Case and word order in Lithuanian infinitival clauses revisited

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This paper considers the Lithuanian constructions with the Dative and Genitive marking of direct objects of transitive verbs in purpose infinitival clauses, studied in Franks and Lavine (2006). I adduce empirical evidence and conceptual arguments both speaking against the analysis proposed by Franks and Lavine (2006), and argue for a different account based on recent "non-orthodox" proposals in case theory. My analysis of the Lithuanian constructions is inspired by a typological comparison with Australian languages possessing "complementizing" and "associating" case marking and morphological case-stacking. I propose that the mechanism of multiple case assignment in syntax is operative in Lithuanian and show how it can naturally account for the Dative-plus-Infinitive and Genitive-plus-Infinitive constructions.

1. Introduction[1]

Lithuanian, being a nominative-accusative language, encodes the direct object of transitive verbs with the Accusative[2] case, cf. (1a). In ordinary finite clauses this Accusative encoding is overridden by the Genitive when the verb is negated, cf. (1b), and frequently also when the object is partitive (see Seržant, this volume).

1. I thank my Lithuanian consultants for their patience and help, and David Erschler, James Lavine, Ora Matushansky, Rolandas Mikulskas and Nicole Nau for their useful comments and criticism on the earlier version of this paper. All faults and shortcomings remain mine.

2. Following the tradition of works in linguistic typology, I capitalize labels of language-particular grammatical categories and features.

(1) a. *Jon-as* *perskait-ė* ***laišk-ą***.
Jonas-NOM.SG read.through-PST(3) letter-ACC.SG
'Jonas read the letter.'
b. *Jon-as* ***ne****-perskait-ė* ***laišk-o***.
Jonas-NOM.SG NEG-read.through-PST(3) letter-GEN.SG
'Jonas didn't read the letter.'

The situation in infinitival clauses based on transitive verbs is, however, more complex. In addition to (i) the "canonical" Accusative encoding of the object in clauses selected by most verbs taking infinitival complements (e.g., verbs denoting modality, volition, manipulation), cf. (2), and (ii) the Genitive encoding in the presence of negation, either on the Infinitive, cf. (3a), or on the matrix verb if the latter belongs to group (i), cf. (3b), there exist three other constructions with "non-canonical" marking of the direct object of a transitive Infinitive.

(2) *Jon-as* *nor-i* [*perskaity-ti* ***laišk-ą***].
Jonas-NOM.SG want-PRS(3) read.through-INF letter-ACC.SG
'Jonas wants to read the letter.'

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

(iii) In impersonal matrix constructions (usually headed by emotional or modal predicates or by the copula *būti* 'be') the object of the Infinitive can be in the Nominative, cf. (4):

(4) *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.' (Ambrazas (ed.) 1997: 638)

(iv) The object of the purposive infinitival clause occurring with verbs of motion is in the Genitive, cf. (5):

(5) *išvažiav-o* [***keli-o*** *taisy-ti*].
drive.out-PST(3) road-GEN.SG repair-INF
'(they) went to repair the road.' (Ambrazas (ed.) 1997: 638)

3. Corpus of Lithuanian Language (LKT, http://tekstynas.vdu.lt/).

(v) Finally, in other kinds of purpose infinitives adjoined to verbs or nouns, the object is in the Dative, cf. (6).

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

The main foci of this paper are constructions with the Dative and the Genitive marking illustrated in (5) and (6). These constructions, which I will call, respectively, Dative-plus-Infinitive and Genitive-plus-Infinitive, have been extensively studied by Steven Franks and James Lavine (2006) (further FL06), and the goal of this contribution is to review and supplement their analysis in the light of new and more comprehensive empirical data and to propose a different treatment, following certain recent proposals in the Minimalist case theory.

The structure of the paper is as follows. In §2 I briefly outline the main conceptual tenets of the Minimalist case theory necessary for the understanding of the article. In §3 I give a summary of FL06's analysis and claims, and in §4 offer a revision of FL06's empirical claims based on my own research. In §5 I go beyond Lithuanian and show how comparable data from other languages, including both those related to Lithuanian (i.e., Latgalian) and those completely unrelated (i.e., some Australian languages), can help us better understand the Lithuanian patterns of "non-canonical" case marking in infinitival clauses. In particular, I claim that such notions as "associating" and "complementizing" case, first introduced by Dench and Evans (1988) for the languages of Australia, and the generalized mechanism of multiple case assignment in syntax (cf. Matushansky 2008, 2010; Erschler 2009) can account for the Lithuanian data in a conceptually satisfactory way. In §6 I give a detailed outline of my own analysis of the Lithuanian constructions with the Dative and Genitive case marking of the object of infinitival clauses.

2. Basics of the Minimalist case theory

Since FL06 address the Lithuanian constructions with Dative and Genitive objects of the Infinitive from the point of view of recent generative case theory and argue that the Lithuanian data are problematic for the general assumptions of this theory (cf. also Anderson, to appear, for a similar argument based on a broader range of data from Lithuanian), I will start by briefly presenting the main tenets of the current "mainstream" generative (Minimalist) case theory, of course in a simplified fashion (see also Hornstein et al. 2005: Ch. 4; Bobaljik & Wurmbrand 2009). However, further on in this paper I assume the reader to be familiar with the most general architecture of the Minimalist theory (cf. Chomsky 2000, 2001; Hornstein et al. 2005) and its basic notions, such as binary branching

X-bar-syntactic structure, features, operations like Merge, Move and Agree, and the division between the so-called "narrow syntax" and Phonological Form (PF).

Initially, case in generative grammar was assumed to be an abstract feature of noun phrases required for the well-formedness of a syntactic derivation. The so-called "case filter" (Chomsky 1981: 49) required every phonologically overt NP to have case (even in languages with only vestigial case distinctions, like English, or no morphological case at all, like Chinese). Most discussion of case in Government and Binding theory was concerned with the relation of case with NP licensing and had little to do with morphological case proper.[4] In most work on case theory it was assumed that NPs receive case only once and that once a case value is assigned it can no longer be substituted by another case value. Such a view has been largely retained in the "mainstream" Minimalist work, see, e.g., Chomsky (2001: 6ff; Hornstein et al. 2005: Ch. 4), where case is viewed as an "uninterpretable" feature on nominals which has to be "checked" or "valuated" via an Agree operation for the derivation to be licit, and where "once the Case value is determined, N no longer enters into agreement relations" (Chomsky 2001: 6). Such a view of case theory has been recently challenged in such work as McFadden (2004), Landau (2006), Keine (2010), Preminger (2011) and some others, who all consider case to be primarily a morphological phenomenon, determined in syntax but independent of the issue of NP licensing and not reducible to the Agree operation, and by Béjar and Massam (1999), Merchant (2006) and Matushansky (2008, 2010), who argue that case can sometimes be assigned more than once to the same NP.[5]

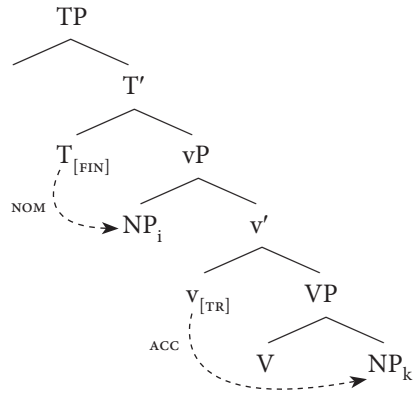
Regardless of the licensing issue, which won't concern us any more, at least since Chomsky (1981: 170) discussions of case in generative theories have involved a distinction between the so-called "structural" and "inherent" types of case. Basically, structural case is determined by the general properties of the syntactic configuration the NP occurs in (hence the synonymous term "configurational" case), while inherent case is determined by the lexical properties of the NP's governor, e.g. by a particular verb or preposition. The distinction between structural and inherent case proves to be especially useful for languages with rich case systems such as, e.g. German, Icelandic, Slavic and Baltic. Here, structural cases are those associated with the core grammatical relations of subject and direct object, i.e. nominative and accusative, as well as the adnominal genitive, while other cases or rather uses of cases, e.g. adverbal genitive, dative, instrumental etc., are regarded as inherent cases. Under the current Minimalist architecture of

4. Cf. the starting sentence of Bobaljik & Wurmbrand (2009: 44).

5. In fact, proposals along these lines go back at least as early as McCreight Young (1988).

syntax, inherent case can be viewed as assigned or checked by lexical heads (V or P), while structural case is assigned/checked by functional heads. In particular, accusative can be viewed as assigned by the "little *v*" head present with transitive verbs, and nominative as assigned by the (finite) T head (Chomsky 2001: 6), see the tree diagram in (7). In (7) case assignment is indicated by dotted arrows subscribed with the relevant case value.

(7)



Further developments in case theory, e.g., Babby (1986, 1994), Woolford (2006), proposed to subdivide non-structural case into "semantic" and "lexical", drawing a distinction between non-structural case which is determined solely by idiosyncratic specifications of particular lexical items and case that is transparently related to some kind of semantic role, e.g., recipient or beneficiary dative. For interesting proposals along these lines concerning Lithuanian, see Anderson (2011, forthcoming).

The distinction between different kinds of case reveals itself in the phenomenon of **case competition**, where, depending on the morphosyntactic context, different cases may appear on an NP (arguably) bearing the same grammatical relation and occupying the same structural position. A paradigm example of case competition is the Genitive of negation rule in Russian and Lithuanian, see example (1b) and (3) above. Here the Genitive is arguably a semantic case triggered by the Neg head; the crucial property of this rule consists in the empirical generalization that the Genitive of negation can replace only the structural Accusative case but not any other case, lexical or semantic, cf. (8).

(8) a. *Aldon-a* *dav-ė* ***broli-ui*** ***obuol-į***.
Aldona-NOM.SG give-PST(3) brother-DAT.SG apple-ACC.SG
'Aldona gave her brother an apple.'

b. *Aldon-a* *ne-dav-ė* ***broli-ui*** **/** ***broli-o***
Aldona-NOM.SG NEG-give-PST(3) brother-DAT.SG/*GEN.SG
obuoli-o **/** ***obuol-į.***
apple-GEN.SG/*ACC.SG
'Aldona didn't give her brother an apple.'

For a more detailed discussion of lexical vs. inherent case in Lithuanian, see FL06 (247–249) and Anderson (forthcoming). What is important here is that under the Minimalist architecture of grammar, case competition and the distinction between lexical, semantic and structural case can be regarded as stemming from the fact that lexical case is assigned to the NP "upon first merge, immediately when it is introduced into the derivation" (Preminger 2011: 151), which, together with the view that case values are determined once and for all, automatically implies that NPs assigned lexical case cannot further receive semantic or structural case. The possibility for semantic case to substitute for structural case, or for one structural case to substitute for another under specific conditions such as non-finiteness, can therefore be captured by establishing local relations between an NP not assigned lexical case and some functional head, e.g. Neg in the case of Genitive of negation.

The last crucial property of the "mainstream" Minimalist conception of case is the view of case assignment/checking as a local operation. The most general constraint on locality of all operations (Move and Agree, the latter comprising case assignment) is the so-called Phase Impenetrability Condition (Chomsky 2000: 108; 2001: 13) in (9).

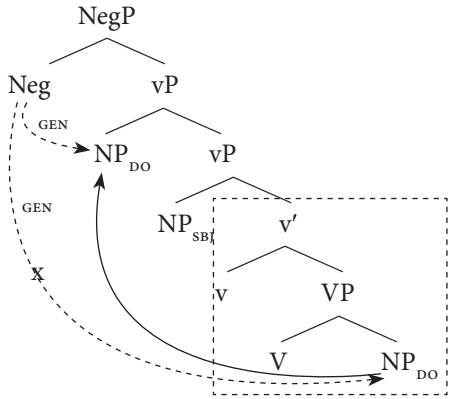
(9) In phase α with head H, the domain of H (its complement) is not accessible to operations outside of α; only H and its edge (specifier) are.

Phases are thus syntactic objects (parts of a derivation) which are inaccessible to further operations once constructed; in general it is assumed that after a phase is built, it is transferred to the semantic and phonological interfaces for interpretation and spell-out. Phasehood is determined by the nature of particular functional heads; thus, (transitive) vPs and CPs are considered phases, while (at least non-finite) TPs are not, which, for instance, makes it possible to capture the familiar distinction between control and raising structures (see e.g. Chomsky 2001: 7–9).

For case theory, the notion of phase has obvious consequences in that case assignment is constrained by the Phase Impenetrability Condition in (9) (see e.g. McFadden 2010). In particular, this means that a head outside of the vP cannot assign case to the direct object NP unless it raises to the edge of the vP – an assumption crucial for FL06's analysis of the Lithuanian constructions discussed in the paper. Incidentally, this implies that with the Genitive of negation the direct

object has to raise to Spec,vP in order to be accessible to case assignment by the Neg head (which is obviously located higher than *v* in syntactic structure), cf. the diagram in (10), where phase boundary is indicated by the square.

(10)



To summarize this necessarily short and simplistic discussion of the "mainstream" Minimalist case theory, let me recapitulate its main theoretical assumptions:

(11)
i. each NP has to bear a unique case value;
ii. case values are assigned/checked by lexical and functional heads;
iii. case assignment/checking can only occur in local configurations constrained by the Phase Impenetrability Condition;
iv. case assignment/checking can only occur once for each NP;
v. in instances of case competition, structural, but not lexical/inherent case can be overridden;
vi. NPs must move from their base positions in order to receive structural case from heads located outside of their phases.

These assumptions constitute the conceptual basis of FL06's analysis of the Lithuanian Dative-plus-Infinitive and Genitive-plus-Infinitive constructions summarized in the next section. My own analysis of these constructions will challenge most of the points in (11) and will be based on recent revisions to the Minimalist case theory which propose an entirely different conception of case.

