

Marking of subjects and objects in Lithuanian non-finite clauses: A typological and diachronic perspective

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Abstract

This article describes non-standard case-marking patterns attested in non-finite clauses headed by participles and infinitive in Lithuanian. Lithuanian is compared with other languages of the same geographical area as well as with typologically remote languages showing similar patterns. “Non-canonical” marking of subject and object in Lithuanian non-finite clauses is argued to be an instance of “complementizing” and “associating” case-marking as postulated for Australian languages. From a historical perspective Lithuanian constructions with “non-canonical” marking of core arguments in non-finite clauses are seen to show convergent morphosyntactic development of patterns originating from different sources.

Keywords: Australian, Baltic linguistic area, case, clause combining, diachrony, finiteness, grammatical relations, inflection, Lithuanian, switch reference, syntax, Uto-Aztecan

1. Introduction

Several patterns of “non-canonical” marking of subjects and objects are attested in non-finite (participial and infinitival) clauses in Lithuanian, a language of the Baltic branch of Indo-European. In participial constructions, the subject appears in Accusative or Dative instead of the normal Nominative, the choice of case being dependent on the syntactic status of the whole participial clause: in sentential complements the subject is marked Accusative, while in sentential adjuncts it appears in the Dative. On the other hand, in a subtype of infinitival purpose clauses sharing their subject with that of the matrix clause, the object is marked Dative or Genitive (the latter option is attested when the matrix verb denotes motion), instead of the Accusative appearing in finite and other kinds of infinitival clauses.

In this article, I first compare these Lithuanian constructions to similar structures (i) in languages related to Lithuanian in terms of genetic origin or areal proximity and (ii) in languages elsewhere in the world. This crosslinguistic perspective allows us not only to reveal similarities and differences between constructions found in Lithuanian and their counterparts elsewhere and to suggest a typologically-informed analysis of the Lithuanian constructions, but also to enrich the typology of non-finite clauses by novel data, since Lithuanian has not been paid much attention to in typological work on clause-combining and in crosslinguistic studies of case-marking.

Second, I discuss the historical development of the Lithuanian participial and infinitival constructions with “non-canonical” marking of subjects and objects and argue that the evolution of both types of construction consisted in various processes of convergence concerning constituency and morphosyntax affecting structures that were originally fairly different. Thus the Lithuanian data discussed in this article sheds light on the diachronic syntax of non-finite clauses.

In Section 2 I briefly introduce the rich system of non-finite verbal forms attested in Lithuanian; in Section 3 I discuss the “non-canonical” case-marking patterns in participial clauses, and in Section 4 I turn to infinitival clauses. Section 5 contains a summary and a concluding discussion.

2. Non-finite verbal forms in Lithuanian

The Lithuanian system of non-finite verbal forms is quite elaborate in comparison to that in other modern “Standard Average European” languages. It includes an Infinitive (suffix *-ti*), a whole system of Participles (see below), a Converb denoting simultaneity (suffix *-dam-* + nominal agreement with the matrix subject), and a Debitive Participle (‘such that must be V-ed’, suffix *-tin-*). Only the Infinitive and the Participles will be discussed here, because only these forms occur in constructions where case-marking of arguments deviates from the canonical finite pattern.

Participles in Lithuanian distinguish such categories as tense (Present, Simple Past, Habitual Past, Future), voice (Active and Passive), and presence vs. absence of agreement in the nominal categories of case, number, and gender. For a detailed overview of the Lithuanian participles see Klimas (1987), Ambrazas (ed.) (1997: 326–372), Wiemer (2001), and Arkadiev (2012: 286–291). Table 1 shows the system of Participles based on the transitive verb *rašyti* ‘write’. The typologically peculiar distinction between agreeing and non-agreeing Participles (called “gerunds” by traditional grammars) is relevant only for the Active Participles. For agreeing Participles, Nominative Singular forms of Masculine and Feminine genders are given.

Table 1. System of participles in Lithuanian

<i>rašyti</i> 'write'	Active		Passive
	Agreeing	Non-agreeing	
Present	<i>rašąs</i> (M), <i>rašanti</i> (F)	<i>rašant</i>	<i>rašomas</i>
Preterite	<i>rašęs</i> (M), <i>rašiusi</i> (F)	<i>rašius</i>	<i>rašytas</i>
Habitual Past	<i>rašydavęs</i> (M), <i>rašydavusi</i> (F)	<i>rašydavus</i>	—
Future	<i>rašysiąs</i> (M), <i>rašysianti</i> (F)	<i>rašysiant</i>	<i>rašysimas</i>

Participles in Lithuanian are fairly polyfunctional and appear in a variety of syntactic environments:

- (i) as heads of non-finite relative clauses (attributive function);
 - (ii) as heads of non-finite adjunct clauses (adverbial function; see, e.g., Greenberg & Lavine 2006);
 - (iii) as heads of non-finite complement clauses with diverse matrix predicates (see Gronemeyer & Usonienė 2001, Arkadiev 2012);
 - (iv) as components of a number of periphrastic verbal forms, such as Perfect and Passive (see Geniušienė & Nedjalkov 1988, Sližienė 1995);
 - (v) as independent predicates in evidential function (see, e.g., Wiemer 2006).
- For the present purpose only the functions listed under (ii) and (iii) will be discussed, because these are the domains where the non-trivial case-marking patterns at issue emerge. (On a type of “non-canonical” marking of core arguments in a variety of evidential participial constructions see, e.g., Lavine 2010.)

The Infinitive in Lithuanian is less polyfunctional than the Participles. Being tenseless it mostly appears as the head of morphosyntactically reduced or deranked clauses (Stassen 1985, Lehmann 1988, Cristofaro 2003) whose temporal reference is fixed relative to that of the main predicate and whose subject reference is controlled by some argument of the matrix sentence (though infinitival clauses can have their own subjects, see Section 4.1). Two main classes of infinitival clauses can be distinguished:

- (i) complement infinitival clauses selected by verbs denoting volition (*norėti* ‘want’), modality (*galėti* ‘can’), manipulation (*leisti* ‘let’, *prašyti* ‘ask’), phase (*pradėti* ‘begin’), and some others;
- (ii) adjunct infinitive clauses denoting goal or purpose and potentially co-occurring with any kind of semantically appropriate matrix predicates.

Other kinds of infinitival constructions in Lithuanian, such as subject infinitive clauses and “independent” infinitive constructions conveying particular modal force, will not concern us here.

3. “Non-canonical” subject marking in participial clauses

3.1. Description of the Lithuanian pattern

In the Lithuanian participial constructions functioning as clausal complements and adjuncts the distinction between agreeing and non-agreeing participles plays a role reminiscent of a switch-reference mechanism (see Haiman & Munro (eds.) 1983, the classic treatment of switch-reference): agreement is present only when the phonologically null subject of the participle is referentially identical to (or controlled by) the nominative subject of the main clause, otherwise a non-agreeing participle is used (cf. Nedjalkov 1995: 113; see Arkadiev 2012: 299–301 for a more detailed discussion). Example (1) shows the agreeing participles in adjunct (1a) and complement (1b) positions, respectively, their subjects being null under identity with the matrix subject. Example (2a) shows the different-subject adjunct non-agreeing participial construction with an overt Dative subject, while example (2b) features Accusative marking of the overt subject in the complement non-agreeing participial construction.

- (1) a. [\emptyset_i *Paraš-ęs* *laišk-q*], *Jon-as_i*
 write-PST.PA.NOM.SG.M letter-ACC.SG J.-NOM.SG
nuėj-o *į* *pašt-q*.
 go-PST(3) in post-ACC.SG
 ‘Having written a letter, Jonas went to the post-office.’
- b. *Jon-as_i* *sak-ė* [\emptyset_i *paraš-ęs*
 J.-NOM.SG say-PST(3) write-PST.PA.NOM.SG.M
laišk-q].
 letter-ACC.SG
 ‘Jonas said that he had written a letter.’
- (2) a. [*Jon-ui* *paraš-ius* *laišk-q*], *Jurg-a* *nuėj-o*
 J.-DAT.SG write-PST.PA letter-ACC.SG J.-NOM.SG go-PST(3)
į *pašt-q*.
 in post-ACC.SG
 ‘Jonas having written a letter, Jurga went to the post-office.’
- b. *Jon-as* *sak-ė* [*Jurg-q* *paraš-ius* *laišk-q*].
 J.-NOM.SG say-PST(3) J.-ACC.SG write-PST.PA letter-ACC.SG
 ‘Jonas said that Jurga had written a letter.’

As examples (2a) and (2b) show, the major overt structural difference between different-subject participial complements and adjuncts lies in the case-marking of their overt subjects: with complements, the subject is marked Accusative (2b), whereas with adjuncts it is in the Dative (2a).

The syntactic structure of adjunct clauses like (2a), in particular the analysis of the Dative subject as belonging with the participial clause, does not seem

controversial. However, a legitimate question can be raised concerning the validity of the bracketing in (2b): what if the Accusative NP is in fact a constituent of the matrix clause, so that we are actually dealing here with a construction involving “raising” of the subject of the embedded participial clause to the position of the object of the matrix clause, where it is marked Accusative in conformance with the “canonical” pattern (on “raising” see Postal 1974, Davies & Dubinsky 2004, and Serdobolskaya 2009), cf. the putative structure in (3).

- (3) [matrix clause V → accusative [participial clause NP_{subject} V_{participle}]]
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However, there is ample evidence (see Arkadiev 2012 for details, argumentation, and a formal analysis) that with the majority of predicates taking participial complements (with the exception of verbs of perception like *matyti* ‘see’ and several other predicates such as *įtarti* ‘suspect’, see below), the Accusative NP belongs to the embedded non-finite clause and gets its Accusative case there. For instance, adverbials taking scope in the dependent (participial) clause can occupy the position linearly preceding the Accusative subject, cf. (4). That the Accusative case of the subject of the participial clause is a property of the construction itself, and is not assigned by the matrix verb, is demonstrated by examples such as (5), where the matrix predicate is an impersonal passive unable to assign Accusative to the object.

- (4) *Sak-iau [rytoj Jurg-į atvyk-si-ant].*
 say-PST.1SG tomorrow J.-ACC.SG arrive-FUT-PA
 ‘I said that Jurgis would arrive tomorrow.’ (Arkadiev 2012: 320)
- (5) ... *kai man-o-m-a [privaiči-q iniciatyv-q*
 when think-PRS-PP-N private-ACC.SG.F initiative-ACC.SG
šal-ies ūki-ui bū-si-ant
 country-GEN.SG economy-DAT.SG be-FUT-PA
veiksmingesn-ę už valdišk-q].
 more.effective-ACC.SG.F than state-ACC.SG.F
 ‘... when it is thought that private initiative will be more effective for the country’s economy than the state one.’ (*Lietuvių kalbos tekstynas (LKT)*, corpus of the contemporary Lithuanian language, compiled at Vytauto Didžiojo Universitetas in Kaunas, <http://tekstynas.vdu.lt/>, quoted after Arkadiev 2012: 325)

Therefore, the correct syntactic structure of examples like (2b) is the one in (6) with the Accusative subject in the participial clause, and not the raising structure in (3).

