidence. Secondly, a sporadic loss of -u# < *-uñ# in Latvian is quite unexpected and unlikely given the fact that -u# is the most stable of the short final vowels and the only one that is usually retained in Latvian (cf. Endzelin 1923, 49–50). Such a loss would, therefore, have to be a highly conditioned sound change calling for thorough substantiation, but it seems that the evidence does not allow for establishing such an inner-Latvian loss of -u#. Thirdly, the exact parallelism between the Latvian and Lithuanian situation makes it rather questionable to presuppose independent developments in the two languages. It is a noteworthy fact that the unexpected short variant forms lacking a reflex of the final *-uñ# are essentially the same in both languages, namely the 3SUBJ. of the copula (Lith *būt*, Latv *bût*) and the GEN.PL. of the first and second person pronoun (Lith *mūs*, *jūs*, Latv *mūs/jūs*, *myus/jius*). One would have to reckon with a remarkable coincidence if one wanted to assume that these specific short forms came into being in the two languages through independent developments. On the contrary, they receive a natural and economical explanation if they are regarded as reflecting a common East Baltic development, because in this case they can be accounted for through only one prehistoric sound change and can be conceived of as dialectal relic

formations stemming from more original shortened contextual variants that stood in complementary distribution with their corresponding long forms. The comparison of the Lithuanian and Latvian evidence thus indicates that the loss of PEbalt *-uñ# was already a Proto-East-Baltic development. The exact phonetic or phonological conditions of this loss may, therefore, have to be sought in the prosodic makeup of Proto-East-Baltic. Such a comprehensive diachronic investigation, however, is beyond the scope of the present paper and must remain a task for future research.

5. Conclusion

This article has attempted to shed light on the diachrony of the subjunctive mood in the two East Baltic languages Latvian and Lithuanian. A general introduction into the topic was given in section 1. Here, the general East Baltic subjunctive and the morphologically as well as semantically related Latvian debitive were introduced as infinitive-based moods, i. e. finite modal formations of the verb going back to infinite nominal verb-forms. The relevant infinitival forms were identified as: (a) the supine in Proto-BSl *-tuñ > OCS *-tŭ*, OPr *-tun*, *-ton*, Lith *-tu*, Latv *-tu* which underlies the subjunctive, and (b) the infinitive in Proto-BSl *-tĩ > OCS *-ti*, OPr *-t*, Lith *-t(i)*, Latv *-t* which underlies the debitive and the heteroclitc 1sg. forms of the subjunctive in Lithuanian (section 3). It was demonstrated by the juxtaposition of an Old Lithuanian and Old Latvian subjunctive paradigm on the one side and a Modern Standard Lithuanian and Latvian subjunctive paradigm on the other that originally (a) the third person of the subjunctive was constituted by the bare supine, while (b) the other forms were constituted by the supine and a clitic auxiliary. The only exception to this rule is a heteroclitc 1sg. form in Lithuanian that calls for a different explanation (given section 3). The introduction was closed with a brief prospect of the topics and discussion in the following sections.

Section 2 dealt with the morphology and etymology of the clitic auxiliary which together with the supine constituted the source construction of the subjunctive. It was shown that the supine was originally univerbated with clitic forms of the copula *bŭti*. Comparative evidence from Baltic and Slavic indicates that these clitic forms were of two kinds: (a) present tense forms and (b) past tense forms. This suggests that originally there were two distinct subjunctive constructions in East Baltic, namely one construed with the supine and present tense forms of the copula and one constituted by the supine

and past tense forms of the copula. In the individual languages, these two constructions were later conflated and merged into one subjunctive paradigm which resulted in a mirror image distribution of the forms in Lithuanian and Latvian: in Lithuanian past tense forms of the copula were used for the singular and present tense forms were used for the plural and dual, while in Latvian present tense forms were used for the singular and past tense forms were used for the plural of the newly arisen subjunctive paradigm.