3. Franks and Lavine (2006)

FL06 is to date the only publication dealing with the non-canonical marking of objects in Lithuanian Infinitive clauses, including the Dative-plus-Infinitive, Genitive-plus-Infinitive and Nominative-plus-Infinitive constructions, from a

synchronic and theoretical point of view. Before that, these constructions had received only a diachronic and historical-comparative treatment in Ambrazas (1981, 1987), cf. also Schmalstieg (1987: 145–152, 174–179, 214–220), and had been noticed in Sawicki (1992), dedicated to the more general issue of the expression of goal and purpose in Lithuanian.

Since in my paper I deal only with Dative-plus-Infinitive and Genitive-plus-Infinitive constructions, leaving aside the Nominative-plus-Infinitive constructions, I will not go into FL06's treatment of the latter. The main empirical claims of FL06 with respect to the Dative-plus-Infinitive and Genitive-plus-Infinitive constructions are outlined in the following subsections. Most examples and grammaticality judgments come from FL06 and are not necessarily endorsed by the author of the present article.

3.1 Structural vs. inherent case

According to FL06, case alternation in infinitival clauses is possible only with Accusative direct objects, which receive case via general mechanisms of structural case assignment, and not with indirect objects assigned inherent case by the verb, cf. (12) showing a verb assigning Instrumental case vs. (13) with a regular transitive verb with an object in the Accusative. The reason for word order variation in (12) and (13) will be discussed in §3.2.

(12) a. *Mes rūpin-a-mė-s* ***vaik-ais***.
we:NOM take.care.of-PRS-1PL-RFL child-INS.PL
'We take care of children.'

b. *Mes pastat-ė-me ligonin-ę* [*rūpin-ti-s*
we:NOM build-PST-1PL hospital-ACC.SG take.care.of-INF-RFL
vaik-ais].
child-INS.PL

c. **Mes pastat-ė-me ligonin-ę* [***vaik-ams***
we:NOM build-PST-1PL hospital-ACC.SG child-DAT.PL
rūpin-ti-s].
take.care.of-INF-RFL
'We built a hospital to take care of children.' (FL06: 250)

d. *Atėj-o* [*rūpin-ti-s* ***draug-u***].
come-PST(3) take.care.of-INF-RFL friend-INS.SG

e. **Atėj-o* [***draug-o*** *rūpin-ti-s*].
come-PST(3) friend-GEN.SG take.care.of-INF-RFL
'He came to take care of a friend.' (FL06: 255)

(13) a. *Mes gyd-o-me **vaik-us**.*
we:NOM treat-PRS-1PL child-ACC.PL
'We treat children.'

b. *Mes pastat-ė-me ligonin-ę [**vaik-ams** gydy-ti].*
we:NOM build-PST-1PL hospital-ACC.SG child-DAT.PL treat-INF
'We built a hospital to treat children.' (FL06: 252)

c. *Daktar-as atėj-o [**vaik-o** gydy-ti].*
doctor-NOM.SG come-PST(3) child-GEN.SG treat-INF
'The doctor came to treat the child.'

The contrast between the behaviour of inherent case in (12) and structural case in (13) naturally falls out of the assumption already stated above that inherent case, being an idiosyncratic feature of individual lexical items (in this case verbs) and assigned in the most local configuration by V to its complement directly upon Merge, cannot be overridden by any other mechanisms of case assignment, all of which necessarily apply at later stages of the derivation.

In addition to that, FL06 show that a case alternation is obligatory in purpose infinitival clauses, but not in goal infinitival clauses with verbs of motion. Thus, the replacement of the Accusative by the Dative is obligatory, cf. (14), while the change from the Accusative to the Genitive is not, cf. (15).

(14) **Pastat-ė daržin-ę [sukrau-ti **šien-ą**].*
build-PST(3) hayloft-ACC.SG keep-INF hay-ACC.SG
intended: 'They built a hayloft to keep hay.' (FL06: 254)

(15) *Parvažiav-o [pasiim-ti **suknel-ę**].*
come.back-PST(3) take.RFL-INF dress-ACC.SG
'She came back to take the dress.' (ibid.)

3.2 Case and word order

Probably the most crucial observation of FL06, from which they draw very important conclusions for their analysis, consists in the link between case alternation and "object shift" whereby the Dative and Genitive direct object normally occupies a position before the Infinitive, in contrast to both the Accusative direct objects of finite and "canonical" Infinitive clauses and the (indirect) objects bearing inherent case. In other words, though the pragmatically neutral word order in Lithuanian is Verb-Object (VO), in the infinitival constructions with "non-canonically" marked direct objects the neutral order is rather OV, while VO is accepted only under specific discourse conditions such as narrow focus on the object, cf. (16) and (17).

(16) a. *Mes pastat-ė-me ligonin-ę* [***vaik-ams*** *gydy-ti*].
we:NOM build-PST-1PL hospital-ACC.SG child-DAT.PL treat-INF
'We built a hospital to treat children.' (FL06: 252)

b. #*Mes pastat-ė-me ligonin-ę* [*gydy-ti* ***vaik-ams***].
we:NOM build-PST-1PL hospital-ACC.SG treat-INF child-DAT.PL
acceptable only under the narrow focus interpretation 'We built a hospital to treat precisely children (and not somebody else)' (FL06: 251–252)

(17) a. *J-ie dėj-o pastang-as* [***ilg-am*** ***kar-ui*** *užbaig-ti*].
3-NOM.PL.M put-PST(3) effort-ACC.PL long-DAT.SG.M war-DAT.SG finish-INF
'They made efforts to end the long war.'

b. #*J-ie dėj-o pastang-as* [*užbaig-ti* ***ilg-am*** ***kar-ui***].
3-NOM.PL.M put-PST(3) effort-ACC.PL finish-INF long-DAT.SG.M war-DAT.SG
acceptable only under the narrow focus interpretation (FL06: 251–252)

However, FL06 (256–257) note that the OV preference is attested only with the Dative-plus-Infinitive constructions, and is not observed with the Genitive-plus-Infinitive, where both orders are claimed to be neutral in terms of information structure, cf. (18).

(18) a. *Siunt-ė mergait-ę* [*parvež-ti* ***daktar-o***].
send-PST(3) girl-ACC.SG bring-INF doctor-GEN.SG

b. *Siunt-ė mergait-ę* [***daktar-o*** *parvež-ti*].
send-PST(3) girl-ACC.SG doctor-GEN.SG bring-INF
'He sent the girl to fetch a doctor.' (FL06: 256)

Examples like (18a) are accounted for by FL06 (256–257) as an intermediate diachronic stage in the development from a construction with the neutral OV order and obligatory Genitive marking of the object to the default Infinitive construction with Accusative object and VO order, like the one shown in (15). Syntactically, FL06 propose that in examples like (18a) "[t]he matrix and embedded verbs appear to be functioning as a single syntactic unit, which together assign lexical genitive to their shared object argument" (FL06: 257).

Further, FL06 claim that in the Infinitive constructions with OV order the Dative or Genitive object not just occurs before the verb but is moved out of the VP, which is indicated by the position of manner adverbials demarcating the left edge of the VP, cf. (19a). The final position of the displaced object is arguably the

left edge of the Infinitive phrase (InfP), which is indicated by the position of epistemic adverbials residing outside the VP, cf. (19b), and the OSV order in examples where both the Dative object and the Dative subject co-occur, cf. (20).

(19) a. *Pastat-ė daržin-ę* [$_{InfP}$***šien-ui*** [$_{VP}$***saugiai*** *sukrau-ti*]].
build-PST(3) hayloft-ACC.SG hay-DAT.SG safely keep-INF
'They built a hayloft to keep the hay safely.'
b. *Išvažiav-o* [$_{InfP}$***keli-o*** ***tikriausiai*** [$_{VP}$*taisy-ti*]]
drive.out-PST(3) road-GEN.SG probably repair-INF
'They went probably to repair the road.' (FL06: 260)

(20) *Pastat-ė daržin-ę* [$_{InfP}$***šien-ui*** [$_{vP}$***mums*** *sukrau-ti*]].
build-PST(3) hayloft-ACC.SG hay-DAT.SG we-DAT keep-INF
'They built a hayloft for us to keep hay.' (FL06: 266)

The correlation between purpose/goal semantics, non-canonical case marking and displacement of the object naturally raises the question whether the Dative/Genitive NP does not in fact occupy a position in the main clause where it receives its Dative or Genitive case from the main verb. And indeed, both Dative and Genitive NPs can appear as purpose/goal adjuncts without an Infinitive (see Sawicki 1992), cf. (21) and (22).

(21) 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* ***kūryb-ai***.
earth-NOM.SG get.up-PRS(3)-RFL work-DAT.SG and creation-DAT.SG
'Earth is getting up for work and creation.' (Kerevičienė 2008: 182)

(22) 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)

However, FL06 show by syntactic tests that the displaced dative or genitive object in fact forms a constituent with the Infinitive. This is evidenced by the following diagnostics. First, in many cases it is impossible to omit the Infinitive, since the object is not always (semantically) licensed in the matrix clause, cf. (23) vs. (21), (24) vs. (22):

(23) *Iššov-ė* ***žmon-ėms*** **(pagąsdin-ti).*
shoot-PST(3) people-DAT.PL frighten-INF
'He fired to frighten the people / *for people.' (FL06: 271)

(24) *Išvažiav-o* ***keli-o*** **(taisy-ti).*
drive.out-PST road-GEN.SG repair-INF
'They went to repair the road / *for the road.' (FL06: 271)

Second, constituency tests such as coordination (25), *tai*-"clefting" (26) or fragmenting (27) also indicate that the Dative (and Genitive) NPs belong to the Infinitive clause rather than to the matrix clause.

(25) *Pastat-ė* *daržin-ę* [***šien-ui*** *sukrau-ti*] *ir* [***grūd-ams***
build-PST(3) hayloft-ACC.SG hay-DAT.SG keep-INF and grain-DAT.PL
apsaugo-ti].
protect-INF
'They built a hayloft to keep hay and protect grain.' (FL06: 272)

(26) *Tai* [***šien-ui*** *sukrau-ti*] *pastat-ė* *daržin-ę.*
it hay-DAT.SG keep-INF build-PST(3) hayloft-ACC.SG
'It is (for them) to keep hay that they built a hayloft.' (FL06: 273)

(27) a. *K-am* *pastat-ė* *daržin-ę?*
what-DAT build-PST(3) hayloft-ACC.SG
'For what purpose did they build a hayloft?'
b. *Šien-ui* *sukrau-ti.*
hay-DAT.SG keep-INF
'To keep hay.' (FL06: 272–273)

All this indicates that the relation between the "independent" Dative and Genitive expressions of goal and purpose shown in (21) and (22) and the Dative-plus-Infinitive and Genitive-plus-Infinitive constructions is probably only a historical one (cf. Ambrazas 1981, 1987 on the origins of the Dative-plus-Infinitive construction), while synchronically both the Dative and Genitive direct object belong to the embedded infinitival clause.

3.3 Argument vs. adjunct

Finally, FL06 claim that Dative-plus-Infinitive and Genitive-plus-Infinitive clauses differ in their syntactic status: the former are purpose adjuncts, whereas the latter are rather (optional) goal arguments of motion verbs. The evidence for this distinction comes from the difference in wh-extraction possibilities from the two

types of construction: the Dative-plus-Infinitive construction does not allow extraction of wh-words, cf. (28), while the Genitive-plus-Infinitive construction freely allows such question formation, cf. (29). (In Generative grammar, it is assumed that wh-extraction is prohibited from adjuncts but permitted from arguments. The exact details of this generalization, supported by data from English and some other languages, are not relevant here. See, e.g., Szabolcsi 2006.)

(28) **K-am*$_i$ *atneš-ė* *vanden-s* [t$_i$ *palaisty-ti*]?
what-DAT bring-PST(3) water-GEN.SG pour-INF
intended: 'What did he bring some water in order to pour on?' (FL06: 277)

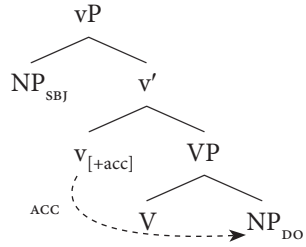
(29) ***K-o***$_i$ *atėj-o* [t$_i$ *aplanky-ti*]?
who-GEN come-PST(3) visit-INF
'Whom did he come to visit?' (FL06: 278)

FL06 propose to capture this putative difference between the Genitive-plus-Infinitive and the Dative-plus-Infinitive constructions in terms of different syntactic structures: while the purpose Dative-plus-Infinitive clause is adjoined to the matrix VP or NP, the Genitive-plus-Infinitive construction is selected by a special Asp(ect) head associated with verbs of motion (FL06 remain somewhat vague as to what the independent motivations for postulating such a functional head are, see below). In the next section their analysis is spelled out in more detail.

3.4 FL06's analysis

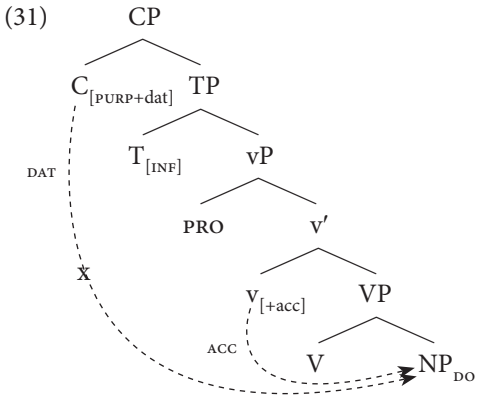
The Lithuanian constructions with the Dative and Genitive marking of the direct object of the Infinitive raise two main problems for the "mainstream" Minimalist case theory. First, they clearly pose problems for the usual assumption that NPs receive case only once and locally. Indeed, if the structure of a transitive verb phrase in Lithuanian is as in (30), and the Accusative case on the direct object is valued by the transitive *v*, as in finite and ordinary infinitival clauses, then what causes the replacement of this Accusative by Dative or Genitive in purpose clauses?

