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Case and word order in Lithuanian[1]

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This paper examines the unusual case and word order behavior of objects of infinitives in Lithuanian. In addition to lexically determined case idiosyncrasy, Lithuanian exhibits syntactically determined case idiosyncrasy: with infinitives in three distinct constructions, case possibilities other than accusative obtain. These cases (dative, genitive, and nominative) depend on the general clause structure rather than on the particular infinitive. Moreover, unlike ordinary direct objects, these objects appear in a position preceding rather than following the verb. It is argued that they move to this position in order potentially to be accessible for Case assignment by some higher Case-assigning head. In this way we unify the two superficially unrelated properties of non-canonical word order and Case. This movement, however, is not feature-driven in the sense of standard minimalist Case-licensing mechanisms. We characterize it as 'agnostic' in that it applies to an object with unvalued Case features, if that object reaches a point in the derivation where it has no recourse but to move because failure to do so would be fatal.

1. Conceptual and empirical preliminaries

This section presents the constructions under consideration and describes their unusual properties. It then develops the theoretical assumptions that will lay the groundwork for an eventual analysis.

[1] An early version of this paper was presented at the 2002 Annual Meeting of the American Association of Teachers of Slavic and East European Languages as 'Case marking on objects of infinitives in Lithuanian'. Later instantiations were presented at the following universities, in chronological order: Indiana, Groningen, Venice, Ljubljana, Maryland, Connecticut, MIT, Pennsylvania, and Princeton; we appreciate the helpful comments of these audiences. Some of the nominative object material is also treated in Lavine & Franks (2005). We wish to thank William Schmalstieg for discussion of these data and for supplying numerous examples, Axel Holvoet of the Institute of the Lithuanian Language in Vilnius and Virginija Vasiliauskienė of Vytautas Magnus University (Kaunas) for, respectively, obtaining and providing many useful judgments, and offering valuable suggestions on how to approach these judgments, and Dalia Cidzikaitė, Evelina Gužauskytė, Teresė Gužauskienė, and Jolanta Mickutė for checking our examples and providing needed additional discussion. Finally, we gratefully acknowledge two anonymous *JL* referees and Bob Borsley for comments leading to many improvements in the present version of the paper. All errors in the interpretation and analysis of these data and comments remain our own.

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1.1 *The puzzle*

Lithuanian is a Baltic language, superficially quite similar to its Slavic neighbors in terms of general properties of word order and Case. The language is basically SVO, in that this is the discourse-neutral word order, although scrambling permutations are common for familiar reasons of functional sentence perspective. Subjects of finite, agreeing verbs are typically nominative, objects of transitive verbs are typically accusative:

(1) (a) Vaikas skaito knygą.
child-NOM reads book-ACC
'The child is reading a book.' (Ambrazas et al. 1997: 605)
(b) Dailininkas nutapė paveikslą.
artist-NOM painted picture-ACC
'The artist has painted a picture.' (Ambrazas et al. 1997: 605)

Objects of transitive infinitives are likewise ordinarily accusative and, as expected, follow the infinitive in their unmarked word order:

(2) (a) Jie stengiasi [**taisyti kelią**].
they try to-repair road-ACC
'They are trying to repair the road.'
(b) Jis nori [**aplankyti draugą**].
he wants to-visit friend-ACC
'He wants to visit a friend.'
(c) Jis nežino, [**kada skaityti knygą**].
he not-know when to-read book-ACC
He doesn't know when to read the book.'

Some verbs govern particular oblique cases:

(3) (a) Jie džiaugėsi pergale.
they rejoiced victory-**INST**
'They rejoiced at the victory.' (Ambrazas et al. 1997: 488)
(b) Jis atstovavo darbininkams.
he represented workers-**DAT**
'He represented the workers.' (Ambrazas et al. 1997: 459)
(c) Mes vengiame to profesoriaus.
we are-avoiding that professor-**GEN**
'We are avoiding that professor.'

Since the fact that *džiaugtis* 'rejoice' governs INST or *atstovauti* 'represent' governs DAT is a lexical property of these verbs, we shall refer to this as 'lexical' Case. Consequently, here too, when such verbs appear as infinitives,

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the expected case government and word order properties are retained; compare (4a–c) with (3a–c), respectively:

(4) (a) Jie norėjo [**pasidžiaugti pergale**].
they wanted to-rejoice victory-INST
They wanted to rejoice at the victory.'
(b) Jis bijojo [**atstovauti darbininkams**].
he was-afraid to-represent workers-DAT
'He was afraid to represent the workers.'
(c) Mes norėjome [**išvengti to profesoriaus**].
we wanted to-avoid that professor-GEN
'We wanted to avoid that professor.'

While these facts are unremarkable, in other infinitival constructions one finds that the accusative is consistently replaceable by some other case:

(5) DAT
Pastatė daržinę [**šienui sukrauti**].
(they)-built hayloft-ACC hay-DAT to-keep
'They built a hayloft to keep hay.' (Ambrazas et al. 1997: 557)

(6) GEN
Išvažiavo [**kelio taisyti**].
(they)-went road-GEN to-repair
'They went to repair the road.' (Ambrazas et al. 1997: 557)

(7) NOM
Man nusibosta [**laikraščiai skaityti**].
me-DAT is-boring-[–AGR] newspapers-NOM to-read
'It is boring for me to read newspapers.'

Examples (5) and (6) involve purpose clauses of different types. In (5), the object of the adjunct infinitival purpose clause is dative. In (6), where the object of the infinitive is genitive, the purpose clause is much less of an adjunct, since it specifically depends on the main clause verb being a verb of motion.[2] The infinitival clause in (7), on the other hand, is clearly the Theme argument of the non-agreeing matrix predicate, and its object appears in the nominative. Note that these all involve verbs that otherwise assign accusative

[2] This contrast can also be detected in English, where we feel that *in order*, which explicitly marks the clause as an adjunct of purpose, is somewhat preferable in (i) but decidedly odd in (ii).

(i) They built a hayloft (in order) to keep hay.
(ii) They went (??in order) to repair the road.

Extraction facts support this contrast:

(iii) *What did they build a hayloft (in order) to keep __?
(iv) ?What did they go to repair __?
(v) *What did they go in order to repair __?

Similar extraction facts from Lithuanian are reported in section 5.