- (6) [matrix clause V [participial clause NP_{subject-accusative} V_{participle}]]

The raising analysis, as shown in Arkadiev (2012), is not feasible for participial complements of verbs of perception, either. With these verbs the Accusative NP corresponding to the subject of the embedded clause behaves in all respects like a genuine direct object of the matrix clause, belonging to it not only morphosyntactically, but semantically as well. For example, in contrast to (4), with verbs of perception it is only possible to put the adverbial taking scope in the participial complement after the Accusative NP:

- (7) a. *Mat-au Jurg-i [lėtai vaikščioj-a-nt park-e].*
 see-PRS.1SG J.-ACC.SG slowly walk-PRS-PA park-LOC.SG
 ‘I see Jurgis slowly walking in the park.’ (Arkadiev 2012: 316)
- b. **Mat-au lėtai Jurg-i [vaikščioj-a-nt park-e].*
 see-PRS.1SG slowly J.-ACC.SG walk-PRS-PA park-LOC.SG
 Intended meaning as in (7a) (Arkadiev 2012: 316)

That the Accusative NP in examples like (7a) is an object of the matrix verb, rather than originating in the participial complement and being raised, is supported by the possibility of omitting the participle while retaining the grammatical and semantic relations in the sentence (8a). This is impossible with participial complements with verbs of speech and thought (8b).

- (8) a. *Mač-iau tėv-q parein-a-nt.*
 see-PST.1SG father-ACC.SG come.back-PRS-PA
 → *Mačiau tėvq.*
 ‘I saw [my] father coming back.’ → ‘I saw [my] father.’
 (Arkadiev 2012: 315)
- b. *Sak-iau tėv-q gerai gyven-a-nt.*
 say-PST.1SG father-ACC.SG well live-PRS-PA
 vs. **Sakiau tėvq*
 ‘I said [my] father lived well.’ vs. *‘I said my father.’
 (Arkadiev 2012: 316)

Therefore, a raising analysis like in (3) does not seem valid for examples like (7a) and (8a), either. Their structure, as argued in Arkadiev (2012: 313–317), involves a normal transitive clause with an Accusative direct object, to which a participial clause with null subject coreferent with that object is adjoined, see structure in (9).

- (9) [matrix clause V NP_{object-accusative} [participial clause \emptyset _{subject} V_{participle}]]

Thus, setting aside the minor pattern in (7)–(9), it is safe to conclude that the internal syntactic structures of complement and adjunct participial constructions in Lithuanian are parallel with respect to such features as (i) the correlation between presence or absence of agreement in case, number, and gender

and sharing or non-sharing of the (Nominative) subject with the matrix clause;
 (ii) clause-internal non-nominative case-assignment to the overt subject.

3.2. Crosslinguistic comparison

Let us first look at the languages closest to Lithuanian in genetic and/or geographic affinity. Both Latvian and Latgalian, Lithuanian's closest relatives, and the Balto-Finnic languages Estonian, Finnish, and Livonian have constructions in certain respects similar to the Lithuanian patterns discussed above.

3.2.1. *Latvian.* Latvian is at first sight in all relevant respects parallel to Lithuanian, possessing an adjunct construction with a Dative-marked subject (10a) and a complement construction with an Accusative-marked subject (10b), both involving non-agreeing Participles.

- (10) a. [**Pēdēj-am** **es-ot** *atva[inājum-ā]*, *viņa*
 latter-DAT.SG.M be-PRS.PA leave-LOC.SG his
darb-u *veic-a* *Cvinger-s.*
 work-ACC.SG do-PST.3 C.-NOM.SG
 'The latter being on leave, his work was done by Cvingers.'
 (Eiche 1983: 54)
- b. *Iedomāj-o-s* [**Solvūt-u** **brien-am**]
 imagine.PST-1SG-RFL S.-ACC.SG wade-PRS.PRT
 'I imagined Solvita wading.' (Eiche 1983: 43)

However, Latvian differs from Lithuanian in the productivity and functional diversity of the participial constructions of the relevant kind. While in Lithuanian Participles of all tenses may be used both in complement and adjunct constructions, giving rise to various temporal interpretations of the embedded clause with respect to the matrix (Arkadiev 2012: 295–297), in Latvian the range of Participles able to appear in such constructions is very restricted. In the different-subject adjunct construction, only the Present Active Participle in *-ot* denoting an event simultaneous with that of the main clause appears. The only form productively used in the participial complement construction is the Participle in *-am*, historically the Present Passive Participle, which has lost its Passive orientation and no longer distinguishes tense. The range of predicates able to combine with the participial complement construction in Latvian is much more restricted than in Lithuanian, and mostly includes verbs of perception (Eiche 1983: 40–49), whereas in Lithuanian this class contains numerous verbs denoting speech and cognition (Arkadiev 2012: 291–295). Thus, in Latvian examples corresponding to the Lithuanian participial complements with verbs of speech (2b) are judged ungrammatical or very unnatural (11a), and a finite complement clause must be used instead (11b).

- (11) a. **Tu teic-i sav-u mās-u*
 2SG.NOM say-PRS.2SG RFL.POSS-ACC.SG sister-ACC.SG
rīt atbrauc-am.
 tomorrow arrive-PRS.PRT
 b. *Tu teic-i, ka tav-a mās-a*
 2SG.NOM say-PRS.2SG that your-NOM.SG.F sister-NOM.SG
atbrauk-s rīt.
 arrive-FUT(3) tomorrow
 ‘You are saying that your sister will arrive tomorrow.’

The test on adverbial position suggests that the Latvian participial complements are more similar to the Lithuanian constructions with perception verbs in (7) to (9), where the Accusative NP is the object of the matrix verb rather than the subject of the participial clause:

- (12) a. *Es redz-ēj-u Kārl-i lēni pārej-am pāri*
 I.NOM see-PST-1SG K.-ACC.SG slowly cross-PRS.PRT across
iel-ai.
 street-DAT.SG
 ‘I saw Karlis slowly crossing the street.’
 b. **Es redz-ēj-u lēni Kārl-i pārej-am pāri*
 I.NOM see-PST-1SG slowly K.-ACC.SG cross-PRS.PRT across
iel-ai.
 street-DAT.SG
 Intended meaning as in (12a)

The analysis of the Accusative NP in the Latvian constructions with participial complements of perception verbs as a direct object of the matrix clause is supported by this NP’s behaviour in the so called Debitive construction expressing necessity, which requires its subject to appear in the Dative and its object (unless it is a 1st or 2nd person pronoun) in the Nominative (see Nau 1998: 39–40, Holvoet 2001: 9–62). When a Debitive form of a perception verb with a participial complement is used, the “logical subject” of the embedded clause is normally encoded by the Nominative, parallel to regular direct objects:

- (13) a. *Es dzird-ēj-u Jān-i dzied-am.*
 I.NOM hear-PST-1SG J.-ACC.SG sing-PRS.PRT
 ‘I heard Janis sing.’
 b. *Man bij-a jā-dzird Jān-is / ?Jān-i*
 I.DAT AUX.PST-3 DEB-hear J.-NOM.SG / J.-ACC.SG
dzied-am.
 sing-PRS.PRT
 ‘I had to hear Janis sing.’

In same-subject environments Latvian, like Lithuanian, uses the agreeing Participles in complement constructions:

- (14) *Pēkšņi jut-o-s [līdz nespēk-am*
suddenly feel.PST-1SG-RFL till exhaustion-DAT.SG
nogur-us-ī].
tired-PST.PA-NOM.SG.F
'Suddenly I felt totally exhausted.' (Eiche 1983: 48)

However, while in Lithuanian the use of non-agreeing Participles in same-subject environments is consistently banned (at least in the standard language), in Latvian such Participles have made their way into the same-subject adjunct constructions denoting simultaneity, where they are used on a par with the agreeing Converb in *-dam-*. Compare (15) with an agreeing Participle in the same-subject adjunct denoting anteriority, and (16a) and (16b) with agreeing Converb and non-agreeing Present Participle (already seen in (10)), respectively.

- (15) [*Paņēm-is Klint-u pie rok-as], Olav-s*
take-PST.PA.NOM.SG.M K.-ACC.SG to arm-GEN.SG O.-NOM.SG
ved t-o pie liel-ā spoguļ-a.
lead.PRS.3 that-ACC.SG to big-GEN.SG.M.DEF mirror-GEN.SG
'Taking (lit. having taken) Klinta by the arm, Olavs leads her to the big mirror.' (Eiche 1983: 53)
- (16) a. *Vien-s iet pa priekšu, [spēlē-dam-s*
one-NOM.SG.M go.PRS.3 in.front play-CNV-SG.M
tād-u maz-u akordeoniņ-u].
such-ACC.SG small-ACC.SG accordion-ACC.SG
'One takes the lead, playing on such a small accordion.' (Nau 1998: 45)
- b. *Mēs vienkārši tā vienmēr priecāj-am-ies*
we.NOM simply so always be.delighted-PRS.1PL-RFL
[ienāk-ot iekšā].
come.in-PRS.PA in
'We are always simply so delighted when coming in here.' (Nau 1998: 45)

3.2.2. *Latgalian.* In Latgalian (also known as one of the varieties of the High Latvian dialect) the situation is more or less similar to Latvian (Nau 2011: 93–94). Different-subject participial complement clauses are mostly formed with the Present (Passive) Participle in *-am* (17a), although in earlier texts the Present Active Participle cognate to the Lithuanian one was used (17b). Both

constructions feature Accusative subjects and are confined to matrix verbs of perception and feeling.

- (17) a. *Na-jiut-u* [*t-ū* “*blog-u*” *as-am*
 NEG-feel-PRS.1SG this-ACC.SG.M blog-ACC.SG be-PRS.PRT
dzeiv-u].
 alive-ACC.SG.M
 ‘I don’t feel that this blog is alive.’ (Nau 2011: 94, an example
 from a modern text)
- b. *Atrod-a ti* [*barn-u,* *pujszkinieni-u,*
 find.PST-3 there child-ACC.SG little.boy-ACC.SG
ziam-ia gul-ejt’].
 ground-LOC.SG sleep-PRS.PA
 ‘There they found a child, a little boy, lying on the ground.’ (Nau
 2011: 93, an example from traditional folklore)

Participial adjunct constructions in Latgalian are similar to those of Latvian, in particular in that non-agreeing Participles can appear in same-subject environments:

- (18) ... [*atbolst-ūt* *latgalisk-ū* *Latvej-u*],
 support-PRS.PA Latgalian-ACC.SG.DEF Latvia-ACC.SG
mes nūturē-s-im i saglobuo-s-im latvysk-u
 we.NOM support-FUT-1PL and preserve-FUT-1PL Latvian-ACC.SG
Latgol-u.
 Latgalia-ACC.SG
 ‘... by supporting a Latgalian Latvia, we will support and preserve a
 Latvian Latgalia.’ (Nau 2011: 94)

Thus, the comparison between Lithuanian, on the one hand, and Latvian and Latgalian, on the other, shows that the three languages share the basic “surface” characteristics of their participial complement and adjunct constructions in that they (i) use the [\pm agreement] feature for “switch-reference” (though note that in Latvian and Latgalian this distinction has been blurred in adjunct constructions denoting simultaneity) and (ii) distinguish complements from adjuncts by the Accusative vs. Dative marking of the subject, whereas they differ (iii) in the productivity of particular constructions and (iv) in their “deeper” syntactic structure, since of the two types of Accusative-plus-Participle constructions in Lithuanian, Latvian (and probably Latgalian as well) shares only one, where the Accusative NP arguably does not belong to the participial clause at all, but rather is the regular direct object of the matrix clause.