(30)



Since the "non-canonical" case marking in the Lithuanian constructions in question is associated with purpose semantics and, moreover, with a particular type of verb, i.e. motion verbs in the case of the Genitive-plus-Infinitive construction, the source of the non-Accusative case on the direct object of the Infinitive can only be located **outside** of the vP, e.g. in the CP domain of the purpose infinitival clause in case of the Dative-plus-Infinitive or in the matrix clause in case of the Genitive-plus-Infinitive. However, in both cases the direct object must have already received its Accusative case from its own *v*, and further case assignment is impossible, cf. (31), showing a putative structure of the purpose infinitival clause with the null purpose C head being the possible source of the Dative case (the illicit case assignment of the Dative case by the C to the object NP already marked Accusative by the *v* is shown by the crossed arrow).

(31)

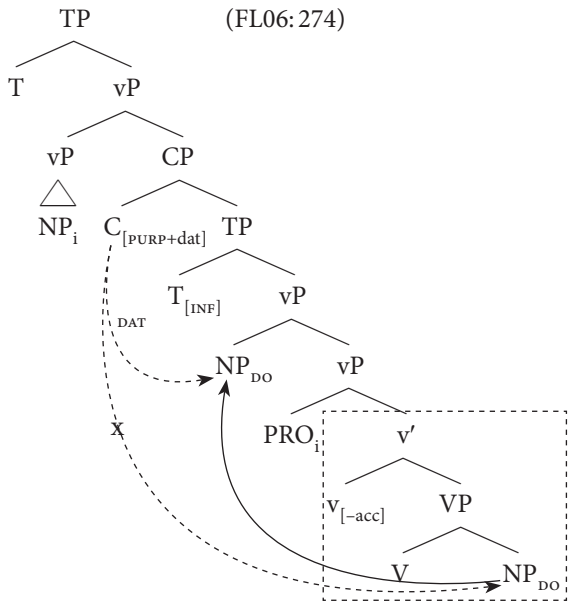


The only way to ensure that some higher head is able to successfully assign the Dative case to the direct object is to stipulate that "*v* has two variants, one with features valuing Case and the other without" (FL06: 248), and that is what FL06 actually do in their analysis (FL06: 275). Another domain where such a "defective" or "inactive" *v* is needed in Lithuanian is the Genitive of negation shown in example (3) above. Once the VP containing an object NP is merged with such a "defective" *v*, Accusative is not assigned and the object thus remains available for case assignment from some other head.

However, suspending the case assignment ability of *v* does not suffice to derive the actual case marking, since the relation between C and the object in the position of the complement of V cannot be established yet for other, independent, reasons: vP is a phase, hence its constituents, including the object, cannot be accessed by heads outside of the vP due to the Phase Impenetrability Condition (9),

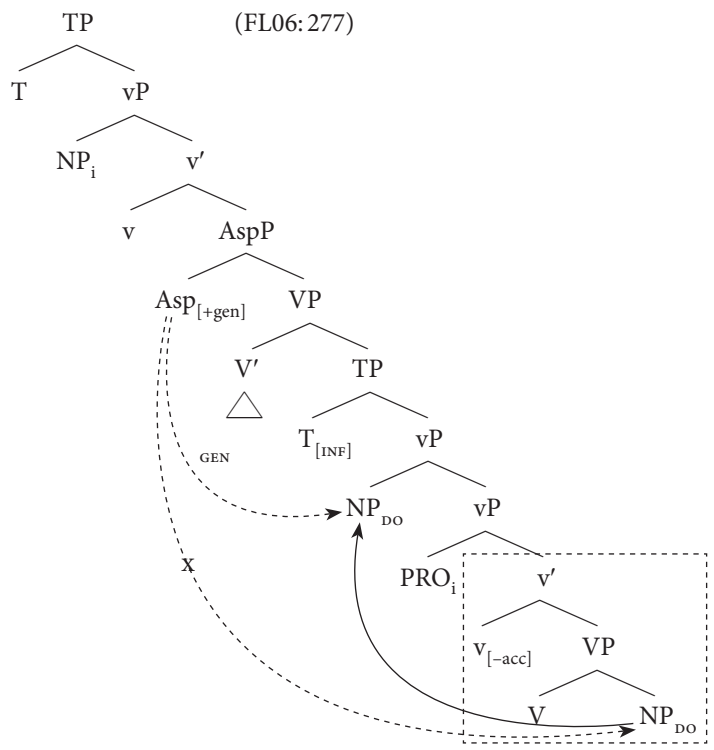
unless they move to some position at the edge of the vP. This is precisely what happens in the Dative-plus-Infinitive construction, where, according to FL06, the object raises and adjoins to the left of the vP as in (32). The diagram shows that unless the direct object NP raises outside of the phase delineated by the square, assignment of the Dative to it by the C head is ruled out.

(32) (FL06: 274)



In a similar vein, FL06 account for the Genitive-plus-Infinitive construction: here, the infinitival TP with a (now optionally) "defective" *v* is selected by the matrix VP itself embedded under the already mentioned aspectual projection responsible for the Genitive case assigned to the object of the Infinitive, which again has to move and adjoin to the left of the lower vP, see (33).

(33) (FL06: 277)



Discussing the nature of the Lithuanian "object shift" and its relation to case assignment, FL06 (244–249, 285–286) call this kind of movement "agnostic", because the object NP, unable to have its case features valued by the closest head (*v*), moves to a higher position, where its case features can be valued by some – yet unmerged – head whose precise nature is not clear at the stage of derivation where movement applies (in a fashion similar to other successive-cyclic movement operations, e.g. long-distance wh-fronting). The only reason for such a movement, in FL06's words, is "the possibility of salvation coupled with the certainty of death", i.e., the crash of the derivation if the object remains in its base position where neither its closest available head assigns case to it, nor any higher head can reach it due to the Phase Impenetrability Condition. This kind of movement operation is peculiar in that it is not "driven by the need to check features" (FL06: 243), and in this respect FL06's proposal is unorthodox, since such movement had not been proposed before as a possible mechanism of case-assignment.

3.5 Summary

To summarize, the main empirical arguments (E) and analytical conclusions (A) of FL06 are as follows:

E1. Only structural (Accusative), and not inherent, case can be replaced by the Dative or Genitive in the infinitival purpose constructions.
E2. Replacement of the Accusative by the Dative is obligatory, while replacement of the Accusative by the Genitive is optional.
E3. The constructions display a strong (with the Dative-plus-Infinitive) and weak (with the Genitive-plus-Infinitive) preference for the preverbal position of the object, and this preverbal position is at the left edge of the embedded vP.
E4. In both constructions, the object forms a constituent with the Infinitive.
E5. Dative-plus-Infinitive clauses are adjuncts whereas Genitive-plus-Infinitive clauses are arguments.

A1. Lithuanian transitive verbs can have both an "active" *v* assigning Accusative to the direct object and an "inactive" *v* unable to assign case; this makes it possible to formulate the account not violating the general assumption of case theory that case of an NP can be assigned/valued only once in the derivation.
A2. The object needs to move "agnostically" to the left edge of the vP in order to enable some higher head to assign case to it; the Dative case is assigned by the null purposive C, and the Genitive is assigned by the Asp(ectual) head associated with verbs of motion; in both cases, Phase Impenetrability Condition is not violated.

In the next section I will critically review both theoretical and empirical parts of the FL06's argument, showing that their account of the non-canonical case marking of the direct object of infinitival clauses in Lithuanian is not entirely satisfactory for conceptual reasons and rests on incomplete and not fully accurate data, and therefore should be abandoned.

4. Franks and Lavine (2006) revised

There are several empirical as well as conceptual problems with FL06's analysis, which will be discussed here together with additional data, coming both from native speakers and the Internet. I will start by briefly listing problems with FL06's

theoretical assumptions and then will proceed with a more lengthy discussion of empirical data. Note that if in the previous section grammaticality judgments were given according to FL06 and their informants and sources, the responsibility for the examples presented in this section lies on me and my interpretation of the sources and my informants' judgments.

4.1 Conceptual problems of FL06

Though most of the details of the analytical proposal advanced by FL06 seem to inevitably follow from the general assumptions about the nature of case assignment in Minimalism outlined in §2 (i.e., unique and local assignment/valuation of case features by the closest available case-assigning head), they neither look really explanatory nor seem to fully account for the data.

First of all, FL06's proposal (A1 above) that *v* comes in two variants, one with a [+acc] feature and the other with a [–acc] feature, does not offer an **explanation** of case variation (not only in the Infinitive clauses, but also with the Genitive of negation) but rather looks like a mere restatement of the facts. There is no reason independent of case marking to postulate a non-case-assigning *v* bearing no obvious semantic difference from its case-assigning partner, in particular in that both varieties of *v* are associated with an agentive theta-role of the external argument merged in their specifier.[6] In my view, stipulations like this should be avoided in a truly explanatory account.

Second, the same can be said about the Asp projection postulated for verbs of motion and assigning Genitive to the object of the infinitival clause or to the "independent" Genitive NP denoting purpose of motion. The motivation FL06 (276) give for such a move is at best insufficient, and since FL06 do not "provide a theory of aspect or event structure" (ibid.) which would independently support the introduction of such an aspectual head, nor explore its repercussions elsewhere in the grammar or semantics, I can only conclude that this Asp head is again a stipulation in order to have a suitable case assigner for the Genitive.

Finally, the other problem of FL06's account of case and word order in Lithuanian infinitival clauses, now not only conceptual but also empirical, is their failure to account for the availability of the VO order in these constructions, especially in the Genitive-plus-Infinitive construction with verbs of motion. Indeed, since

6. FL06's remark (p. 248) that the "defective" *v* "would also be needed for intransitive clauses" does not seem warranted, since unaccusative intransitive clauses without agentive subjects arguably lack a vP projection altogether while unergative intransitive clauses differ from transitive ones not in the nature of their functional head *v*, but in the fact that their lexical V either does not select a complement at all or assigns to it some inherent case.

FL06 (256) themselves note that in the Genitive-plus-Infinitive construction both word orders are considered neutral, cf. example (18) above, this implies that the object of the Infinitive does not necessarily need to move to the edge of the vP in order to be assigned Genitive from the matrix clause.[7] This fact seems to undermine the whole argumentation of FL06, since it means that (i) the object can be somehow accessed by a non-local case-assigning head even inside the VP and, consequently, (ii) that "agnostic" movement is not necessary in order to rescue the derivation, which can happily converge even if the object remains *in situ*. This, in my view, casts doubt on the close link between case marking and word order (A2 above) assumed by FL06.

In the next subsection I will present further empirical evidence showing, among other things, that case marking and word order in infinitival clauses of Lithuanian should preferably not be lumped together and most probably involve synchronically independent phenomena, and that, therefore, FL06's analysis is untenable.

4.2 Testing FL06's empirical claims

According to the data I collected, of the empirical points (E1)–(E5) listed in §3.5, only (E4) concerning the constituency of the infinitival constructions holds without any further qualification. Below I will re-evaluate each of the FL06 empirical claims on the basis of new data.

(E1) Structural vs. inherent case. Surprisingly, it turns out that not only structural Accusative, but also inherent Genitive can sometimes be replaced by the Dative in the infinitival constructions with OV order, at least for some speakers (partial acceptability is indicated by the % sign), cf. example (34).

(34) a. *J-ie* *nor-i* [*išveng-ti* ***kar-o***].
3-NOM.PL.M want-PRS(3) avoid-INF war-GEN.SG
'They want to avoid war.'

b. %*J-ie* *dėj-o* *pastang-as* [***kar-ui*** *išveng-ti*].
3-NOM.PL.M put-PST(3) effort-ACC.PL war-DAT.SG avoid-INF

7. As has been already mentioned in §3.2, the account of the VO order in the Genitive-plus-Infinitive construction hinted at by FL06 (257) considers such cases as involving an entirely different syntactic structure, i.e. a complex predicate assigning the Genitive to the object, but since this analysis is not outlined in any detail and is not supported by any independent evidence, I see no reason to seriously discuss it here.

c. %*J-ie dėj-o pastang-as* [*išveng-ti* ***kar-ui***].
3-NOM.PL.M put-PST(3) effort-ACC.PL avoid-INF war-DAT.SG
'They made efforts to avoid war.'

In particular, the quantificational Genitive assigned by verbs with the cumulative preverb *pri-* is always obligatorily replaced by the Dative, cf. (35)–(36):

(35) a. *Vaik-ai skin-a* ***gėl-es***.
child-NOM.PL pick-PRS(3) flower-ACC.PL
'The children are picking up flowers.'
b. *Vaik-ai pri-si-skyn-ė* ***gėli-ų***.
child-NOM.PL PRV-RFL-pick-PST(3) flower-GEN.PL
'The children have picked up (lots of) flowers.'

(36) a. **Vaik-ai atneš-ė krepš-į* [*prisiskin-ti* ***gėl-ių***].
child-NOM.PL bring-PST(3) basket-ACC.SG pick.up-INF flower-GEN.PL
b. *Vaik-ai atneš-ė krepš-į* [***gėl-ėms*** *prisiskin-ti*].
child-NOM.PL bring-PST(3) basket-ACC.SG flower-DAT.PL pick.up-INF
'The children brought a basket to pick up flowers.'

Examples parallel to (34) with the Genitive replaced by the Dative in purpose infinitival clauses are also found on the Internet, cf. (37):

(37) a. *Veiksm-ai* [***ši-oms*** ***problem-oms*** *išveng-ti*].
action-NOM.PL this-DAT.PL.F problem-DAT.PL avoid-INF
'Actions in order to avoid these problems.'[8]
b. *…dokument-ai* [***finansin-ei*** ***param-ai*** *prašy-ti*].
document-NOM.PL financial-DAT.SG.F support-DAT.SG ask-INF
'documents in order to ask for financial support.'[9]

It is important to note that this unexpected phenomenon does not seem to be correlated with the non-standard use of the Accusative case on the object of verbs such as *išvengti* 'avoid' or *prašyti* 'ask', since the latter use is attested much less frequently than the Dative marking with the Infinitive, cf. (38).[10]

8. http://support.google.com/webmasters/bin/answer.py?hl=lt&answer=76401

9. http://kekstas.darbastalis.lt/istorija/

10. To be sure, the standard variants with the Genitive marking of the object are many times more frequent.

(38) Google search 04.01.2013:[11]

problemoms (DAT) *išvengti* 'to avoid problems' >	40 results
išvengti problemas (ACC)	2 results
išvengė problemas (ACC) 'avoided problems'	0 results
paramai (DAT) *prašyti* 'to ask for support'	7 results
prašyti paramą (ACC)	0 results
prašo paramą (ACC) 'asks for help'	4 results

In contrast to the replacement of the inherent Genitive by the Dative in purpose infinitival clauses, the replacement of cases other than Accusative (e.g. Instrumental) by the Genitive in goal infinitives with verbs of motion seems to be consistently banned.