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to their direct objects, in which case the object follows the verb. What is particularly striking about the objects in (5)–(7) is that they precede the infinitive, resulting in an unusual discourse-neutral OV order in an otherwise SVO language. Their interpretation indicates that the bracketed phrases in (5)–(7) must at least be VPs; the question is how they differ from ordinary VO clauses. Clearly, choice of case here does not depend on the embedded infinitive, hence we hypothesize that it must be the effect of some additional structure. Since we will be arguing in this paper that the object NP moves to the left edge of the infinitival clause in these non-canonical object case constructions, we will refer to (5)–(7) as the LEFT-EDGE (LE) dative, genitive, and nominative, respectively. Some element in the structure above the infinitival clause will call for a particular LE case.

In the remainder of section 1 we place the paper in its broader theoretical context, laying out some preliminary ideas about Case, phrase structure, and word order. Section 2 presents the constructions in detail. In section 3 we develop the necessary theory of movement (or displacement) and derived word order. Section 4 discusses and rejects a possible alternative analysis that does not exploit movement. Finally, in section 5, we argue for a coherent explanatory account of the constructions instantiated in (5)–(7), adapting to our purposes the phase-based analysis of Chomsky 2001.

1.2 *Features, phrase structure, and movement*

Our main concern in this paper is to shed light on the unusual properties of the constructions in section 1.1. Since we adopt a derivationalist stance in analyzing them, we take minimalism as a useful frame of reference. The correlation between OV order and LE Case, which constitutes the core empirical problem at hand, can surely be expressed in alternative, non-derivational frameworks (as well as by derivational precursors to minimalism). Nonetheless, the Lithuanian facts pose interesting problems for existing minimalist formalisms, ones which lead us to particular analyses employing the novel concept of AGNOSTIC movement. Here we subscribe to the spirit expressed by Andrews (1990: 213) in his remark that 'there is little if any point to doing formal syntax if one is not prepared to allow the formalisms to suggest some surprising analyses'.

In GB, all operations were optional and illicit structures were ultimately filtered out when they violated principles pertaining to modules such as Case Theory, Theta Theory, Binding Theory, or the ECP. Minimalism, on the other hand, only sanctions operations that are locally necessitated. Movement takes place only if there is no alternative.[3] Moreover,

[3] In earlier versions of minimalism, as in Chomsky (1995: chapter 3), this was partly captured by the economy principle 'Procrastinate'. In Optimality Theoretic syntax this same idea is expressed by the constraint STAY.

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although different proposals have been entertained about how this should be implemented, movement is always driven by the need to check features. These features have been variously argued to be either features of some 'probe' that searches down the tree for an element with potentially matching features, or features of the element that moves. For example, in (8a) [+wh] *what* moves to [+wh] C and in (8b) nominative *John* moves to [+NOM] T; positions in which elements are not pronounced are indicated by a strike-through.

(8) (a) I wonder [$_{CP}$ what C [$_{TP}$ Luda brought ~~what~~]].
(b) [$_{TP}$ John T was arrested ~~John~~].

However, feature-driven movement comes up against a pervasive problem: in the standard successive-cyclic account of movement, what is it that motivates the intermediate movements forced by locality conditions and evidenced by various effects?[4] That is, if *wh*-movement in (9a) and NP movement in (9b) take *what* and *John*, respectively, through the hypothesized intermediate landing sites, in what sense can we say that features cause these elements to make the intermediate movements?[5]

(9) (a) I wonder [$_{CP}$ what C [$_{TP}$ Karen thinks [$_{CP}$ ~~what~~ that [$_{TP}$ Luda brought ~~what~~]]]].
(b) [$_{TP}$ John T is believed [$_{TP}$ ~~John~~ to have been arrested ~~John~~]].

In the minimalist architecture, the derivation proceeds by selecting items from the Lexicon and merging them into a phrase structure tree. In this way, structure is created from the bottom up, with new items entering at the root, thereby continually extending the tree.[6] When faced with intermediate movements as in (9), however, this approach runs up against the classic conceptual problem of 'look-ahead' or 'counter-cyclicity', since the ostensibly motivating [+wh] C or [+NOM] T feature has not yet been merged into the structure.

The traditional insight about this problem is that if intermediate movement failed to take place, then the derivation would not converge; but we know of no convincing implementation of this insight that avoids in some

[4] For example, as described by Henry (1995: 108), in Belfast English subject–auxiliary inversion (technically, movement of the auxiliary from T to C) occurs not only in the target CP, but also in embedded clauses through which a *wh*-phrase has passed:

(i) [$_{CP}$ what did [$_{TP}$ Mary claim [$_{CP}$ ~~what~~ did [$_{TP}$ they steal ~~what~~]]]]?

See also Hukari & Levine (1995).

[5] There may well be additional landing sites not indicated; these only exacerbate the problem.

[6] Since the operation Move is a composite of Copy and (Re)Merge, we have indicated copies that are not pronounced by striking through them.

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way 'looking ahead' in the derivation.[7] Since there is no obvious local feature that would drive intermediate movement, a fairly standard minimalist recourse is to stipulate that every landing site that is passed has a feature that requires its specifier position to be filled, the so-called 'EPP' feature. In this way, Lasnik (1995/1999: 130), for example, is able to claim that 'EVERY step of movement will immediately satisfy a requirement; no look-ahead will be required or permitted'. While this approach indeed means that 'the computation can be strictly local', it nonetheless strikes us as circular: a diacritic EPP feature is posited to drive movement for no other reason than that the theory requires that movement be motivated by some feature.

In this paper we will argue instead that not all movement is forced by the direct need to satisfy some feature. Movement also takes place when, at specific points in the derivation, it can be locally determined that there exists no other option but to move.[8] We will make these notions explicit below. In this way, both intermediate movement and LE Case in Lithuanian will turn out to be instances of this type of 'last resort' operation. Our claim is that the element that moves has features which need to be licensed (or 'valued') – [wh] in (9a) or [Case] in (9b) and the LE constructions – and that displacement to the left-edge of the structure is a way of avoiding opacity (which would be fatal) and enabling subsequent visibility (which may save the derivation). Thus, while some deficiency in features is what motivates the movement, no look-ahead 'knowledge' is actually invoked, merely the possibility of salvation coupled with the certainty of death. We thus metaphorically refer to this kind of movement as 'agnostic' movement.

