

The dual face of structural object case: on Lithuanian genitive of negation¹

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We analyze genitive of negation (GN) in Lithuanian. When the verb is negated, GN is realized on an object that would otherwise be realized as accusative. We demonstrate that Lithuanian GN is a syntactic (in line with Arkadiev 2016) and morphological phenomenon in contrast to Russian GN, whose realization is influenced by semantic factors (e.g. Kagan 2013). It differs from Russian (Pesetsky 1982) in that (i) it is always assigned to a DP which would otherwise bear structural accusative regardless of its semantic properties, and (ii) it cannot affect a structural nominative DP regardless of whether it is an external or internal argument. Lithuanian GN, in this respect, is similar to Polish GN (e.g. Przepiórkowski 2000, Witkoś 2008). We offer a three-layered approach to case, arguing that GN is a reflection of structural object case, assigned in syntax, then translated to morphological genitive case at PF and, finally, realized at Vocabulary Insertion (Halle & Marantz 1993). Thus, structural object case has two morphological realizations: as genitive under negation or as accusative in the absence of negation. Lithuanian also exhibits long-distance GN (Arkadiev 2016), showing that case boundaries can cross non-finite clauses without an overt CP element, suggesting these are not phases.

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1. INTRODUCTION

This paper explores case at different levels in the derivation through an analysis of genitive of negation (GN) in Lithuanian (a Baltic language) and makes a clear

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division between case in syntax and case determined in morphology. We propose a three-layered approach to case: case is assigned in syntax (sometimes referred to as abstract Case), translated to morphological case in the Morphological Component (at PF) and finally realized late in the derivation at Vocabulary Insertion. Lithuanian GN is a reflection of structural object case assigned by *v* in syntax. At PF, this case is translated and subsequently realized as genitive case under negation. When negation is absent, the case realized is accusative.

GN is found in various Slavic and Baltic languages, most famously in Russian (e.g. Pesetsky 1982, Pereltsvaig 1999, Partee & Borschev 2004, Kagan 2013). Broadly speaking, the nature of GN cross-linguistically can be divided into two categories: a semantic side and a syntactic side. While semantic properties have been shown to play an important role in Russian GN, Lithuanian falls into the syntactic category for the most part as we will show, together with at least Polish (e.g. Franks 1995, Przepiórkowski 1999, 2000, Błaszczak 2001, 2010, Witkoś 2008).

Lithuanian GN has barely been studied in the generative framework (e.g. Arkadiev 2016). An illustration is provided in (1): The verb ‘read’ in (1a) assigns accusative case to its object, but when negation is added, its case is genitive (1b).^{2,3,4}

- (1) (a) Jon-as per-skait-ė laišk-ą.
Jonas(M)-NOM.SG PRV-read-PST.3 letter(M)-ACC.SG
‘Jonas read a/the letter.’
- (b) Jon-as ne-per-skait-ė laišk-o /
Jonas(M)-NOM.SG NEG-PRV-read-PST.3 letter(M)-GEN.SG /
*laišk-ą.
letter(M)-ACC.SG
‘Jonas didn’t read a/the letter.’ (adapted from Arkadiev 2016: 38)

[2] This paper examines GN in Standard Lithuanian, which, as we argue, is obligatorily realized on DPs which would typically be assigned structural accusative case. Nevertheless, West, East and South Aukštaitian dialects may allow accusative when negation is present (Mikulėnienė & Morkūnas 1997, Kozhanov 2017). We do not discuss this variation in these dialects.

[3] We follow the Leipzig Glossing Rules. Abbreviations used: 1/2/3 = 1st/2nd/3rd person, ABS = absolutive, ACC = accusative, ACT = active, AGR = agreement, DAT = dative, DIST = distributive, ERG = ergative, F = feminine, GEN = genitive, GN = genitive of negation, INF = infinitive, INS = instrumental, LOC = locative, M = masculine, N = neuter, NEG = negation, NOM = nominative, NPOSS = non-possessive, PERF = perfect, PL = plural, PPP = past passive participle, PPRP = present passive participle, PRS = present, PRV = preverb, PST = past, PTCP = participle, POSS = possessive, REFL = reflexive, SBJV = subjunctive, SG = singular.

[4] Note that GN is available in clauses with sentential negation. Phrasal negation, however, does not trigger genitive, as indicated below, and will not be discussed in this paper.

- (i) Suprant-u ne tik matematik-ą / *matematik-os, bet ir
understand-PRS.1.SG not only math(F)-ACC.SG / math(F)-GEN.SG but and
fizik-ą / *fizik-os.
physics(F)-ACC.SG / physics(F)-GEN.SG
‘I understand not only math, but also physics.’

However, it is a well-known fact from Slavic languages that GN does not affect non-structural case (e.g. Pesetsky 1982). This applies to Lithuanian as well, as exemplified with verbs like *tarnauti* ‘serve’, which take a DP with inherent dative case (2) (Anderson 2015, E.F. Sigurðsson et al. 2018, Šereikaitė 2020).

- (2) (a) Iev-a tarvan-o atėjūn-ams.
 Ieva(F)-NOM.SG serve-PST.3 invader(M)-DAT.PL
 ‘Ieva served the invaders.’
 (b) Iev-a ne-tarnav-o atėjūn-ams /
 Ieva(F)-NOM.SG NEG-serve-PST.3 invader(M)-DAT.PL /
 *atėjūn-ų.
 invader(M)-GEN.PL
 ‘Ieva didn’t serve the invaders.’

It seems like Lithuanian GN applies to DPs with structural case, but not with non-structural case.⁵ However, Lithuanian GN needs to be narrowed down further. We show that it is a type of case that tracks **structural object case**. GN is applied to DPs which would normally be in structural accusative case, but it does not affect nominative DPs of unaccusatives (3) and unergatives (4).

- (3) (a) Traukin-ys atvažiav-o.
 train(M)-NOM.SG arrive-PST.3
 ‘The train arrived.’
 (b) Traukin-ys / *traukini-o ne-atvažiav-o.
 train(M)-NOM.SG / train(M)-GEN.SG NEG-arrive-PST.3
 ‘The train didn’t arrive.’
 (4) (a) Mam-a dirb-o.
 mother(F)-NOM.SG work-PST.3
 ‘Mother worked/was working.’
 (b) Mam-a / *mam-os ne-dirb-o.
 mother(F)-NOM.SG / mother(F)-GEN.SG NEG-work-PST.3
 ‘Mother didn’t work/wasn’t working.’

We demonstrate that GN in Lithuanian differs from Russian. First, Russian GN has been taken as an unaccusativity test: GN surfaces on subjects of unaccusatives, but subjects of unergatives are not affected by it (e.g. Pesetsky 1982, also Section 2). This contrast is not found in Lithuanian as the argument of an unaccusative, as in (3), disallows GN. Second, while Russian GN is influenced by semantic factors (e.g. Bailyn 1997, Partee et al. 2011, Kagan 2013), we show that Lithuanian GN (in line with Arkadiev 2016) is a syntactic phenomenon (with an exception of two constructions) and its assignment is not based on semantic properties of a DP.

[5] This is not an unexpected pattern given that, in various languages, only structural case, but not non-structural case, can be replaced by other cases (e.g. Richards 2013).

Polish patterns the same as Lithuanian in these respects (e.g. Przepiórkowski 1999, Błaszczak 2001, 2010).⁶ GN in Polish has been shown to surface on objects of transitive predicates that would normally be assigned accusative (e.g. Przepiórkowski 1999, 2000, Błaszczak 2001, 2010, Witkoś 2008). However, we show that Lithuanian GN can be narrowed down even further. Lithuanian GN is the realization of a structural case assigned by *v*. GN does not track a specific grammatical function (e.g. a direct object) or a specific θ -role (e.g. a theme). We demonstrate that it surfaces where structural accusative case would otherwise surface: on a direct object of transitives, an indirect object of ditransitives (such as ‘teach’) and the object of passive-like impersonals without a syntactically projected initiator. Importantly, Lithuanian shows that GN cannot appear on a direct grammatical object that is otherwise nominative.

As Lithuanian – as well as at least Polish – differs from Russian in interesting ways, it offers new challenges and leads to important questions regarding how case is determined and realized.

Based on evidence from GN, we demonstrate that while case is assigned in syntax (known as abstract Case; e.g. Vergnaud 1977/2008, Chomsky 1981, 1995, Legate 2008), it is translated at the morphological component (at PF) and then realized late in the derivation (Halle & Marantz 1993).⁷ We argue that accusative and genitive under negation are two morphological realizations of the same structural case, namely structural object case assigned by *v* in syntax. This structural case is then translated into morphological case at PF which is either genitive when negation is present or accusative if negation is absent. Lastly, Vocabulary Insertion proceeds and realizes the phonological exponents of these case values. We therefore make a clear distinction between case at a more abstract level in the derivation, and its morphological translation and realization. One of the most important contributions of this study is a three-layered approach to case. Some approaches to case have two levels of case determination (e.g. Legate 2008, Akkuş 2020), i.e. syntactic case and its phonological realizations through Vocabulary Insertion. In contrast, we argue that Lithuanian GN requires us to posit three levels of determination.

Finally, whereas Legate (2008) shows that one and the same morphological case, absolutive, can realize two different syntactic cases, nominative and accusative abstract Cases, we demonstrate that this can also be the other way around: a single syntactic case can be realized by two different morphological cases, accusative and genitive, depending on the absence or presence of negation (also see Spencer 2006 for a similar observation in Chukchee and Czech).

The paper is structured as follows. Section 2 looks at previous approaches to Russian GN showing that Lithuanian GN differs in many ways from Russian.

[6] We frequently point out similarities to Polish GN. Due to space, we cannot go into various interesting analyses of Polish, such as Przepiórkowski (2000), Witkoś (2008), Błaszczak (2010).

[7] See also the distinction made between syntactic case and morphological case (s-case and m-case) in Lexical Functional Grammar (Spencer 2003, 2006, 2009). See also the clear distinction made between syntax and morphology in H.Á. Sigurðsson (2006).

Section 3 distinguishes between GN and other types of genitives that exist in Lithuanian, e.g. the partitive genitive and intensional genitive. We argue that GN is a type of structural case that requires an analysis independent from the rest of genitives found in the language. Section 4 provides evidence for our central claim that GN is the realization of structural object case. We demonstrate that GN can only be applied to DPs that would normally receive structural accusative case. We also briefly show how Lithuanian GN differs in a few respects from Polish GN. Our analysis is presented in Section 5, where we show how structural object case can be realized either as morphological accusative or genitive. We employ H. Á. Sigurðsson's (2012a, 2012b) notion of case stars in syntax to account for case assignment. Case stars are translated to morphological case at PF and realized at Vocabulary Insertion. We also discuss long-distance GN and what consequences it has for phase theory. Section 6 examines two exceptions where GN is governed by semantic factors. Section 7 presents the conclusion. The data presented in Sections 2 and 6 were tested with three native speakers, and the data presented in Sections 3, 4 and 5 were tested with five native speakers. Some data also came from Google searches.

2. PREVIOUS APPROACHES TO RUSSIAN GN

Lithuanian GN has been claimed to be a syntactic phenomenon for the most part (Arkadiev 2016) and the same goes for Polish (e.g. Franks 1995, Przepiórkowski 1999, Błaszczak 2001, 2010). In contrast, Russian GN is, to a greater extent, influenced by semantic factors, which have led a number of researchers to adopt a semantic approach (e.g. Neidle 1988, Pereltsvaig 1998, Borschev & Partee 2002, Partee & Borschev 2004, Kagan 2013). However, various syntactic approaches to Russian GN also exist (e.g. Pesetsky 1982, Harves 2002, Bailyn 2004). For instance, a recent syntactic approach to Russian GN analyzes it through case replacement (Richards 2013). In this section, we briefly discuss semantic accounts as well as a syntactic account, namely Richards' replacement approach, proposed for Russian GN. We demonstrate that these analyses cannot account for Lithuanian GN, and thus Lithuanian deserves a distinct analysis.

2.1. *Semantic approaches to GN*

It has been observed that the distribution of Russian GN is governed by semantic factors, including specificity (Babyonyshev & Brun 2002), definiteness (Bailyn 1997) and the semantic type of a noun phrase (Kagan 2007, 2013, Partee et al. 2011). For instance, the grammatical object of transitives may or may not be marked with GN depending on its definiteness properties (see Kagan 2013: 12). A definite theme favors accusative, as in (5b), with a definite object modified by the demonstrative pronoun and, in (6), with a proper noun. An indefinite theme is compatible with accusative and genitive, as in (5c).

(5) *Russian*

- (a) Lena kupila eti ukrašenija / *etix ukrašenij.
Lena bought these jewels.ACC.PL / these jewels.GEN.PL
'Lena bought these jewels.'
- (b) Lena ne kupila eti ukrašenija / ???etix ukrašenij.
Lena NEG bought these jewels.ACC.PL / these jewels.GEN.PL
'Lena didn't buy these jewels.'
- (c) Lena ne kupila novyje ukrašenija / novyx ukrašenij.
Lena NEG bought new jewels.ACC.PL / new jewels.GEN.PL
'Lena didn't buy new jewels.'

(Kagan 2013: 12)

- (6) Vanja ne pročital 'Vojnu i mir' / *'Vojny i mira.'
Vanya NEG read War and Peace.ACC / War and Peace.GEN
'Vanya hasn't read War and Peace.'

(Babyonyshev 1996: 136)

Under negation, genitive is preferred over accusative when the object refers to an abstract entity, like 'happiness' in (7b). If the object refers to a concrete noun, such as 'flower' in (8b), only accusative has been reported to be available.⁸

- (7) (a) On našel sčast'je / *sčast'ja.
he found happiness.ACC / happiness.GEN
'He found happiness.'
- (b) On ne našel sčast'ja / ???sčast'je.
he NEG found happiness.GEN / happiness.ACC
'He didn't find happiness.'
- (8) (a) On našel cvetok / *cvetka.
he found flower.ACC / flower.GEN
'He found a flower.'
- (b) On ne našel cvetok / ???cvetka.
he NEG found flower.ACC / flower.GEN
'He didn't find the/a flower.'

(adapted from Kagan 2013: 10–11)

In equivalent Lithuanian examples, GN is always substituted for an accusative theme object regardless of whether it is definite, referential or indefinite (9).