(E2) At least for some native speakers, Accusative to Dative conversion is not obligatory in purpose infinitival constructions. Accusative is also possible, at least as a marginal option, especially in the VO order, cf. (39).

(39) a. %*Jon-as nupirk-o medžiag-as* [*pastaty-ti* ***nam-ą***].
Jonas-NOM.SG buy-PST(3) material-ACC.PL build-INF house-ACC.SG
'Jonas bought materials to built a house.'

b. %*Mes pastat-ė-me ligonin-ę* [*gydy-ti* ***vaik-us***].
we.NOM build-PST-1PL hospital-ACC.SG treat-INF child-ACC.PL
'We built a hospital to treat children.'

Though examples like (39) seem to be on the verge of grammaticality, Accusative tends to become the primary option when another Dative NP is present in the infinitival clause. This will be discussed below in relation to FL06's observation (E4).

(E3) The correlations between case marking and "object shift" postulated by FL06 turn out to have a much subtler nature.

First, the native speakers I consulted (five Vilnius University students) all tend to freely allow VO in both types of Infinitive constructions, cf. (40) and (41). According to their judgments, the VO order, consistent with the general pattern of the language, is often regarded as neutral, whereas the OV order is associated with focus or emphasis. *Contra* FL06, Dative-plus-Infinitive and Genitive-plus-Infinitive constructions do not seem to differ in this respect either from each other or from Accusative-plus-Infinitive constructions.

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11. Since LKT does not provide morphological annotation, using it for the study of infinitival constructions is virtually impossible. I obtained my "corpus" results by simple Google searches performed in January and February 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.

(40) *Jon-as atėj-o* [*aplanky-ti* ***draug-o***].
Jonas-NOM.SG come-PST(3) visit-INF friend-GEN.SG
'Jonas came to visit his friend.'

(41) *Mes pastat-ė-me ligonin-ę* [*gydy-ti* ***vaik-ams***].
we:NOM build-PST-1PL hospital-ACC.SG treat-INF child-DAT.PL
'We built a hospital in order to treat children.'

Second, the analysis of elicited material is partly supported by corpus data. Thus, for the Genitive-plus-Infinitive construction, the VO order is clearly preferred to the OV order, as shown in (42).

(42) Google search 03.01.2013:

aplankyti ***draugo*** 'to visit a friend'	~ 80 results
draugo *aplankyti*	~ 35 results
pasiimti ***vaiko*** 'to take the child'	~ 200 results
vaiko *pasiimti*	~ 160 results
nusipirkti ***laikraščio*** 'to buy a paper'	45 results
laikraščio *nusipirkti*	5 results

The OV order seems to be preferred only when the matrix verb is itself a prenominal attributive participle, cf. (43):

(43) a. [[***draug-o*** *aplanky-ti*] *atėj-ęs*] *berniuk-as.*
friend-GEN.SG visit-INF come-PST.PA.NOM.SG.M boy-NOM.SG
'the boy who came to visit his friend'[12]

b. [[***vaik-o*** *pasiim-ti*] *atvyk-us-i*] *mam-a*
child-GEN.SG take.RFL-INF arrive-PST.PA-NOM.SG.F mother-NOM.SG
'the mother who came to take along her child'[13]

Thus, the correct generalization about the word order in the Genitive-plus-Infinitive construction is that the latter does not significantly differ in its word order possibilities from the regular Infinitive clauses with the Accusative marked object, cf. the comparable statistics for the latter in (44).[14]

12. http://www.delfi.lt/news/daily/crime/article.php?id=14784007

13. http://www.15min.lt/komentaras/2492729

14. The two-tailed version of Fisher's exact test applied to the data on OV vs. VO order in Genitive-plus-Infinitive and Accusative-plus-Infinitive structures yielded $p > 0.2$ for "visit a/the friend" and $p > 0.089$ for "buy a/the newspaper", neither of which indicates a statistuically significant relation between case and word order.

(44) Google search 04.02.2013:

aplankyti ***draugą*** 'to visit a friend'	~ 70 results
draugą *aplankyti*	20 results
nusipirkti ***laikraštį*** 'to buy a paper'	~ 110 results
laikraštį *nusipirkti*	30 results

However, for the Dative-plus-Infinitive construction, the Internet data show a clear preference for OV order, though VO order is evidently a well-established, though yet minor, pattern, cf. (45).

(45) Google search 04.01.2013:

durims *uždaryti* 'to close doors'	30 results
uždaryti ***durims***	7 results
namui *pastatyti* 'to build a house'	~ 300 results
pastatyti ***namui***	10 results
mašinai *nusipirkti* 'to buy a car'	60 results
nusipirkti ***mašinai***	11 results
nuomai *sumokėti* 'to repay the loan'	~ 55 results
sumokėti ***nuomai***	~ 10 results
knygai *skaityti* 'to read a book'	~ 70 results
skaityti ***knygai***	10 results

The VO order occurs e.g. when the object NP is heavy, cf. (46) and (47).

(46) *neelektrini-ai* *įtais-ai* [*atidary-ti* *ir* *uždary-ti*
non.electric-NOM.PL.M device-NOM.PL open-INF and close-INF
dur-ims, ***lang-ams*** *ir* ***langin-ėms***].
door-DAT.PL window-DAT.PL and shutter-DAT.PL
'non-electric devices for opening and closing of doors, windows and shutters'[15]

(47) *Vis dėlto* *ne* *pat-s* *geriausi-as* *laik-as*
however NEG very-NOM.SG.M best-NOM.SG.M time-NOM.SG
[*rašy-ti* ***laišk-ui*** ***apie*** ***sav-e***]…
write-INF letter-DAT.SG about self-ACC
'However, it's not the best time to write about oneself…'[16]

However, the Google data are inconclusive, cf. (48) showing heavy postverbal Dative objects vs. (49) with heavy preverbal Dative objects.

15. http://isdv.upv.cz/portal/pls/portal/portlets.ozs.det?pozk=729339&plan=en

16. http://www.rasyk.lt/dienorastis/195020/195020.html

(48) Google search 04.01.2013:
pastatyti ***namui ar butui*** 'to build a house or a flat'[17] vs.
no: ***namui ar butui*** *pastatyti*
malti ***mėsai ir žuviai*** 'to chop meat and fish'[18] vs.
no: ***mėsai ir žuviai*** *malti*

(49) Google search 04.01.2013:
butui ar mašinai *nusipirkti* 'to buy a flat or a car' 3 results vs.
no: *nusipirkti* ***butui ar mašinai***
buto nuomai *sumokėti* 'to pay the rent for the flat' 6 results vs.
sumokėti ***buto nuomai*** 2 results

In fact, it looks like a considerable part of the instances of the Dative-plus-Infinitive construction with the OV order is constituted by set phrases which are not created anew but memorized and repeated and often involve non-referential objects,[19] e.g., ***mėsai malti*** *mašinėlė* 'mincing machine', lit. "meat-DAT chop-INF machine", *indas* ***kavai virti*** 'coffee maker', lit. "vessel coffee-DAT boil-INF", *pinigai* ***nuomai sumokėti*** 'money to repay the loan', lit. "money loan-DAT pay-INF", *paskola* ***namui pirkti*** 'loan to buy a house', lit. "loan house-DAT buy-INF" etc. This hypothesis, however, cannot be substantiated without a statistical analysis, which is very hard to conduct given the current state of the Lithuanian corpus.

The data at hand, in my view, warrant the conclusion that at least for the Genitive-plus-Infinitive construction the "object shift" is not connected with case marking at all. As to the Dative-plus-Infinitive construction, it seems that it is undergoing a gradual shift towards the neutral VO word order, and thus the two parameters – case marking and word order – should better be kept apart and not lumped together in the account of these constructions.

(E4) Though FL06's observations on the position of adverbials in Dative-plus-Infinitive and Genitive-plus-Infinitive OV structures, indicative of the object being shifted to the left periphery of the infinitival clause, is largely confirmed by my consultants, examples like (20) above where both the Dative subject and the Dative object are present are considered marginal or even sometimes ungrammatical. In such cases, marking of the object with the Accusative is preferred, cf. (50).

17. http://verslas.delfi.lt/nekilnojamas-turtas/article.php?id=19144292&com=1&s=1&no=140

18. http://www.mokslai.lt/referatai/referatas/smulkinimo-irengimai-prekybinese-ir-maitinimo-imonese-puslapis5.html

19. I thank Rolandas Mikulskas for pointing out to me the possible relevance of the referential status of the object in these constructions.

(50) a. %*Atidėj-o-me* *pinig-ų* [***nam-ui*** ***sūn-ui***
put.by-PST-1PL money-GEN.PL house-DAT.SG son-DAT.SG
pasistaty-ti].
build:RFL-INF

b. OK*Atidėj-o-me* *pinig-ų* [***sūn-ui*** *pasistaty-ti*
put.by-PST-1PL money-GEN.PL son-DAT.SG build:RFL-INF
nam-ą].
house-ACC.SG
'We put by some money for our son to build a house.'[20]

Moreover, this tendency to avoid two Dative NPs in an infinitive clause is not limited to the co-occurrence of the object and the subject in the Dative case, but is operative in prohibiting the Dative of the direct object in the presence of a Dative indirect object regardless of word order, cf. (51):

(51) a. **pinig-ai* ***vaz-ai*** ***motin-ai*** *nupirk-ti*
money-NOM.PL vase-DAT.SG mother-DAT.SG buy-INF

b. **pinig-ai* ***vaz-ai*** *nupirk-ti* ***motin-ai***
money-NOM.PL vase-DAT.SG buy-INF mother-DAT.SG

c. *pinig-ai* *nupirk-ti* ***motin-ai*** ***vaz-ą***
money-NOM.PL buy-INF mother-DAT.SG vase-ACC.SG
'money in order to buy a vase for the mother'

In the Genitive-plus-Infinitive construction, the Genitive on the direct object is compatible with the Dative indirect object, but not with the Dative subject (overt subjects of infinitival clauses appear in the Dative in Lithuanian), cf. (52).

(52) a. *Jon-as* *atėj-o* [***vaz-os*** ***motin-ai*** *padovano-ti*].
Jonas-NOM.SG come-PST(3) vase-GEN.SG mother-DAT.SG give-INF
'Jonas came in order to give the vase to his mother.'

b. **Jon-as* *atėj-o* *pas* *mane* [***laišk-o*** ***mums***
Jonas-NOM.SG come-PST(3) at me.ACC letter-GEN.SG we.DAT
parašy-ti].
write-INF
intended: 'Jonas came to me in order for us to write a letter.'

Thus it seems that Genitive-plus-Infinitive constructions selected by verbs of motion do not have a subject position at all. This is, however, not true of the other purpose Infinitive constructions, which can have their own Dative subjects, as

20. I thank Rolandas Mikulskas for an illuminating discussion of such examples. Note that the interpretation of the Dative *sūnui* in (50) as the beneficiary ('to build a house for our son') is ruled out by the reflexive form of the verb *pasistatyti* 'to build for oneself'.

(50b) shows. Such examples are paralleled by other kinds of infinitival clauses with Dative subjects, not expressing purpose, cf. (53).

(53) a. … *pakeis-ti* *būd-ą* [***vis-iems*** *skaity-ti* *knyg-as*]
change-INF way-ACC.SG all-DAT.PL.M read-INF book-ACC.PL
'to change the way everyone reads books'[21]

b. *tikimyb-ė* [***vaik-ams*** *susirg-ti* *alergij-a*]
probability-NOM.SG child-DAT.PL.M fall.ill-INF allergy-INS.SG
'the probability that children become allergic'[22]

It is clear from these data that whatever the source of the Dative case on the object of purposive Infinitive is, some other case-assigner is responsible for the Dative case on the subject of infinitival clauses in Lithuanian.

(E5) The adjunct vs. complement status of Dative-plus-Infinitive resp. Genitive-plus-Infinitive clauses diagnosed by wh-extraction is not uncontroversial, since the contrast between (28) and (29) and similar examples in (54) and (55) can actually be explained as stemming from a Complex NP Constraint violation, without recourse to the adjunct/complement distinction.

(54) ****K-am***$_i$ *atidėj-ai* [$_{NP}$ *pinig-us* [$_{InfP}$ t$_i$ *nusipirk-ti*]]*?*
what-DAT put.by-PST.2SG money-ACC.PL buy.RFL-INF
intended: 'What did you put by money to buy?'

(55) ***K-o***$_i$ *darbinink-ai* *nuvažiav-o* [$_{InfP}$ t$_i$ *taisy-ti*]*?*
what-GEN worker-NOM.PL drive.out-PST(3) repair-INF
'What did the workers go to repair?'

The grammatical variant of (54) involves pied-piping of the whole Infinitive clause, cf. (56):

(56) [$_{InfP}$ ***K-am*** ***nusipirk-ti***]$_i$ *atidėj-ai* *pinig-us* t$_i$?
what-DAT buy-INF put.by-PST.2SG money-ACC.PL
lit. 'What to buy did you put by money?'