1.3 *Case and word order*

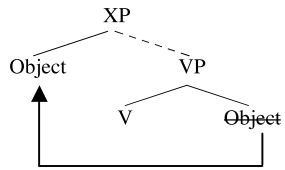
Language is articulated in time and hence must be linearized. Basic VO word order can be regarded as the head V being linearized prior to its complement NP (that is, the Lithuanian VP is head-initial). Therefore, when O instead precedes V, it must have been displaced from its canonical position, presumably to the left edge of some higher phrase XP, as indicated in (10).

[7] One could of course avoid this issue by rejecting the bottom–up model, reverting either to a traditional top–down derivation, a left-to-right one, or a purely representational system. Comparison of these alternatives and exploration of their consequences are unfortunately beyond the scope of this paper.

[8] Our approach has much in common with that of Bošković (in press), who addresses conceptually very similar issues (although in a far broader context).

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(10)



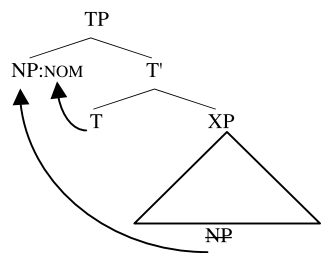
We will take this displacement in LE Case OV structures to be a process by which moving the O to the top of some containing projection XP renders it accessible to a higher Case-licensing head outside of XP. Since this shifts the object leftwards over the verb, the phenomenon can be descriptively referred to as OBJECT SHIFT.[9]

In traditional Government-Binding theory, NP movement was motivated by Case, as in the classic 'passive' and 'raising' examples (11a–b).

(11) (a) **Coventry** was destroyed ~~Coventry~~ in the air raid.
(b) **Dresden** seemed [~~Dresden~~ to have suffered a similar fate].

Coventry and *Dresden* are analyzed as moving from a position that receives a theta-role but does not license Case to a position that does license Case, as in (12).

(12)



In early minimalist work, the notion of displacement for purposes of Case was generalized. For example, it can be extended to accommodate accusative, under the assumption that there is some kind of functional category that similarly licenses Case on objects. Originally, the idea of (Object) Agreement was exploited; more recently functional phrases such as Aspect, Voice, Transitivity, and so on have been implicated.[10] The point is that these phrases dominate VP, so that the object shifts to the left, over V, for Case purposes, as for example in (13). Reflecting common current practice, we use

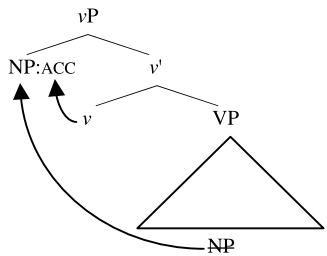
[9] To be sure, the term 'Object Shift' is meant to refer only loosely to its well-known correlate in the Scandinavian languages. Lithuanian Object Shift differs from its Scandinavian counterpart in the following ways: (i) it is not optional; (ii) it is not dependent on V-to-I movement; and (iii) it has no discourse-interpretive consequences (see Thráinsson 2001 and sources cited therein for an overview of Object Shift in Scandinavian).

[10] On Voice and Transitivity, see Collins (1997) and Bowers (2002), respectively. For work linking Aspect and structural Case assignment, see Borer (1994), Harley (1995), Ramchand (1997), Svenonius (2001), Alexiadou (2003), and Richardson (2003).

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*v*P, where *v*° is a kind of light verb used *inter alia* to introduce the external argument of the predicate:

(13)



Given the movement possibility in (13), OV word order, as in German (14a–b), can be analyzed as a transform of underlying VO order.

(14) (a) Ich habe **den Hund** nicht [$_{VP}$ gesehen ~~den Hund~~].
I have the dog-ACC not seen
'I have not seen the dog.'
(b) … dass er **den Hund** nicht [$_{VP}$ sah ~~den Hund~~].
that he the dog-ACC not saw

That *den Hund* has moved out of VP in (14) is indicated by the fact that it precedes *nicht*. On the basis of such arguments, as well as extensive typological considerations, Zwart (1997) argues that surface OV word order in German and Dutch is derived through Object Shift. Given this displacement for Case, a natural question for a minimalist to ask is why OV order is not universal. One can imagine various ways of addressing this problem, but regardless of how the existence of both OV and VO surface orders is technically implemented,[11] it seems to us that Lithuanian reflects both possibilities, in different parts of the grammar. That is, canonical VO order reflects something like the English system, and the discourse-neutral OV order found in the LE Case constructions under consideration reflects something like the German system.

Finally, a more recent version of minimalism, one we have been assuming in the preliminary discussion, holds that Case assignment can take place from a higher functional Case-licensing head, PROBING down the tree to a target NP (its GOAL), with which it can AGREE and on which it can

[11] For example, Chomsky (1995: chapter 3) suggested that Object Shift holds for all languages but is parameterized with respect to whether the movement is overt or covert; in English, then, it only applies on the interpretive side of the grammar (LF), after the syntactic structure has been shunted off to the pronunciation module (PF). Lasnik & Saito (1991/1999) and Lasnik (1995/1999) persuasively argued that overt Object Shift does obtain in English, but that the verb also moves out of the VP, past the shifted object. Another minimalist way to obtain this effect would be for overt Object Shift to apply universally, but, in languages such as English, to have the lower rather than the higher copy be the one that is actually pronounced.

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concomitantly license (VALUE) Case features. Details of the probe-goal system will be introduced below as needed, although many of the repercussions of this idea are tangential to the eventual analysis; our point is that whether this or earlier approaches are implemented, the analysis of LE Case constructions crucially involves Case-related Object Shift in order to derive surface OV order.

1.4 *Competition between structural and lexical Case*

The existence of both OV and VO orders within a single grammar raises an interesting conceptual problem, once we bear in mind that the embedded verbs in (5)–(7) above, unlike those in (3)–(4), are not lexical Case assigners. They assign structural accusative, just like any garden-variety Lithuanian verb. However, in these LE constructions the canonical accusative Case-assigning strategy appears somehow to be overridden by the dative, genitive, and nominative, peculiar to these constructions. Any model of Case must entertain at least a contrast between these two types of Case: one 'structural' in the sense that it is what obtains in a particular structure, everything else being equal, and the other 'lexical' in the sense that it depends on some special property of a lexical item.[12] Finer divisions do not concern us here, since all that is at issue is whether the object receives accusative case from *v* or another case from lexical V. For ease of exposition, we will call the former structural and the latter lexical, without making substantive claims about what else a full-fledged theory of Case should distinguish.[13]

A general feature of the competition between structural and lexical Case is that normally lexical Case wins. Thus, although in Lithuanian genitive replaces accusative under negation, as shown in (15), it cannot replace the lexical instrumental assigned by *džiaugėsi* 'rejoiced', as in (16).