3.2.3. *Estonian*. If we now turn to the Balto-Finnic languages, we find both similarities and differences with Lithuanian constructions (see Wälchli 2004 and Lees 2010). In Estonian, participial complements are allowed with a wide range of predicates comparable to that of Lithuanian rather than Latvian, and show non-Nominative marking on their overt subjects coinciding with the possibilities for the marking of the ordinary direct object, viz. Genitive or Partitive, the choice being dependent on semantic factors (Tamm 2009). However, the form of the Participle in Estonian is invariable (viz., Partitive Singular), regardless of whether the construction is same-subject or different-subject (19a, b).

- (19) a. *Mari arva-s [Tooma/Toomas-t raamatu-t*
M.NOM.SG think-PST.3SG T.GEN.SG/T.-PTV.SG book-PTV.SG
kirjuta-va-t.
write-PRS.PA-PTV.SG
‘Mary thought that Thomas was writing a book.’ (Tamm 2008: 1)
- b. *Heli_i tundu-s [Ø_i tule-va-t*
sound.NOM.SG seem-PST.3SG come-PRS.PA-PTV.SG
koopast.]
dungeon-ELAT
‘The sound seemed to come from a dungeon.’ (Tamm 2009: 390)

In non-finite adverbial constructions, Converb (“gerundial”) forms are used in both same-subject and different-subject constructions (Erelt (ed.) 2003: 122–123); in different-subject constructions the subject of the embedded clause is marked by the Genitive (20a); the same-subject constructions differ only in lacking their own subject, morphology of the non-finite verb being identical in both cases (20b). According to Erelt (ed. 2003: 122–123), different-subject non-finite constructions are rather restricted in their usage; in particular, the embedded verb cannot take a direct object and thus such constructions are only rarely formed on the basis of transitive verbs.¹

- (20) a. [*Päikese looju-des*] *läk-s ilm*
sun.GEN.SG set-CNV.PRS go-PST.3SG weather.NOM.SG
jaheda-ks.
cool-TRANS.SG
‘The sun setting it became cooler.’ (Erelt (ed.) 2003: 123)

1. However, Wälchli (2004: 4) gives (constructed) examples of Estonian Converb constructions based on transitive verbs and containing a direct object.

- b. *Õhtu-l* [*toa-s* *istu-des*] *mõlte-s*
 evening-ADE.SG room-INE.SG sit-CNV.PRS think-PST.3SG
ta sellete kava.
 3SG.NOM it.ALL.SG long
 ‘In the evening when sitting in the room he thought long about it.’ (Erelt (ed.) 2003: 122)

Although the non-finite forms in such constructions can inflect for tense, cf. (21a) with a Perfect Participle denoting anteriority, and voice, cf. (21b) with a Passive Participle, in fact only the Present tense Converb in *-des* shown in (20) normally admits overt subjects in the Genitive, similarly to Latvian.²

- (21) a. [*Telegrammi läbi luge-nud*] *läk-s-id ta-l*
 telegram.GEN.SG through read-PRF.PA go-PST-3PL 3-ADE
jalad nõrg-aks.
 leg.NOM.PL weak-TRANS
 ‘When he read the telegram, his legs became weak.’ (Wälchli 2004: 4)
- b. [*Üksi koju jäe-tud*], *oli poiss algul*
 alone at.home leave-PRF.PP be.PST.3SG boy.NOM.SG first
nukker.
 wistful
 ‘Left alone at home, the boy at first was wistful.’ (Wälchli 2004: 4)

3.2.4. *Finnish.* In Finnish, like in Lithuanian, the distinction between same-subject and different-subject non-finite constructions is manifested by means of agreement on the non-finite form; however, this agreement is not in case, number, and gender, but in person and number, and is implemented via possessive suffixes, cf. (22a) and (23a). However, the parallelism between Lithuanian and Finnish in the functioning of agreement on non-finite forms is still weaker, since the use of possessive agreement in Finnish is not confined to same-subject constructions, and also appears when the subject of the embedded adjunct clause is a pronoun, cf. (24). In complement clauses such agreement with the embedded subject is not found, even with pronominal subjects. The case-marking of embedded subjects is identical in adjunct and complement constructions, viz. Genitive, cf. (22b) and (23b). The complement vs. adjunct distinction is manifested by the choice of different non-finite forms: Inessive-marked Infinitive in adjunct constructions (22) and Participles (marked Genitive when different-subject) in complement constructions (23).

2. I thank Andres Karjus and Polina Oskolskaya for their help in clarifying this point.

- (22) a. [\emptyset_i **Herät-e-ssä-än**] Pekka_i oli sairas.
 wake-INF-INE-3 P.NOM.SG be.PST.3SG ill
 ‘When Pekka woke up, he was ill.’ (Karlsson 1999: 186)
- b. [**Peka-n herät-e-ssä**] Liisa lähtee
 P.-GEN.SG wake-INF-INE L.NOM.SG go.PRS.3SG
 tö-i-hin.
 work-PL-ILL
 ‘When Pekka wakes, Liisa goes to work.’ (Karlsson 1999: 187)
- (23) a. Tiedä-n_i [\emptyset_i **ole-va-ni** vanha].
 know.PRS-1SG be-PRS.PA-1SG old
 ‘I know that I am old.’ (Karlsson 1999: 202)
- b. Pekka kuuli [**juna-n saapu-va-n**].
 P.NOM.SG hear.PST.3SG train-GEN.SG arrive-PRS.PA-GEN.SG
 ‘Pekka heard the train arrive.’ (Karlsson 1999: 202)
- (24) *Muu-t nukku-i-vat* [**häne-n herat-e-ssä-än**].
 other-NOM.PL sleep-PST-3PL 3SG-GEN wake-INF-INE-3SG
 ‘The others were sleeping when he/she woke.’ (Karlsson 1999: 187)

3.2.5. *Livonian*. Finally, Livonian comes closest to the Latvian pattern in that its participles show agreement in same-subject adjunct constructions (25a), and in different-subject adjunct constructions the subject is marked by the Dative (25b) (Wälchli 2004: 4–5). Both types of marking have evidently been borrowed by Livonian from Latvian (see in particular Wälchli 2001 on the contact-induced origins of the Livonian Dative).

- (25) a. *Je’dōviedāji brūt’ōks tu’ltō* [*kā’d*
 best.man.NOM.SG bride.COM.SG come.PST.3PL hand.GEN.SG
aķōn-d] ...
 hold.PRF.PA-NOM.PL
 ‘The best man together with the bride were coming holding hands ...’ (Wälchli 2004: 5)
- b. [**Tä’m-ōn** *k^uo’dō* *sil̄ lā’dsō*] *ne*
 3.SG-DAT house-GEN.SG in go-CNV.ESS these
so’gd-ōd tu’ltō tā’m jū’r.
 blind-NOM.PL come.PST.3PL 3SG.GEN to
 ‘When he went into the house, the blind came to him.’ (Sjögren 1861: 137, Wälchli 2004: 5)

Livonian non-finite complement clauses, as far as can be judged from the description in Sjögren (1861: 142, 147–148) and Lees (2010: 21), are formed in a way similar to Estonian (26). The exact syntactic status of the Partitive NP

– whether it is an object of the matrix verb ‘see’ or the subject of the Infinitive – cannot be determined for the lack of sufficient and reliable data.

- (26) *Ja nābōd Rišting Puoigō tul-m.*
 and see.PRS.3PL man.GEN.SG son.PTV.SG come-INF.ILL
 ‘And they see the Son of Man coming.’ (*Ūz Testament* 1942, Matt. 24:30, quoted after Lees 2010: 21)

The comparison of Baltic with the Balto-Finnic languages shows that although the parameters organizing the domain of non-finite subordinate clauses, viz. same-subject vs. different-subject and adjunct vs. complement (I leave aside the important and complicated issue of tense distinctions in non-finite clauses, which seem to be most elaborate and productive in Lithuanian and reduced to different degrees in the other languages), are relevant for all languages in question, their formal treatment is different. In particular, Baltic languages seem to be the only ones where the primary locus of the complement vs. adjunct distinction is the case-marking of the overt subject.

3.2.6. *Other Indo-European languages.* Returning to Indo-European, in particular the ancient languages, we find there constructions cognate to the Lithuanian and Latvian patterns shown above. The Lithuanian adjunct participial constructions with the Dative-marked subject correspond to various “absolute” participial constructions (Keydana 1997), such as the Latin “Ablative absolute”, Indic “Locative absolute”, cf. the Pali example (27), or Slavic “Dative absolute”, cf. the Old Russian example (28).

- (27) [*t-esu vivad-a-nt-esu*] *bodhisatt-o cintesi.*
 3-LOC.PL argue-PRS-PA-LOC.PL bodhisattva-NOM.SG thought
 ‘While they were disputing, the Future Buddha thought.’ (Duroiselle 1906 [1997]: 160)

- (28) *i [bēž-ašt’-u j-emu] napad-e na*
 and run-PRS-PA-DAT.SG.M 3-DAT.SG.M attack-AOR.3SG on
nj-б бѣс-ѣ.
 3-ACC.SG.M devil-NOM.SG
 ‘And while he was fleeing, a devil attacked him.’ (Živov 2008: 15)

Counterparts of the Lithuanian participial complement construction with the Accusative subject are found, for instance, in Latin (Schoof 2004) and especially in Ancient Greek (Cristofaro 2008, 2012), cf. (29).

- (29) *kai h-ē gyn-ē e-por-āi min*
 and ART-NOM.SG.F woman-NOM.SG PST-see.AOR-3SG 3SG.ACC
eksi-o-nt-a.
 go.out-PRS-PA-ACC.SG
 ‘And the woman saw him go out.’ (Herodotus, Hist. I 10:6, quoted
 after Cristofaro 2008: 576)

The most important feature (in fact, an innovation, see below) whereby the Baltic languages and especially Lithuanian differ from the ancient Indo-European languages is the special set of non-agreeing participles used in different-subject constructions. By contrast, the participles in the “absolute” and “Accusative-plus-Participle” constructions of the ancient Indo-European languages invariably agree with their non-Nominative subjects, cf. (27)–(29).