(9) *Lithuanian*

- (a) Jon-as pirk-o nauj-ą / š-į
Jonas(M)-NOM.SG buy-PST.3 new-ACC.M.SG / this-ACC.M.SG
brangakmen-į.
jewel(M)-ACC.SG
'Jonas bought a new/this jewel.'

[8] However, a reviewer disagrees, stating that the use of genitive in, for example, (8b) is fine, and so does Nikita Bezrukov, p.c., who finds both accusative and genitive acceptable in (7b) and (8b). The judgments reported in (7) and (8) are taken from Kagan (2013).

- (b) Jon-as ne-pirk-o ši-o brangakmeni-o /
 Jonas(M)-NOM.SG NEG-buy-PST.3 this-GEN.M.SG jewel(M)-GEN.SG /
 *š-i brangakmen-i.
 this-ACC.M.SG jewel(M)-ACC.SG
 'Jonas was not buying this jewel.'
- (c) Jon-as ne-pirk-o nauj-o brangakmeni-o /
 Jonas(M)-NOM.SG NEG-buy-PST.3 new-GEN.M.SG jewel(M)-GEN.SG /
 *nauj-a brangakmen-i.
 new-ACC.M.SG jewel(M)-ACC.SG
 'Jonas was not buying a new jewel.'

Similarly, the theme object, be it a concrete entity or an abstract entity, is always genitive when negation is present (10).

- (10) (a) Iev-a rad-o gėl-ė.
 Ieva(F)-NOM.SG find-PST.3 flower(F)-ACC.SG
 'Ieva found a/the flower.'
- (b) Iev-a ne-rad-o gėl-ės / *gėl-ė.
 Ieva(F)-NOM.SG NEG-find-PST.3 flower(F)-GEN.SG / flower(F)-ACC.SG
 'Ieva didn't find a/the flower.'
- (c) Iev-a pagaliau rad-o džiaugsm-a
 Ieva(F)-NOM.SG finally find-PST.3 happiness(M)-ACC.SG
 sav-o šird-yje.
 self-GEN.POSS heart(F)-LOC.SG
 'Ieva finally found happiness in her heart.'
- (d) Iev-a ne-rad-o džiaugsm-o /
 Ieva(F)-NOM.SG NEG-find-PST.3 happiness(M)-GEN.SG /
 *džiaugsm-a sav-o šird-yje.
 happiness(M)-ACC.SG self-GEN.POSS heart(F)-LOC.SG
 'Ieva didn't find happiness in her heart.'

It should also be pointed out that Polish GN, which is like Lithuanian GN in many respects, exhibits the same pattern where semantic properties of the object do not play a role as to whether the GN rule can be applied or not (e.g. Błaszczak 2010).

The difference between Russian and Lithuanian is also reflected in the case marking of the theme of unaccusatives. Russian GN is famous for being an unaccusativity test (Pesetsky 1982): GN is found with canonical unaccusatives like 'arrive' (11b) and passives (12b), but not with unergatives. However, GN is not always obligatory in these environments – sometimes nominative is also possible. See (11a) and (12a).

(11) *Russian*

- (a) Otvét iz polka ne prišel
 answer.NOM from regiment NEG arrived.M.SG
 'The answer from the regiment did not arrive.'

- (b) *Otveta iz polka ne prišlo*
 answer.GEN from regiment NEG arrived.N
 ‘No answer from the regiment arrived.’ (Babby 1980: 71)
- (12) (a) *Zajavlenie o kraže ne bylo podano.*
 statement.NOM about theft NEG was submitted
 ‘The statement about the theft was not submitted.’
- (b) *Zajavlenija o kraže ne bylo podano.*
 statement.GEN about theft NEG was submitted
 ‘No statement about the theft was submitted.’ (Partee et al. 2011: 148)

There is a difference in meaning between the nominative theme and the genitive theme under negation. (11a) has a reading where there is an answer such that it did not arrive, and the same goes for ‘the statement’ in (12a). These refer to a specific answer or a specific statement (an entity of semantic type *e*), and thus these examples presuppose the existence of a theme. However, when the theme is genitive, it has a reading where no answer and no statement exist, meaning that no existence of a theme is presupposed. On Partee et al.’s (2011) account, these are properties (of type $\langle e, t \rangle$). They propose a semantic analysis – the Property-Type Hypothesis, discussed in Section 6 – to account for this pattern.⁹

Whereas a property-type vs. *e*-type analysis is tenable for Russian, it is not for Lithuanian, in general. GN is ungrammatical in Lithuanian with passives and unaccusatives, as we show in (15)–(16) in Section 2.2 below, regardless of whether the theme is presupposed to exist or not – the theme is always nominative. Thus, this group of predicates differs from Russian unaccusatives. The same goes for the difference between the genitive/accusative alternation in transitive clauses: although it is crucial in Russian whether the object is of type *e* or $\langle e, t \rangle$, it does not affect the outcome in Lithuanian. Recall our examples in (10).

To sum up, while Russian GN can be governed by semantic factors, Lithuanian does not follow the same pattern. Rather, Lithuanian GN applies to accusative theme grammatical objects irrespective of their semantic properties. It is disallowed in constructions with canonical unaccusatives, as opposed to Russian GN. Nevertheless, there is a small subset of unaccusative predicates in Lithuanian, namely locative-existential constructions with verbs of perception and existential

[9] Their analysis is extended to transitive constructions. In (i-a), structural accusative is realized when ‘statement’ refers to a specific statement (of type *e*). When ‘no statement’ has been submitted, this is a property (of type $\langle e, t \rangle$) and as a result, genitive is realized as in (i-b).

- (i) (a) *On ne podal zajavlenie o kraže.*
 he NEG submitted statement.ACC.N.SG about theft
 ‘He did not submit the statement about the theft.’
- (b) *On ne podal zajavlenija o kraže.*
 he NEG submitted statement.GEN.N.SG about theft
 ‘He did not submit a statement about the theft.’

predicates, that permit optional GN (see Ambrazas et al. 1997: 667–673, Holvoet 2005: 143, Aleksandravičiūtė 2013). These indeed resemble Russian GN constructions, where genitive DPs are properties of type <e,t>, whereas nominative DPs are of type e. However, these exceptions, discussed in Section 6, do not contradict our claim that Lithuanian GN is a type of structural object case.

2.2. Syntactic approach to GN

Richards (2013) argues, based in part on data from Russian GN, that case is assigned in syntax.¹⁰ We agree and, as discussed in Section 5, argue, furthermore, that case is realized late in the derivation, at Vocabulary Insertion at PF (Halle & Marantz 1993). We demonstrate, nonetheless, that the case replacement analysis proposed by Richards cannot account for Lithuanian GN.

Richards (2013) gives an analysis of case replacement in Lardil and extends it to Russian GN. He splits case into meaningful and meaningless cases; the former category is meaningful at LF, the latter is not. Structural case is meaningless, whereas inherent case, such as instrumental case, is meaningful. In his approach to Russian GN, genitive case is assigned by a negation head to an argument of a transitive verb that originates as an object and has previously been assigned accusative case. After the meaningless structural case, namely accusative, has been assigned to a DP, it is deleted and replaced by genitive. However, GN cannot replace a meaningful case, like instrumental case in (13).

- (13) (a) Anna pišet pis'mo ručkoj.
 Anna writes letter.ACC pen.INS
 'Anna is writing a letter with a pen.'
 (b) Anna ne pišet pis'ma ručkoj.
 Anna NEG writes letter.GEN pen.INS
 'Anna is not writing a letter with a pen.'
- (Richards 2013: 2)

Russian GN also applies to arguments in the passive (see (14b) below) that – without negation – would have been assigned nominative (see also discussion above and example (12)). For Richards (2013), genitive case assignment under negation, like case stacking in Lardil, is subject to timing: genitive is assigned to an argument by negation before it moves to subject position, and nominative case (structural/meaningless case) cannot replace genitive. This analysis can also be extended to unaccusative predicates (see (11b) above).

[10] Other syntactic approaches, like those by Pesetsky (1982) and Bailyn (2004), suggest that GN, like other genitives in Russian, such as the partitive genitive, is assigned by a phonologically empty quantifier. Nevertheless, as we show in Section 3, Lithuanian GN patterns differently from other genitives, like the partitive genitive, and thus these analyses cannot account for this phenomenon. Whether Lithuanian partitive genitive can be accounted for by the same analysis as Russian partitive genitive is a separate question that we leave for further research.

- (14) (a) Bylo polucheno pismo.
 was received letter.NOM
 ‘A letter was received.’ (Nikita Bezrukov, p.c.)
- (b) Pis’ma ne bylo polučeno.
 letter.GEN NEG was received
 ‘No letter was received.’ (Richards 2013: 25)

However, Richards’ approach cannot be extended to Lithuanian. First, GN cannot replace structural nominative, neither in passives (15) nor canonical unaccusatives (16).¹¹ Thus, the theme argument that is a grammatical subject is not affected by GN, in contrast to Russian GN. Second, GN in Lithuanian is not sensitive to timing: the passive subject cannot be genitive regardless of whether it is in SpecTP (15a) or in situ (15b), which is also the case for unaccusatives (see (16a) and (16b)). One could have argued for Lithuanian, based on Richards’ analysis, that the DP in (15a) and (16a) moves to subject position before GN is assigned, which could explain the nominative case that is realized on the subject. However, the fact that nominative case is also realized in situ in (15b) and (16b) shows that GN in Lithuanian passives is not affected by the timing of case assignment; GN cannot be realized regardless of whether the DP moves or not.

(15) *Lithuanian*

- (a) Laišk-as / *laišk-o ne-buv-o
 letter(M)-NOM.SG / letter(M)-GEN.SG NEG-be-PST.3
 skaito-m-a/-as tėv-o.
 read-PPRP-[-AGR]/-NOM.M.SG father(M)-GEN.SG
 ‘The/a letter was not being read by the father.’
- (b) Tėv-o ne-buv-o skaitom-a/-as
 father(M)-GEN.SG NEG-be-PST.3 read-PPRP-[-AGR]/-NOM.M.SG
 laišk-as / *laišk-o.
 letter(M)-NOM.SG / letter(M)-GEN.SG
 ‘By the father, the/a letter was not being read.’
- (16) (a) Traukini-ai / *traukini-ų ne-atvažiuoj-a į
 train(M)-NOM.PL / train(M)-GEN.PL NEG-arrive-PRS.3 to
 stot-į.
 station(M)-ACC.SG
 ‘Trains/the trains are not arriving to the station.’
- (b) Į stot-į ne-atvažiuoj-a traukini-ai /
 to station(M)-ACC.SG NEG-arrive-PRS.3 train(M)-NOM.PL /
 *traukini-ų.
 train(M)-GEN.PL
 ‘No trains are arriving to the station.’

[11] It should be pointed out that Polish GN patterns the same (e.g. Błaszczak 2001).

Furthermore, Lithuanian long-distance GN, as in (17b), may pose a challenge for Richards' approach.¹² In (17a), a predicate 'teach' takes an accusative object 'children' and an infinitival complement whose main verb 'paint' occurs with an accusative object 'fence'. When the matrix predicate is negated, as in (17b), both the matrix object and the object of the infinitival clause are genitive. This phenomenon is known as long-distance GN (see Arkadiev 2016 and Section 5). Note that it is also possible for the object of the infinitive to bear accusative.

- (17) (a) Tėv-ai mok-o vaik-us [dažy-ti
parent(M)-NOM.PL teach-PRS.3 child(M)-ACC.PL paint-INF
tvor-ą].
fence(F)-ACC.SG
'Parents are teaching the children to paint the fence.'
- (b) Tėv-ai ne-mok-o vaik-ų /
parent(M)-NOM.PL NEG-teach-PRS.3 child(M)-GEN.PL /
*vaik-us [dažy-ti tvor-os / ?tvor-ą].
child(M)-ACC.PL paint-INF fence(F)-GEN.SG / fence(F)-ACC.SG
'Parents do not teach the children to paint the fence.'
- (Arkadiev 2016: 39)

Under an account that places a case feature on NEG, it would have to be able to assign case to two DPs – in this case, to the object of 'teach' in the matrix clause and to the object of 'paint' in the infinitival clause. That is, the meaningless structural case assigned to both 'children' and 'fence' would be deleted and subsequently replaced by genitive case assigned by one and the same NEG head. Long-distance GN is not a problem per se for an approach that places a case feature on NEG – this could be accounted for by using, for example, a Multiple Agree approach, as discussed for Polish in Witkoś (2008). We, however, will propose a different syntactic approach to Lithuanian GN that successfully derives (15)–(17).

2.3. *Interim summary*

To summarize, we have reviewed semantic and syntactic approaches that have been used for Russian GN. While the choice of Russian GN can be semantically conditioned when applied to both transitives and unaccusatives, the distribution of Lithuanian GN is not restricted by these semantic factors. We argue that Lithuanian GN is a syntactic phenomenon that should not, however, be analyzed using a case replacement account, such as introduced by Richards (2013) for Russian. We introduce our syntactic approach in Section 5, but now we turn to the difference between GN and other types of genitive case in Lithuanian.

[12] Long-distance GN is rare in Russian but common in other Slavic languages like Polish or Slovene (see Arkadiev 2016: 74 for a detailed list of languages and further discussion).

3. DIFFERENT TYPES OF GENITIVE CASE: GN IS SPECIAL

In this section, we distinguish Lithuanian GN from other genitives found in the language. A number of approaches to Russian GN suggest that GN patterns similarly to other genitives, especially the intensional genitive (e.g. Neidle 1988, Kagan 2013) or the partitive genitive (e.g. Pesetsky 1982), and thus these cases should be given a unified analysis. In contrast, we argue that Lithuanian GN is different from other genitives, requiring a separate syntactic account. Lithuanian has other types of genitives, including the non-structural genitive determined by certain predicates, the intensional genitive, the partitive genitive and the genitive of evidentials.¹³ Even though these overlap morphologically, we show that GN behaves differently from other types of genitives. Unlike other cases discussed here, we claim that Lithuanian GN is a realization of structural object case (see also at least Przepiórkowski 2000, who takes GN in Polish to be structural case).

3.1. *Non-structural genitive*

Some Lithuanian verbs marked with the reflexive *-si-* take a genitive object. These include stative experiencer-like verbs, such as *baimintis* ‘be afraid of’, *gailėtis* ‘be sorry’, *gėdytis* ‘be ashamed’, *saugotis* ‘beware of’, as well as verbs like *šalintis* ‘avoid’ (18) (for a full list, see Ambrasas et al. 1997: 503).