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[12] This matter is independent of framework. As noted by Sag, Karttunen & Goldberg (1992: 307): 'In any adequate lexical theory, verbs must be provided with some mechanism for selecting their various dependents … [T]he actual complements the verb combines with must be consistent with the partial information the verb selects for'. In their HPSG approach, this mechanism is a SUBCAT list, and the two types of Case interact through CASE and D(efault)CASE features: 'Non-quirky verbs require that the DCASE and CASE values … be identified (structure-shared). Quirky verbs impose no such identity, and select a particular CASE value'. Within an LFG framework, Andrews (1990: 192) observes that the way 'to explain the difference between structural and lexical case marking is by setting up an F-structural difference between them. Structurally case-marked NPs have conventional F-structures … Lexically case-marked NPs, in contrast, have an extra layer of structure that, in effect, ''hides'' the grammatical features of the NP … from regular case-marking rules'. We thank an anonymous *JL* referee for drawing our attention to these and related works on Case theory.

[13] We thus conflate 'structural' with terms like 'configurational' and 'canonical', and 'lexical' with terms like 'quirky' and 'idiosyncratic'. Much more can of course be said: see for example Schütze (2001) on the existence of 'default' Case (that is independent of structure), Babby (1991) on 'semantic' Case (that is not lexical), or Franks (2002) for the proposal that 'lexical' Case may be theta-related or not.

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(15) (a) Dailininkas nutapė paveikslą.
artist-NOM painted picture-ACC
'The artist painted a picture.'
(b) Dailininkas nenutapė paveikslo.
artist-NOM NEG-painted picture-GEN
The artist didn't paint a picture.'
(c) *Dailininkas nenutapė paveikslą.
picture-ACC

(16) (a) Jie džiaugėsi pergale.
they rejoiced victory-INST
'They rejoiced at the victory.'
(b) Jie nesidžiaugė pergale.
they NEG-rejoiced victory-INST
'They didn't rejoice at the victory.'
(c) *Jie nesidžiaugė pergalės.
victory-GEN

The phenomenon displayed by (16b), which we can loosely refer to as 'Case preservation', is typically accounted for by stipulating that lexical Case is required for proper semantic interpretation, whereas structural Case, although canonically marking a particular grammatical function, is not. Again citing Andrews (1990: 192):

> Case preservation is relatively easy to accommodate, since all one has to do is associate lexical case with the thematic role of a lexical item rather than with a superficial GF [grammatical function] in a sentence structure, which is easily envisioned in most frameworks.

Note that the very existence of Case preservation implies that structural Case, unlike lexical Case, need not be discharged; the idea that the so-called 'Inverse Case Filter', since it derives from theta-theory, does not carry over to (non-theta-related) structural Case is argued at length in Franks (2002). So our first and relatively minor problem is that we need a way to allow *v* either to value accusative case or not to do so. When two Case licensing strategies compete in the same domain, as is arguably the situation with the genitive of negation, the structural strategy is suppressed. It is not crucial to us exactly how Case theory implements the optionality of assigning accusative, which we observe in the genitive of negation (15b) or the LE constructions under investigation in this article. One could well imagine that *v* has two variants, one with features for valuing Case and the other without; the latter would also be needed for intransitive clauses. Optionality would then lie in which version of *v* is actually selected. Alternatively, one could imagine that *v* always has Case features, and hence the POTENTIAL to value Case, but whether it does so or not in any particular instance is optional. For English, where virtually any verb with an external argument can be made

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transitive under the right conditions (*The engineer worked the problem*; *Mary laughed a loud laugh*), this might make sense, but cognate accusative objects are not the norm elsewhere.

Be that as it may, what concerns us here is the second problem, that of look-ahead. However, this problem is only apparent. Recall that in our system, assuming a bottom–up syntax, agnostic movement will cause an NP not valued for Case to shift to the left edge of its (cyclic) domain, in order to be visible to a potential probe that may be subsequently introduced higher in the structure. The conceptual problem, to which an anonymous *JL* referee draws our attention, is that this approach appears to be treating accusative assignment as 'contextually determined', in that it applies UNLESS a higher probe is eventually going to be merged and assign Case to the (shifted) object NP. So it would seem that whether or not *v* must value accusative cannot be determined without look-ahead. But notice that this situation is no different than that of agnostic movement in the first place: agnostic movement applies whenever it needs to, regardless of whether the derivation converges in the end. That is, LE movement applies and the result is either a grammatical sentence (because the properties of the moved element are eventually licensed by some probe) or it is not (because features are sent to the interfaces unvalued). It is the same, we contend, with structural Case. A functional head that values structural Case on nominals is under no compulsion to do so when faced with an unvalued NP in its search space; if it fails to value the Case of the NP and no higher head ever values the NP's Case, then the derivation crashes. Thus, optionality of structural Case avoids invoking look-ahead. The conceptual issue raised by this optionality is, to be sure, a serious one: minimalism does not, so far as we are aware, have an elegant way of dealing with optionality. The resolution of this issue, however, goes well beyond the Lithuanian LE Case constructions being studied in this paper and to which we now turn.

2. CORE DATA: THE CONSTRUCTIONS

This section describes the three LE Case constructions in more detail.