3.2.7. *Uto-Aztec languages.* In a world-wide perspective, interesting parallels to the Lithuanian participial constructions can be found in various languages. Here I will look at just two groups of examples, coming from North America and Australia (the parallel between Baltic and Indo-European and Australian patterns of case-marking in non-finite clauses have been drawn already by Wälchli 2004).

Rather close (at least superficially) counterparts to the Lithuanian participial constructions with “non-canonical” subject marking are found in Northern Uto-Aztec, where it is common for overt subjects of non-finite (nominalized) subordinate clauses to bear the Oblique/Accusative case. This rule normally applies indiscriminately to all types of non-finite clauses, cf. complement clause in (30) from Kawaiisu and adjunct clause in (31) from the Kaibab dialect of Southern Paiute. Same-subject clauses are formed with a different set of subordination/nominalization markers, cf. (32) from Southern Paiute.

- (30) *niʔi pucugu-ri=ika [ta ʔnipizi-a pogwiti-na*
 I.NOM know-NMR=it man-ACC grizzly-ACC
paka-kaa-na=ina].
 kill-REAL-SBD=him
 ‘I know that the man killed the grizzly bear.’ (Zigmond et al. 1990: 105)
- (31) [*John-i-ung pichi-ka-‘ngw*] *pingwa-‘ngw suvai-va-nt.*
 J.-OBL-ART arrive-SBD.DS-3SG wife.NOM-3SG happy-FUT-PRT
 ‘When John arrives (lit. John’s his-arrival) his wife will be happy.’
 (Bunte 1986: 296)
- (32) *pʷni-kai-va-anga-n nʷ-ni pichi-ts(i).*
 see-PRF-FUT-3SG-1SG me-OBL arrive-SBD.SS
 ‘He will see me when he has arrived.’ (Bunte 1986: 295)

The Uto-Aztecan patterns are particularly similar to the Finnish ones, especially if one takes into consideration the common pattern of case polyfunctionality involving (i) direct object, (ii) adnominal possessor (in most Northern Uto-Aztecan languages the Oblique case marks both direct and indirect objects and adnominal possessors), and (iii) subject of a subordinate non-finite clause.

3.2.8. *Australian languages.* Although superficially not very similar to the Lithuanian constructions, the Australian data are very instructive. In their seminal paper on multiple case-marking in Australian languages, Dench & Evans (1988) propose a classification of case functions, comprising, in addition to the familiar RELATIONAL and ADNOMINAL, such functions as COMPLEMENTIZING and ASSOCIATING. Complementizing case appears on a subordinate (usually, though not necessarily non-finite) clause and can spread to some or all of its subconstituents (Dench & Evans 1988: 18–23). Thus, in (33a) from Panytyima³ (Pama-Nyungan, South-West; Western Australia) both the nominalized embedded predicate ‘being hit’ and its subject ‘other child’ are marked with the complementizing Locative, while in (33b) from the same language all constituents of the embedded complement clause are marked with the complementizing Accusative.

- (33) a. *nyiya jilya panti-ku minyma, [kutiya-la jilya-ngka*
 this child sit-PRS quiet other-LOC child-LOC
katama-nnguli-jangu-la marlpa-ngku].
 hit-PASS-REL-LOC man-INS
 ‘This kid is sitting quiet while the other one is being hit by the man.’ (Dench & Evans 1988: 23)
- b. *ngatha yana-ku panti-rta kumpa-ku [kangkuru-ku*
 1SG.NOM go-PRS sit-FUT wait-PRS kangaroo-ACC
paka-rnu-ku murrka-karta-ku].
 come-REL-ACC soak-ALL-ACC
 ‘I am going to sit waiting for a kangaroo to come to the soak.’
 (Dench 2006: 85)

The Panytyima example (33a) actually closely resembles the “absolute” constructions of the classical Indo-European languages, especially the one from Indo-Iranian (recall the Pali example (27) with the “locative absolute” construction), and the Panytyima example (33b) shows striking similarities to the

3. The names of the Australian languages are transcribed according to the list of primary language names given at http://www.ethnologue.com/language_index.asp.

Indo-European constructions of the “accusativus cum participio” kind, like the Ancient Greek one in (29). On such grounds, the notion of complementizing case can arguably be extrapolated to the Indo-European data.

The other kind of case function singled out by Dench & Evans (1988) for Australian languages is associating case, which appears on the arguments of nominalized verbs instead of “canonical” case-marking (Dench & Evans 1988: 31–32). The crucial difference between complementizing and associating case is that while the former is assigned to the whole subordinate clause and in principle can appear on its predicate head, the latter is assigned inside the nominalized clause and never appears on its head. Consider, for instance, (34) from Dhalandji (Pama-Nyungan, South-West; Western Australia), where the Accusative on the nominalized head of the relative clause ‘cutting’ is arguably a complementizing case occurring in agreement with the nominal head ‘man’, while the Dative on the object ‘meat’ of the relative clause is an instance of associating case.

- (34) *ngatha nhaku-nha [kanyara-nha [murla-ku*
 1SG.NOM see-PST man-ACC meat-DAT
warni-lkitha-nha]].
 cut-REL.DS-ACC
 ‘I saw the man cutting meat.’ (Dench & Evans 1988: 31)

Although at first glance it may seem that the Lithuanian Dative-plus-Participle and Accusative-plus-Participle constructions involve associating rather than complementizing case, I would argue to the contrary. The main reasons for treating the Dative and Accusative cases on the subject of the Lithuanian participial clauses as complementizing case are the following: first, this kind of case-marking serves to distinguish between adjunct and complement syntactic status of the participial construction and thus relates to the clause as a whole (this relation is spelt out more formally in Arkadiev 2012: 326–328); second, the diachronic development of the modern Lithuanian constructions with non-case-marked participles from the constructions with case-marked participles showing the same case as the subject, to be elaborated presently. By contrast, the Uto-Aztec constructions in (30)–(32) can arguably be subsumed under associating case.

Yet another instance of complementizing case from Australia deserves to be introduced here. In the Tangkic language family (North Australia), the complementizing case marks all constituents of finite subordinate clauses, including the subject and the predicate. For our discussion it is important that complementizing case normally appears when the subordinate clause has its own subject different from that of the matrix clause (Evans 1995: 489–490, 503), cf. the Kayardild (Tangkic; North Australia) examples (35a) with a same-subject

clause and no complementizing case and (35b) with a different-subject clause marked by the complementizing Oblique case.⁴

- (35) a. *ki-l-da_i karna-ja minal-i, [Ø_i karn-marri-wu*
 they-PL-NOM burn-ACT scrub-MLOC grass-PRIV-MPROP
rajurri-ju]
 walk-POT
 ‘They are burning off the scrub, so (they) can walk about unimpeded by grass.’ (Evans 1995: 489)
- b. *nyingka mungurr-wa [ngumban-inja kajakaja-ntha*
 2SG.NOM know-NMR your-COBL daddy-COBL
buka-nth]
 dead-COBL
 ‘Do you know that your father is dead?’ (Evans 1995: 512)

In Kayardild, however, there is no distinction between different types of subordinate clauses in terms of the choice of the complementizing case; the complementizing Oblique indiscriminately marks complement (35b), adjunct (36a), and relative (36b) clauses.

4. It must be borne in mind, however, that same vs. different subject is not the only condition on the use of complementizing case in Kayardild; thus, Evans (1995: 490–491) shows that clausal arguments, whether same-subject or different-subject, bear the complementizing Oblique case:

- (i) *ngada murnmurdawa-th, [ngijin-inja thabuju-ntha thaa-thuu-nth].*
 1SG.NOM be.glad-ACT my-COBL brother-COBL return-POT-COBL
 ‘I am glad that my brother is coming back.’ (Evans 1995: 490)
- (ii) *ngada murnmurdawa-th, [(ngijuwa) kada-ntha thaa-thuu-nth]*
 1SG.NOM be.glad-ACT 1SG.SUB.COBL again-COBL return-POT-COBL
 ‘I am glad that I will come back again.’ (Evans 1995: 491)

Note, however, that in (ii) the subject of the embedded clause co-referential with the subject of the matrix clause can be overt (see discussion in Evans 1995: 489), which suggests that what we are dealing with here is probably not the issue of pure referential (non-)identity of subjects, but rather the availability of the subject position for filling by overt material. Incidentally, in Lithuanian, participial complement clauses with the subject position occupied by a reflexive pronoun bound by the matrix subject are treated on a par with different-subject constructions in showing Accusative case on the embedded subject and non-agreeing morphology on the participle:

- (iii) ... *žino-ti [sav-e es-a-nt skurd-ų] yra didinga.*
 know-INF self-ACC be-PRS-PA poor-ACC.SG.M be.PRS.3 grand
 ‘... to know oneself to be miserable is grand.’ (Arkadiev 2012: 300)

- (36) a. *dii-ja ngakul-da yulaa-j*, [*yarangkarr-inja*
 sit-ACT 1PL.INC-NOM fear-ACT star-COBL
barji-jurrk]
 fall-IMMED.COBL
 ‘We sat down and were afraid, as the star fell.’ (Evans 1995: 521)
- b. *jina-a maku*, [*ngijuwa kurri-jurrk*]
 where-NOM woman.NOM 1SG.NOM.COBL see-IMMED.COBL
 ‘Where’s this woman who I’m seeing?’ (Evans 1995: 517)

A more complicated system is attested in Yukulta (Tangkic; North Australia), where, first, the same vs. different subject condition operates on an absolutive (S/P) basis (Evans 1995: 543), and not on a nominative (S/A) basis as in Kayardild, and, second, different complementizing cases are used depending on the particular construction. Consider (37a) where the subject (A) of the subordinate clause is controlled by the Absolutive P of the matrix clause, and so no complementizing case is used.⁵ By contrast, in (37b), which is parallel to the Kayardild example (35a), the subject of the embedded clause is controlled by the Ergative A of the matrix clause, and so the complementizing Ergative appears on the constituents of the subordinate clause. Example (37c) shows the complementizing Dative (cognate to the Kayardild Oblique, Evans 1995: 547), which is used when the subject of the embedded clause is not controlled by the Absolutive or by the Ergative of the main clause (Evans 1995: 544–546).

- (37) a. *dangka-ya=kanda kurri-ja maku*,
 man-ERG=PST.3>3 see-ACT woman.ABS
 [\emptyset_i *kunawuna-naba jambila-tharrba*]
 child-ABL kick-PRIOR
 ‘The man saw the woman kick the child.’ (Evans 1995: 543)

5. Actually, Evans (1995: 432–438) analyses subordinate verb inflections in Yukulta as an instance of complementizing case as well; thus, the Priorative suffix *-tharrba* in (37a) and (37c) is actually decomposed into the verbal suffix *-th* and the complementizing Consequential/Ablative case marker *-arrba*. The Ablative suffix on the object of the embedded clause in (37a) is also an instance of complementizing case. However, in the section from which (37a–c) are taken, Evans discusses and marks as such only the outer layer of complementizing case-marking, having to do with cross-clausal co-reference relations (what Dench & Evans 1988: 28–29 call “C-complementizing case”), rather than with temporal or modal relations (“T-complementizing case”, Dench & Evans 1988: 18–23). Here I follow Evans in disregarding the inner T-complementizing case in the Yukulta examples.