- (18) (a) Politik-ai baimin-o-si pakilusi-ų
 politician(M)-NOM.PL be.afraid-PST.3-REFL increased-GEN.F.PL
 kain-ų.
 price(F)-GEN.PL
 ‘Politicians were afraid of increased prices.’
- (b) Žmon-ės šalin-o-si ši-ų naujovi-ų.
 people(M)-NOM.PL avoid-PST.3-REFL this-GEN.F.PL novelty(F)-GEN.PL
 ‘People were avoiding these novelties.’

[13] Lithuanian also has genitives that are realized inside nominals, e.g. the possessive genitive as in (i) (see Ambrasas et al. 1997: 562–567). The possessive genitive and GN can be distinguished morphologically. For instance, 1st person singular and 2nd person singular pronouns have two genitive forms: the possessive *mano* ‘me.GEN.POSS’ vs. non-possessive *manęs* ‘me.GEN.NPOSS’ (see Pakerys 2006: 132–133, Germain 2017: 104–105, Šereikaitė 2020). *Mano* appears as a possessor and it cannot appear with GN, whereas *manęs* can (ii–iii), suggesting that these are distinct cases.

- (i) man-o /*man-ęs rank-a
 me-GEN.POSS/me-GEN.NPOSS hand(F)-NOM.SG
 ‘my hand’
- (ii) Tu mat-ai man-e.
 you.NOM.SG see-PRS.2SG me-ACC
 ‘You see me.’
- (iii) Tu ne-mat-ai man-ęs /*man-o.
 you.NOM.SG NEG-see-PRS.2SG me-GEN.NPOSS/me-GEN.POSS
 ‘You don’t see me.’

In contrast, Lithuanian GN is not associated with a particular class of verbs. It occurs with both stative (19) and non-stative verbs (20) as long as the predicate can assign structural accusative case (see [Section 4](#) for more examples).

- (19) (a) Aš myli-u vaik-us.
I.NOM love-PRS.1SG child(M)-ACC.PL
'I love children.'
- (b) Aš ne-myli-u vaik-ų / *vaik-us.
I.NOM NEG-love-PRS.1SG child(M)-GEN.PL / child(M)-ACC.PL
'I don't love children.'
- (20) (a) Jon-as per-skait-ė laišk-a.
Jonas(M)-NOM.SG PRV-read-PST.3 letter(M)-ACC.SG
'Jonas read a/the letter.'
- (b) Jon-as ne-per-skait-ė laišk-o /
Jonas(M)-NOM.SG NEG-PRV-read-PST.3 letter(M)-GEN.SG /
*laišk-a.
letter(M)-ACC.SG
'Jonas didn't read a/the letter.' (adapted from Arkadiev 2016: 38)

The genitive assigned to an object with experiencer-type verbs in (18) exhibits properties of a non-structural case, whereas GN lacks these properties. The difference between the two is reflected in their behavior with the distributive preposition *po* 'each'. DPs with a non-structural case are not compatible with *po*, whereas structural case DPs are. *Po* assigns accusative case to its argument, and a PP headed by *po* can occur in a position where, normally, a structural case is assigned (Anderson 2013, 2015, E.F. Sigurðsson et al. 2018, Šereikaitė 2020). It can occur as an object (21b) or as a subject of a transitive (22b). In (22b), the preposition takes an accusative complement, and the assignment of nominative is blocked. We therefore take the accusative in (21b) to be assigned by *po*, but not the verb.¹⁴

- (21) (a) Jie su-valg-ė obuol-į.
they.NOM PRV-eat-PST.3 apple(M)-ACC.SG
'They ate an apple.'
- (b) Jie su-valg-ė po obuol-į.
they.NOM PRV-eat-PST.3 DIST apple(M)-ACC.SG
'They ate an apple each.' (Anderson 2015: 305)
- (22) (a) Du lingvist-ai peržiūrėj-o kiekvien-ą tekst-ą.
two linguist(M)-NOM.PL view-PST.3 every-ACC.M text(M)-ACC.SG
'Two linguists viewed every text.'

[14] The word order in (22b) is OVS rather than SVO due to indefiniteness effects. *Po* 'each' reinforces an indefinite interpretation of an agent. Generally, indefinite expressions in the language tend to occur post-verbally (see Gillon & Armoskaite 2015).

- (b) Kiekvien-ą tekst-ą peržiūrėj-o po du lingvist-us
 every-ACC.M text(M)-ACC.SG view-PST.3 DIST two linguist(M)-ACC.PL
 / *du lingvist-ai.
 / two linguist(M)-NOM.PL
 ‘A pair of two linguists viewed every text.’
 (Internet example from Šereikaitė 2020)¹⁵

Anderson (2013, 2015) observes that DPs with non-structural case cannot be complements of *po*. Verbs like *tarnauti* ‘serve’, which take an object with inherent dative case, are incompatible with this preposition. Neither accusative, which is the case normally assigned by *po*, nor inherent dative is grammatical in (23) (E.F. Sigurðsson et al. 2018, Šereikaitė 2020). Šereikaitė (2020) hypothesizes that PPs in Lithuanian have a strong phase head which blocks case assignment from outside. At the same time, the assignment of non-structural case, like inherent dative, is obligatory. The PP blocks this case assignment which results in ungrammaticality.

- (23) (a) Darbinink-ai tarnav-o atėjūn-ams.
 employee(M)-NOM.PL serve-PST.3 invader(M)-DAT.PL
 ‘The employees served the invaders.’
 (b) *Darbinink-ai tarnav-o po atėjūn-ą /
 employee(M)-NOM.PL serve-PST.3 DIST invader(M)-ACC.SG /
 atėjūn-ui.
 invader(M)-DAT.SG
 Lit. ‘The employees served a (different) invader each.’

The genitive case of verbs like *šalintis* ‘avoid’ behaves like inherent case: a DP marked with this case cannot be embedded under *po* as in (24). The complement of *po* cannot be accusative either. The genitive case of these predicates requires obligatory assignment just like inherent dative in (23).

- (24) (a) Kiekvien-as politik-as šalin-o-si
 every-NOM.M politician(M)-NOM.SG avoid-PST.3-REFL
 užsieni-o žurnalist-ų.
 foreign(M)-GEN.SG journalist(M)-GEN.PL
 ‘Every politician was avoiding foreign journalists.’
 (b) *Kiekvien-as politik-as šalin-o-si po
 every-NOM.M politician(M)-NOM.SG avoid-PST.3-REFL DIST
 užsieni-o žurnalist-ą / žurnalist-o.
 foreign(M)-GEN.SG journalist(M)-ACC.SG / journalist(M)-GEN.SG
 ‘Every politician was avoiding a (different) journalist each.’

[15] https://www.researchgate.net/publication/321926056_Kolokaciju_ir_frazeologizmu_atpazinimo_kriterijai (accessed 03-04-2019).

In contrast, adding a negation to a structural-case-assigning predicate, which in turn is followed by *po*, is grammatical.¹⁶ This is illustrated with the verb *gauti* ‘receive’ in (25), whose object becomes genitive under negation. When *po* is present, it assigns accusative to its complement, and GN is not available (26) (for discussion of GN with PPs, see Section 5.2). The grammaticality of (26), where *po* assigns accusative under negation, suggests that GN itself behaves like structural case: its failure to be realized on the object does not cause the derivation to crash.¹⁷

- (25) (a) Komand-a gav-o du bal-us.
 team(F)-NOM.SG receive-PST.3 two point(M)-ACC.PL
 ‘The team received two points.’
 (b) Komand-a ne-gav-o dviejų bal-ų / *du
 team(F)-NOM.SG NEG-receive-PST.3 two point(M)-GEN.PL / two
 bal-us.
 point(M)-ACC.PL
 ‘The team did not receive two points.’
- (26) Mūsų komand-a surink-o virš 20 balų, kai
 our team(F)-NOM.SG collect-PST.3 above 20 points while
 tuo tarpu kitos komand-os ne-gav-o net po
 meanwhile other team(F)-NOM.PL NEG-receive-PST.3 even DIST
 penkis bal-us / *penkių bal-ų.
 five point(M)-ACC.PL / five point(M)-GEN.PL
 ‘Our team received over twenty points while other teams didn’t even receive
 5 points each.’

We have demonstrated that non-structural genitive in Lithuanian differs from GN. Non-structural case is associated with a certain group of predicates, and a DP bearing this case cannot be a complement of *po*. In contrast, GN does not exhibit properties associated with a non-structural genitive. It can occur with any predicate as long as that predicate assigns structural accusative case to its object, meaning that it is not licensed thematically like a non-structural case. Furthermore, it is compatible with the distributive preposition *po*, which can occur with the type of arguments that are normally assigned structural case.

3.2. Intensional genitive

Lithuanian has a class of so-called intensional predicates like *norėti* ‘want’, *geisti* ‘desire/crave’, *laukti* ‘wait’, *trokšti* ‘desire’ and *tikėtis* ‘hope’. They assign genitive

[16] Note that the same behavior can be observed in Polish where *po* can be applied to an object that would normally be assigned structural accusative case. Adding a negation to the verb in constructions where *po* is applied to an object does not result in ungrammaticality (see Przepiórkowski & Patejuk 2013). We thank an anonymous reviewer for pointing this out.

[17] Note that we are not arguing that the accusative case assigned by *po* is structural case. An analysis of whether that is structural or non-structural case needs further research.

- (b) Nauj-as film-as buv-o labai laukia-m-as
 new-NOM.M.SG movie(M)-NOM.SG be-PST.3 very wait-PPRP-NOM.M.SG
 ir vaik-ų ir suaugusiųjų.
 and child(M)-GEN.PL and adult(M)-GEN.PL
 Lit. 'The new movie was very much being waited for by the children
 and the adults.'

GN is compatible with the preposition *po* (recall (26)). The intensional genitive is different. A DP assigned intensional genitive cannot occur as a complement of *po*, and the accusative is ungrammatical also (30). Intensional genitive is obligatorily assigned, but *po* blocks the case assignment, which results in ungrammaticality.

- (30) (a) Kiekvien-as augintin-is mūsų prieglaud-oje lauki-a
 every-NOM.M pet(M)-NOM.SG our.GEN shelter(F)-LOC.SG wait-PST.3
 nauj-o šeiminink-o.
 new-GEN.M.SG owner(M)-GEN.SG
 'Every pet in our shelter is waiting for a new owner.'
 (b) *Kiekvien-as augintin-is mūsų prieglaud-oje lauki-a
 every-NOM.M pet(M)-NOM.SG our.GEN shelter(F)-LOC.SG wait-PST.3
 po nauj-o šeiminink-o / nauj-ą
 DIST new-GEN.M.SG owner(M)-GEN.SG / new-ACC.M.SG
 šeiminink-ą.
 owner(M)-ACC.SG
 'Every pet in our shelter is waiting for a new (different) owner each.'

To sum up, the intensional genitive is distinct from GN. It is a mixed case that falls between two categories. It must be obligatorily assigned like an inherent case, but it can advance to nominative in the passive (see Šereikaitė 2020), just like a structural case. In contrast, GN does not show this ambiguity.

3.3. Partitive genitive

Yet another type of genitive is partitive genitive, also known as genitive of indefinite quantity (see Ambrazas et al. 1997: 486 and Seržant 2014 for discussion). This type of genitive, shown in (31), denotes a part or indefinite quantity of something and is usually realized with singular mass nouns and plural count nouns.

- (31) Gav-au laišk-ų.
 receive-PST.1SG letter(M)-GEN.PL
 'I received some letters.' (Ambrazas et al. 1997: 486)

Unlike GN, the partitive genitive is incompatible with a definite object, as shown in (32a). Lithuanian lacks definite articles and, therefore, we use a demonstrative *šiti* 'these' in (32) to reinforce a definite interpretation. In (32), a definite object DP is only possible when its case is accusative, as in (32b).

- (32) (a) *Gav-au šit-ų laišk-ų.
 receive-PST.1SG this-GEN.M.PL letter(M)-GEN.PL
 Lit. 'I received some of these letters.'
 (b) Gav-au šit-us laišk-us.
 receive-PST.1SG this-ACC.M.PL letter(M)-ACC.PL
 'I received these letters.'

A unified account has been proposed for the partitive genitive and GN in Russian by Pesetsky (1982), in which both cases are realized as genitive by a phonologically null quantifier (also see Pereltsvaig 1999, Bailyn 2004, 2012).¹⁹ However, Lithuanian GN is not a partitive genitive case. First, the partitive genitive object cannot be definite, as in (32a), whereas a GN object can, as indicated by the availability of the genitive object with the demonstrative in (33).

- (33) Ne-gav-au šit-ų laišk-ų.
 NEG-receive-PST.1SG this-GEN.M.PL letter(M)-GEN.PL
 'I haven't received these letters.'

Second, the partitive genitive cannot be assigned to singular count-noun DPs as in (34a): they are incompatible with an indefinite quantity interpretation like 'some'. However, GN can occur with singular count-noun objects, as in (34b).

- (34) (a) *Gav-au laišk-o.
 receive-PST.1SG letter(M)-GEN.SG
 Lit. 'I received some letter.'
 (b) Ne-gav-au laišk-o.
 NEG-receive-PST.1SG letter(M)-GEN.SG
 'I haven't received a/the letter.'

Lastly, the partitive genitive can also surface with passives, as in (35b), as well as with unaccusatives, as in (36b). Note that the theme in both cases occurs in a clause-final position due to (in)definiteness (also see fn. 14 for discussion).

- (35) (a) Valdži-a gav-o laišk-ų, kuriuose
 government(F)-NOM.SG receive-PST.3 letter(M)-GEN.PL which
 gyventoj-ai skund-ė-si dėl mokesči-ų.
 resident(M)-NOM.PL complain-PST.3-REFL because.of fee(M)-GEN.PL
 'The government received some letters in which the residents were
 complaining about taxes.'
 (b) Valdži-os buv-o gau-t-a laišk-ų,
 government(F)-GEN.SG be-PST.3 receive-PPP-[-AGR] letter(M)-GEN.PL

[19] However, see Franks (1995) showing that in Polish, Serbo-Croatian and Slovenian, the partitive genitive and GN behave differently and should not be subsumed under one account.

kuriuose gyventojai skund-ė-si dėl
 which resident(M)-NOM.PL complain-PST.3-REFL because.of
 mokesčių.
 fee(M)-GEN.PL

‘Some letters in which the residents were complaining about taxes were received by government.’²⁰

- (36) (a) Atvažiav-o sveči-ai (b) Atvažiav-o sveči-ų.
 arrive-PST.3 guest(M)-NOM.PL arrive-PST.3 guest(M)-GEN.PL
 ‘Guests arrived.’ ‘Some guests arrived.’