Moreover, passivization of the matrix clause, which dissociates the infinitival clause from the noun, improves extraction, cf. (57):

21. http://www.johns-company.com/index.php?lang=lt&cat=400&month=2009-08&id=54486

22. http://www.alergija.info/view.php?page=104&rpid=2

(57) a. *Nauj-oji* *ligonin-ė* *buv-o*
new-NOM.SG.F.DEF hospital-NOM.SG AUX-PST(3)
pastaty-t-a [***vaik-ams*** ***gydy-ti***].
build-PST.PP-NOM.SG.F child-DAT.PL treat-INF
'The new hospital was built to treat children.'

b. ***K-am***$_i$ *nauj-oji* *ligonin-ė* *buv-o*
who-DAT new-NOM.SG.F.DEF hospital-NOM.SG AUX-PST(3)
pastaty-t-a [t_i *gydy-ti*]?
build-PST.PP-NOM.SG.F treat-INF
lit. 'Whom was the new hospital built to treat?'

This suggests (if we take the extraction diagnostic seriously at all, which is not compelling pending an independent investigation of this phenomenon in Lithuanian) that there is no syntactic difference between Genitive-plus-Infinitive and Dative-plus-Infinitive constructions in terms of the argument vs. adjunct distinction.

The observed properties of Dative-plus-Infinitive and Genitive-plus-Infinitive constructions are summarized in Table 1.

Among the features listed, (d-ii) and (e) are most probably a reflection of a processing-related surface ban on two Dative argument NPs in the same clause, while others call for a deeper structural explanation. My account of case marking in the constructions in question, in contrast to that of FL06, will rest on the assumption that word order does not play any important role in this phenomenon, which, I believe, is warranted by the facts discussed above. (Of course, the analysis proposed by FL06, or some other analysis taking word order into account, might be inevitable for an earlier stage of Lithuanian where the OV order in the Dative-plus-Infinitive and Genitive-plus-Infinitive constructions was obligatory – if such a stage has ever existed.) This means that, first, the conceptually problematic mechanism of

Table 1. Properties of Dative-plus-Infinitive and Genitive-plus-Infinitive constructions

	Dative-plus-Infinitive	**Genitive-plus-Infinitive**
(a) replacement of inherent case	marginally possible	impossible
(b) accusative retention	marginally possible	possible
(c) VO order	possible, though less frequent	preferred
(d) overt subject	i. possible with Acc object ii. marginal with Dat object	impossible
(e) Dative indirect object	i. possible with Acc object ii. impossible with Dat object	possible with Gen object
(f) wh-extraction	possible	possible

case assignment via "agnostic movement" proposed by FL06 is unnecessary, and, second and most importantly, that the case assignment in Genitive-plus-Infinitive and Dative-plus-Infinitive constructions in Lithuanian is not subject to the familiar constraints on long-distance dependencies, such as the Phase Impenetrability Condition (*contra* McFadden 2010). In the next section I will present typological data which suggests an alternative analysis in terms of **multiple case assignment** in syntax, which will be applied to Lithuanian data in §6.

5. Typological parallels

"Non-canonical" marking of objects of infinitival or purpose clauses seems to be an infrequent phenomenon cross-linguistically; e.g., in a recent monograph on the typology of purpose clauses (Schmidtke-Bode 2009) such patterns are not mentioned at all. In this section I will first look for phenomena similar to the Lithuanian Genitive-plus-Infinitive and Dative-plus-Infinitive constructions in the related languages and then will proceed to a more remote but instructive parallel with the languages of Australia.

5.1 The Baltic and Slavic Supine

In the neighbouring languages (Latvian, Latgalian, Estonian, Slavic), no direct parallels to the Lithuanian Dative-plus-Infinitive and Genitive-plus-Infinitive constructions are found, with the exception of the Latgalian Genitive-plus-Supine construction occurring with verbs of motion (for more details on object case marking in Latgalian and on the Supine construction, see Nau, this volume).

In Latgalian, the Supine is a verbal form morphologically distinct from the Infinitive (the formal difference between the two is often realized by root vocalism only) and cognate to a very similar form attested in older Lithuanian (see below). Clauses headed by the Supine denote purpose of motion; with the Supine of transitive verbs, the direct object is normally encoded in the Genitive case, as in (58).

Latgalian

(58) *Rogon-a* *izsyutej-a* *bōrineit-i* [***drēb-u*** *valāt*]
witch-NOM.SG send-PST(3) orphan-ACC.SG cloth-GEN.PL beat:SUP
'The witch sent out the orphan to beat clothes.' (Nau 2011:61)

By contrast, the Infinitive in Latgalian, which normally occurs with a different range of matrix verbs, requires the Accusative marking of the direct object, cf.

(59). However, examples are attested where the Infinitive is used instead of the Supine with verbs of motion, retaining the Genitive case of the object, as in (60).

Latgalian

(59) *Bōrineit-ia sōk-a* [*viaļāt* ***driāb-is***].
orphan-NOM.SG begin-PST(3) beat:INF clothes-ACC.PL
'The orphan began to beat clothes.' (Nau 2011: 61)

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

In Lithuanian, the Supine construction with the Genitive object was well-attested in older language up to the beginning of the 20th century, and is reported to have been used in the North-Eastern Aukštaitian dialects (Zinkevičius 1966: 390), which border on Latgale, cf. (61)–(63).

Old Lithuanian

(61) *Atei-s* [***sudi-tu*** ***giw-u*** ***ir*** ***nůmirusi-u***].
come-FUT(3) judge-SUP living-GEN.PL and dead-GEN.PL
'He will come to judge the living and the dead.'
(VE 1579,[23] 18:8, Schmalstieg 1987: 174)

19th century Lithuanian

(62) [*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.' (BA 1859,[24] II)

North-Eastern Aukštaitian

(63) *ažusuk* [***al-aus*** ***atsiger-tų***]
drop.in:IMP.2SG beer-GEN.SG have.a.drink-SUP
'Drop in to drink some beer.' (Zinkevičius 1966: 390)

Beyond Baltic, the Supine with the Genitive direct object was also (vestigially) attested in the older Slavic languages: Old Church Slavonic (Vaillant 1966: 127–129; 1977: 171–172; Lunt 2001: 159–160), Old Russian (Ivanov 1990: 356–357), Old Czech (Vaillant 1966: 129), see example (64).

23. Baltramiejus Vilentas. Enchiridion. Königsberg, 1579.

24. Antanas Baranauskas. Anykščių šilelis. 1858–1859. http://antologija.lt/text/antanas-baranauskas-anyksciu-silelis

Old Church Slavonic

(64) *id-ǫ* [***ugotova-tъ*** ***měst-a*** *vamъ*].
go-PRS.1SG prepare-SUP place-GEN.SG you:DAT.PL
'I am going in order to prepare a place for you.'
(Sav 1030[25] J 14:2, Lunt 2001: 160)

Among modern Slavic languages, the Supine as a verbal form distinct from the Infinitive is still attested in Slovene (Brezar et al. 2005: 114), example (65), and Lower Sorbian (Steenwijk 2003), example (66), but in both these languages the direct object of the Supine is marked by the canonical Accusative and not Genitive.

Slovene

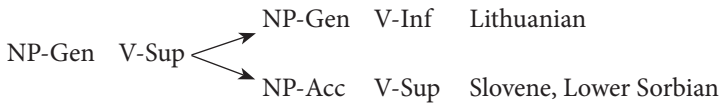
(65) *Še-l* *je* [***gleda-t*** ***nov-i*** ***film***].
go-PST.M AUX.PRS.3SG watch-SUP new-ACC.SG.M film(ACC.SG)
'He went to watch the new film.' (Brezar et al. 2005: 114)

Lower Sorbian

(66) *Witśe* *pojěd-u* [***Lenk-u*** ***pyta-t***].
tomorrow go-FUT.1SG Lenka-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: the former retained the form but shifted the object case marking to the "canonical" pattern, while the latter (partly) retained the "non-canonical" case marking but got rid of the distinction between the Supine and the Infinitive, cf. (67).

(67)



In fact, FL06 (252–257), following Schmalstieg (1987), recognize the Supine origin of the Lithuanian Genitive-plus-Infinitive construction, but do not synchronically analyze the latter along the lines of the former, which would involve, in particular, the assumption that the source of the Genitive on the object is located inside the non-finite construction and not in the matrix clause. I will explore this hypothesis further in §6, after bringing forward a very different typological parallel.

25. Sava's Book, ca. 1030.

5.2 The Australian "complementizing" and "associating" case

Constructions with "non-canonical" case marking of the object of purpose clauses are attested in some Australian languages, where the so-called "complementizing" and "associating" functions of case are singled out by Dench and Evans (1988) (further DE88). In this subsection I will explore these notions and the data behind them in some detail. My intention is to show that the Australian case marking strategies, "exotic" though they may seem at first glance, can be very instructive for the understanding of the case marking mechanisms in the Lithuanian constructions discussed in this paper (for further parallels between Lithuanian and Australian case marking see Arkadiev 2013b). From a theoretical perspective, I largely follow the spirit of recent proposals in Richards (2007, 2013), Matushansky (2008, 2010), Erschler (2009), though I diverge from these authors in the more specific details of my analysis.

Complementizing case is a feature of a subordinate (usually, though not necessarily non-finite) clause and can spread to some or all of its subconstituents (DE88: 18–23), cf. (68) from Warumungu with the Dative complementizing case appearing both on the nominalized predicate and on its object.

Warumungu (Pama-Nyungan > Warumungic, Northern Australia)

(68) *api-jirra* *warnapartt=arna* [***ngapa-ka*** ***pari-nji-kki***].
walk-towards tomorrow=1SG.FUT water-DAT get-NML-DAT
'I will go tomorrow to get water.' (DE88: 19)

Associating case appears on arguments of nominalized verbs instead of the ordinary "canonical" case-marking (DE88: 31–32). The crucial difference between complementizing and associating case is that while the former is assigned from outside to the whole subordinate clause and can in principle appear on its predicate head, the latter is assigned inside the nominalized clause and never appears on its head. Consider example (69) from Dhalandji, 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.

Dhalandji (Pama-Nyungan > South-Western branch, Western Australia)

(69) *ngatha* *nhaku-nha* [*kanyara-nha* [***murla-ku*** *warni-lkitha-nha*]].
1SG.NOM see-PST man-ACC meat-DAT cut-REL.DS-ACC
'I saw the man cutting meat.' (DE88: 31)

Complementizing and associating case functions (or, to put it otherwise, mechanisms of case assignment) are postulated by DE88 in addition to such more familiar types of case functions as relational (appearing on arguments and adjuncts

and indicating their semantic or syntactic relation to the predicate) and adnominal (appearing on NPs embedded into other NPs). A further, apparently still more "exotic" type of case function is the so called "modal" case, attested in the Tangkic family, which involves NPs and other constituents of the clause showing particular case marking depending on the tense or mood of the predicate, see below.

Different functions of case have different sources and domains of application, i.e. are associated with different lexical or functional heads:

(70) – relational case is assigned in the VP/vP domain;
– adnominal case is assigned in the NP/DP domain;
– "modal" case (DE88: 23–28) is assigned in the TP domain by (varieties) of finite T;
– associating case is assigned in the TP domain by (varieties) of nonfinite T;
– complementizing case is assigned in the CP domain by varieties of C.[26]

The crucial question with respect to (70) is what the syntactic objects to which different kinds of case are assigned are. I will assume the simplest answer proposed by Matushansky (2008, 2010) following Stowell (1981), i.e., that (by default) case is assigned by a head to its complement and subsequently percolates to all subconstituents of the latter. Thus, complementizing case is assigned by the C to the TP, modal and associating cases are assigned by the T to the vP/VP and so on; from this, in particular, follows, that the relational Accusative is assigned by the *v* to the VP and not directly to the object NP/DP. Crucial evidence for such a view of case assignment is presented by Matushansky (2008, 2010) on the basis of predicate nominal case marking in Russian (Matushansky's analysis, incidentally, can be extended to similar constructions in Lithuanian as well) and even more so by the Australian examples discussed below (cf. also the already presented (68) and (69)).

In a number of Australian languages cases assigned at different levels of structure do not exclude each other but are expressed by stacked case suffixes whose order normally reflects the scope of case-assigning domains. Thus in Kayardild, belonging to the Tangkic family, a single noun may bear up to four consecutive case markers, e.g. adnominal, relational, modal and complementizing, as in example (71); what is most important, in this language modal, associating and complementizing cases appear on **all** subconstituents of the relevant domain, strongly supporting the hypothesis of case assignment by the head to its complement with

26. Of course, different kinds of complementizing case can in principle be associated with different layers of Rizzi (1997)'s "extended left periphery", but I am not going to pursue this question here.

subsequent percolation outlined above, cf. the putative structure of (71c) in (72).[27] For a detailed illuminating discussion of case marking in Kayardild, see Evans (1995a, 1995b[28]).

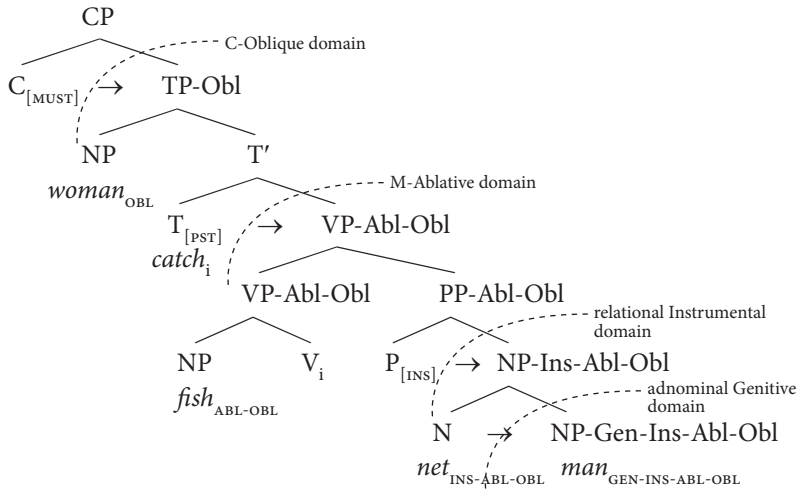
Kayardild (Tangkic, Northern Australia; Evans 1995a: 102–103, 115–116)

(71) a. *dangka-**karra-nguni*** *mijil-**nguni***
man-GEN-INS net-INS
'with the man's net'

b. *maku yalawu-jarra yakuri-**na** dangka-**karra-nguni-na***
woman catch-PST fish-M:ABL man-GEN-INS-M:ABL
*mijil-**nguni-na**.*
net-INS-M:ABL
'The woman caught fish with the man's net.'

c. *maku-**ntha** yalawu-jarra-**ntha** yakuri-**naa-ntha***
woman-C:OBL catch-PST-C:OBL fish-M:ABL-C:OBL
*dangka-**karra-nguni-naa-ntha** mijil-**nguni-naa-nth**.*
man-GEN-INS-M:ABL-C:OBL net-INS-M:ABL-C:OBL
'The woman must have caught fish with the man's net.'