- b. *dangka-ya_i=karri ngida karna-ja*
 man-ERG=PRS.3>3 wood.ABS light-ACT
 [\emptyset _i *makurrarra-wurlu-ya karna-jurlu-ya*]
 wallaby-PROP-CERG light-IMPL-CERG
 ‘The man lit a fire in order to cook the wallaby.’ (Evans 1995: 543)
- c. *dangka-ya=kanda kurri-ja maku, [kunawuna-ntha*
 man-ERG=PST.3>3 see-ACT woman.ABS child-CDAT
jambila-tharrba-ntha].
 hit-PRIOR-CDAT
 ‘The man saw the woman as the child kicked her.’ (Evans 1995: 545)

The system of complementizing case in the Tangkic languages is again similar to the Indo-European “absolute” constructions in that both the predicate (participle in Indo-European, finite verb in Tangkic) and the arguments (just the subject in Indo-European, all constituents including objects and obliques in Tangkic) are marked by a special case signaling the subordinate status of the proposition. The main difference between the Indo-European and the Tangkic situations, which at first glance is so striking that it might obscure the similarity of the grammatical mechanisms involved, lies in the morphological properties of case systems. Indeed, while in the classic Indo-European languages a nominal may bear only one case marker, Tangkic as well as many other Australian languages (Dench & Evans 1988) allows their nominals to simultaneously attach several case markers, reflecting different case functions and different domains of case-assignment (see, e.g., Evans 1995 for a detailed account of Kayardild). However, once the syntactic mechanisms of case-marking are carefully distinguished from the morphological means of expression (cf. Spencer 2006 on the useful distinction between syntactic case and morphological case), the similarities between the Australian and the Indo-European systems of complementizing case turn out to be no less striking and profound than the differences between them.

3.2.9. *Conclusion.* To conclude this typological discussion, the Lithuanian participial clauses show an interesting and rare combination of crosslinguistically recurrent morphosyntactic patterns. Both switch-reference and oblique case-marking of subjects of subordinate clauses is attested in different parts of the world, but Lithuanian is probably unique in that it simultaneously (i) uses the same non-finite forms for both complement and adjunct clauses, (ii) employs different cases on the embedded subject as a primary means of signaling the complement vs. adjunct distinction, and (iii) links the presence resp. absence of syntactic agreement to the same or different subject dichotomy. In

addition, Lithuanian as a (somewhat peculiar) representative of the older Indo-European pattern of marking non-finite complement and adjunct clauses, has been shown to be directly comparable to quite “exotic” patterns of complementizing case attested in the languages of Australia, differing from such languages as Panytyima or Kayardild not in the general case-marking mechanisms, but rather in the details of morphological expression.

3.3. Diachronic sources

Let us now examine the historical development of the Lithuanian participial constructions with Dative and Accusative subjects. (The discussion here is mainly based on Ambrazas 1990.) Having originated as fairly different types of structure, the two participial constructions can be shown to have undergone a number of changes leading to the current state of a high degree of morphosyntactic convergence.

The Lithuanian Dative-plus-Participle construction is evidently a continuation of an Indo-European-type of “Dative absolute” construction; recall the Old Russian example (28). In Old Lithuanian, like in Old Russian, the Participle used to show full agreement with its Dative subject in case, number, and gender (Ambrazas 1990: 163–179, Greenberg & Lavine 2006):

- (38) a. [*Bet Petr-**ui** atai-us-iam ing Antiochi-a*],
 but P.-DAT.SG come-PST.PA-DAT.SG.M in A.-ACC.SG
passisteng-iau esch ing ak-is.
 oppose-PST.1SG I.NOM in eye-ACC.PL
 ‘When Peter came to Antioch, I opposed him to his face.’ (Jonas Bertkūnas’s Lithuanian translation of the Bible, Königsberg 1579–1590 (BB), Gal. 2:11, quoted after Ambrazas 1990: 164)
- b. [*Ir reg-i-nt-**iemus** an-**iemus**] gh-is-sai*
 and see-PRS-PA-DAT.PL.M 3-DAT.PL.M 3-NOM.SG.M-DEF
usseng-e dang-un-a.
 ascend-PST(3) sky-ACC-ALL
 ‘And while they were looking, He ascended to the sky.’ (Jonas Bretkūnas’s Lithuanian *Postilla Catholica*, Königsberg, 1591 (BP), II:10₂₃, quoted after Ambrazas 1990: 169)
- c. *Ir karali-us ... numir-e [Saul-**ei***
 and king-NOM.SG die-PST(3) sun-DAT.SG
nussileid-e-ncz-ei].
 descend-PRS-PA-DAT.SG.F
 ‘And the king died at sunset (lit. to-Sun to-descending).’ (BB, I Chron. 18:34, quoted after Ambrazas 1990: 169)

However, already in Old Lithuanian the agreeing Participle in such construc-

tions was being ousted by the truncated non-agreeing Participle, cf. (39) from the same period, and by the nineteenth century constructions shown above became obsolete (Ambrazas 1990: 171).

- (39) *Ir [an-iemus iei-us karali-aus-pi], biloi-a*
 and 3-DAT.PL.M enter-PST.PA king-GEN.SG-ADE say-PST(3)
iemus karali-us.
 3PL.DAT.M king-NOM.SG
 ‘When they came before the king, he said to them.’ (BB, I Kings 1:32–33, quoted after Ambrazas 1990: 166)

The Accusative-plus-Participle construction, on the other hand, goes back to structures with a participial clause modifying the Accusative direct object of a verb of perception or cognition (cf. the modern Lithuanian constructions in (7) to (9) above). In Old Lithuanian, the Participle was again agreeing with the Accusative NP in case, number, and gender (Tangl 1928, Schmalstieg 1987: 86–98, Ambrazas 1990: 141–163), cf. (40a, b).

- (40) a. *Reg-i-m mald-a daug gal-i-ncz-e.*
 see-PRS-1SG prayer-ACC.SG a.lot can-PRS-PA-ACC.SG.F
 ‘We see that prayer can (do) a lot.’ (BP, II 99, quoted after Ambrazas 1990: 143)
- b. *Atmin-k man-e gerai giwen-us-i ... ir*
 remember-IMP I-ACC well live-PST.PA-ACC.SG.M and
dar-ius-i k-as taw intjkk-a.
 do-PST.PA-ACC.SG.M what-NOM.SG you.DAT like-PST(3)
 ‘Remember me having lived well ... and having always done what you liked.’ (BP, II 426, quoted after Ambrazas 1990: 143)

Historically, these constructions go back to predicate nominals (nouns, adjectives, or participles) appearing in apposition to the direct object, widely attested in Old Lithuanian (41), as well as in the contemporary language (42).

- (41) a. *Ischwid-a i-ūs ne linksm-us.*
 see-PST(3) 3-ACC.PL.M NEG happy-ACC.PL.M
 ‘He saw that they were dejected.’ (BB, Gen. 40:6, quoted after Ambrazas 1990: 146)
- b. *Szinn-a an-us ne-giw-us.*
 know-PRS(3) 3-ACC.PL.M NEG-alive-ACC.SG.M
 ‘They know that they are dead.’ (BB, Bar. 6:41, quoted after Ambrazas 1990: 146)
- (42) a. *Rad-au trobel-ę tušči-q.*
 find-PST.1SG cabin-ACC.SG empty-ACC.SG.F
 ‘I found the cabin empty.’ (Giparaitė 2010: 42)

- b. *Kaip šiandien j-is mat-ė sav-e*
 as today 3-NOM.SG.M see-PST self-ACC
student-q.
 student-ACC.SG
 ‘He saw himself still a student, as if it were today.’ (Giparaitė 2010: 49)

The development of the Accusative-plus-Participle construction involved two separate processes: (i) the extension of the range of predicates licensing the construction, with a concomitant reanalysis of the Accusative direct object of the matrix verb as an overt subject of the participial clause (Ambrazas 1990: 150–151), as schematically represented in (43a),⁶ and (ii) the analogical extension of the non-agreeing Participles already used in different-subject participial adjunct clauses to the different-subject participial complements, as schematically shown in (43b).

- (43) a. $V \text{ NP}_{\text{Acc-i}} [\emptyset_i \text{ V}_{\text{Prt}[+\text{Agr}]}] \rightarrow V [\text{NP}_{\text{Acc}} \text{ V}_{\text{Prt}[+\text{Agr}]}]$
 b. $V [\text{NP}_{\text{Acc}} \text{ V}_{\text{Prt}[+\text{Agr}]}] \rightarrow V [\text{NP}_{\text{Acc}} \text{ V}_{\text{Prt}[-\text{Agr}]}]$

In terms of Dench & Evans (1988), the reanalysis which occurred in Lithuanian involves a transition from “C-complementizer case”, “which agrees with some coreferential NP in a matrix clause” (Dench & Evans 1988: 28) to “T-complementizer case”, which does not require any “anchor” in the matrix clause.

That the process of the replacement of the agreeing Participles by the non-agreeing ones in the participial complement construction must have followed the analogical extension and at least partial reanalysis of the construction, and that such a replacement must have been triggered by the analogy with the participial adjunct construction, is confirmed by the following facts. First, already in Old Lithuanian, the Accusative-plus-agreeing Participle construction was attested with verbs of speech (44), which suggests an advanced degree of extension along the lines of the first process.

- (44) *T-ūs sak-o-me nūg ischganim-a*
 that-ACC.PL.M say-PRS-1PL from salvation-GEN.SG
amszin-oia atpūl-us-ius.
 eternal-GEN.SG.M.DEF fall.back-PST.PA-ACC.PL.M
 ‘About those we say that they have fallen back from the eternal salvation.’ (Simonas Waischnoras’s *Lithuanian Margarita Theologica*, Königsberg, 1600, Praef. 6:4, quoted after Ambrazas 1990: 143)

6. Note that a similar reanalysis is postulated for Finnish Genitive-plus-Participle constructions by Anttila (1972: 103–104).

Second, agreeing Participles are still marginally attested in contemporary Lithuanian in constructions where the Accusative NP is a direct object of perception verbs and especially of verbs like *rasti* 'find', cf. example (45), which is parallel to (42a).

- (45) *Rad-au broleli-us be-gul-i-nči-us.*
 find-PST.1SG brother-ACC.PL CNT-lie-PRS-PA-ACC.PL.M
 'I found the brothers sleeping.' (Ambrasas 1990: 142)

Third, comparative evidence also suggests that the loss of agreement went faster with the Participles in adjunct clauses than with those in complement clauses. Thus, in Old Latvian, agreeing Participles were found in the complement constructions parallel to the Old Lithuanian ones (46a), whereas in the Dative-plus-Participle adjunct constructions, only non-agreeing Participles were attested even in the oldest texts (46b) (Ambrasas 1990: 171).