In contrast, GN is incompatible with passives (37–38), or unaccusatives, as in (39) (see also Section 2.2). To ensure that we are testing GN rather than the partitive genitive in (39), we use the demonstrative *šie* ‘these’, which reinforces a definite interpretation otherwise impossible with the partitive genitive.

- (37) *Laišk-o ne-buv-o skaito-m-a tėv-o.
 letter(M)-GEN.SG NEG-be-PST.3 read-PPRP-[-AGR] father(M)-GEN.SG
 ‘The letter was not being read by the father.’
- (38) Laišk-as ne-buv-o skaito-m-as tėv-o.
 letter(M)-NOM.SG NEG-be-PST.3 read-PPRP-NOM.M.SG father(M)-GEN.SG
 ‘The letter was not being read by the father.’
- (39) Š-ie sveči-ai / *ši-ų sveči-ų
 this-NOM.M.PL guest(M)-NOM.PL / this-GEN.M.PL guest(M)-GEN.PL
 ne-atvažiav-o.
 NEG-arrive-PST.3
 ‘These guests did not arrive.’

Given these differences, we take GN and the partitive genitive to be two distinct cases that deserve separate analyses. We do not attempt to give an analysis of the partitive genitive in Lithuanian.²¹ However, we note that due to a number of semantic restrictions, the assignment of partitive genitive does not seem to be related to the assignment of structural case, unlike GN.

3.4. Genitive of evidentials

Lastly, the Lithuanian evidential construction (see Geniušienė 2006, Lavine 2006, 2010, Spraunienė et al. 2015, Legate et al. 2020, i.a.) presents yet another type of genitive case. This is a non-finite construction with a verb taking a non-agreeing passive morphology. A thematic subject that is typically in the nominative case in

[20] Adapted from <http://old.skrastas.lt/?data=2008-05-20&rub=1141817778&id=1288950939> (accessed on 12-07-2021).

[21] For various analyses of partitive genitive in Slavic, see Pesetsky (1982), Neidle (1988), Franks (1995), Bailyn (2004), Kagan (2013).

an active transitive (40a) appears in the genitive case in the evidential construction (40b). The grammatical object, that would otherwise be in the accusative, is realized in the nominative case.

- (40) (a) Ing-a nuramin-o vaik-ą.
 Inga(F)-NOM.SG calm.down-PST.3 child(M)-ACC.SG
 'Inga calmed the child down.'
 (b) Ing-os nuramin-t-a vaik-as.
 Inga(F)-GEN.SG calm.down-PPP-[-AGR] child(M)-NOM.SG
 'Inga must have calmed the child down.' (Ambrasas et al. 1997: 207)

Legate et al. (2020) argue that the evidential genitive is a type of structural case assigned by an evidential head to the highest argument in the clause. Genitive of evidentials is realized on the subject of a transitive (40b), unergative (41a), unaccusative (41b) and passive (41c). It is thus associated with a subject position and assigned under A-movement to the highest argument, like structural nominative case.

- (41) (a) Čia žmoni-ų dirb-t-a
 here people(M)-GEN.PL work-PPP-[-AGR]
 'People must have worked here.'
 (b) Jon-o numir-t-a praeit-ą ruden-į.
 Jonas(M)-GEN.SG die-PPP-[-AGR] last-ACC.M.SG fall(M)-ACC.SG
 'Jonas must have died last fall.' (Legate et al. 2020: 797)
 (c) Vaik-o bū-t-a nuramin-t-o
 child(M)-GEN.SG be-PPP-[-AGR] calm.down-PPP-GEN.M.SG
 Ing-os.
 Inga(F)-GEN.SG
 'The child must have been calmed down by Inga.'

By contrast, GN does not appear on a thematic subject of unergatives or transitives (42) or a grammatical subject of passives or unaccusatives (37–39). We conclude that GN is not assigned under A-movement, unlike the genitive of evidentials. In other words, it does not target the highest available argument that becomes a subject. Rather, as we argue in Section 4, it tracks structural accusative case.

- (42) (a) Marij-a / *Marij-os ne-per-skait-ė
 Marija(F)-NOM.SG / Marija(F)-GEN.SG NEG-PRV-read-PST.3
 laišk-o.
 letter(M)-GEN.SG
 'Marija didn't read the letter.'
 (b) Mam-a / *mam-os ne-dirb-o.
 mother(F)-NOM.SG / mother(F)-GEN.SG NEG-work-PST.3
 'Mother wasn't working/didn't work.'

Type of case	Description
Non-structural genitive	assigned by stative experiencer-like verbs like <i>baimintis</i> 'be afraid of'
Intensional genitive	assigned by verbs like <i>laukti</i> 'wait'; mixed behavior between structural vs. non-structural case
Partitive genitive	expresses an indefinite quantity of something
Genitive of evidentials	structural case assigned under A-movement
Genitive of negation	a type of structural case assigned to an object which typically bears structural accusative case

Table 1
Different types of genitives in Lithuanian.

3.5. *Interim summary*

We have distinguished between different types of genitives in Lithuanian and demonstrated that GN is different from the rest. An overview is given in [Table 1](#). GN is not a non-structural genitive that is associated with a certain type of a θ -role. Thus it is not assigned thematically. The failure to realize GN, when *po* is used, does not result in ungrammaticality, unlike what happens with non-structural case. While Lithuanian has a class of mixed cases like the intensional genitive, which bears properties of both structural and non-structural case, the assignment of GN does not show this type of ambiguity. Furthermore, GN differs from the partitive genitive, which has a number of semantic restrictions. GN affects an object that would typically be marked with structural accusative case regardless of its semantic properties (e.g. definiteness). Thus, GN deserves its own analysis. Lastly, GN is not associated with a type of structural case that is assigned under A-movement to the highest argument in the clause as the genitive of evidentials. Even though it is a type of structural case (which has also been argued for Polish GN, see [Przepiórkowski 2000](#)), its assignment is not related to A-movement.

4. GENITIVE OF NEGATION AND STRUCTURAL ACCUSATIVE CASE

The central generalization of this paper is that Lithuanian GN is a realization of structural object case, assigned by *v*. We show that GN does not track a specific grammatical function (e.g. a direct object) nor does it track a specific θ -role (e.g. a theme). Instead, it is realized where structural accusative case would otherwise surface (e.g. on a direct object of transitives or an indirect object of ditransitives). Thus, GN strictly tracks structural object case. We argue that it is sensitive to syntactic rather than morphological case. GN does not apply blindly to all DPs that would appear with accusative; it is not realized on, for example, adjuncts (see [Franks & Dziwirek 1993](#) for a similar pattern in Slavic). Furthermore, GN is

banned from environments where a structural nominative case would be assigned. This applies to subjects and grammatical objects that are realized in the nominative, with or without negation. Lastly, non-structural case on arguments is not affected by negation, which is another piece of evidence for our claim that GN should be treated as structural case. Note that while Polish GN has been argued to apply to objects of transitives that would bear structural accusative case (Przepiórkowski 1999: §5.2, 2000), Lithuanian seems to exhibit a wider range of different constructions with structural object case, which allow us to pinpoint the exact nature of GN.

4.1. *GN tracks structural accusative case*

In this subsection, we demonstrate that GN occurs in various syntactic environments where structural accusative case would typically be assigned.

4.1.1. *DP_{NOM}-DP_{ACC} environment*

We start the discussion of GN by reviewing its behavior in DP_{NOM}-DP_{ACC} environments. A typical example of Lithuanian GN is in transitive clauses with negation where structural accusative case would otherwise surface, as in (43).

- (43) (a) Jon-as per-skait-ė laišk-a.
Jonas(M)-NOM.SG PRV-read-PST.3 letter(M)-ACC.SG
'Jonas read a/the letter.'
- (b) Jon-as ne-per-skait-ė laišk-o /
Jonas(M)-NOM.SG NEG-PRV-read-PST.3 letter(M)-GEN.SG /
*laišk-a.
letter(M)-ACC.SG
'Jonas didn't read a/the letter.'
- (Arkadiev 2016: 38)

Under our account, the direct object is assigned structural case by *v* in transitive active constructions (for further details, see Section 5). The result is normally accusative, unless the DP is c-commanded by negation; then, genitive is the result. The same pattern can be observed with direct objects of ditransitives (44).

- (44) (a) Mam-a dav-ė vaik-ui obuol-į.
mother(F)-NOM.SG give-PST.3 child(M)-DAT.SG apple(M)-ACC.SG
'Mother gave the child the apple.'
- (b) Mam-a ne-dav-ė vaik-ui
mother(F)-NOM.SG NEG-give-PST.3 child(M)-DAT.SG
obuoli-o / *obuol-į.
apple(M)-GEN.SG / apple(M)-ACC.SG
'Mother didn't give the child the apple.'

GN does not only apply to direct objects, as the indirect object of the ditransitive verb ‘teach’ is in the genitive under negation.²² This suggests that GN does not track a particular θ -role (e.g. a theme, or a particular grammatical function – for example, a direct object). It can affect a goal – an indirect object – as long as that object can be realized in a structural accusative case as in (45) (see Arkadiev 2016 for more examples with ‘teach’).

- (45) (a) Aš moki-au ši-uos vaik-us
 I.NOM teach-PST.1.SG this-ACC.M.PL child(M)-ACC.PL
 lietuvi-ų kalb-os.
 Lithuanian(M)-GEN.PL language(F)-GEN.SG
 ‘I taught these children the Lithuanian language.’

[22] We take ‘children’ in (45) to be an indirect object of the ditransitive ‘teach’. Even though the status of indirect objects can vary cross-linguistically, this is in line with Citko’s (2011: 116–118) treatment of Polish *uczyć* ‘teach’ and Wood’s (2015: 233–235) treatment of Icelandic *kenna* ‘teach’. We assume indirect objects to be generated in SpecApplP, whereas direct objects are generated as the complement of the verb phrase or ApplP (see E.F. Sigurðsson et al. 2018). First, both internal arguments are DPs, which is expected of a double object construction (Pylkkänen 2008). The accusative goal in (45a) is a DP rather than a PP because PPs are not affected by GN in Lithuanian (see 5.2), whereas this argument is. The genitive theme in (45a) is also a DP. The distributive preposition *po* (see 3.1), which cannot be stacked on PPs (i), can appear on it, as in (ii). The theme becomes accusative when it is a complement of *po*, as expected.

- (i) Kiekvien-as vaik-as ėjo (*po) į mokyklą.
 every-NOM.M child(M)-NOM.SG go.PST.3 DIST to school
 Intend. ‘Every child went to a different school.’
 (ii) Aš išmoki-au sav-o vaik-us po nauj-ą
 I.NOM teach-PST.1.SG self-GEN.POSS child(M)-ACC.PL DIST new-ACC.F.SG
 dain-ą.
 song(F)-ACC.SG
 ‘I taught my children a new song each.’

Furthermore, the goal DP in (45) c-commands the genitive theme as evidenced by binding facts. The goal binds the anti-subject-oriented pronoun *ju*, as indicated in (iii).

- (iii) Aš moki-au vaik-us_i jų_{i/j} nauj-ų vard-ų.
 I.NOM teach-PST.1.SG child(M)-ACC.PL their new-GEN.M.PL name(M)-GEN.PL
 ‘I was teaching the children_i their_{i/j} new names.’ Context: *during a new game, each child needs to learn their new name.*

This is the same pattern as found with the verb ‘give’, which takes a dative case indirect object and an accusative direct object, as in (44). The relationship between these two arguments is such that the indirect argument c-commands the direct argument as in (iv) (also see Štreikaitė (2020) for this test). See, furthermore, (59) in Subsection 4.2.1, showing that the anti-subject-oriented pronoun cannot be bound by the subject. We thank an anonymous reviewer for asking us to clarify our position on the status of the accusative goal.

- (iv) Aš davi-au vaik-ams_i jų_{i/j} knyg-as.
 I.NOM give-PST.1.SG child(M)-DAT.PL their book(F)-ACC.PL
 ‘I gave children_i their_{i/j} books.’

- (b) Aš ne-moki-au ši-ų vaik-ų /
 I.NOM NEG-teach-PST.1SG this-GEN.M.PL child(M)-GEN.PL /
 *ši-uos vaik-us lietuvi-ų
 this-ACC.M.PL child(M)-ACC.PL Lithuanian(M)-GEN.PL
 kalb-os.
 language(F)-GEN.SG
 ‘I didn’t teach these children the Lithuanian language.’

In order to bear GN, the DP needs to be base-generated below negation. For example, when the verb in the to-infinitive in (46) is negated, the object of that clause, ‘same mistake’, is genitive, as it is base-generated below the negation. The matrix object ‘children’ is accusative, as it is base-generated above the negation.

- (46) Ji mok-ė vaik-us ne-dary-ti t-os
 she.NOM teach-PST.3 child(M)-ACC.PL NEG-do-INF that-GEN.F.SG
 pači-os klaid-os / *t-ą pači-ą
 same-GEN.F.SG mistake(F)-GEN.SG / that-ACC.F.SG same-ACC.F.SG
 klaid-ą.
 mistake(F)-ACC.SG
 ‘She taught children not to make the same mistake.’

However, a DP does not need to be under the semantic scope of negation to receive GN. This is reflected in the behavior of the topicalized direct object in (47) which retains its genitive case even when it takes scope over negation, and its surface position is not c-commanded by it.

- (47) Laišk-o_i/*laišk-a_i Marij-a ne-per-skait-ė t_i
 letter(M)-GEN.SG/letter(M)-ACC.SG Marija(F)-NOM.SG NEG-PRV-read-PST.3
 (i) ‘There is some specific letter such that Marija hasn’t read it.’ $\exists > \neg$
 (ii) #‘It is not the case that Marija has read a specific letter.’ $\neg > \exists$

All in all, the realization of GN is dependent on the syntactic structure, specifically whether or not a grammatical object case is assigned in the structure.

4.1.2. *Impersonals*

GN is found in impersonals like (48)–(50). Typically, these constructions include an accusative direct object and a subject that is not expressed overtly. Lavine (2016) argues that impersonals like (48) have a nonvolitional causer that is not projected in syntax. Šereikaitė (2021) proposes that constructions like (49) also lack a projected external argument, which is interpreted as an existential ‘someone’. Regardless of whether there is a projected initiator or not, the assignment of accusative case in these constructions is possible. We take these impersonals to have *v*, which assigns structural case in syntax to a direct object, resulting in accusative case at PF – unless when negation is added, then the result is genitive.