(72)



27. In (72) I assume for the sake of consistency that the relational Instrumental case is assigned by a null P(repositional) head responsible for the interpretation of the adjunct instrument phrase. The case itself is thus void of semantics and only reflects the presence of a semantically interpretable but in this instance phonologically null case assigner. A different account, assuming that semantic case on NPs does not necessarily need any external case-assigner, is certainly also possible.

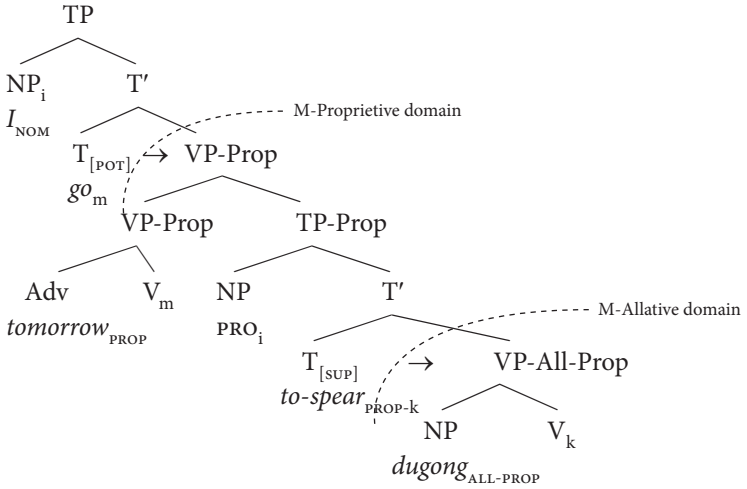
28. For an alternative analysis of Kayardild data see Round (2013).

Turning to non-finite clauses, it is worth noting that in Kayardild there is a special verbal form similar to the Indo-European Supine, which appears with matrix verbs of motion and assigns the Allative to the object. In (73a) this Allative, which Evans classifies as modal rather than associating for reasons irrelevant to the current discussion, appears to the left of the "outer" "modal" case assigned by the matrix T; the structure of (73a) is given in (73b). Note that I assume that the Supine is a special kind of non-finite T head and that there is no CP layer intervening between the Supine construction and the matrix clause; this seems to be empirically supported for Kayardild, but I won't go into the details of argumentation, see Evans (1995: 486–487), where it is argued that Kayardild Supine clauses share features of both finite and non-finite structures.

Kayardild

(73) a. *balmb-u* *ngada* *warra-ju* [*bijarrba-**ring**-ku*
tomorrow-M:PROP 1SG:NOM go-POT dugong-M:ALL-M:PROP
*raa-**jiring**-ku*].
spear-SUP-M:PROP
'Tomorrow I will go to spear dugong.' (Evans 1995a: 487)

b.



Looking further into Australian languages, we find the most striking parallel to the Lithuanian Dative-plus-Infinitive construction in the Pama-Nyungan languages Nyamal and Jiwarli. These languages have non-finite purpose clauses whose object appears in the Dative, cf. (74) and (75). In particular, examples (74b) and (75b) can be translated into Lithuanian literally, with the use of the Dative-plus-Infinitive construction, while example (74a) could be rendered by the Genitive-plus-Infinitive construction (and in Latgalian, by the Genitive-plus-Supine construction). The diagram in (76) shows the proposed structure of (74b);

I assume that the Dative is a complementizing case assigned by the purposive C head.

Nyamal (Pama-Nyungan > South-Western branch, Western Australia)

(74) 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)

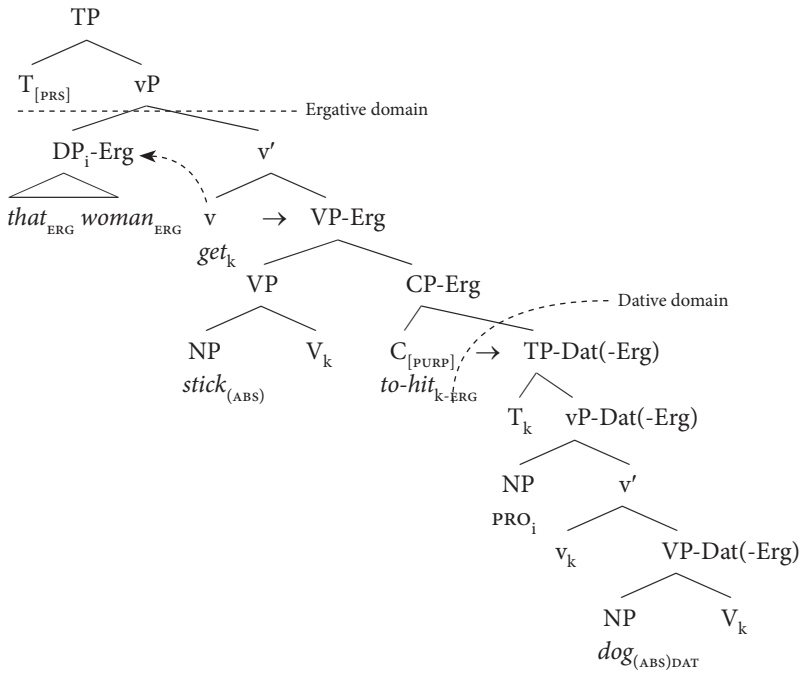
b. *Ngunya-ngku mangkurla-lu warnta kurti-la* [*punga-lartara-lu*
that-ERG woman-ERG stick get-PRS hit-PURP-ERG
yukurru-ku].
dog-DAT
'That woman is getting a stick to hit the dog.' (ibid.: 767)

Jiwarli (Pama-Nyungan > South-Western branch, Western Australia)

(75) 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* ***jiriparri-yi***].
now boomerang toss-PST pelt-PURP-ERG echidna-DAT
'Next (he) threw a boomerang to hit echidna.' (ibid.)

(76)

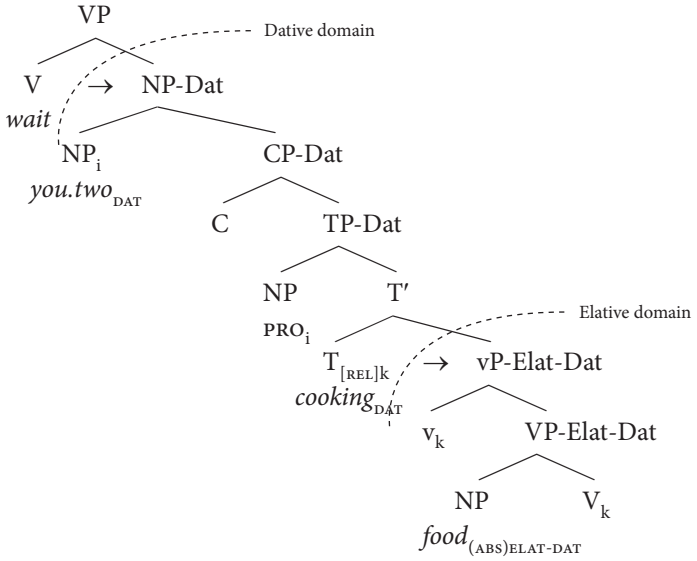


(74b) and (76) raise the obvious question why the object of the purpose clause bears only the Dative case and not the double Dative-Ergative, especially since otherwise Nyamal allows case-stacking, cf. (77), where the Dative complementizing case (occurring in agreement with the corresponding relational case) follows the Elative associating case in a nominalized relative clause.

Nyamal

(77) a. *Wurtama-la nyumpalanga-mu* [*mayi-**kapu-ku** kama-njanu-**ku***].
wait.for-ANT you.DU.DAT-ANT food-ELAT-DAT cook-REL-DAT
'He'll wait for you two who are cooking food.' (Dench 2009: 766)

b.



The only empirically tenable answer to the question regarding the presence of case-stacking in (77) and its absence in (74) (cf. Dench 2009: 766–768) is that there exist language-specific morphological restrictions on the co-occurrence or co-expression of several cases (see also DE88: 35–43). Thus, in Djapu (DE88: 40–41) relational case markers must be omitted before the complementizing case markers, cf. (78), and Locative case markers are deleted after the (adnominal) Oblique, cf. (79).

Djapu (Pama-Nyungan >Yuulnguan, Northern Australia):

(78) *ngayi rongiyi-n* [*nha-nhara-ngur malu-'mirringu-wal*].
he return-PRF see-NML-ABL father-KIN-(*REL.CASE)-OBL
'He came back from seeing his father.' (DE88: 40)

(79) *waanga-ngur* [*yapa-'mirringu-**wal**(*-ngur) ngarra-kalangu-**wal**(*-ngur)*].
camp-LOC sister-KIN-OBL(*-LOC) I-OBL-OBL(*-LOC)
'at my sister's camp' (ibid.: 41)

Further, in Lardil (a Tangkic language related to Kayardild), in a fashion reminiscent of the behaviour of structural vs. inherent cases in Lithuanian or Slavic, the modal "future" case replaces the structural Accusative case but attaches outside of the inherent Instrumental case (Richards 2007, 2013), cf. (80).

Lardil (Tangkic, Northern Australia):

(80) a. *ngada nguthungu warnawu dulnhuka-**n** beerr-**u** nyith-**u**.*
I:NOM slowly cook month.fish-ACC ti-tree-INS fire-INS
'I slowly cooked the month-fish on a fire of ti-tree wood.'
(Richards 2013: 48)

b. *ngada nguthungu-**thur** warnawu-**thur** dulnhuka-**r***
I:NOM slowly-FUT cook-FUT month.fish-FUT
*beerr-**uru-r** nyith-**uru-r**.*
ti-tree-INS-FUT fire-INS-FUT
'I will slowly cook the month-fish on a fire of ti-tree wood.' (ibid.)

In fact, Richards (2007, 2013) draws a direct parallel between the Lardil "future" case shown in (80) and the Genitive of negation rule in Russian, which applies only to the structural Accusative case, and this parallel can certainly be extended to Lithuanian, cf. (8) above.

Anyway, it remains an open question where the co-occurrence restrictions and rules governing case-stacking and case-resolution belong (syntax vs. morphology, case values vs. case markers etc.), and most probably this is a domain of intra- and interlinguistic variation (cf. Richards 2007, 2013 and Erschler 2009 for very different proposals). In the discussion of Lithuanian in the next section I will assume that phenomena similar to those shown in (76), (78)–(80) belong to the domain of morphology rather than syntax, and – admittedly, for aesthetic reasons – I believe that to assign cross-linguistic variation and sometimes quite idiosyncratic language specific phenomena to morphology, where many irregularities belong anyway, is conceptually more attractive than trying to capture them in syntax by postulating ad hoc solutions and unnecessary complications.

To conclude this section, I would like to say that since the mechanism of multiple case assignment is anyway necessary not only to account for the phenomena in the Australian languages, but also elsewhere (cf. Plank (ed.) 1995 on *Suffixaufnahme* in the world's languages), and even not only for the instances of overt multiple case marking (cf. McCreight Young 1988; Béjar & Massam 1999; Matushansky 2008, 2010; Erschler 2009), I see no conceptual obstacles to extending this mechanism beyond Australia and, specifically, to accounting for the Lithuanian constructions along the lines of the schematic analysis of the Australian data presented above.

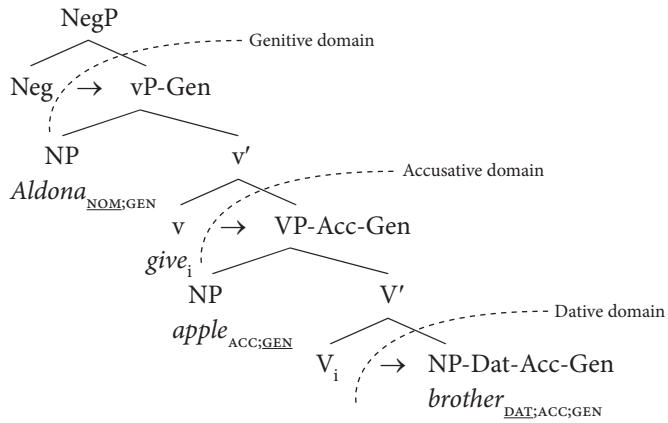
6. Back to Lithuanian: A new analysis

I will start by drawing upon an arguably simpler case hinted at in the previous section, viz. the Genitive of negation. As has been already mentioned, this rule applies to the Accusative direct objects but not to objects marked by inherent cases (cf. (8) above), and targets the objects of the infinitival complement clauses as well (cf. (3b) above). The Lithuanian Genitive of negation can be easily accounted for with the mechanism of multiple case assignment (cf. a similar proposal for the much more complicated Russian data in Erschler 2009) as a kind of "modal" case assigned by the Neg head to the vP. The analysis has two components: the relatively straightforward syntactic one shown in the tree diagram in (81a) corresponding to (8b), and the morphological case resolution rules outlined in a simplified form in (81b).[29] From now on the case values realized morphologically will be underlined in the diagrams.

29. I assume the simplest model of case, whereby the case values assigned in syntax directly match the language specific values of morphological case, and are not decomposed into some more abstract features (cf. Matushansky 2008, 2010 and Keine 2010 for the latter view). Also, my model of case resolution is cast in terms of simple rules, though a more sophisticated approach, e.g., in the spirit of Optimality Theory (see Erschler 2009) is probably preferable. I leave the choice of a more adequate formal representation of case resolution for future research.