- (46) a. *t-e zinna-ia wini-û esse-t-u*
 that-NOM.PL.M know-PST(3) 3-ACC.SG.M be.PRS-PA-ACC.SG.M
Christ-um.
 Christ-ACC.SG
 '... they knew he was the Christ.' (Georgius Elger's Latvian Gospel, Wilno, 1671, Luc. 4:41, quoted after Ambrasas 1990: 143)
- b. [*Un viņņ-am us Semm-es iseij-oh*]
 and 3-DAT.SG.M in land-GEN.SG go.out-PST.PA
sastapp-a t-am ween-s Wihr-s.
 meet-PST(3) that-DAT.SG.M one-NOM.SG.M man-NOM.SG
 'When He stepped ashore, a man met Him.' (Latvian Bible, Riga, 1685–1689, Luc. 8:27, quoted after Ambrasas 1990: 166)

Thus, we have seen that the development of the Lithuanian complement and adjunct participial constructions involved a complex interplay of to a large extent mutually independent and non-simultaneous processes, operating on different linguistic levels: (i) morphology, viz. truncation of the agreeing Dative Participle, and (ii) analogical extension of the truncated non-agreeing Participle from the adjunct to the complement construction; (iii) semantics and syntax, viz. the extension and reanalysis of the Accusative-plus-Participle construction, which went considerably farther in Lithuanian than in Latvian. All these historical tendencies have resulted in a significant degree of structural isomorphism of the two participial constructions in Lithuanian and in the rise of the new category of switch-reference expressed by the [\pm agreement] feature.

4. “Non-canonical” object marking in the infinitive constructions

4.1. Description of the Lithuanian pattern

In Modern Lithuanian, the overt object of the Infinitive based on a transitive verb can be marked in four different ways depending on the type of construction and on the class of the matrix verb (see Franks & Lavine 2006). With most verbs taking infinitival complements, the object is in the Accusative, like in ordinary finite clauses, cf. (47).

- (47) a. *Jon-as per-skait-ė laišk-a.*
 J.-NOM.SG PRV-read-PST(3) letter-ACC.SG
 ‘Jonas read the letter.’
- b. *Jon-as nor-i [per-skaity-ti laišk-a].*
 J.-NOM.SG want-PRS(3) PRV-read-INF letter-ACC.SG
 ‘Jonas wants to read the letter.’

With impersonal predicates denoting emotional attitudes and in copular constructions expressing some kinds of modality (on the latter see Holvoet 2007: 195–216), the object of the Infinitive can be in the Nominative (48a, b). A common feature of such constructions is the lack of a Nominative argument in the matrix clause, whose syntactic position is arguably occupied by the infinitival clause.

- (48) a. *J-am ne-patik-o [laukel-is ar-ti].*
 3-DAT.SG.M NEG-like-PST(3) field-NOM.SG plough-INF
 ‘He did not like to plough the field.’ (Ambrasas (ed.) 1997: 638)
- b. *Iš toli bu-s [maty-ti dūm-ai].*
 from far be-FUT(3) see-INF smoke-NOM.PL
 ‘You’ll be able to see the smoke from afar.’ (Ambrasas (ed.) 1997: 374)

Two other constructions involve purposive infinitives, arguably displaying adjunct rather than argument properties; these constructions have recently been studied in Franks & Lavine (2006); for a revision of Franks & Lavine’s analysis see Arkadiev (forthcoming). Their distribution depends on the type of the matrix predicate: when the infinitive is adjoined to a verb of motion, the object is marked Genitive (49a), while with non-motion verbs it is marked Dative (49b).

- (49) a. *Išvažiav-o [keli-o taisy-ti].*
 drive.out-PST(3) road-GEN.SG repair-INF
 ‘(They) went to repair the road.’ (Ambrasas (ed.) 1997: 557)

- b. *Iššov-ė* [žmon-ėms pagąsdin-ti].
shoot-PST(3) people-DAT.PL frighten-INF
'(He) fired to scare the people.' (Ambrazas (ed.) 1997: 557)

In addition, the direct object of the infinitival clause of the type shown in (47) is marked Genitive in the presence of negation, either on the Infinitive (50a) or on the matrix verb (50b).

- (50) a. *Dėking-a Onut-ė pažadėj-o [ne-palik-ti*
grateful-NOM.SG O.-NOM.SG promise-PST(3) NEG-leave-INF
mūs-ų] ...
we-GEN
'Grateful Onutė promised not to leave us.' (LKT)
- b. *Jon-as ne-nor-i [per-skaity-ti laišk-o].*
J.-NOM.SG NEG-want-PRS(3) PRV-read-INF letter-GEN.SG
'Jonas does not want to read the letter.'

Subsequently I will mainly focus on the purposive infinitival constructions of the type shown in (49), since they pose non-trivial challenges for analysis and are rather peculiar from a typological perspective (see Arkadiev (forthcoming) for more details and a formal analysis).

In addition to the "non-canonical" case-marking of the object, the purposive infinitival constructions tend to show OV rather than VO word order, especially in the written language, a feature emphasized by Franks & Lavine (2006). However, my own consultants belonging to the post-Soviet generation often prefer the neutral VO order in these constructions, cf. (51a) with Genitive⁷ and (51b) with Dative objects.

- (51) a. *Jon-as atėj-o [aplanky-ti draug-o].*
J.-NOM.SG come-PST(3) visit-INF friend-GEN.SG
'Jonas came to visit his friend.'
- b. *Vaik-ai atsistoj-o [pa-sveikin-ti mokytoj-ųi].*
child-NOM.PL stand.up-PST(3) PRV-greet-INF teacher-DAT.SG
'The children stood up in order to greet the teacher.'

Examples like (51a) and (51b) suggest that in contemporary Lithuanian infinitival constructions with Accusative, Genitive, and Dative objects share at least their surface syntactic properties, in particular that the object of all three constructions belongs to the infinitival clause both semantically and syntactically (see Franks & Lavine (2006: 270–273) for additional arguments). That

7. With respect to the Genitive, this is already acknowledged by Franks & Lavine (2006); however, they explicitly – and, according to my data, erroneously – state that "the dative NP object cannot follow V in discourse-neutral speech" (Franks & Lavine 2006: 256).

the Dative object forms a constituent with the Infinitive even with OV order is shown by coordination (52a) and “cleft” (52b) constructions.

- (52) a. *Pa-stat-ė daržin-ę [šien-ui sukrau-ti] ir*
 PRV-build-PST(3) hayloft-ACC.SG hay-DAT keep-INF and
[grūd-ams apsaugo-ti].
 grain-DAT.PL protect-INF
 ‘They build a hayloft to keep hay and protect grain.’ (Franks & Lavine 2006: 272)
- b. *Tai [šien-ui sukrau-ti] pa-stat-ė daržin-ę.*
 it hay-DAT.SG keep-INF PRV-build-PST(3) hayloft-ACC.SG
 ‘It is to keep hay that they built a hayloft.’ (Franks & Lavine 2006: 273)

It should also be mentioned that the behaviour of the Dative-plus-Infinitive clauses is parallel to that of the clauses where the Dative NP is the subject of the infinitival clause (see Holvoet 2010 for a recent analysis and discussion):

- (53) a. *Pastūm-ė kėd-ę [sveči-ui atsisės-ti]*
 move-PST(3) chair-ACC.SG guest-DAT.SG sit.down-INF
 ‘He moved the chair for the visitor to sit down.’ (Ambrasas (ed.) 1997: 558)
- b. *tikimyb-ė [vaik-ams susirg-ti]*
 probability-NOM.SG child-DAT.PL fall.ill-INF
 ‘the probability that the children would fall ill.’ (<http://www.alergija.info/view.php?page=104&rpId=2>)

Constructions with the Dative subject of the Infinitive clause will become relevant in the discussion of the historical origins of the “non-canonical” case-marking in infinitival constructions in Section 4.3.

4.2. Crosslinguistic comparison

In contrast to the “non-canonical” marking of subjects of participial clauses, counterparts of which can be found in languages both of the Baltic region and world-wide, “non-canonical” case-marking of objects of infinitives and similar non-finite verbal forms⁸ is a much less wide-spread phenomenon. (Note that in the recent comprehensive typology of purpose clauses, Schmidtke-Bode (2009), “non-canonical” marking of objects is not mentioned at all.)

8. With the obvious exception of event-denoting deverbal nominals whose arguments are often encoded similarly to adnominal possessors (see Koptjevskaja-Tamm 1993 for a typological study).

In the neighbouring Baltic, Slavic, and Balto-Finnic languages, only the Nominative object construction shown in (48) is found; see Larin (1963), Timberlake (1974), Ambrazas (2001) for an areal-typological treatment of this pattern. By contrast, constructions similar to the Lithuanian Genitive-plus-Infinitive and Dative-plus-Infinitive are almost altogether lacking in the languages genetically and geographically close to Lithuanian.

The closest counterpart to the Lithuanian construction with the Genitive object licensed by the verb of motion is found in Latgalian, which retains the ancient Supine (a special verbal noun used with verbs of motion; the Supine shares its stem with the Infinitive and in Latgalian differs from the latter only in the vowel quality of the stem), cf. examples (54a, b). The Supine construction will be discussed in more detail in the next section in connection with the historical origins of “non-canonical” object marking.

- (54) a. *Rogon-a izsyutej-a bōrineit-i [drēb-u*
 witch-NOM.SG send-PST(3) orphan-ACC.SG cloth-GEN.PL
valāt].
 beat.SUP
 ‘The witch sent out the orphan to beat clothes.’ (Nau 2011: 61)
- b. *Bōrineit-ia sōk-a [vialāt driāb-is]*.
 orphan-NOM.SG begin-PST(3) beat-INF clothes-ACC.PL
 ‘The orphan began to beat clothes.’ (Nau 2011: 61)

Dative objects with Infinitive (or other non-finite forms) are not documented either in Latgalian, or in Latvian. Modern Slavic languages also lack them, although sporadic examples are attested in some ancient texts, cf. (55) from Old Czech. Even if such constructions had been systematically available at earlier stages of Slavic, they did not develop any further and gradually disappeared.

- (55) *kúpi-chu pol-e pútnik-óm hrēs-ti*.
 buy-AOR.1SG field-ACC.SG traveller-DAT.PL bury-INF
 ‘I bought a field in order to bury travellers.’ (Ambrazas 1981: 18)

Interesting parallels to the non-canonically case-marked objects of infinitival clauses of Lithuanian are again found in Australia, where the already mentioned associating case (Dench & Evans 1988) appearing on the constituents of a nominalized clause is quite widely attested. Thus, Kayardild shares with Baltic (especially with archaic Latgalian) the use of a specialized construction for the purpose of movement (Evans 1995: 486–487), involving a specific verbal form with its own case-assignment properties (according to Evans, this form shares morphosyntactic properties of both finite and non-finite constructions). As shown in (56), the Kayardild counterpart of Supine requires marking of the object by the Allative, which appears to the left of the “outer” “modal” case assigned by the matrix verb.