- (48) (a) Man-e pykin-a.
me-ACC sick-PRS.3
'I feel sick.' (Ambrasas et al. 1997: 630)
- (b) Man-ęs / *man-e ne-pykin-a.
me-GEN.POSS / me-ACC NEG-sick-PRS.3
'I don't feel sick.'
- (49) (a) Vali-ų kvieči-a į dekanat-ą.
Valius(M)-ACC.SG invite-PRS.3 to dean's.office(M)-ACC.SG
'Someone is inviting Valius to the dean's office.'
(adapted from Kibort and Maskaliūnienė (eds.) 2016: 251)
- (b) Vali-aus / *Vali-ų ne-kvieči-a į
Valius(M)-GEN.SG / Valius(M)-ACC.SG NEG-invite-PRS.3 to
dekanat-ą.
dean's.office(M)-ACC.SG
'It is not the case that someone is inviting Valius to the dean's office.'
(adapted from Šereikaitė 2021: 753)
- (50) (a) Vaik-ą mėt-o spuog-ais.
child(M)-ACC.SG throw-PRS.3 pimple(M)-INS.PL
'The child is covered with pimples.' (Ambrasas et al. 1997: 632)
- (b) Vaik-o / *vaik-ą ne-mėt-o
child(M)-GEN.SG / child(M)-ACC.SG NEG-throw-PRS.3
spuog-ais.
pimple(M)-INS.PL
'The child is not covered with pimples.'

These impersonals are similar to short passives (i.e. without *by*-phrases): both constructions lack a projected initiator in syntax (Šereikaitė 2022). However, the *v* in impersonals licenses accusative, while the assignment of accusative in Lithuanian passives is impossible.²³ Similarly, GN is possible in the impersonals in (48)–(50), but not in passives (e.g. (38)). The realization of GN does not require the presence of a syntactically projected agent; GN can appear in constructions that lack it as long as they license the assignment of structural object case.

Polish also has an impersonal construction with an accusative theme argument as in (51). Nevertheless, the Polish *-no/-to* construction, unlike the Lithuanian impersonals above, has been argued to have a projected null subject (Lavine 2005, Legate 2014) and thus exhibits active voice characteristics. While the Polish data show us that GN is found in active impersonals with a fully projected agent, the Lithuanian data suggest that GN also occurs in passive-like constructions (i.e. without a projected external argument) as long as they license accusative case.

[23] The assignment of accusative is often viewed as being dependent on the syntactic presence of an external argument in a structure (e.g. Burzio 1986, Marantz 1991/2000, Kratzer 1994, 1996, Woolford 2003). However, in Lithuanian, the assignment of accusative and the presence of a projected external argument are dissociable from each other (see Lavine 2016, Šereikaitė 2021).

(51) *Polish*

- (a) W niektórych środowiskach czytano chętnie książki.
 in some circles read.N eagerly books.ACC
 ‘In certain circles they read books eagerly.’
 (Rozwadowska 1992: 62, via Lavine 2013)
- (b) Nie czytano tej książki.
 NEG read.N that book.GEN
 ‘They didn’t read that book.’ (Lavine 2005: 94)

4.1.3. *DP_{DAT}-DP_{ACC} environment*

Lastly, GN appears in dative-accusative constructions. These take a dative subject followed by an object which is assigned structural object case realized with accusative. Crucially, the object becomes genitive when negation is present. Lithuanian *pain*-verb constructions (see Seržant 2013, Holvoet 2016) with a dative possessor and an accusative theme belong to this class. The theme direct object is affected by negation – it is realized in the genitive case (52b).²⁴

(52) *Lithuanian*

- (a) Man skaud-a galv-ą.
 me.DAT ache-PRS.3 head(F)-ACC.SG
 ‘I have a headache.’
- (b) Man ne-skaud-a galv-os / *galv-ą.
 me.DAT NEG-ache-PRS.3 head(F)-GEN.SG / head(F)-ACC.SG
 ‘I don’t have a headache.’ (Seržant 2013: 192–193)

However, in Polish, verbs like *boleć* ‘ache’, *stać* ‘afford’ and *kosztować* ‘cost’ take a nominative theme and an accusative possessor. Interestingly, the accusative is either retained on the DP under negation or it becomes genitive (Przepiórkowski 1999, Błaszczak 2001). That is, Polish exhibits optionality in these environments, unlike Lithuanian. It has been argued for Polish that the object of verbs like ‘ache’ is associated with two types of cases: (i) a structural one to which GN can apply and (ii) an inherent one, to which GN does not apply (*ibid.*).

[24] Polish has a somewhat similar DAT-ACC construction – see (i) – in which the direct object is expressed in genitive under negation, as mentioned by Rivero (2003). However, its analysis has been debated. This construction differs from the Lithuanian construction in that it has a clitic *się*. Willim (2020) argues that this construction has a non-thematic Voice where *się* carries neither ϕ nor case features. However, Rivero (2003) argues that this clitic is in nominative case. We thank an anonymous reviewer for pointing out this construction.

(i) Jankowi czytało się tę książkę przyjemnie.
 John.DAT read.3SG.N SE this.ACC book.ACC pleasantly
 ‘John enjoyed reading this book.’ (Willim 2020: 246)

(53) *Polish*

- (a) Głowa ją boli.
head.NOM she.ACC ache.PRS.3SG
'Her head is aching.'
- (b) Głowa już ją / jej nie boli.
head.NOM already she.ACC / she.GEN NEG ache.PRS.3SG
'Her head isn't aching any more.' (Przepiórkowski 1999: 137)

Returning to Lithuanian DAT-ACC patterns, an accusative theme is found also in non-finite subordinate clauses with a dative subject (see Ambrazas et al. 1997: 363, Arkadieiev 2012, 2017, Šereikaitė 2020). It is in the genitive under negation (54).

(54) *Lithuanian*

- (a) [Vaik-ams parodži-us iniciatyv-a],
child(M)-DAT.PL show-PST.ACT.PTCP initiative(F)-ACC.SG
mokytoj-a apsidžiaug-ė.
teacher(F)-NOM.SG become.happy-PST.3
'When the children showed initiative, the teacher became happy.'
- (b) [Vaik-ams ne-parodži-us iniciatyv-os /
child(M)-DAT.PL NEG-show-PST.ACT.PTCP initiative(F)-GEN.SG /
*iniciatyv-a], mokytoj-a nuliūd-o.
initiative(F)-ACC.SG teacher(F)-NOM.SG become.upset-PST.3
'When children didn't show initiative, the teacher became upset.'

To-infinitive clauses also belong to this class of constructions. The case of arbitrary PRO in Lithuanian is dative as illustrated by the agreement properties of the adjective *vienas* 'alone' in (55a) (see Šereikaitė 2020; for similar facts in Russian, see Landau 2008).²⁵ The theme object in this configuration is accusative (55a) but realized in the genitive under negation (55b).

- (55) (a) [PRO_i skaity-ti knyg-as vien-am_i] yra gerai.
read-INF book(F)-ACC.PL alone-DAT.M.SG is good
'To read books alone is good.'
- (b) [PRO_i ne-skaity-ti knyg-u / *knyg-as
NEG-read-INF book(F)-GEN.PL / book(F)-ACC.PL
vien-am_i] yra blogai.
alone-DAT.M.SG is bad
'Not to read books alone is bad.'

To sum up, GN is not sensitive to whether a clause is finite or non-finite. Nor is it sensitive to the case of a subject, be it nominative (see Section 4.1.1) or dative. GN appears on a grammatical object as long as that object can be realized in structural

[25] See also H.Á. Sigurðsson (2008) for arguments that PRO has case.

accusative case when negation is absent. In addition to DAT-ACC constructions, Lithuanian also allows DAT-NOM constructions. If GN indeed tracks structural object case, then we predict that GN cannot be realized where nominative surfaces (e.g. in DAT-NOM constructions). We show that this prediction is borne out in the next subsection.

4.2. *GN does not track nominative case*

Here we discuss environments with structural nominative case that appears on a grammatical subject and a grammatical object. We demonstrate that GN cannot be realized on DPs which would normally be marked with nominative regardless of whether that DP is a subject or an object.

4.2.1. *Nominative subjects*

A structural-case-marked subject is realized in the nominative case in Lithuanian, whether or not negation is present in the clause. Examples follow with the thematic subject of a transitive verb (56a) and an unergative verb (56b).

- (56) (a) Jon-as / *Jon-o ne-per-skait-ė
 Jonas(M)-NOM.SG / Jonas(M)-GEN.SG NEG-PRV-read-PST.3
 laišk-o.
 letter(M)-GEN.SG
 ‘Jonas didn’t read a/the letter.’
 (b) Mam-a / *mam-os ne-dirb-o.
 mother(F)-NOM.SG / mother(F)-GEN.SG NEG-work-PST.3
 ‘Mother wasn’t working/didn’t work.’

The sole arguments of, for example, unaccusatives and passives, that originate as underlying objects, are realized as nominative under negation. In (57a)–(58a), the theme has moved to subject position (SpecTP). If it stays in its original object position, as in (57b)–(58b), it is still nominative. Hence, GN does not track a specific syntactic position. Rather, we argue that GN affects arguments that are assigned structural object case, typically accusative.

- (57) (a) Laišk-as / *laišk-o ne-buv-o
 letter(M)-NOM.SG / letter(M)-GEN.SG NEG-be-PST.3
 skaito-m-as.
 read-PPRP-NOM.M.SG
 ‘A/the letter was not being read.’
 (b) Pamokos metu ne-buv-o skaito-m-as
 lesson time NEG-be-PST.3 read-PPRP-NOM.M.SG
 laišk-as / *laišk-o.
 letter(M)-NOM.SG / letter(M)-GEN.SG
 ‘A/the letter was not being read during the lesson.’

- (58) (a) Traukin-ys / *traukini-o ne-atvažiav-o.
train(M)-NOM.SG / train(M)-GEN.SG NEG-arrive-PST.3
‘The train didn’t arrive.’
(b) Vakar ne-atvažiav-o traukin-ys / *traukini-o.
yesterday NEG-arrive-PST.3 train(M)-NOM.SG / train(M)-GEN.SG
‘Yesterday, the train didn’t arrive.’

Lithuanian *like*-class verbs (e.g. *patikti* ‘like’, *rūpėti* ‘care’) present yet another argument for GN not tracking nominative. These constructions have a non-structural dative experiencer, followed by a nominative theme. The theme is a grammatical subject: it binds the subject-oriented anaphor *savo* and triggers agreement on the predicate, as in (59).²⁶ It cannot bind the anti-subject-oriented anaphor *tavo*. The theme is nominative in an environment with negation (60).

- (59) Tu_i man patink-i dėl sav-o_i / *tav-o_i
you.NOM me.DAT like-PRS.2.SG because.of self-GEN.POSS / you-GEN.POSS
išvaizd-os.
appearance(F)-GEN.SG
‘I like you because of your appearance.’
(60) (a) Man patink-a muzik-a.
me.DAT like-PRS.3 music(F)-NOM.SG
‘I like music.’
(b) Man ne-patink-a muzik-a / *muzik-os.
me.DAT NEG-like-PRS.3 music(F)-NOM.SG / music(F)-GEN.SG
‘I don’t like music.’

This is unlike the DAT-ACC construction in Subsection 4.1.3 where the theme, which typically bears accusative, is realized with GN. The DAT-ACC construction allows GN, whereas the DAT-NOM construction does not. The theme in the former bears structural object case, whereas the theme in the latter does not. The juxtaposition of the two constructions is another piece of evidence that GN is sensitive to the type of case the theme bears.

4.2.2. Nominative objects

We now investigate GN in environments with a nominative object. Evidence from evidentials in (61) (see also Section 3.4) demonstrates that GN does not merely track the grammatical function of a DP. In evidentials, the subject is genitive and the

[26] To illustrate subjecthood properties, using a 2nd person rather than a 3rd person argument in (59) is crucial as 3rd person active morphology, which does not distinguish between singular and plural, is default in the language and thus cannot be used to test the agreement facts. It is also worth pointing out that pronouns in Lithuanian generally tend not to occur sentence-finally in discourse-neutral situations, which explains why the nominative pronoun subject in (59) precedes the dative DP, whereas in (60), the nominative DP does occur sentence-finally.

theme object is nominative.²⁷ The theme is a grammatical object: it binds the anti-subject-oriented pronoun *jū* instead of the subject-oriented anaphor *savo* (Lavine 2006). When negation is added, the object is nominative (62).

- (61) Domant-o rūšiūo-t-a darbuotoj-ai_i
 Domantas(M)-GEN.SG divide-PPP-[-AGR] employee(M)-NOM.PL
 pagal jū_i / *sav-o_i įsitikinim-us.
 according.to their.GEN / self-GEN.POSS belief(M)-ACC.PL
 ‘Domantas must have divided employees_i according to their_i beliefs.’
 (adapted from Legate et al. 2020)

- (62) Domant-o ne-rūšiūo-t-a darbuotoj-ai /
 Domantas(M)-GEN NEG-divide-PPP-[-AGR] employee(M)-NOM.PL /
 *darbuotoj-ų.
 employee(M)-GEN.PL
 ‘Domantas must have not divided employees.’

We could have predicted that GN affects all grammatical objects regardless of the type of case they are marked with. However, the facts from evidentials show that GN does not track a specific grammatical function, such as a grammatical object. Rather, GN affects DPs that would otherwise be realized with accusative case.

4.3. GN does not track non-structural case

We now turn to environments with non-structural case. GN cannot appear on arguments that are marked with a non-structural case – a common property of GN in Slavic languages as well (e.g. Pesetsky 1982). This is shown below for direct objects (63) and indirect objects (64) that are assigned non-structural dative.

- (63) (a) Marij-a tarvan-o atėjūn-ams.
 Marija(F)-NOM.SG serve-PST.3 invader(M)-DAT.PL
 ‘Marija served the invaders.’
 (b) Marij-a ne-tarnav-o atėjūn-ams /
 Marija(F)-NOM.SG NEG-serve-PST.3 invader(M)-DAT.PL /
 *atėjūn-ų.
 invader(M)-GEN.PL
 ‘Marija didn’t serve the invaders.’
- (64) (a) Mam-a dav-ė vaik-ui obuol-į.
 mother(F)-NOM.SG give-PST.3 child(M)-DAT.SG apple(M)-ACC.SG
 ‘Mother gave the child an apple.’