Note also that I do not propose any mechanism assigning the Nominative case to the subject of the finite clause, because this issue is largely irrelevant for the purposes of the present paper. The most natural and empirically plausible solution under the current theory would be to assume that the Nominative is assigned by the finite T to the vP/VP, and percolates to the NP occupying its specifier, which then can, but need not, move to Spec,TP. Integrating the Nominative into the system of case resolution rules for Lithuanian presumably would not be difficult, but this can be left for further research. Finally, I do not assume that Nominative is just the "default" or "unmarked" case appearing where no other case is assigned; such a view does not seem to be warranted for Lithuanian or at least for the constructions I am discussing; it is also worth noting that in their analysis of the Lithuanian Nominative-plus-Infinitive constructions, FL06 (278–284) explicitly argue against treating Nominative as default case. I thank Ora Matushansky for suggesting that I clarify this issue.

(81) a.

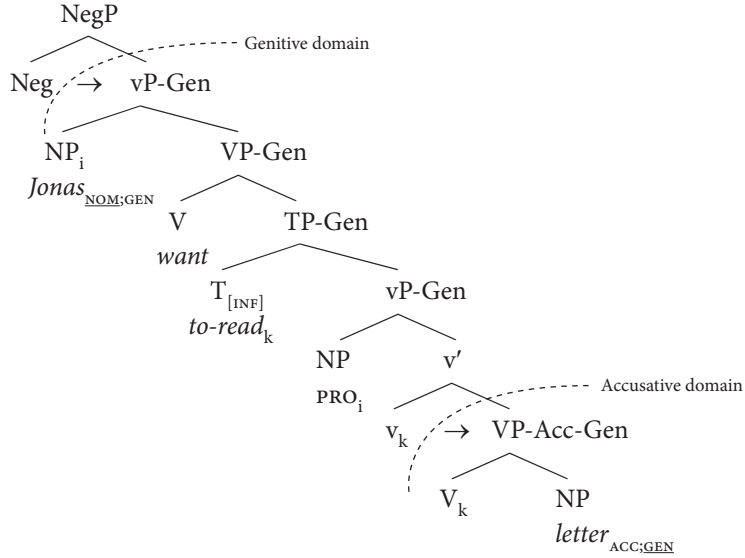


b. case resolution rules (simplified):
[acc][gen] → [gen]
[α-case[30]][gen] → [α-case]

The long-distance Genitive of negation like in (3b) repeated here as (82a) falls out naturally as well (for the reasons of pure simplicity of exposition I treat the infinitival clause as a bare TP), see (82b).

(82) a. *Jon-as* ***ne-nor-i*** [*perskaity-ti* ***laišk-o***].
Jonas-NOM.SG NEG-want-PRS(3) read.through-INF letter-GEN.SG
'Jonas does not want to read the letter.'

b.



30. "α-case" means "any case value".

The analysis I propose for the Dative-plus-Infinitive and Genitive-plus-Infinitive constructions is basically similar to that of the Genitive of negation, though more complex. The syntactic part of the analysis is fairly simple: I assume that the Dative and Genitive cases are assigned by some higher heads at least to the whole vP containing the object of the Infinitive and then percolate to its subconstituents. The question of what these case-assigning heads are will be addressed separately for each construction. The morphological side is more intricate, since it has to capture most of the concrete phenomena discussed in §§3 and 4. Generally, just like with the Genitive of negation, the "outer" Dative and Genitive cases are realized when they combine with the "inner" structural Accusative and deleted otherwise, but this is certainly not sufficient because, as has been shown in §4, first, the replacement of the Accusative by the "outer" cases is optional in the Infinitive constructions (in contrast to the obligatory Genitive of negation rule), and, second, Dative in purposive infinitival clauses can replace not only the structural Accusative but the putatively inherent Genitive as well.[31] Together with the soft constraint against the Dative case marking of the direct object in the presence of a Dative subject or indirect object this yields the resolution rules listed in (83).[32]

(83) i. [acc][dat] → [dat] or [acc]
ii. [acc][gen] → [gen] or [acc]
iii. [gen][dat] → [gen] or marginally [dat]
iv. [α-case][dat] → [α-case]
v. [α-case][gen] → [α-case]
vi. Surface constraint: *[$_{TP}$ NP$_{DAT}$ … NP$_{DAT}$]

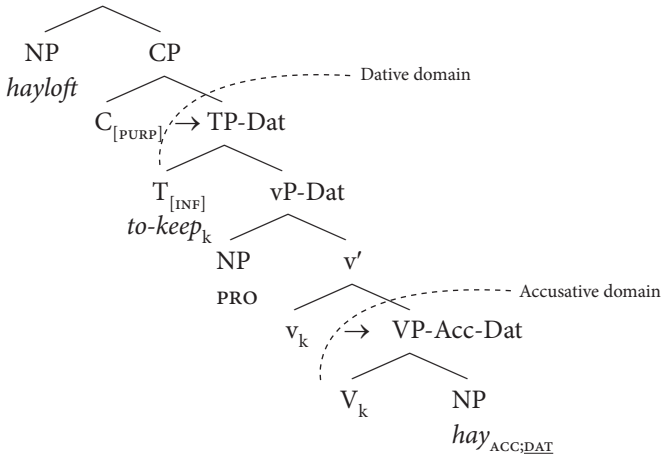
Let us now turn to the analysis of individual constructions. For the Dative-plus-Infinitive I propose that the Dative is a complementizing case assigned by C$_{[PURP]}$ to the infinitival TP, which actually follows the proposal in FL06 (274), with the only difference that my analysis does not assume any locality restriction and hence does not require the case marking to be in any way linked to word order (compare also the Nyamal purposive construction in (74b) and (76)). Cf. the diagrams in

31. As pointed out by David Erschler, perhaps the best material to demonstrate this kind of case interaction would be negated purpose infinitival clauses with a competition between the Dative of purpose and the Genitive of negation. However, my consultants almost unanimously rejected examples of negated purpose Infinitives, so this question remains unresolved.

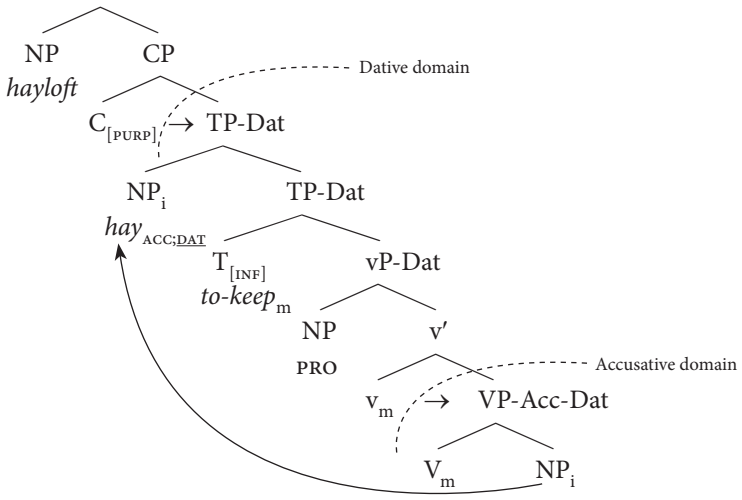
32. From the comparison of (81b) and (83) it is clear that the case resolution rules have to include information about the head assigning the "outer" case – otherwise there would be no way to account for the different outputs of the [acc][gen] input for the Genitive of negation and for the Genitive-plus-Infinitive construction. This can be implemented in different ways, see Erschler (2009) and Matushansky (2010) for fairly different proposals.

(84a) and (84b) differing in word order only; in (84b) the displaced object is left-adjoined to the infinitival TP rather than vP, which seems to better capture the adverbial position facts established by FL06.[33]

(84) a. *daržinė sukrauti šienui* 'hayloft to keep hay'



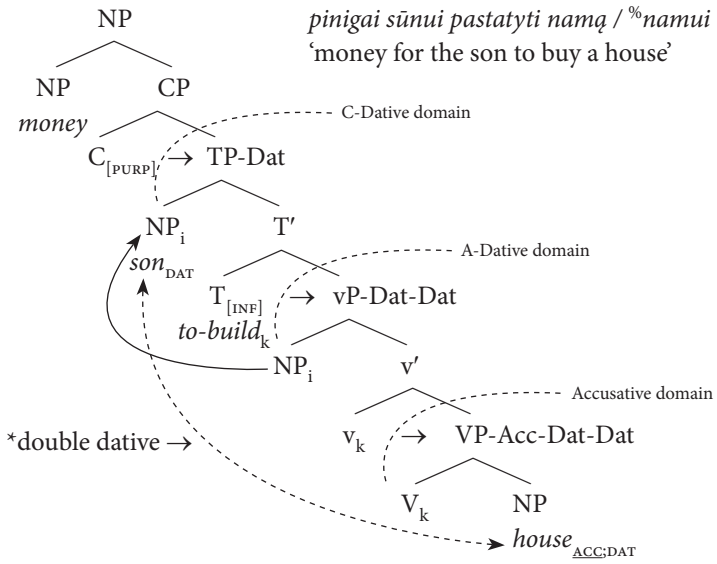
b. *daržinė šienui sukrauti* 'id'.



33. Note that I remain agnostic as to what in particular triggers the preferred movement of the object in the Dative-plus-Infinitive construction to its left edge position. This could be e.g. construction-specific or information structure properties of the C head. What is crucial is that this movement is **not** related to case assignment in any way and occurs **after** case is assigned – just as most other instances of overt NP movement attested in Lithuanian are associated with information structure or weight rather than with case.

Infinitive constructions with overt Dative subjects, being not limited to purpose Infinitives, suggest a different analysis, i.e., the one where the subject NP in Spec,vP gets associating Dative assigned to the vP by the $T_{[INF]}$ head. If an Infinitive clause with an overt subject gets embedded under $C_{[PURP]}$, its direct object can potentially also receive the complementizing Dative from the latter, but such a surface structure is often ruled out by the constraint against two Datives in one TP (83vi), so the "inner" Accusative" is realized instead of the "outer" Dative, cf. the diagram (85).

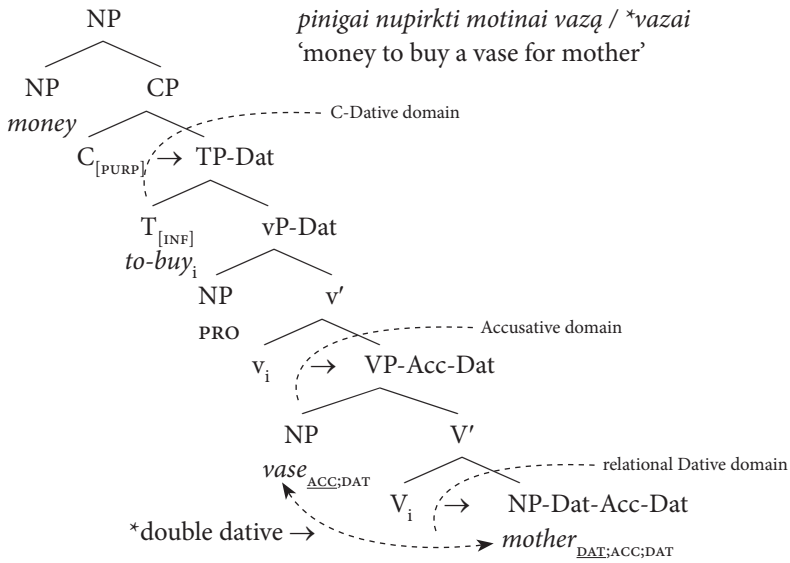
(85)



pinigai sūnui pastatyti namą / %namui
'money for the son to buy a house'

The ban on the Accusative-to-Dative conversion in the presence of a Dative indirect object is accounted for in the same way, cf. (86).

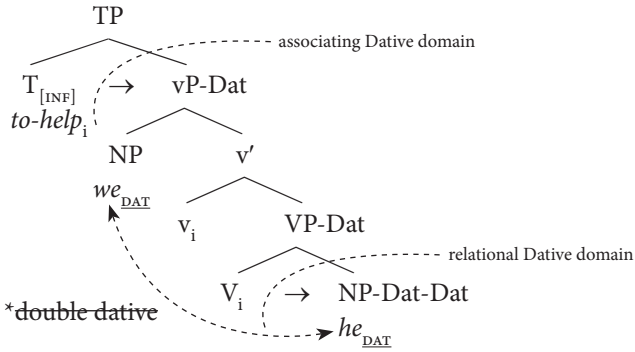
(86) *pinigai nupirkti motinai vazą / *vazai*
'money to buy a vase for mother'



It is important to note that the "double-dative" constraint is violable, since, first, not all speakers reject examples like (50a) (=85), and, second, not all structures with more than one Dative NP can be thus ruled out, but only those where there is an **alternative** variant of case-marking (i.e., Accusative). Cf. a perfectly felicitous modal Infinitive clause (87) with a Dative subject and a Dative indirect object. Such violability can in principle be handled by OT-style constraint interaction, cf. Erschler (2009).

(87) a. *Kaip* [***mums*** *padė-ti* ***j-am*** *pripras-ti* *prie* *nauj-ų*
how we.DAT help-INF 3-DAT.SG.M get.used-INF at new-GEN.PL
nam-ų]*?*
house-GEN.PL
'How can we help him to get accustomed to the new home?'[34]

b.



34. http://www.paukstis.lt/forumas/viewtopic.php?f=23&t=6006&start=810

Turning to the Genitive-plus-Infinitive construction, I propose to analyze it similarly to the Kayardild Supine shown in (73), i.e. as an associating case assigned by the special variety of non-finite T.[35] This functional head $T_{[SUP]}$ is constrained to co-occur with verbs expressing motion and is semantically interpreted as denoting an event serving as the goal or purpose of the matrix motion event. I assume that such a functional head is available in all languages where non-finite clauses denoting goal or purpose of motion display specific morphology or syntax (or both). Thus, of the languages discussed in this paper, the following possess a distinct $T_{[SUP]}$ with differing morphological and/or case assigning properties, cf. Table 2.