- (56) *balmb-u ngada warra-ju [bijarrba-ring-ku*
 tomorrow-MPROP 1SG.NOM go-POT dugong-ALL-MPROP
raa-jiring-ku].
 spear-SUP-MPROP
 ‘Tomorrow I will go to spear dugong.’ (Evans 1995: 487)

“Non-canonical” marking of object NPs in non-finite clauses is also attested in the Pama-Nyungan language Kalaw Lagaw Ya (Torres Strait, northern Australia; Comrie 1981: 22–25). For instance, the object of the special non-finite form used as a complement of the predicate ‘to be afraid’ is marked with the Ablative:

- (57) *Ngay akanmepa [puy-ngu poethay-le].*
 1SG.NOM be.afraid tree-ABL chop.down-NF
 ‘I am afraid to chop down the tree.’ (Comrie 1981: 24)

The closest counterparts of the Lithuanian Dative-plus-Infinitive constructions are found in South-West Pama-Nyungan languages spoken in Western Australia, such as Nyamal (Dench 2009) and Jiwarli (Austin 2009). Here the object of the non-finite purpose clause is marked with the Dative, cf. (58a, b) from Nyamal and (59a, b) from Jiwarli. In particular, examples (58b) and (59b) can be translated into Lithuanian literally, with the use of the Dative-plus-Infinitive construction.

- (58) a. *Ngunti-rna-rna jilya [kurti-larta yurta-yu].*
 send-PST-1SG child get-PURP fish-DAT
 ‘I sent the child to get fish.’ (Dench 2009: 761)
 b. *Ngunya-ngku mangkurla-lu warnta kurti-la*
 that-ERG woman-ERG stick get-PRS
[punga-lartara-lu yukurru-ku].
 hit-PURP-ERG dog-DAT
 ‘That woman is getting a stick to hit the dog.’ (Dench 2009: 767)
- (59) a. *Ngatha kamurri-a-rru [pirru-wu thika-lkarringu].*
 I.NOM get.hungry-PRS-now meat-DAT eat-PURP
 ‘I am becoming hungry to eat meat.’ (Austin 2009: 4)
 b. *Kuwarti kurriya purra-rninyja [patha-rrkarringu-ru*
 now boomerang toss-PST pelt-PURP-ERG
jiriparri-yi].
 echidna-DAT
 ‘Next (he) threw a boomerang to hit echidna.’ (Austin 2009: 4)

Returning to Baltic, like with participial constructions, there appear to be no conceptual obstacles to treating the Lithuanian Genitive-plus-Infinitive and

Dative-plus-Infinitive constructions, as well as the Latgalian Genitive-plus-Supine construction, as instances of associating case. Again, like in the case of the participial constructions, the most important difference between Baltic and Australian (especially Tangkic) lies in the domain of morphological expression of case, and not in the basic mechanism of case-assignment.

To conclude, pending a special crosslinguistic study, “non-canonical” object marking in non-finite clauses would seem to be a typologically rather infrequent phenomenon. The more striking are the parallels between Lithuanian and the languages of Australia, which, as I hope to have demonstrated, are not just superficial, but involve basically identical mechanisms of associating case-marking.

4.3. Diachronic sources

When we look at the diachronic sources of the Lithuanian Dative-plus-Infinitive and Genitive-plus-Infinitive constructions, we again see a process of morphosyntactic convergence of originally quite different constructions.

The infinitival clauses with the Dative object originate from constructions with the Infinitive adjoined to the Dative NP denoting the object serving as a purpose of an action or of another object (Ambrasas 1981, 1987). In contemporary Lithuanian, Dative NPs can occur as purpose adjuncts to certain verbs and especially to nouns, as in (60) (Sawicki 1992, Kerevičienė 2008: 111–113, 182–183).

- (60) a. *Čia bu-s lentyn-a knyg-oms.*
 here be-FUT(3) shelf-NOM.SG book-DAT.PL
 ‘Here will be a shelf for books.’ (Kerevičienė 2008: 182)
- b. *Žem-ė keli-a-s darb-ui ir*
 earth-NOM.SG get.up-PRS(3)-RFL work-DAT.SG and
kūryb-ai.
 creation-DAT.SG
 ‘Earth is getting up to work and to create.’ (Kerevičienė 2008: 182)

Thus, the development of the Dative-plus-Infinitive construction, similarly to that of the Accusative-plus-Participle construction, involved a reanalysis whereby the Dative NP became interpreted as belonging only to the dependent clause, while the semantic “licensing conditions” (Holvoet 2010) on the Dative, which used to come from the matrix verb or noun, were suspended. Example (61) illustrates such a reanalysis. In (61a) we see the original structure with the Dative NP depending on the head noun and the Infinitive being adjoined to it; in (61b) the same surface string is reanalyzed with the Dative NP now forming a unit with the Infinitive; in (61c) the Dative no longer needs to

be adjacent to the head noun, so that the infinitival clause serves as a purpose adjunct to the whole sentence. Finally, after this process has reached an advanced stage (which seems to be a recent and still ongoing development), the infinitival clause with the Dative object starts to accommodate to the neutral VO word order shown in (61d).

- (61) a. *laišk-as* ***motin-ai_i*** [\emptyset_i *pasveikin-ti*]
 letter-NOM.SG mother-DAT.SG greet-INF
 lit. ‘a letter to the mother in order to greet (her)’
- b. *laišk-as* [***motin-ai*** *pasveikin-ti*]
 letter-NOM.SG mother-DAT.SG greet-INF
 ‘a letter in order to greet the mother’
- c. *Šit-q* *laišk-q* *Jon-as* *siunt-ė*
 this-ACC.SG.M letter-ACC.SG J.-NOM.SG send-PST(3)
motin-ai *pasveikin-ti*.
 mother-DAT.SG greet-INF
 ‘Jonas sent this letter in order to greet his mother.’
- d. [?]*Šit-q* *laišk-q* *Jon-as* *siunt-ė*
 this-ACC.SG.M letter-ACC.SG J.-NOM.SG send-PST(3)
 [*pasveikin-ti* ***motin-ai***].
 greet-INF mother-DAT.SG
 ‘Jonas sent this letter in order to greet his mother.’

This scenario pertains not only to object, but also to subject Dative NPs in purpose infinitive clauses shown above (Ambrasas 1981, Holvoet 2010). Note that if (62a) (=53a) can be synchronically understood as a modification of the NP *kėdė svečiui* ‘the chair for the guest’ by the infinitive, (62b) (=53b) cannot be interpreted in this way, since **tikimybė vaikams* lit. ‘the probability for the children’ is semantically ill-formed.

- (62) a. *Pastūm-ė* *kėd-ę* ***sveči-ui*** *atsisės-ti*
 move-PST(3) chair-ACC.SG guest-DAT.SG sit.down-INF
 ‘He moved the chair for the visitor to sit down.’
- b. *tikimyb-ė* ***vaik-ams*** *susirg-ti*
 probability-NOM.SG child-DAT.PL fall.ill-INF
 ‘the probability that the children would fall ill’

The Genitive-plus-Infinitive construction with verbs of motion followed an entirely different path of development. It goes back to a construction involving the Supine, which, as mentioned in Section 4.2 with respect to Latgalian, shared its stem with the Infinitive and assigned Genitive to its object, like other verbal nouns (Schmalstieg 1987: 174–176), cf. the Old Lithuanian example (63).

- (63) *Atei-s* [*sudi-tu giw-u ir nūmirusi-u*].
 come-FUT(3) judge-SUP living-GEN.PL and dead-GEN.PL
 ‘He will come to judge the living and the dead.’ (Baltramiejus Vi-
 lentas’s Lithuanian translation of Luther’s Enchiridion, Königsberg,
 1579, 18:8, quoted after Schmalstieg 1987: 174)

The Supine was in use in the literary language until the beginning of the twentieth century (64), and has been documented in the North-Eastern Aukštaitian dialects (Zinkevičius 1966: 390), which border on Latgale (65).

- (64) [*Svetim-uos mišk-uos malk-ų pirk-tų*] *važinėj-o*.
 alien-LOC.PL.M forest-LOC.PL wood-GEN.PL buy-SUP ride-PST(3)
 ‘They rode to buy wood in other people’s forests.’ (Antanas Baranaus-
 kas’s *Anykščių šilelis*, 1858–1859, II)
- (65) *ažusuk* [*al-aus at-si-ger-tų*]
 drop.in.IMP beer-GEN.SG PRV-RFL-drink-SUP
 ‘Drop in to drink some beer.’ (Zinkevičius 1966: 390)

In standard Lithuanian and most dialects the Supine was gradually replaced by the semantically and formally very similar Infinitive, with the retention of the original Genitive marking of the object. A similar process seems to be happening in the more conservative Latgalian, where a variant of the Genitive-plus-Supine construction with the Supine replaced by the Infinitive is also sporadically attested:

- (66) *Jei aizguoj-a iz klāv-u [da-cierp-t*
 3SG.NOM.F go.out.PST-3 to barn-ACC.SG PRV-shear-INF
pādej-ūs vušk-u].
 last-GEN.PL sheep-GEN.PL
 ‘She went out to the barn in order to shear the last sheep.’ (Nau 2011:
 79)

The Supine with the Genitive direct object was also (vestigially) attested in the older Slavic languages (Vaillant 1966: 127–129, 1977: 171–172), cf. the Old Church Slavonic example (67).

- (67) *id-ę [ugotova-tě mĕst-a vamě]*.
 go-PRS.1SG prepare-SUP place-GEN.SG you.DAT.PL
 ‘I am going in order to prepare a place for you.’ (Sava’s Book, ca.
 1030, John 14:2, quoted after Lunt 2001: 160)

The Supine as a verbal form distinct from the Infinitive is still attested in Slovene (68) (Schlamberger Brezar et al. 2005: 114) and Lower Sorbian (69) (Steenwijk 2003), but here the direct object is marked Accusative and not Genitive.

- (68) *Še-l je [gleda-t nov-i film].*
 go-PST.M AUX.PRS.3SG watch-SUP new-ACC.SG.M film.ACC.SG
 ‘He went to watch the new film.’ (Schlamberger Brezar et al. 2005: 114)
- (69) *Witše pojed-u [Lenk-u pyta-t].*
 tomorrow go-FUT.1SG L.-ACC.SG look.for-SUP
 ‘Tomorrow I shall go and look for Lenka.’ (Steenwijk 2003: 333)

Thus, Slovene and Lower Sorbian have chosen a path of development of the original Genitive-plus-Supine construction opposite to that of Lithuanian:

- (70) NP-Gen V-Sup $\begin{cases} \rightarrow \text{NP-Gen V-Inf Lithuanian} \\ \rightarrow \text{NP-Acc V-Sup Slovene, Lower Sorbian} \end{cases}$

It must be noted that although, similarly to the purposive Dative NPs in (60), Genitive NPs may denote purpose of motion in the absence of the Infinitive (71), Old Lithuanian examples like (63) with VO order and no direct semantic relation between matrix verb and embedded object indicate that the Genitive object belonged to the non-finite clause headed by the Supine already in Old Lithuanian.