[27] Lavine (2006) argues that nominative in the evidential is a default case. Legate et al. (2020) propose that it is assigned by a thematic Voice. We will not go further into this issue, but what is important for current purposes is that *v* does not assign case to its object, realized in the nominative case.

- (b) Mam-a ne-dav-ė vaik-ui / *vaik-o
 mother(F)-NOM.SG NEG-give-PST.3 child(M)-DAT.SG / child(M)-GEN.SG
 obuoli-o.
 apple(M)-GEN.SG
 ‘Mother didn’t give the child an apple.’

Quirky dative subjects can also be found in the language. *Lack*-class verbs (e.g. *trūkti* ‘lack’, *užtekti* ‘have enough’) take a dative subject and a genitive theme. As a subject, the dative DP binds the subject-oriented anaphor *savo* (65a) (see also Šereikaitė 2020). GN cannot affect non-structural case subjects, as shown in (65).

- (65) (a) Man_i trūkst-a pinig-ų sav-o_i reikm-ėms.
 me.DAT lack-PRS.3 money(M)-GEN.PL self-GEN.POSS need(M)-GEN.PL
 ‘I lack money for my own needs.’ (adapted from Šereikaitė 2020)
- (b) Man / *man-ęs ne-trūkst-a pinig-ų.
 me.DAT / me-GEN.NPOSS NEG-lack-PRS.3 money(M)-GEN.PL
 ‘I don’t lack money.’

4.4. GN does not track adjuncts

Lastly, we show that GN cannot be realized on adjuncts. Lithuanian measure adjuncts are marked with accusative case (e.g. ‘for x amount of time’); see (66a). Adverbial phrases like ‘every/each day’ also take an accusative temporal DP; see (67a). GN is nonetheless prohibited with these phrases; see (66b)–(67b).

- (66) (a) Jis miegoj-o jau trisdešimt šeši-as valand-as /
 he.NOM sleep-PST.3 already thirty six-ACC.F hour(F)-ACC.PL /
 *trisdešimt šeši-ų valand-ų.
 thirty six-GEN.F hour(F)-GEN.PL
 ‘He has already been sleeping for thirty six hours.’
- (b) Jis ne-miegoj-o jau trisdešimt šeši-as
 he.NOM NEG-sleep-PST.3 already thirty six-ACC.F
 valand-as / *trisdešimt šeši-ų valand-ų.
 hour(F)-ACC.PL / thirty six-GEN.F hour(F)-GEN.PL
 ‘He hasn’t already been sleeping for thirty six hours.’
- (67) (a) Ji atein-a kiekvien-ą dien-ą / *kiekvien-os
 she.NOM come-PRS.3 every-ACC.F day(F)-ACC.SG / every-GEN.F
 dien-os.
 day(F)-GEN.SG
 ‘She comes over every day.’

- (b) Ji ne-atein-a kiekvien-ą dien-ą / *kiekvien-os
 she.NOM NEG-COME-PRS.3 every-ACC.F day(F)-ACC.SG / every-GEN.F
 dien-os.
 day(F)-GEN.SG
 ‘She does not come over every day.’

From a morphological perspective, we could have expected GN to apply to all DPs that can be marked with accusative case, including adjuncts, contrary to fact. (66)–(67) suggest that GN does not track a particular morphological case but rather that it is sensitive to syntactic case. In other words, the accusative that appears on adjuncts is not assigned by *v*, and thus, GN does not apply in this environment.^{28,29}

4.5. *Interim summary*

We have demonstrated that GN is realized on DPs which (i) are c-commanded by negation and (ii) would otherwise be realized in the accusative case. The availability of GN is not restricted by scope; topicalized objects which are outside the scope of negation still must bear GN. Our main claim is that Lithuanian GN tracks structural object case. We have supported this finding by showing that GN does not track a specific grammatical function since neither a nominative grammatical subject nor an object is affected by GN. Furthermore, the availability of a GN object is not dependent on whether the subject is marked with nominative or dative, or whether the clause is finite or non-finite. In contrast, GN is realized on DPs which are assigned structural accusative case, e.g. the grammatical object of transitives, ditransitives, impersonals and *pain*-class verbs, and the indirect object of ditransitives. We summarize our findings in Table 2.

[28] There are various proposals regarding the assignment of accusative case to adjuncts (e.g. see Szucsich (2002) arguing that this case can be licensed by Asp(ect)P).

[29] In some cases, adjuncts can bear genitive when negation is present; see (i). However, (i) has a different reading from (66b). (i) means that he slept for ‘less than 36 hours’, whereas (66b) means he has ‘not slept 36 hours’. Franks & Dziwirek (1993) discuss Slavic languages that permit genitive with adjuncts, which otherwise are accusative, only under ‘less than’ type of reading. They suggest that this is in fact partitive genitive, which denotes an indefinite quantity/part of something (see Section 3.3). Given the difference between (i) and (66b), we suggest that the genitive in (i) is not a true instance of GN and may rather be subsumed under partitive genitive.

- (i) Jis ne-iš-miegoj-o net trisdešimt šeši-ų valand-ų / *trisdešimt šeši-as
 he NEG-PRV-sleep-PST.3 even thirty six-GEN.F hour(F)-GEN.PL / thirty six-ACC.F
 valand-as.
 hour(F)-ACC.PL
 ‘He hasn’t even slept for thirty six hours.’

Environment	GN
NOM subject of transitives	*
NOM subject of unergatives	*
NOM subject of unaccusatives	*
NOM subject of passives	*
NOM subject of <i>like</i> -class verbs	*
NOM object of evidentials	*
ACC adjuncts	*
ACC object of prepositions	*
ACC object of transitives	✓
ACC object of to-infinitives	✓
ACC object of ditransitives	✓
ACC object of impersonals	✓
ACC object of <i>pain</i> -class verbs	✓
DAT object of monotransitives	*
DAT object of ditransitives	*
DAT quirky subject of <i>lack</i> -class verbs	*

Table 2

Summary of what type of case GN tracks.

5. REALIZING STRUCTURAL OBJECT CASE AS ACCUSATIVE AND GENITIVE

Below we present an analysis of Lithuanian GN. We propose that accusative and GN are two morphological cases derived from the same syntactic case – namely, structural object case. We argue that case is assigned in syntax (sometimes referred to as abstract Case; e.g. Legate 2008) and then translated to morphological case at PF. Lastly, assuming a Distributed Morphology (DM) approach, morphological case is realized at Vocabulary Insertion (VI; e.g. Halle & Marantz 1993). That is, we propose that case at PF is determined in two steps rather than making VI do all the work interpreting case assigned in syntax.

When structural object case is assigned and the derivation is transferred to the Morphological Component, prior to VI, it is translated to ACC. The same applies under negation except that structural object case is translated to GEN. We therefore have three layers of case: abstract syntactic case, abstract PF case (at which stage in the derivation syntactic case is translated to morphological case) and its realization. Furthermore, we examine case boundaries through long-distance GN, which is found in a few GN languages, including Polish. We suggest that case boundaries can cross non-finite clauses and that infinitival clauses without an overt CP element are not phases (see also Landau 2008).

We do not place case on NEG, as in Richards (2013) or Witkoś (2008), who argues that ‘an amalgamated Probe’, NEG + *v*, checks GN; structural accusative case for him is checked in the same way but by a *positive* polarity head + *v*. For us, these are the same syntactic case, realized as accusative or GN. This is reminiscent of Przepiórkowski’s (2000) HPSG account, who takes structural object case to be ‘resolved’ to accusative in the absence of negation but with it to genitive.

5.1. *Translation and realization of case in the Morphological Component*

For our analysis of Lithuanian GN, we adopt H.Á Sigurðsson's (2012a, 2012b) notion of case stars. We use them for expository purposes to emphasize a distinction between case in syntax and case at PF.³⁰ For him, arguments are A-licensed in syntax. At the Morphological Component (or deep PF, as he refers to it), A-licensing relations are translated accordingly, such that transitive v becomes v^* – a v that assigns accusative. Dative is assigned by v^{*+} and genitive by v^{*++} . Relations between (eventual) case assigners and DPs realizing case are established in syntax, but ‘case feature values’ (NOM, ACC, etc.) are determined at PF.

For us, however, v^* , v^{*+} and v^{*++} assign case in syntax that is later realized morphologically as accusative, dative and genitive, etc. We refer to case assigned by functional heads like T, v^* , etc., as syntactic case. This largely amounts to abstract Case (Vergnaud 1977/2008, Chomsky 1981, 1995, Legate 2008). We assume that when DPs are assigned syntactic case, they are marked accordingly as, for example, DP^0 , DP^* , DP^{*+} and DP^{*++} . When the derivation is sent to PF, the DPs are still case marked as, for example, DP^* ; syntactic case then needs to be interpreted at PF. We might expect this to be done when Vocabulary items are inserted. However, we take this translation process of syntactic case at PF to take place earlier in the derivation. That is, at the Morphological Component, of PF, prior to VI, case diacritics on DPs are translated to morphological case features, as in (68).

- (68) (a) $DP^0 \rightarrow DP_{\text{NOM}}$ (c) $DP^{*+} \rightarrow DP_{\text{DAT}}$
 (b) $DP^* \rightarrow DP_{\text{ACC}}$ (d) $DP^{*++} \rightarrow DP_{\text{GEN}}$

When, for example, DP^* is translated as DP_{ACC} , accusative percolates to all case values within the DP (see Norris 2014 and E.F. Sigurðsson 2017: §3 for feature percolation accounts). Subsequently, VI uses these values when inserting phonological exponents. We therefore suggest three levels of representation: abstract syntactic case, abstract PF case and its realization at VI. Note that the rules in (68) do not refer to Vocabulary items as we might expect if this took place at VI. In DM, Vocabulary items are inserted after concatenation and pruning, which are part of the linearization process (Embick 2010, 2015, Ingason 2016). At that point in the derivation, the tree structure is not available, and as a result, the c-command relation is no longer visible. However, we assume that when the syntactic case is translated into abstract PF case, the syntactic structure is still available.³¹ As argued

[30] It is important for us to be able to (i) distinguish between case in syntax and case in morphology and (ii) derive morphological accusative and genitive (of negation) from the same syntactic case.

[31] That is in line with a number of studies on the syntax-morphology interface. For example, lowering, such as in English, requires hierarchical structure, but nonetheless, Embick & Noyer (2001) argue that it takes place post-syntactically (see also Ingason & E.F. Sigurðsson 2017). To mention a few properties of Marantz' (1991/2000) Dependent Case approach, where case is argued to be morphological, '[t]he morpho-phonology of case and agreement interprets

in Section 5.2, it is essential for long-distance GN to have access to the negation in the matrix clause when case in the embedded infinitival clause is determined.

Our model makes a clear distinction between case at syntax and morphological case. NOM, ACC, GEN, etc., are morphological labels and reflect how the Morphological Component uses its finite inventory to interpret different syntactic structures. It does not have one morphological case for each syntactic case licensing relation; there is not a one-to-one relation between case in syntax and in morphology. For instance, two different syntactic cases can have the same realization. Lithuanian reflects this. As argued by E.F. Sigurdsson et al. (2018) and Šereikaitė (2020), the indirect object of *duoti* ‘give’ in (69a) is assigned (non-structural) dative case by an Applicative head. Monotransitive verbs like *vadovauti* ‘manage’ also take a dative object (69b). However, this object bears structural case properties; unlike the dative indirect object of ‘give’, it can, for example, advance to nominative in the passive and is therefore argued to be assigned by ν (E.F. Sigurdsson et al. 2018). This suggests a relationship between syntactic cases and their morphological representation, as in (69)–(70), where two distinct syntactic cases, DP^{AppI} (see (69a)–(70a)) and DP^{*+} (see (69b)–(70b)), have the same morphological outcome, DAT. The label DP^{AppI} reflects here that dative case of indirect arguments is assigned by Appl but not ν .

- (69) (a) Mam-a dav-ė vaik-ui obuol-į.
 mother(F)-NOM.SG give-PST.3 child(M)-DAT.SG apple(M)-ACC.SG
 ‘Mother gave the child an apple.’
 (b) Marij-a vadovauj-a fabrik-ui.
 Marija(F)-NOM.SG manage-PRS.3 factory(M)-DAT.SG
 ‘Marija manages the factory.’
- (70) (a) $DP^{AppI} \rightarrow DP_{DAT}$ (b) $DP^{*+} \rightarrow DP_{DAT}$

The opposite also exists where a single syntactic case can have two morphological reflections. We propose that structural object case in Lithuanian can have two realizations depending on whether negation is present or not. We argue that Lithuanian GN is not a realization of DP^{*++} , which we would normally assume

S-structure relations between constituents’ (p. 22), the Morphological Component (“Morphological Structure” in Marantz 1991/2000) is assumed to preserve ‘all the syntactic relations of SS’ (p. 22) and the calculation of dependent case is based on the syntactic structure: ‘Dependent case is assigned by V+I to a position governed by V+I when [...]’ (p. 25). An approach to agreement as that of Arregi & Nevins (2012) takes agreement to be established in syntax (Agree-Link), whereas the copying of ϕ -feature values from a goal to a probe (Agree-Copy) takes place post-syntactically, relatively early at PF, while the derivation still has access to the hierarchical structure (see also Atlamaz & Baker 2018, Bhatt & Walkow 2013, E.F. Sigurdsson 2017, Kalin 2020). Furthermore, some works take head movement to take place early at PF even though it needs syntactic structure (see, for example, Harizanov & Gribanova 2019 on amalgamation, which is a postsyntactic word-formation operation that includes both raising and lowering).

for non-structural (lexical) genitive case (assigned by v^{*++}) of the type discussed in Section 3.1, but of DP^* . That is, even though the outcome is genitive, GN is not a realization of non-structural case, as in (68d)/(71b), but of structural object case, as illustrated in (71a). Thus, we propose that even though DP^* with structural object case is under normal circumstances realized as accusative case, it is realized as genitive under negation in Lithuanian. In other words, GN is a realization of structural object case assigned by v^* when it is base-generated below negation.³²

- (71) (a) $DP^* \rightarrow DP_{ACC}, DP_{GEN}$ (b) $DP^{*++} \rightarrow DP_{GEN}$

In Lithuanian, the syntax of ‘I read a beautiful book’ (72a) is identical to ‘I didn’t read a beautiful book’ (72b) with respect to syntactic case features: when v^* probes down and agrees with its object, v^* assigns ‘a beautiful book’ structural object case, yielding DP^* , whether or not negation is present. For concreteness, we assume that the thematic subject ‘I’ is introduced in the specifier of an agentive Voice (Kratzer 1996, Pylkkänen 2008, Harley 2013, Legate 2014, i.a.) and moves to SpecTP. It receives its structural subject case from a finite T, resulting in DP^0 . We show the tree structure for these clauses in (73); we add NegP – which we assume to be generated above VoiceP – in parentheses, as it is absent in (72a).³³

- (72) (a) Aš skaiči-au graži-a kny-g-a.
I.NOM read-PST.1SG beautiful-ACC.F.SG book(F)-ACC.SG
(b) Aš ne-skaiči-au graži-os kny-g-os.
I.NOM NEG-read-PST.1SG beautiful-GEN.F.SG book(F)-GEN.SG
(a): ‘I read a beautiful book.’ (b): ‘I didn’t read a beautiful book.’