The discussion in section 3 was dedicated to the explanation of the heteroclitic 1SG. subjunctive form of the type *būčia* in Lithuanian. It was demonstrated that this essentially reflects the same construction as the Latvian debitive. Both formations go back to a univerbation of the infinitive with a ditropic clitic PEbalt **já* that preceded the infinitive in the case of the debitive and followed it in the case of the 1SG. subjunctive form in Lithuanian: **já*=*'búti* > Latv *jà*=*būt* as against **'búti*=*já* > Lith *būčia*. Forms like *būčia* were thus most probably not first person singular forms originally and came to be used as such forms only secondarily. The occurrence of dialectal Lithuanian 1SG. subjunctive forms such as *būčiau*, *būčiu* indicates that, prior to being used as a first person form, *būčia* and similar forms were reanalysed as third person forms, and forms like *būčiau*, *būčiu* were analogically created on the basis of these forms following the pattern of forms like 3PRES. *láuikia*, 1SG. PRET. *láuikiau*, 1SG.PRES. *láuikiu*. While the ultimate origin of 1SG. subjunctive forms such as *būčia* from an infinitival construction can thus be established, it still remains unclear why and how exactly these forms came to be used as first person singular subjunctive forms.

Eventually, section 4 saw a discussion of innovated subjunctive paradigms with forms like 1SG. *eitaũ*, 2SG. *sùktai*, *eitaĩ* and short 3SG. forms like *bút*, *(at-)eĩt* attested in modern Lithuanian dialects, especially South and East Aukštaitian. It was shown that these paradigms reflect the effects of regular sound change and proportional analogy in these dialects. All short 3SG. subjunctive forms are likely to have followed the pattern of the copula *búty* > *bút* which was the first to have regularly lost the final *-y#* in unstressed adnominal position, where the loss of *-y#* finds supportive evidence in the pronominal GEN.PL. forms *músy* > *mús*, *júsy* > *jús*. 1SG. subjunctive forms of the type *eitaũ* and 2SG. forms like *sùktai*, *eitaĩ* are then best conceived of as secondary analogical formations based on the short 3SUBJ. forms of the type *bút*, *(at-)eĩt* following the pattern of the preterite, where the third person forms like *ẽjo* > *ẽj*, *jójo* > *jój* had regularly lost their final *-o* in South and East Aukštaitian dialects.

The exact conditioning and dating of the loss of *-u#* need further research and substantiation, but comparative evidence from Latvian suggests that it might have been of Proto-East-Baltic date already. Our findings presented in this paper do thus not only provide new insights into the multi-faceted evolution and development of the East Baltic subjunctive mood as such but also encourage further in-depth research into the common phonological and morphological prehistory of the East Baltic languages.

IŽVALGOS APIE RYTŲ BALTŲ SUBJUNKTYVO DIACHRONIJĄ

Santrauka

Straipsniu siekiama aptarti subjunktivo (taip pat vadinamo optatyvu ar kondicionaliu) diachroniją rytų baltų – lietuvių ir latvių – kalbose. Straipsnyje parodoma, kaip abiejų kalbų – ypač senosios lietuvių, senosios latvių bei dabartinės lietuvių kalbos tarmių – subjunktivo paradigmos atspindi pirmines konstrukcijas, paremtas infinitinėmis veiksmažodžio formomis: supynu (pvz., lie. *dúo-tų*, la. *duô-tu*, plg. pr. *dā-tun*, s. sl. *da-tŭ*) ir bendratimi (pvz., lie. *dúo-ti*, la. *duô-t*, plg. pr. *dā-t*, s. sl. *da-ti*). Sistemiškai palyginus baltų ir slavų kalbų duomenis, matyti, kad dauguma lietuvių ir latvių subjunktivo paradigmos formų yra kilusios iš dviejų rytų baltų prokalbės konstrukcijų, kurių abi susidėjo iš atitinkamo veiksmažodžio supyno ir jungties (liet. *būti*, la. *būt*) formų: (a) supynas susiliejo su jungties esamojo laiko formomis, (b) supynas susiliejo su jungties būtojo laiko formomis. Viena reikšminga išimtis – lietuvių kalbos heteroklitinė 1 sg. forma, kilusi iš tos pačios konstrukcijos kaip ir latvių debityvas. Likusi straipsnio dalis skiriama antrinių subjunktivo formų atsiradimui dabartinėse lietuvių tarmėse (ypač aukštaičių šnektoms pietų ir rytų Lietuvoje). Nagrinėjama, kiek šios formos atspindi reguliarių diachroninių procesų – (proporcinės) analogijos ir garsų kitimo – sąveiką. Pristatomos išvados yra svarbios bendrai abiejų rytų baltų kalbų morfologijos ir fonologijos priešistorėi.

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