- (71) a. *Išėj-o pien-o.*
 go.out-PST(3) milk-GEN.SG
 ‘(He/she) went for milk’ (Ambrazas (ed.) 1997: 557)
- b. *Išsiunt-ė sūn-ų daktar-o.*
 send-PST(3) son-ACC.SG doctor-GEN.SG
 ‘(He/she) sent the son to get the doctor.’ (Ambrazas (ed.) 1997: 557)

Finally, the examination of naturally occurring data in contemporary Lithuanian reveals no preference of the Genitive-plus-Infinitive construction for OV order over neutral VO, still observed with the Dative-plus-Infinitive construction. Table 2 shows the results of Google searches⁹ for Genitive-plus-Infinitive and Dative-plus-Infinitive constructions with different word orders.

The data in Table 2 admittedly can only give a hint at the real distribution and should be taken with much caution; nonetheless, they suggest that VO in the Dative-plus-Infinitive construction, although less frequent than OV, is

9. Since the *LKT* corpus does not provide morphological annotation, using it for the study of infinitival constructions is virtually impossible. Google searches have been performed on January 3–4, 2013. The number of occurrences has been established manually by filtering out all irrelevant data (e.g., examples showing a different type of construction) and multiple occurrences of identical examples.

Table 2. Corpus data on word order in infinitival constructions with non-canonical case-marking on the object

'to visit the friend' (Genitive)	OV: <i>draugo aplankyti</i>	ca. 35 results
	VO: <i>aplankyti draugo</i>	ca. 80 results
'to buy a newspaper' (Genitive)	OV: <i>laikraščio nusipirkti</i>	5 results
	VO: <i>nusipirkti laikraščio</i>	ca. 45 results
'to read a book' (Dative)	OV: <i>knygai skaityti</i>	ca. 70 results
	VO: <i>skaityti knygai</i>	10 results
'to repay the loan' (Dative)	OV: <i>nuomai sumokėti</i>	ca. 55 results
	VO: <i>sumokėti nuomai</i>	10 results

definitely not marginal. This indicates that the two infinitival constructions with non-canonical object marking are gradually becoming more similar.

To conclude, in Lithuanian infinitival constructions with Dative and Genitive objects we again observe, as with participial constructions with “non-canonical” case-marking of the subject, how different historical sources and different diachronic paths have converged on a set of constructions which synchronically are to a large extent structurally isomorphic and differ mainly in the types of environment where they occur. The changes involved range from the simple substitution of a more “marked” form (Supine) by a less “marked” (Infinitive) in the development of the Genitive-plus-Infinitive construction to a complex interplay of syntactic reanalysis and analogical change in the development of the Dative-plus-Infinitive construction.

5. Summary and conclusions

In this article I have discussed two types of non-finite construction with “non-canonical” marking of core syntactic arguments attested in contemporary Lithuanian.

In the participial construction the subject is marked Accusative or Dative depending on the argument vs. adjunct status of the clause. Although partly similar structures are attested both in the neighbouring Baltic and Balto-Finnic languages and in the older Indo-European languages, as well as in various languages all over the world, e.g., in Australia and North America, Lithuanian constructions are peculiar in that, due to the loss of the agreement inflection on the participle, the case-marking of the subject is the only overt morphological means of distinguishing between argument vs. adjunct participial constructions. Although this characteristic is in fact shared with the cognate constructions in Latvian and Latgalian, in the latter languages the relevant constructions have not developed to such a degree of generality as in Lithuanian in terms of tense distinctions and co-occurrence with various types of matrix predicates.

In the purpose infinitival clauses, by contrast, it is the direct object which gets Dative or Genitive, instead of the normal Accusative, depending now on the type of the matrix predicate: verbs of motion select the Genitive of the infinitival object, while other environments, including nouns, require the Dative. I have argued that although historically these constructions displayed (and to a certain degree still display) a preference for an OV order instead of the more general VO characteristic of the whole language system, including infinitival constructions with the Accusative object, in contemporary usage they actually show a drift towards the default order. Besides, following and extending Franks & Lavine (2006), I have argued that constructions with “non-canonical” object-marking do not differ substantially in their syntactic structure from constructions with “canonical” Accusative direct objects. From a crosslinguistic perspective, the Lithuanian constructions with Dative and Genitive objects seem to be rather exceptional, at least in a European and more generally Eurasian context. However, non-trivial counterparts to these constructions are attested in various languages of Australia, such as Kayardild and Jiwarli.

The comparison of the Lithuanian (and Indo-European in general) non-finite constructions showing “non-canonical” case-marking of arguments with constructions featuring “complementizing” and “associating” case in the languages of Australia has proven to be instructive. As I have argued, the rather “exotic” mechanisms of case-assignment postulated by Dench & Evans (1988) for Australian languages, especially for those of them that display multiple case-marking, are actually identical to well-known case-marking strategies attested in such constructions as “Dative Absolute” or “Accusative-plus-Participle” in classic Indo-European languages, as well as to the case-marking patterns found in Lithuanian. The principal difference between Indo-European and Australian varieties of complementizing and associating case-marking lies in the morphological expression of case. Indo-European languages do not allow multiple case-marking, and therefore complementizing and associating cases must replace the original “canonical” case of subjects or objects, and such “case substitution” is usually subject to strict constraints (e.g., only “grammatical” or “structural” cases like Nominative or Accusative can be replaced). By contrast, many languages of Australia are more “liberal” in this respect and allow several layers of case markers pertaining to different domains of case-assignment to appear on a single nominal. However, this obvious surface difference should not obscure the profound similarity of the general syntactic mechanisms of case-assignment in these languages.

From a diachronic perspective, both types of Lithuanian constructions represent a convergent development of originally fairly different morphosyntactic structures, involving such processes as analogical extension, syntactic re-analysis, and morphological simplification. Morphosyntactic isomorphism of the participial constructions arose due to the interaction of general crosslin-

guistic trends in the development of non-finite propositional complements and an idiosyncratic process of the loss of agreement morphology on the participles, driven by analogy with adjunct Dative-plus-Participle constructions. In the case of infinitival clauses the initial structures had even less in common, since the Genitive-plus-Infinitive construction goes back to the Genitive-plus-Supine construction still in use in the more conservative Latgalian, whereas the Dative-plus-Infinitive construction was based on the Infinitive used in apposition to a nominal modifier denoting purpose. The convergence of the two structures again involved both such general processes as reanalysis and analogy and idiosyncratic developments, i.e., the replacement of the Supine by the Infinitive.

One important common process in the development of both participial and infinitival constructions in Lithuanian is the change of clause boundaries, whereby an NP historically belonging to the matrix clause gets reanalyzed as a part of the non-finite clause modifying this NP, and the non-finite clause in turn becomes a part of a larger syntactic structure (of the whole matrix clause), cf. (43a) and (61a,b), and the general scheme in (72).

$$(72) \quad [\text{matrix clause} \dots [\text{NP N} [\text{non-finite clause V}_{\text{nonfin}}]]] \\ \rightarrow [\text{matrix clause} \dots [\text{non-finite clause NP V}_{\text{nonfin}}]]$$

Such a development is quite common crosslinguistically (cf. Harris & Campbell 1995: 62), and the cases of the Lithuanian Accusative-plus-Participle and Dative-plus-Infinitive constructions both show how the process of reanalysis is intertwined with other diachronic changes of a general and language-particular nature.

The paths of diachronic evolution of the Lithuanian non-finite constructions with the “non-canonical” marking of subjects and objects are interesting also for another reason. As has been shown by Ambrazas (1990, 1981, 1987) for participial constructions and the Dative-plus-Infinitive construction, the “structural prerequisites” for the development of constructions similar to those attested in contemporary Lithuanian had existed in the earlier stages of many Indo-European languages, including the Slavic languages, some of which have been in prolonged contact with Lithuanian. Indeed, the Dative-plus-Participle construction and the Accusative-plus-Participle construction were well-attested in the ancient Slavic languages (see, e.g., Živov 2008 on Old Russian), and traces of the Dative-plus-Infinitive construction have been found in Old Czech (55). However, in contemporary Slavic languages, including the closest neighbours of Lithuanian, no traces of any of these constructions seem to be found. Paradoxically, at the same time when in Lithuanian the constructions in question were gradually expanding and gaining in morphosyntactic generality, their Slavic counterparts were disappearing. It is striking that the intensive language contacts between Lithuanian and Slavic languages, whose

results can be seen throughout the lexicon and the morphosyntax of Lithuanian (and in the rural Slavic varieties in contact with Lithuanian, see, e.g., Wiemer 2004), seem to have had no serious effect on the development of non-finite structures with “non-canonical” marking of arguments.

To conclude, the patterns of case-marking of subjects and objects of participial and infinitival clauses in Lithuanian are interesting and instructive from the following perspectives:

- (i) They show how elaborate a system of marking dependent clauses can be, and how nominal case may be employed to signal the kind of relation between two clauses rather than between an NP and its syntactic head.
- (ii) They contribute to the typology of both non-finite clauses and case, showing patterns which are not very widespread crosslinguistically (this especially relates to the “non-canonical” marking of objects of infinitives), but still seem to occur in languages extremely distant in terms of geography, genetics, and typological profile. In particular, these constructions show how the notions of “complementizing” and “associating” case, initially proposed to describe quite “exotic” case-marking patterns in the languages of Australia, can be naturally extended to Indo-European languages.
- (iii) From a diachronic point of view, they show how synchronically parallel constructions arise via a complex interplay of different changes on various linguistic levels (semantic, syntactic, and morphological), “pushing” originally heterogeneous structures to morphosyntactic convergence.

Lithuanian offers particularly rich and elaborate systems of clause combining (Gronemeyer & Usonienė 2001) and differential case-marking, and, once fully described, they should be integrated into any comprehensive typology of both kinds of phenomena.

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Abbreviations: 1/2/3 1st/2nd/3rd person; ABL ablative; ABS absolutive; ACC accusative; ACT actual; ADE adessive; ALL allative; AOR aorist; ART article; AUX auxiliary; CDAT complementizing dative; CERG complementizing ergative; CNT continuative; CNV converb; COBL complementizing oblique; COM comitative; DAT dative; DEB debitive; DEF definite; DS different subject; ELAT elative; ERG ergative; ESS essive; F feminine; FUT future; GEN genitive; ILL illative; IMMED immediate; IMP imperative; IMPL implicative; INC inclusive; INE inessive; INF infinitive; INS instrumental; LOC locative; M masculine; MLOC modal locative; MPROP modal proprietive; N neuter; NEG negation; NF non-finite form; NMR nominalizer; NOM nominative; OBL oblique; PA active participle; PASS passive; PL plural; POSS possessive; POT potential; PP passive participle; PRF perfect; PRIOR priorative; PRIV privative; PROP proprietive; PRS present; PRT participle; PRV preverb; PST past; PTV partitive; PURP purposive; REAL realized; REL relativization; RFL reflexive; SBD subordinator; SG singular; SS same subject; SUB subject form; SUP supine; TRANS translative.

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