[32] A reviewer asks how the correct version of v is selected in the derivation. We assume that if the root does not demand a specific case, structural-case assigning v^* is selected. For a non-structural genitive case, marked as DP^{*++} , v^{*++} will be selected by specific roots. For a similar approach where roots are sensitive to different Voice heads, see Alexiadou et al. (2006). We can think of v^{*+} and v^{*++} as different flavors of v whose selection depends on roots. See also Svenonius (2006) and Wood (2015) for discussion of different types of v ; also see Woolford (2006) for related discussion.

[33] The prefix *ne-* can be attached either to an auxiliary element or to a lexical predicate itself, as illustrated here with passives. For both cases, we assume that *ne-* is generated in the same place (i.e. above a VoiceP) and can either attach to the head above it, as in (i), or below it, as in (ii).

- | | | | | | |
|-----|--|--------------------------|------|---|-------------------|
| (i) | Laišk-as
letter(M)-NOM.SG
išsiųs-t-as.
send-PPP-NOM.M.SG
‘The letter wasn’t sent.’ | ne-buv-o
NEG-be-PST.3 | (ii) | Laišk-as
letter(M)-NOM.SG
ne-išsiųs-t-as.
NEG-send-PPP-NOM.M.SG
‘The letter wasn’t sent.’ | buv-o
be-PST.3 |
|-----|--|--------------------------|------|---|-------------------|

(74) (a) **Rule 1** DP* \rightarrow DP_{GEN} / Neg ____
(b) **Rule 2** DP* \rightarrow DP_{ACC} / elsewhere

[34] Such an allomorphic approach would potentially be more fitting to the Czech syntactic dative case discussed in Spencer (2006), which can be realized with two different morphological datives. Spencer suggests that the realization of the two morphological datives is, in part, a syntactically-conditioned type of allomorphy.

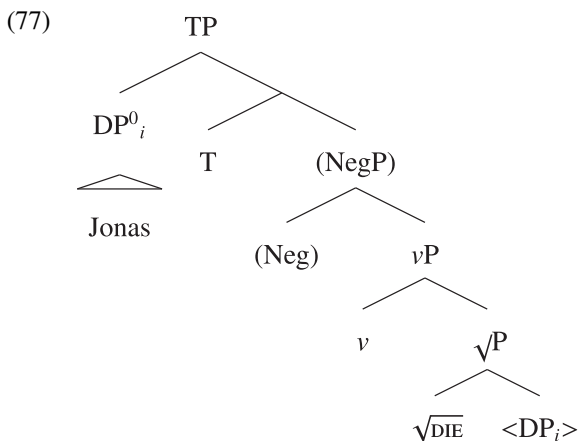
acts on a large scale as it applies to the whole DP, making all elements within the DP be interpreted and eventually realized as genitive case – that is, genitive percolates to all case values within the DP as shown for ‘beautiful book’ in (72b). Furthermore, as discussed in Section 5.2, it is possible to have long-distance GN where the genitive in the embedded infinitival clause can be determined by negation in the matrix clause. Thus, GN does not comply with locality and adjacency constraints common to allomorphy.

After the translation process in (74), Vocabulary items are realized, at VI. We assume an *xInfl* node which expresses syntactic features of heads from which they are separated at PF (this node is similar to the *Agr* node in Embick 1997, 2015; see also the *nInfl* node in Ingason 2016, which applies to all nominals). In the DP object *graži-os knyg-os* ‘beautiful book’ in (72b), the feature values of *nInfl* (i.e. genitive and singular) are realized with the exponent *-os* in (75), and the same applies to *aInfl*, which is an adjectival node (Adamson & Šereikaitė 2019).

- (75) (a) *aInfl*[GEN,F,SG] \leftrightarrow -os as in *graži-ōs* ‘beautiful-GEN.F.SG’
 (b) *nInfl*[GEN,SG] \leftrightarrow -os as in *knỹg-os* ‘book(F)-GEN.SG’

Turning to unaccusatives, we assume the structure in (77). They do not assign structural object case to their theme as they lack *v**; the structure contains *v*, which does not assign case. Unaccusatives also lack agentive semantics, meaning they have no Voice head assigning an external argument θ -role. T assigns structural subject case to the theme, resulting in DP^0 in syntax, which in turn is translated and realized as nominative, irrespective of the presence or absence of negation.

- (76) (a) Jon-as numir-ė. (b) Jon-as ne-numir-ė.
 Jonas(M)-NOM.SG die-PST.3 Jonas(M)-NOM.SG NEG-die-PST.3
 ‘Jonas died.’ ‘Jonas didn’t die.’



Our approach therefore explains why a sole argument of unaccusatives (and passives), generated in object position, does not bear genitive case.

Recall from Section 4, that under negation, DAT-ACC structures have a GN object, whereas DAT-NOM structures do not, as in (78)–(79) (repeated from (52b) and (60b)). We suggest that DAT-ACC verb phrases have a v^* , whereas DAT-NOM verb phrases have a v . The former assigns structural object case to its object, resulting in DP^* , whereas the object of the latter is assigned case by T, resulting in DP^0 .

- (78) Man ne-skaud-a galv-os / *galv-ą.
 me.DAT NEG-ache-PRS.3 head(F)-GEN.SG / head(F)-ACC.SG
 ‘I don’t have a headache.’ (Seržant 2013: 192–193)
- (79) Man ne-patink-a muzik-a / *muzik-os.
 me.DAT NEG-like-PRS.3 music(F)-NOM.SG / music(F)-GEN.SG
 ‘I don’t like music.’

Our approach reflects in an interesting way Legate’s (2008) approach to case in languages that have absolutive case as default (ABS=DEF languages). Legate argues for ABS=DEF languages, such as Niuean (see (80)), that morphological absolutive case realizes different syntactic cases, which she refers to as nominative and accusative Cases. The intransitive subject ‘Pita’ in (80a) is morphologically in the absolutive case, but syntactically, according to Legate, in the nominative Case. Likewise, the transitive object ‘tree’ in (80b) is also in the absolutive case morphologically, but its abstract syntactic Case is accusative.

- (80) *Niuean*
- (a) Maeke [ke nofo a Pita i Tuapa].
 possibly [SBJV stay ABS Pita at Tuapa]
 ‘Pita can stay at Tuapa.’
- (b) Kua kamata [ke hala he tama e akau].
 PERF begin [SBJV cut ERG child ABS tree]
 ‘The child has begun to cut down trees.’
 (Massam 2006, via Legate 2008: 64)

Extending Legate’s account to the current approach, one and the same morphological case, absolutive, realizes both DP^0 and DP^* (see (81a); cf. also (70) above on two syntactic cases translated to dative in Lithuanian). The opposite pattern is also possible; namely, that the same type of structural case can have two distinct morphological realizations, as is the case in Lithuanian GN; see (81b).

- (81) (a) *Niuean* (b) *Lithuanian*
- DP^0 \searrow ABS \swarrow DP^* ACC
 DP^* \swarrow \searrow GEN

Our analysis could potentially also be extended to accommodate Spencer's (2006) approach to Chuckchee in which syntactic ergative case is sometimes realized as morphological locative case and sometimes as morphological instrumental case.

5.2. Case boundaries

Our approach to Lithuanian GN raises questions regarding phase (Chomsky 2001) and case boundaries. Since GN is a syntax-morphology interface phenomenon, negation must be visible to the DP object at PF, suggesting that the whole VoiceP together with NegP will be sent to PF. For us, the phase is at least as big as NegP, as Neg has to be visible to DP* at PF for it to be translated to genitive.

Furthermore, Lithuanian GN exhibits long-distance dependencies across non-finite clauses which provide important insights into phases and boundaries of case determination: they are quite large as they include embedded infinitival clauses in long-distance GN, as in (17) above, repeated as (82). Note that Polish also allows long-distance GN across non-finite clauses, which also challenges the idea of phases as discussed by Przepiórkowski (2000), Błaszczak (2001), Witkoś (2008).

(82) Lithuanian

- (a) Tėv-ai mok-o vaik-us [dažy-ti
parent(M)-NOM.PL teach-PRS.3 child(M)-ACC.PL paint-INF
tvor-ą].
fence(F)-ACC.SG
'Parents are teaching the children to paint the fence.'
- (b) Tėv-ai ne-mok-o vaik-ų /
parent(M)-NOM.PL NEG-teach-PRS.3 child(M)-GEN.PL /
*vaik-us [dažy-ti tvor-os / ?tvor-ą].
child(M)-ACC.PL paint-INF fence(F)-GEN.SG / fence(F)-ACC.SG
'Parents do not teach the children to paint the fence.'
- (Arkadiev 2016: 39)

The matrix clause object 'children' in (82b) is genitive. The object of 'paint' in the infinitival clause can also be genitive.^{35,36} This suggests that when DP* 'fence' in the infinitival clause is translated to morphological case, the negation in the matrix is visible to it. Therefore, long-distance GN is also subject to the rule in (74a).

[35] For some speakers, accusative in a to-infinitive clause under negation, as in (82b), is also possible. We hypothesize that for these speakers, a to-infinitive clause may be a phase boundary or, alternatively, embedded GN is optional. Some instances of long-distance GN in Polish have also been reported to be optional, as discussed and examined by Przepiórkowski (1999, 2000) and Witkoś (2008). We leave this for further research.

[36] Examples like (82b) are not instances of Neg-raising where negation of the embedded clause has raised to the matrix clause. If that were the case, we would expect (82b) to be interpreted as 'Parents taught children not to paint the fence'. However, this interpretation is not possible.

However, long-distance GN cannot apply in *wh*-infinitives as in (83) with an overt CP element. It also does not apply past overt finite CP boundaries (84).³⁷

- (83) Marij-a ne-žin-o kur pastaty-ti automobil-į /
 Marija(F)-NOM.SG NEG-know-PST.3 where park-INF car(M)-ACC.SG /
 *automobili-o
 car(M)-GEN.SG
 'Marija does not know where to park her car.'
- (84) Marij-a ne-man-o, kad vaik-ai nudaž-ė
 Marija(F)-NOM.SG NEG-think-PRS.3 that child(M)-NOM.PL paint-PST.3
 tvor-a / *tvor-os.
 fence(F)-ACC.SG / fence(F)-GEN.SG
 'Marija doesn't think that children painted the fence.'

Assuming that case assignment and its realization is phase-bounded, we take long-distance GN to show that infinitival clauses in Lithuanian without an overt CP layer are not phases (see also Landau 2008, who shows that infinitival clauses in Russian do not form a phase boundary). The infinitival clause in (83) and the embedded finite clause in (84) both have a CP element, *kur* and *kad*, respectively. Given that long-distance GN cannot be realized, we take these to be phases.

Further indication of overt CPs being the boundaries to GN is seen in full relative vs. reduced relative clauses. In (85a), negation is located outside the full relative clause. As the relative clause has an overt CP layer, it is a phase, and the case of the object in this clause is not affected by the matrix negation. In reduced relatives, there is no overt CP, and the object of this clause can bear GN (85b).³⁸

- (85) (a) Aš ne-mači-au vaik-ų, kurie daž-ė
 I.NOM NEG-see-PST.1SG child(M)-GEN.PL that.NOM.M.PL paint-PST.3
 tvor-a / *tvor-os.
 fence(F)-ACC.SG / fence(F)-GEN.SG
 'I haven't seen the children, who were painting the fence.'
- (b) Aš ne-mači-au vaik-ų dažančių
 I.NOM NEG-see-PST.1SG child(M)-GEN.PL painting
 tvor-os / tvor-a.
 fence(F)-GEN.SG / fence(F)-ACC.SG
 'I haven't seen the children painting the fence.'

This suggests that full relative clauses constitute phase boundaries, whereas reduced relative clauses do not. Note that the structure of reduced relative clauses in Lithuanian merits further research, but it is outside the scope of this paper.

[37] The same is true of Polish; see Witkoś (2008: 248–249).

[38] While all speakers we have consulted agree that GN is ungrammatical in a full relative clause (85a), there is speaker variation w.r.t. acceptability of GN in reduced relatives, as in (85b). While all speakers allow long-distance GN to some extent, there are speakers who prefer accusative.

Finally, Lithuanian has prepositions like *į*, which assigns accusative to its complement. The accusative complement is not affected by negation, as in (86).

- (86) Marij-a ne-beld-ė į dur-is / *dur-ų
 Marija(F)-NOM.SG NEG-knock-PST.3 to door(F)-ACC.SG / door(F)-GEN.SG
 ‘Marija didn’t knock on the door.’

We treat PPs in Lithuanian as phases which prevent the features of the complement from being accessed by functional heads outside PPs (for a PP acting as a phase see, for example, Řezáč 2008 and Šereikaitė 2020).

5.3. *Interim summary*

We have provided an analysis of GN, arguing that it is a syntax-morphology phenomenon. We proposed that structural object case can be translated into two morphological cases at PF (i.e. either GN or accusative) depending on whether negation is present in the structure or not. This is not case allomorphy, as GN acts on a large scale and applies even to DPs in infinitival clauses. Lastly, instances of long-distance GN show that while finite clauses with an overt CP layer are phases, non-finite clauses lacking an overt C do not constitute phase boundaries.