2.1 *Dative objects: the Purpose Construction*

In Lithuanian, an adjunct infinitive of purpose occurs with a dative direct object, rather than an accusative one, as in (5), repeated here as (17a), together with additional examples in (17b–d):

(17) (a) DAT
Pastatė daržinę [**šienui** **sukrauti**].
(they)-built hayloft-ACC hay-**DAT** to-keep
'They built a hayloft to keep hay.' (Ambrazas et al. 1997: 557)

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(b) Atnešė vandens **[gėlėms palaistyti]**.
(he)-brought water-PARTITIVE.GEN flowers-DAT to-pour
'He brought some water to pour on the flowers.'
(Ambrazas et al. 1997: 510)

(c) Tėvas parsivežė malkų **[trobai kūrenti]**.
father brought firewood-PARTITIVE.GEN cottage-DAT to-heat
'Father brought some firewood to heat the cottage.'
(Schmalstieg 1988: 218)

(d) Reikės ieškoti arklio **[žemei arti]**.
it-will-be-necessary to-search-for horse-GEN land-DAT to-plow
'It will be necessary to search for a horse to plow the land.'
(Jablonskis 1928/1957: 598)

Evidence that the dative NP receives structural Case and undergoes Object Shift comes from purpose clauses whose infinitive assigns a lexical Case. If the verb selects an object that is instrumental or genitive, then its object must appear in that case and not the dative, following our earlier observation that lexical Case overrides structural Case. When Case conflicts involve two lexical Case assigners, the derivation crashes (see Babby 1986 and Franks 1995, where these points are made on the basis of Russian data). This strongly suggests that the dative in (5)/(17a) and (17b–d) is assigned structurally. Moreover, since the object of a lexical-Case-assigning verb is assigned its Case directly by the verb (rather than by a higher Case-licensing head), Object Shift is predicted not to apply, and indeed the standard word order in such instances is VO. The contrast between the (a) and (b) sentences in (18)–(19) indicates this expected lack of Object Shift with lexical Case assigners; the (c) sentences show that structural dative is indeed overridden by lexical instrumental (18) and genitive (19).[14]

(18) (a) Mes pastatėme ligoninę [rūpintis vaikais].
we built hospital-ACC to-take-care-of children-INST
'We built a hospital to take care of children.'
(b) Mes pastatėme ligoninę [# vaikais rūpintis].
children-INST to-take-care-of
(c) Mes pastatėme ligoninę [*vaikams rūpintis].
children-DAT to-take-care-of

(19) (a) Jie dėjo pastangas [išvengti ilgo karo].
they made efforts to-avoid long war-GEN
'They made efforts to avoid a long war.'
(b) Jie dėjo pastangas [# ilgo karo išvengti].
long war-GEN to-avoid

[14] The # symbol indicates an inappropriate word order under conditions of neutral discourse. The * symbol indicates an ungrammatical word-form or sentence, regardless of discourse interpretation.

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(c) Jie dėjo pastangas [*ilgam karui išvengti].
long war-DAT to-avoid

Lithuanian also has a purpose clause introduced by the overt complementizer (COMP) *kad* followed by the subjunctive (SUB) form of the verb. The purpose clause introduced by *kad* freely alternates with the LE dative construction. Compare the examples in (20a–b), with *kad*, to those with the LE dative in (17a–b).

(20) (a) Pastatė daržinę [kad sukrautų šieną].
(they)-built hayloft-ACC comp keep-SUB hay-ACC
(b) Atnešė vandens [kad palaistytų gėles].
(he)-brought water-PARTITIVE.GEN COMP pour-SUB flowers-ACC

We will see in section 5 that the overt complementizer *kad* occupies the same structural position as the LE dative's Case assigner, which we will take to be a phonologically null complementizer. It follows that in (20a–b) accusative case on the object must be assigned locally and, consequently, that the normal word order is VO. However, when the embedded verb is a lexical Case assigner it must discharge its Case, which renders the dative option simply unavailable, as indicated in (18c) and (19c) above. The structure with the overt complementizer in such instances is therefore strongly preferred. In other words, the purpose clause is most felicitously marked either by the complementizer *kad* or by assignment of dative to the object of the infinitive. It follows that (21) is preferred to (18a) and (22) is preferred to (19a), with the expected discourse-neutral VO order.

(21) Mes pastatėme ligoninę [kad rūpintumėmės vaikais].
we built hospital-ACC COMP take-care-of-SUB children-INST

(22) Jie dėjo pastangas [kad išvengtų ilgo karo].
they made efforts COMP avoid-SUB long war-GEN

If, on the other hand, we replace the verbs in (21)–(22) with structural-Case-assigning verbs, then the OV pattern reemerges, as in (23a) and (24a), with the LE dative object; the VO order given in the (b) examples is now unacceptable under neutral discourse (in that Lithuanian speakers can only interpret the object in the (b) examples as narrowly focused).[15]

[15] In Lithuanian scrambled structures, the rightmost element receives narrow focus (in prosodically neutral speech). Note that we assume that the dative object in the VO structure is NOT in its base-generated position, since under our account its dative marking indicates earlier leftward agnostic movement, rendering the NP accessible for Case-licensing purposes. Subsequent scrambling causes the object to appear on the right periphery of the surface string, where it bears narrow focus. In (18b) and (19b), on the other hand, it is the OV order that indicates scrambling: oblique (lexical) Case assignment is local, yielding the standard VO order, with no special focus. In the scrambled OV structure, it is the verb, now situated at the right periphery, which receives narrow focus.

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(23) (a) Mes pastatėme ligoninę [vaikams gydyti].
we built hospital-ACC children-DAT to-treat
'We built a hospital to treat children.'
(b) Mes pastatėme ligoninę [#gydyti vaikams].
to-treat children-DAT

(24) (a) Jie dėjo pastangas [ilgam karui užbaigti].
they made efforts long war-DAT to-end
'They made efforts to end the long war.'
(b) Jie dėjo pastangas [#užbaigti ilgam karui].
to-end long war-DAT

Although the purpose clauses considered thus far are all VP-adjuncts, their distribution is not confined to this position. For example, they may appear within NPs as (reduced) infinitival relatives, as in (25).

(25) (a) peilis [duonai riekti]
knife-NOM bread-DAT to-cut
'a knife for cutting bread' (Ambrazas et al. 1997: 376)
(b) lentyna [indams sudėti]
shelf-NOM dishes-DAT to-put
'a shelf to put the dishes on' (Ambrazas et al. 1997: 376)
(c) indas [arbatai virti]
kettle-NOM tea-DAT to-boil
'a kettle for making tea' (Ambrazas et al. 1997: 570)

What this shows is that the dative-of-purpose construction is some kind of clausal syntactic unit. Internally it is, at the very least, a VP. Externally, it is a phrasal projection that enters the structure as an adjunct, with purpose clause semantics. As such, it can potentially combine with both nominal and verbal phrases.