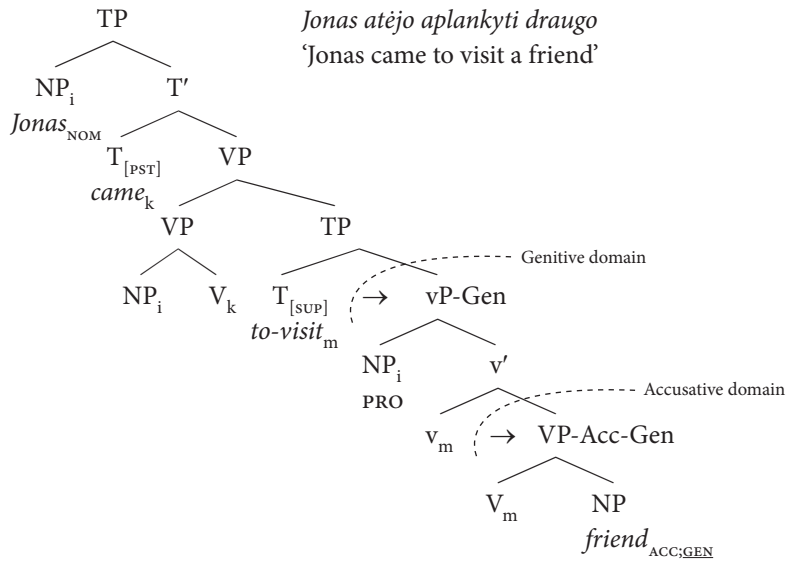
The only difference between the Supine constructions in Latgalian and earlier/dialectal Lithuanian, on the one hand, and in standard Lithuanian, on the other, is that in the latter the morphological realizations of $T_{[SUP]}$ and $T_{[INF]}$ are identical, though the functional heads differ in their interpretation, co-occurrence possibilities and case assigning properties. The structure of the Lithuanian Genitive-plus-Infinitive construction is thus as shown in (88).

Table 2. Varieties of the Supine

Language	Morphology	Case assignment
Latgalian	≠ Inf	Genitive
Lithuanian	= Inf	Genitive
Slovene	≠ Inf	Accusative
Kayardild	*-jiring*	Allative

35. An alternative solution would be to follow the lines of the Dative-plus-Infinitive construction and postulate a special C head constrained to co-occur with verbs of motion and selecting the Infinitive T in Lithuanian and a Supine T in Latgalian; this C head would then assign the complementizing Genitive. In my view, such an analysis is unnecesarily complicated and should be rejected for reasons of economy, unless it turns out that it is supported by empirical data. I thank David Erschler for drawing my attention to this possibility.

(88) *Jonas atėjo aplankyti draugo*
'Jonas came to visit a friend'



The only question which still remains unresolved concerns the relationship between the Dative-plus-Infinitive and Genitive-plus-Infinitive constructions and the corresponding "independent" cases appearing on the NPs denoting purpose and goal, as in examples (21) and (22), repeated here as (89) and (90). Of course, it would be desirable to have a common account of these clearly related uses of both Dative and Genitive.

(89) 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 **kūryb-ai**.*
earth-NOM.SG get.up-PRS(3)-RFL work-DAT.SG and creation-DAT.SG
'Earth is getting up for work and creation.' (Kerevičienė 2008: 182)

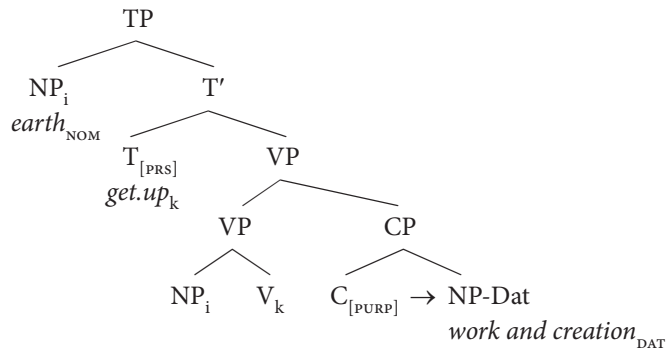
(90) a. *Išėj-o **pien-o**.*
go.out-PST(3) milk-GEN.SG
'(He/she) went for milk.' (Ambrazas (ed.) 1997: 557)

b. *Iššiunt-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)

In the analysis of the purposive Dative in (89) I will follow FL06 (p. 274), assuming that the Dative case on both independent purposive Dative NPs and direct objects of purpose Infinitives has the same source, viz. the null purposive C. That a C head can combine both with clauses and NPs is no surprise, cf. English *for*

and numerous instances in many other languages. Thus the structure of (89b) is as shown in (91).

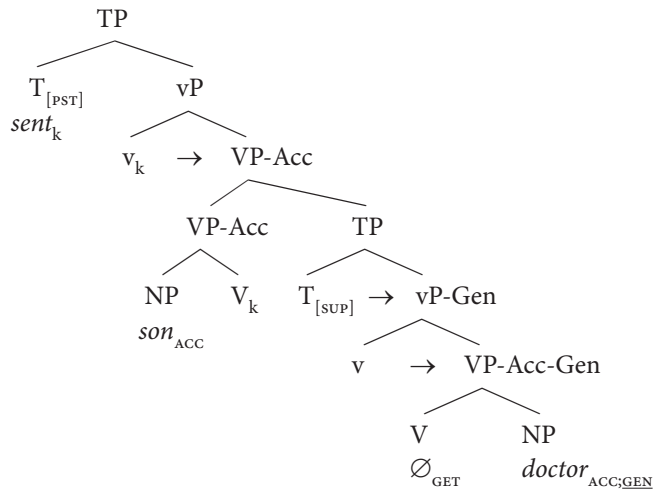
(91)



My proposal concerning the purposive Genitive with verbs of motion, however, diverges from that of FL06. The latter postulate a common source for both the independent Genitive and the Genitive on the object of the Infinitive, viz. the head Asp associated with verbs of motion. Since I dispense with such an aspectual head, I see two alternative ways of analyzing the independent Genitive, both of which find some cross-linguistic support. The first possible analysis rests on the default interpretation of the independent Genitive with verbs of motion, i.e. that the motion event occurs in order to get or obtain the referent of the Genitive NP.[36] This kind of semantics can be naturally captured by assuming that the independent Genitive has the underlying structure of the Supine (= Genitive-plus-Infinitive) construction with a silent verbal head interpreted as 'get', 'obtain' or 'bring back', cf. the structure of (90b) in (92).

36. Cf. the analysis of intensional transitive verbs by den Dikken et al. (1996) arguing for a structure with a "concealed" complement clause. I thank Ora Matushansky for drawing my attention to the relevance of this parallel.

(92)



This kind of analysis can be indirectly supported by the fact that there are languages where case markers encoding the object serving as the purpose of motion historically go back to verbal stems meaning 'get' or 'bring'. One such language is Adyghe (North-West Caucasian), cf. (93a) with the lexical fully inflected verb 'bring' and (93b) with its stem (with a vowel alternation) attached to the purposive adjunct and serving as a case marker.

Adyghe (North West Caucasian, own fieldwork)

(93) a. *pŝaŝe-m psə q-ə-**hə**-ʁ.*
girl-OBL water DIR-3SG.A-bring-PST
'The girl brought (some) water.'

b. *pŝaŝe-m gʷegʷenə-r ə-št-jə psə-**he** qʷa-ʁe.*
girl-OBL pitcher-ABS 3SG.A-take-and water-bring go-PST
'The girl took the pitcher and went to fetch water.'

However, the analysis of the independent purposive Genitive as a Supine construction with an elided or null verb is not the only possibility. It might be the case that the analogy between the Genitive-plus-Infinitive construction and the independent Genitive of purpose with verbs of motion is just accidental, and that the independent Genitive is just a semantic case appearing on a particular kind of adjuncts, possibly assigned by some kind of null P(reposition). Note that it is not a problem for such an analysis that purpose NPs with verbs of motion receive a different encoding from other types of purpose NPs, since this is what often happens in languages, cf. Russian in (94) where two different overt prepositions assigning different cases are employed.

Russian (personal knowledge)

(94) a. *Zdes' bud-et polka **dlja knig**.*
here be-FUT.3SG shelf for$_1$ book(GEN.PL)
'Here will be a shelf for books.'

b. *Devušk-a poš-l-a **za vod-oj**.*
girl-NOM.SG go-PST-SG.F for$_2$ water-INS.SG
'The girl went to fetch water.'

Though for reasons of symmetry the analysis with the reduced Supine construction seems to me to be more attractive for the independent Genitive denoting purpose of motion, I prefer to leave this issue unresolved.

Thus, from the analysis of the Lithuanian constructions in this section and its comparison to the Australian data presented in §5 it can be inferred that case marking in individual languages boils down to the interaction of the universal mechanism of case assignment by a head to its complement and such language-specific issues as (i) the case inventory, (ii) the case-assignment specifications of particular lexical and functional heads (note that (i) and (ii) probably are just two facets of the same phenomenon), and (iii) the (morphological) rules of case-resolution. Note that the issue of locality crucially invoked in much of the current theorizing about case and in particular in FL06's analysis of Lithuanian plays no role in the proposed conception of case assignment – though it might turn out that it is still relevant for some (but definitely not all) phenomena associated with case.

7. Conclusions and implications

The Lithuanian Dative-plus-Infinitive and Genitive-plus-Infinitive constructions pose very peculiar problems for a formal analysis, and, indeed, for an analysis in any theoretical framework. The reason for this is a complex and cross-linguistically not widespread interplay between case-marking and non-finite subordination, which is an outstanding characteristic of Lithuanian in general (see Arkadiev 2013a, 2013b).

In this paper I presented empirical evidence arguing for a revision of the only analysis of these constructions so far proposed in the literature (Franks & Lavine 2006), and have drawn my own analysis upon "very exotic" typological parallels from Australian languages with "complementizing" and "associating" case and overt multiple case marking, which, in my view, help us better understand the nature of the actually no less "exotic" Lithuanian constructions (cf. Erschler 2009 and Matushansky 2008, 2010 for similar proposals concerning completely different data).

The analysis presented above has some immediate consequences for the formal theory of case (cf. also Merchant 2006). Metaphorically speaking, instead of assuming that "all languages are like English", the belief which has guided much of the Government and Binding theory of "abstract case", I propose to assume that in fact "all languages are like Kayardild". In particular, this means that:

1. NPs may receive case from many (potentially all) functional as well as lexical heads which c-command them; this is implemented by a very general conception of case assignment, viz. by default a head assigns case to its complement as a whole, and this case feature subsequently percolates down to (potentially all) subconstituents of that complement.
2. Morphological realization of these multiple cases assigned in syntax is subject to language-particular rules and constraints, which do not belong to "narrow syntax"; to put it more accurately, languages may vary as to whether they have any syntactic constraints on case percolation (e.g., it is obvious that in Lithuanian and many other languages finite T as well as overt C and (some) overt Ps block case percolation) and in the nature of morphological or morphosyntactic case resolution rules:
   2a. some languages, like Kayardild or Nyamal, allow simultaneous morphological realization of several layers of case on a nominal; this is the strongest empirical evidence for the syntactic mechanism of multiple case assignment;
   2b. other languages (arguably the majority) do not allow overt multiple case marking in morphology, but in some (and probably many) of them the mechanism of syntactic multiple case assignment reveals itself in alternations of case marking like the ones discussed in this paper.

The outlined conception of case assignment, largely inspired by Matushansky (2008, 2010) but not following the latter in all details, has some implications for the architecture of grammar in Minimalist case theory. While in the "classic" case theory (e.g., Chomsky 1981: 162–176; Stowell 1981: 110–125; see Bobaljik & Wurmbrand 2009 for a review) case assignment is a **local** operation, sometimes assumed to be just a reflection of **Agree** ultimately constrained by the Phase theory of the Minimalist program (Chomsky 2001: 6ff.), the current analysis and the data supporting it, by contrast, imply a **non-local** view of case. Since case is assigned by a head to its complement and percolates down to all subconstituents of the latter, **case assignment** *per se* is still a strictly local (head-complement) operation, but **case percolation** is unbounded and in particular pays no attention to (at least some) phase boundaries. A possible way to reconcile the novel view of case and the independently motivated Phase theory is to exclude case percolation from "narrow syntax" and to transfer it to PF, where case realization belongs,

anyway. This move, however, necessarily requires that PF-spellout occur not as soon as each phase is constructed, but only after the whole derivation in "narrow syntax" is completed (cf. Richards 2013).

Setting aside potential far-reaching implications of the analysis presented in this paper, I would like to conclude by saying that I hope to have shown that, first, typological comparison between languages apparently having as little to do with each other as Lithuanian and the Australian languages can elucidate the phenomena attested in both of them, and, second, that an adequate (formal or informal) theory of case and its relations to such phenomena as non-finiteness and subordination has to take into account a broad range of empirical data from all kinds of languages, including such more or less "exotic" ones as Baltic or Australian. The last point may seem trivial, but for the fact that Lithuanian data have so far only rarely figured in any kind of theorizing about case, and almost no attempts have been made to find a really adequate place for these data in the typology and theory of case. I hope that this paper has served to partly fill this gap.

Abbreviations

A	agent
ABL	ablative
ABS	absolutive
ACC	accusative
ALL	allative
ANT	anticipatory mood
AUX	auxiliary
C:OBL	complementizing oblique case
DAT	dative
DEF	definiteness
DIR	directional
DO	direct object
DS	different subject
DU	dual
ELAT	elative
ERG	ergative
F	feminine
FIN	finite
FUT	future
GEN	genitive
IMP	imperative
INF	infinitive
INS	instrumental
KIN	kinship possessive
LOC	locative
M	masculine
M:ABL	modal ablative
M:ALL	modal allative
M:PROP	modal proprietive
NEG	negation
NML	nominalization
NOM	nominative
OBL	oblique case
PA	active participle
PL	plural
POT	potential
PP	passive participle
PRF	perfect
PRS	present
PST	past
PTCL	particle
PURP	purposive
REL	relativization
RFL	reflexive
SBJ	subject
SG	singular
SUP	supine
TR	transitive

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