6. THE SEMANTIC SIDE OF GN IN LITHUANIAN

In this section, we discuss the behavior of GN in existential constructions, which is different from the syntactic GN discussed so far in this paper. GN in these constructions is applied to the theme argument that otherwise would surface as a nominative grammatical subject. Thus, GN in these constructions resembles GN in equivalent constructions in Russian, which also sometimes appears in genitive instead of nominative (see Section 2; also see Partee & Borschev 2002, 2004, Partee et al. 2011, Kagan 2013). Below, we show that the realization of GN in existential constructions is affected by semantic factors (in line with Holvoet 2005: 143, Aleksandravičiūtė 2013).³⁹

6.1. *Semantically conditioned GN in a locative-existential construction*

We begin our discussion of the semantic GN by looking at Russian. Russian has a nominative/genitive alternation in locative-existential constructions (Babby 1980, Partee & Borschev 2004), as in (87). Both (87a) and (87b) state that Petja was not at some concert. However, only in (87a), where Petja is in the nominative, is it possible to proceed with the example and say that, in fact, there was no concert.

[39] Recall that choice of case in Lithuanian may be semantically conditioned. The partitive genitive, for example, shows this type of behavior (see Section 3.3).

(87) *Russian*

- (a) Petja na koncerte ne byl. Koncerta ne bylo.
 Petja.NOM at concert NEG was.N.SG concert.GEN NEG was.N.SG
 ‘Petja was not at the concert. There was no concert.’
- (b) Peti na koncerte ne bylo. #Koncerta ne bylo.
 Petja.GEN at concert NEG was.N.SG concert.GEN NEG was.N.SG
 ‘Petja was not at the concert. There was no concert.’
- (Partee & Borschev 2004: 218)

Following Babby (1980), Partee & Borschev (2004) term the type in (87a) negated declarative sentences (NDS) and (87b) negated existential sentences (NES). To explain the contrast between NDS and NES, Partee & Borschev (2004) focus on what they refer to as *thing* (Petja in the examples above) and *location* (the concert), one of which is a *Perspectival Center* (88), presupposed to exist.

- (88) **Perspectival Center Presupposition:** Any Perspectival Center must normally be presupposed to exist.

(Partee & Borschev 2004)

The concert in (87b) is the Perspectival Center; thus, the location is presupposed and the existence of the concert cannot be denied. In other words, the NES in (87b) negates the existence of the thing (i.e. Petja) in the presupposed location (i.e. the concert) (see Partee & Borschev 2004: 218). In contrast, when the thing is the Perspectival Center, as in the NDS in (87a), Petja’s existence is presupposed and the location can be negated (i.e. it is possible to say that there was no concert).

Whether the thing or the location is presupposed affects case marking of the theme: when the thing (Petja) is presupposed, it is nominative, even under negation, whereas when the location is the Perspectival Center, the theme is marked with GN. The case in these situations is conditioned semantically.

A similar construction exists in Lithuanian, which has a class of locative-existential predicates, such as *būti* ‘be’, *egzistuoti* ‘exist’, *likti* ‘remain’, *atsirasti* ‘appear’. Without negation, they occur with a nominative theme subject and a locative phrase. Nominative is grammatical when negation is present, as in (89a). Surprisingly, genitive can also be used, as in (89b), resulting in a different reading (Ambrasas et al. 1997, Holvoet 2005, Aleksandravičiūtė 2013).⁴⁰

[40] In rare cases, copular constructions with an adjectival predicate also permit a nominative-genitive alternation with negation, as in (i) (Ambrasas et al. 1997: 668). However, this alternation is restricted given that most copular constructions with adjectives disallow genitive (ii) (see Harves 2002, 2006, 2013 for a similar restriction in Russian).

(i)	(a) Aš ne-buv-au gyv-as. I.NOM NEG-be-PST.1SG alive-NOM.M.SG ‘I was not alive.’	(b) Man-ęs ne-buv-o gyv-o. me-GEN.NPOSS NEG-be-PST.3 alive-GEN.M.SG ‘I was not alive.’
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(89) *Lithuanian*

- (a) Student-ai ne-buv-o koncert-e.
 student(M)-NOM.PL NEG-be-PST.3 concert(M)-LOC.SG
 ‘The students were not at a/the concert.’
- (b) Student-ų ne-buv-o koncert-e.
 student(M)-GEN.PL NEG-be-PST.3 concert(M)-LOC.SG
 ‘There were no students in the concert.’

(Aleksandravičiūtė 2013: 21)

As suggested by Holvoet (2005: 144) and Aleksandravičiūtė (2013), we can use Partee & Borschev (2004)’s system to account for the contrast found in (89a) and (89b). According to Aleksandravičiūtė (2013), the subject/thing is the Perspectival Center in (89a). The existence of the subject ‘students’ is presupposed, making the example in (89a) parallel to the Russian NDS in (87a). In both languages, the thing, functioning as a Perspectival Center, is marked with nominative. Aleksandravičiūtė (2013) points out that ‘students’ is marked with the genitive case when location is the Perspectival Center, as in (89b). The same case marking in a similar semantic context is found in Russian, as evidenced by the NES in (87b). Unlike the syntactic GN discussed in Section 5, the semantic GN occurs in syntactic environments which lack structural object case. The realization of GN in these constructions seems to be based on the Perspectival Center.

6.2. *Semantically conditioned GN with verbs of perception*

A similar contrast is seen in another construction in Russian, in which nominative and genitive are both possible under negation but the genitive facilitates a different reading. Partee et al. (2011) discuss example (90) with a perception verb ‘see’.

(90) *Russian*

- (a) Maša ne vidna.
 Maša.NOM NEG seen.F.SG
 ‘Maša can’t be seen.’ (but she’s here)
- (b) Maši ne vidno.
 Maša.GEN NEG seen.N.SG
 ‘Maša is nowhere to be seen.’ (and may not be here at all)

(Partee et al. 2011: 142)

-
- (ii) (a) Aš ne-buv-au (b) *Manęs ne-buv-o
 I.NOM NEG-be-PST.1.SG me.GEN.NPOSS NEG-be-PST.3
 graž-us.
 beautiful-NOM.M.SG graž-aus.
 beautiful-GEN.M.SG beautiful-GEN.M.SG
 ‘I wasn’t beautiful.’ ‘I wasn’t beautiful.’

When the thing is presupposed (as the Perspectival Center), as in (90a), Maša is of type *e* and she cannot be seen for some reason, even though she is present. Under such a reading, the DP is nominative. However, the case is genitive in (90b), indicating Maša's non-existence in an implicit location (i.e. she may not be there at all). It is surprising that the thing in (90b) (and (87b)) is genitive, as Maša (as well as Petja) is the name of an individual, which is type *e*, and type *e* arguments in Russian are typically not genitive under negation. Partee et al. (2011), however, present a Property-Type Hypothesis (91) and argue for a type shift to a property (type $\langle e, t \rangle$) which results in a different reading and different case marking.

- (91) **Property-Type Hypothesis:** Where Russian has a Nom/Gen or Acc/Gen alternation, if there is a semantic difference at all, then Nom or Acc preferentially represents an *e*-type argument, whereas a Gen NP is preferentially interpreted as property-type: $\langle e, t \rangle$.

(Partee et al. 2011: 150)

For (90b), according to Partee et al., the type shift results in the reading 'being Maša', compatible with the genitive case. Overall, then, (90) suggests that there is a correlation between case marking and a semantic type.

Lithuanian has a similar perception verb construction with nominative/genitive alternations, depending on the meaning. Perception verbs with the reflexive clitic *-si-* like *matyti-s* 'see-REFL', *girdėti-s* 'hear-REFL' or *jausti-s* 'feel-REFL' typically take a nominative theme subject (92); the theme cannot be accusative.⁴¹

- (92) *Lithuanian*

Mergait-ė / *mergait-ę gerai mat-o-si nuotrauk-oje.
 girl(F)-NOM.SG / girl(F)-ACC.SG well see-PRS.3-REFL picture(F)-LOC.SG
 'The girl is clearly visible in the picture.'

When negation is applied, however, the theme argument of these reflexive predicates occurs either in the nominative or genitive case, as in (93)–(94).

- (93) Mergait-ė ne-si-mat-o nuotrauk-oje.
 girl(F)-NOM.SG NEG-REFL-see-PRS.3 picture(F)-LOC.SG
 'The girl can't be seen in the picture.'

i. Context: because a classmate is standing in front of her.

ii. #Context: because she may not be there at all.

(adapted from Aleksandravičiūtė 2013: 24)

[41] Without the reflexive clitic, these predicates take an accusative DP argument in an active transitive clause which obligatorily becomes genitive in the presence of negation, as expected.

(i) Aš mat-au tave. (ii) Aš ne-mat-au tav-ęs / *tave.
 I.NOM see-PRS.1.SG you.ACC I.NOM NEG-see-PRS.1.SG you-GEN.NPOSS / you.ACC
 'I see you.' 'I don't see you.'

- (94) Mergait-ès ne-si-mat-o nuotrauk-oje.
 girl(F)-GEN.SG NEG-REFL-see-PRS.3 picture(F)-LOC.SG
 ‘The girl can’t be seen in the picture.’
 i. Context: because a classmate is standing in front of her.
 ii. Context: because she may not be there at all.
 (adapted from Aleksandravičiūtė 2013: 26)

Aleksandravičiūtė (2013) argues that there is a semantic difference between the use of the nominative or the genitive in this construction. Under her analysis, nominative presupposes the existence of the argument in question. Only (94), with the argument in the genitive case, but not (93), with nominative case, can have the reading where the girl is not seen because she is not visible, as she has never been a part of the picture (see Aleksandravičiūtė 2013 for discussion). This pattern is expected, as genitive case is not associated with the ‘existential commitment’ (Aleksandravičiūtė 2013): there is no evidence for the girl’s presence in the assumed location.

Nevertheless, not only nominative in (93), but also genitive in (94) facilitate the reading where the thing, ‘girl’, is not seen in the picture because, for example, her classmate was standing in front of her. In this respect, Lithuanian differs from Russian, as under the interpretation that presupposes the existence of the thing, the phrase is typically marked with nominative, not genitive. Hence, in certain Lithuanian constructions with negation, there is not a one-to-one correspondence between the case marking and the reading, as opposed to Russian.⁴² The observed pattern challenges the Perspectival Center Analysis and merits further research.

6.3. Summary

The overview given in Sections 6.1 and 6.2 shows that even though Lithuanian GN is syntactic for the most part, there is a semantic side that deserves a separate analysis. We have demonstrated that there are two components that distinguish semantic GN from syntactic GN in Lithuanian. First, it is sensitive to semantic factors, unlike syntactic GN. Building on Holvoet (2005) and Aleksandravičiūtė (2013), we argued that the (un)availability of GN is related to referentiality and what

[42] This group of perception verbs in an infinitive form can occur in constructions with the copula *būti* (Sirtautas 1971, Ambrazas et al. 1997: 668, Arkadiev 2016). The theme argument is nominative and behaves like a subject. Just like the copular construction discussed in Section 6.1, this construction also allows the theme to become genitive (i–ii).

- | | |
|---|--|
| (i) Buv-o maty-ti kaim-as /
be-PST.3 see-INF village(M)-NOM.SG /
*kaim-ą.
village-ACC
‘One could see a village.’ | (ii) Ne-buv-o maty-ti
NEG-be-PST.3 see-INF
kaim-o.
village(M)-GEN.SG
‘One could not see a village.’
(adapted from Arkadiev 2016: 46) |
|---|--|

Partee et al. (2011) call *Perspectival Centers*. Second, semantic GN can be realized in syntactic configurations where accusative case is typically not realized – in other words, where syntactic GN does not occur. Semantic GN does not track structural object case, meaning that it deserves a separate analysis from syntactic GN in Lithuanian, which we leave for further research.

Note that the contrast between nominative and genitive discussed for Russian and Lithuanian in Section 6.1 is also found in Polish. Błaszczak (2010) argues for a syntactic analysis, assuming two structures for the verb ‘be’ with the DP generated in two different locations (see also Holvoet 2005 for Lithuanian). However, as she notes, the construction discussed in Section 6.2 is not found in Polish. Her analysis presumably cannot straightforwardly be extended to Lithuanian if the two constructions in Sections 6.1 and 6.2 are to be given one and the same analysis.

7. CONCLUSION

We argued above for a morphosyntactic account of GN in Lithuanian. We showed that one syntactic case does not have to correspond to one morphological case and vice versa. Lithuanian provides evidence for this observation. One of the main contributions of this paper is demonstrating that GN tracks structural object case, assigned in syntax, which is usually translated and realized as accusative. Under negation, however, it is translated to genitive at the Morphological Component at PF. Thus, structural object case can have two morphological realizations. Importantly, the realization of these two morphological cases is not a type of allomorphy. While allomorphy is restricted by locality and adjacency, GN can be long-distance: it can operate on a large scale across non-finite clauses and, therefore, the realization of these cases should not be subsumed under allomorphy.

Some approaches to case (e.g. Legate 2008, Akkuş 2020) have two levels of case determination (i.e. syntactic case and its phonological realization through Vocabulary Insertion). In contrast, we argued that Lithuanian GN shows the need for three levels of case determination. First, case is assigned in syntax. Using H.Á. Sigurðsson’s (2012a, 2012b) case star approach, structural object case on a DP is notated as DP*. Second, syntactic case is translated at the Morphological Component. DP* is generally translated to ACC (accusative case). Under negation, however, it is translated to GEN (genitive case). This genitive case percolates to the nominals within that DP*. Third, Vocabulary Insertion takes place and inserts phonological exponents for case values.

Our approach provides important insights for Case Theory. It shows that both syntax and morphology are two necessary components in case determination. We make a clear distinction between case in syntax and case in morphology, where the latter component translates syntactic relations using its finite inventory of morphological case features. That results in, for example, genitive case being used in Lithuanian to interpret various different syntactic cases, such as non-structural or intensional genitive, as discussed in Section 3. The opposite is also found in the language, where one and the same syntactic case – namely, structural object case –

is translated to more than one morphological case, as is the case for genitive of negation and accusative when negation is not present.

While GN in many respects has been viewed as a semantic phenomenon in languages like Russian, we demonstrated that GN in Lithuanian is a syntax-morphology interface phenomenon, and it cannot be assimilated with other genitive cases found in the language (e.g. the partitive or intensional genitive). GN in Polish has also been shown to be syntactic: it applies to objects of transitive predicates. Nevertheless, the existing array of various constructions in Lithuanian has allowed us to pinpoint the exact nature of GN; that is, GN is the realization of a structural object case which appears on direct and indirect objects as well as the object of passive-like impersonals. Further research should focus on the exploration of constructions with long-distance GN.

COMPETING INTERESTS

The authors declare none.

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