2.2 *Genitive objects: the supine construction*

When an infinitival purpose clause appears with a motion verb, the object of that infinitive is realized in the genitive rather than the accusative case. This was shown in (6), repeated here as (26a), together with additional examples in (26b–c).

(26) GEN[16]
(a) Išvažiavo **[kelio taisyti]**.
(they)-went road-GEN to-repair
'They went to repair the road.' (Ambrazas et al. 1997: 557)

[16] The past tense, third person suffixes *-o*/*-ė* do not distinguish number or gender.

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(b) Atėjo [**draugo aplankyti**].
(he)-came friend-GEN to-visit
'He came to visit a friend.' (Ambrazas et al. 1997: 557)

(c) Parvažiavo [**suknelės pasiimti**].
(she)-came-back dress-GEN to-take
'She came back to take the dress.'
(adapted from Schmalstieg 1988: 174)

It is clear that the Lithuanian genitive-object construction is a vestigial supine, so that, historically, this was actually an adnominal genitive. We might thus seek to explain the synchronic genitive marking on the object as in some sense also the result of an adnominal genitive configuration.[17] The gloss for (26a) might then be paraphrased as 'They went for the road's repair(ing)'. This is consistent with the use of genitive pre-modifiers in Lithuanian NPs, as illustrated in (27).

(27) kelio taisymas
road-GEN repair-NOM
'the road's repair'

While the supine generally fell together morphologically with the infinitive, Dambriūnas et al. (1966/1999: 140), Schmalstieg (1988: 174), and Ambrazas et al. (1997: 375) point out that in eastern Lithuanian dialects and among conservative speakers the old supine form (SUP) with the suffix *-ų* still persists, as in the examples in (28).[18]

(28) *Old supine in* -ų
(a) Jis atėjo [karvės pirkt**ų**].
he came cow-GEN to-buy-SUP
'He came to buy a cow.'
(b) Aš atėjau [gėlių surinkt**ų**].
I came flowers-GEN to-gather-SUP
'I came to gather flowers.' (Dambriūnas et al. 1966/1999: 140)

Compare the finite main-clause examples in (29a–b), which show that these verbs ordinarily assign accusative:

(29) (a) Jis pirko karvę.
he bought cow-ACC
(b) Jis surinko gėles.
he gathered flowers-ACC

Of particular interest is the fact that, once again, the LE Case construction displays OV rather than the standard VO order. Although historically this is

[17] We thank Len Babby for suggesting this analysis to us.

[18] The old supine in *-ų* derives from an accusative form of PIE *u*-stem nouns, while the infinitive proper was a dative form of *i*-stem nouns. See Meillet (1934) for details.

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expected, given the nominal origins of the construction, we argue that the construction has been reanalyzed along the lines of the dative purpose clause discussed in section 2.1 above. For one thing, it has been extended beyond traditional verbs of motion, as shown by (30).[19]

(30) Siuntė mergaitę [vandens parnešti].
(he)-sent girl-ACC water-GEN to-fetch
'He sent the girl to fetch the water.'

Secondly, in contemporary Lithuanian, the LE genitive construction is being replaced by the regular accusative pattern, as in (31) (cf. (26b–c)).

(31) (a) Atėjo [**aplankyti draugą**].
(he)-came to-visit friend-ACC
'He came to visit a friend.'
(b) Parvažiavo [**pasiimti suknelę**].
(she)-came-back to-take dress-ACC
'She came back to take the dress.'

The genitive is giving way to a strategy in which all direct objects are uniformly marked accusative, even when the vestigial supine marking appears:

(32) (a) Puolė visi [**bučiuotų rankas** seneliui].
fell all to-kiss-SUP hands-ACC old-man-DAT
'All fell to kiss the old man's hands.' (Schmalstieg 1988: 177)
(b) Stankūnas nubėgo [**sudėtų drabužius**].
Stankunas ran-off to-collect-SUP clothes-ACC
'Stankunas ran off to gather his clothes.'
(adapted from Schmalstieg 1988: 177)

By contrast, this tendency is not found with the dative purpose clause discussed in section 2.1. The accusative in (33) is unacceptable and, as such, is in no way supplanting the dative.

(33) *Pastatė daržinę [sukrauti šieną].
(they)-built hayloft-ACC to-keep hay-ACC
'They built a hayloft to keep hay.'

This divergence in Case-marking potential between the two purpose clauses suggests treating them as fundamentally different structures, an idea to which we ultimately return.

[19] Although it is not immediately obvious why *siuntė* 'sent' in (30) should be different from *atnešė* or *parsivežė* 'brought' in (17), which take dative objects, we will propose an analysis that distinguishes these in terms of argument versus adjunct status for the purpose clause.

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Note, finally, that when the infinitive is a verb that assigns lexical Case, just as with the LE dative examples in (18)–(19) above, then the lexical Case, rather than the LE genitive, must appear:

(34) (a) Atėjo [rūpintis draugu].
(he)-came to-take-care-of friend-INST
'He came to take care of a friend.'
(b) Atėjo [#draugu rūpintis].
friend-INST to-take-care-of
(c) Atėjo [*draugo rūpintis].
friend-GEN to-take-care-of

(35) (a) Parvažiavo [padėkoti motinai].
(she)-came-back to-thank mother-DAT
'She came back to thank her mother.'
(b) Parvaiavo [#motinai padėkoti].
mother-DAT to-thank
(c) Parvažiavo [*motinos padėkoti].
mother-GEN to-thank

What is significant about the examples in (31)–(32) is that the accusative object follows rather than precedes the verb. That is, once again, the Object Shift pattern correlates with non-canonical case (here, genitive). Whenever the LE Case construction gives way to the familiar accusative strategy, the unmarked VO order reemerges. Likewise, in (34)–(35), Object Shift is suppressed by lexical Case-assigning verbs, again demonstrating that the LE dative and genitive should be regarded as structural Cases.

To accommodate the correlation between the dative object and OV word order, we suggested appealing to the mechanism of leftward displacement, as in (10). We believe that a similar story can be told here, and will offer further details of the analysis in section 5. Under this view, one would need to contend that the object moves to the left edge of its projection in order to enter the 'search space' of its higher licensing head. In the vestigial supine construction, this higher head is presumably in some way associated with the specific semantics of motion verbs, since its effect is not felt more widely.[20] Some corroboration for this assumption is provided by the observation that an appropriate bare genitive NP can be selected directly by such verbs, as in the following examples:

(36) (a) Išėjo pieno.
(he)-went milk-GEN
'He went for milk.'

[20] In section 5.2 we will argue that the relevant head is Aspect. See footnote 10.

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(b) Išsiuntė sūnų daktaro.
(he)-sent son-ACC doctor-GEN
'He sent his son for the doctor.' (Ambrazas et al. 1997: 557)

The most parsimonious explanation for why a purpose NP appears in the genitive with motion verbs should also extend to the preposed genitive object of a purpose clause. Our eventual analysis of the genitive supine construction relies on this intuition.

Before proceeding, let us return to a second difference between the genitive supine construction and the dative purpose construction. Note that whereas the dative NP object cannot follow V in discourse-neutral speech, the genitive object can.[21] Thus, for some speakers at least, (37) has the same status as (30) above.[22] An additional example is given in (38).

(37) Siuntė mergaitę [parvežti daktaro].
(he)-sent girl-ACC to-fetch doctor-GEN
'He sent the girl to fetch a doctor.'
(38) Stankūnas nubėgo [paimti pinigų].
Stankunas ran-off to-get money-GEN
'Stankunas ran off to get the money.'

Crucially, in all the other constructions we discuss, either VO or OV is discourse-neutral, but not both. For example, when the accusative is used with an infinitive, as in (31), or even with a morphological supine, as in (32), the OV order is marked. Thus, the historically motivated analysis, which treats these genitive objects on a par with the dative objects of section 2.1, calls for leftward movement of the object, but there is a more recent reanalysis of the historical supine construction that simply treats the post-verbal genitive object as a vestigial transitional form. As an anonymous *JL* referee notes, the data in (37)–(38) suggest the progression of reanalyzed forms in (39).

(39) V + [NP-GEN V] > V + [V NP-GEN] > V + [V NP-ACC]

The first form represents the LE genitive vestigial supine. The final form represents the stage where all direct objects are uniformly marked accusative, as in (31)–(32). It is the middle stage, still productive in the language, which is of most interest, particularly in distinguishing the supine construction from the superficially similar dative purpose clause. Recall that the dative purpose clause does not admit such variation in Case marking, nor does it allow the dative NP to follow the infinitive discourse-neutrally. It is this latter property that suggests a mono-clausal analysis for the supine, at least for the middle, transitional stage, V + [V NP-GEN]. The same LE Case surfaces, but now in VO order, indicating that its source is local and not some higher

[21] We thank Evelina Gužauskytė for bringing this fact to our attention.

[22] *Daktaro*-GEN is used in (37) to avoid a possibly confounding partitive interpretation.

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Case-licensing head. The matrix and embedded verbs appear to be functioning as a single syntactic unit, which together assign lexical genitive to their shared object argument, along the lines proposed in recent work for complex predicates and serial verbs (see Ackerman & Webelhuth 1998, Baker (1996: chapter 8), for relevant discussion). Despite the likely relevance of this construction to questions both of historical reanalysis and of complex predicate formation, we cannot pursue these issues in this article. In what follows, we focus exclusively on the conservative OV order, which reflects the genuine LE genitive. This focus is necessitated by our goal of unifying all three LE cases (dative, genitive, and nominative) under a single analysis.

2.3 *Nominative objects: the PSYCH construction*

With this aim in mind, we now turn to the nominative LE construction. Nominative objects occur in Lithuanian infinitivals embedded in Experiencer (or PSYCH) predicates. These follow the same general pattern described in the previous two sections for dative and genitive objects. Example (7) is repeated as (40a), with additional examples in (40b–d).

(40) NOM

(a) Man nusibosta **[laikraščiai skaityti]**.
me-DAT is-boring-[–AGR] newspapers-**NOM** to-read
'It is boring for me to read newspapers.'

(b) Jam nepatiko **[laukelis arti]**.
him-DAT did-not-like-[–AGR] field-NOM to-plow
'He didn't like to plow the field.' (Ambrazas et al. 1997: 638)

(c) Jiems buvo neįdomu **[radijas klausyti]**.
them-DAT was uninteresting-[–AGR] radio-NOM to-listen
'It was boring for them to listen to the radio.'

(d) Man atsitiko vakar **[geras arklys pirkti]**.
me-DAT happened-[–AGR] yesterday good horse-NOM to-buy
'I was fortunate yesterday to buy a good horse.'
(Jablonskis 1928/1957: 560f.)

One important fact to note about this construction is that the main-clause verb is 'defective' in the sense that it fails to show subject–predicate agreement: nominative objects in Lithuanian embedded infinitivals occur ONLY when the matrix predicate is non-agreeing. This lack of agreement also means that there is no possibility of assigning nominative case to the 'logical subject' Experiencer, which, as the examples in (40) show, is marked dative instead, as is standard for the Experiencer argument in psych predicates. Although in our eventual analysis we will capitalize on these facts, the very existence of nominative in the absence of agreement should seem puzzling, given the widespread view that nominative case is the reflex of agreement

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with a Tense projection; for discussion, see Pesetsky & Torrego (2001) and the many references cited therein. While one might conclude, along with Harley (1995) and Alexiadou (2003), that there must be more than one licensing strategy for nominative, and that the source for the nominative marking on the objects in (40a–d) is some head that is not implicated in the subject–predicate agreement system, we will argue in section 5.3 that what is special about Lithuanian is the role [–AGREEMENT] plays in valuing nominative case. One reason for this claim is that nominative objects occur elsewhere in Lithuanian, not just on shifted objects of infinitival Themes of psych verbs. Nominative objects also occur in mono-clausal infinitival psych predicates and in the evidential *-ma*/*-ta* predicate.[23] These share with our LE nominative construction the obligatory lack of agreement and the fact that the subject appears in some case other than nominative (dative for matrix psych verbs or genitive for *-ma*/*-ta* predicates), but they differ in that only with the embedded infinitival of psych predicates is the neutral word order OV instead of VO. In the analysis to be developed in section 5.3 we explain this contrast, showing why Object Shift is motivated within the clausal Theme argument of a psych verb but not in the other [–AGREEMENT] contexts that appear with a nominative object.

Although the LE nominative construction is accepted by all grammarians, it should be noted that it is historically on the decline and its productive use in the modern language is somewhat restricted. It is now found mainly in East High Lithuanian – to be sure, a major dialect area – but even here the nominative object is productive only among conservative speakers.[24] As expected, Lithuanians who do not employ LE nominative objects will substitute the accusative in this psych construction. And, in keeping with the pattern already established, when this happens the object appears discourse-neutrally AFTER the verb, as shown in (41a–b).

(41) (a) Man nusibosta [**skaityti laikraštį**].
me-DAT is-boring-[–AGR] to-read newspaper-ACC
(b) Jiems buvo neįdomu [**klausyti radiją**].
them-DAT was uninteresting-[–AGR] to-listen radio-ACC

For this reason, we once again propose that the object NP, when nominative, but crucially not when accusative, has to move to the left edge of the clause (or phase; see section 3.2) for accessibility to its Case-assigner.

[23] We return to the evidential *-ma*/*-ta* construction in section 5.3 below, but see Lavine (1999, 2000) and Blevins (2003) for other analyses.

[24] Note that the OV pattern that we report here for nominative objects is nonetheless robust. Of the 26 examples of this construction provided by Jablonskis (1928/1957: 56of.), 24 of them instantiate this pattern (we take the other two examples, which are VO, to indicate a special focus structure, namely, narrow focus on the right edge). We thank Axel Holvoet for bringing this source to our attention.

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As with the other LE Case constructions, if the infinitive is based on a verb that governs some lexical Case, then the object must be marked with that case and cannot be nominative. Consequently, the infinitival clause in such instances shows standard VO word order as well, as in the (a) examples in (42)–(43).

(42) (a) Man nusibosta [rūpintis vaikais].
me-DAT is-boring-[–AGR] to-take-care-of children-INST
'It is boring for me to take care of children.'
(b) Man nusibosta [# vaikais rūpintis].
children-INST to-take-care-of
(c) Man nusibosta [*vaikai rūpintis].
children-NOM to-take-care-of

(43) (a) Jam nepatiko [laukti pinigų].
him-DAT did-not-like-[–AGR] to-wait money-GEN
'He didn't like to wait for money.'
(b) Jam nepatiko [# pinigų laukti].
money-GEN to-wait
(c) Jam nepatiko [*pinigai laukti].
money-NOM to-wait

To review, we found in this section that the appearance of the non-canonical LE case (dative, genitive, or nominative) patterns with OV order. Our leading idea is that this OV order is derived by some kind of Object Shift, a process that displaces the direct object into the search space of some higher Case-licensing head. In those instances in which case on the object is assigned by V (or its extended functional projection *v*) we predict no such Object Shift, and, indeed, the expected VO order appears.

3. On displacement and accessibility

Our analysis of the constructions reviewed in section 2 will require an explicit model of how and why movement takes place in human language. This section details some of the relevant theoretical claims and technical machinery available in current syntactic theory.

3.1 *Intermediate summary and discussion*

The data presented so far reveal several potentially significant generalizations. The most striking of these is the word order generalization, namely that LE case is assigned under OV rather than VO order. We treat this fact in terms of leftward displacement of the direct object (i.e. Object Shift). Further evidence for a movement analysis can be drawn from the placement of adverbial modifiers. Manner adverbs, as in (44a–b), are standardly

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analyzed as demarcating the left edge of the VP, and sentential adverbs, such as *tikriausiai* 'probably' in (44c), demarcate the left edge of some higher projection. In all these cases, we see that LE objects appear most naturally ABOVE such adverbs.

(44) (a) Pastatė daržinę [šienui [$_{VP}$**saugiai** sukrauti]].
(they)-built hayloft-ACC hay-DAT safely to-keep
'They built a hayloft to keep the hay safely.'
(b) Jam nepatiko [laukelis [$_{VP}$**greitai** arti]].
him-DAT did-not-like field-NOM quickly to-plow
'He did not like to plow the field quickly.'
(c) Išvažiavo [kelio **tikriausiai** [$_{VP}$taisyti]].
(they)-went road-GEN probably to-repair
'They went probably to repair the road.'

A second relevant fact is that whenever there is a lexical Case associated with the infinitive, this consistently overrides the LE Case that would otherwise be assigned to the object. While this is not especially surprising, in that lexical Case must be satisfied, it does mean that whatever assigns the LE dative, genitive, or nominative is technically not required to discharge its Case. This is a property we argued to be generally true of structural Case assigners. This point is particularly telling when we consider the dative of purpose, since the dative object (in the absence of *kad* or a lexical-Case-assigning verb) is otherwise obligatory. Note that the LE dative can be overridden by lexical instrumental, as in (45a), but not by a competing structural Case, as in (46b).

(45) (a) Mes pastatėme ligoninę [rūpintis vaikais].
we built hospital-ACC to-take-care-of children-INST
'We built a hospital to take care of children.'
(b) *Mes pastatėme ligoninę [rūpintis vaikams].
to-take-care-of children-DAT

(46) (a) Pastatė daržinę [šienui sukrauti].
(they)-built hayloft-ACC hay-DAT to-keep
'They built a hayloft to keep hay.' (Ambrazas et al. 1997: 557)
(b) *Pastatė daržinę [sukrauti šieną].
to-keep hay-ACC

The LE dative thus patterns as a structural Case along with the accusative. Note additionally that we are not dealing with a matter as simple as the availability of two competing structures (as is likely the case with facultative LE genitive and surely is with LE nominative). This is shown by the unacceptability of (46b), where an attempt is made to have the accusative supplant the dative.

Finally, in all these constructions there seems to be a connection between the particular LE Case assigned and the unactualized possibility of assigning

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that case in the main clause.[25] With regard to the dative of purpose construction, the dative case is used, as in many languages, on NPs that denote purpose:

(47) (a) turėti pinigų namui
to-have money-GEN house-DAT
'to have money FOR A HOUSE'
(b) išsinuomoti kambarį mezgyklai
to-rent room-ACC knitting-shop-DAT
'to rent a room FOR A KNITTING SHOP'
(c) atnešti vandens daržams
to-bring water-PARTITIVE.GEN kitchen-garden-DAT
'to bring water FOR THE KITCHEN-GARDEN'
(Ambrazas et al. 1997: 510)
(d) popierius laiškams
paper letters-DAT
'paper FOR LETTERS' (Ambrazas et al. 1997: 570)

When the semantics allows for such a combination, Ambrazas et al. (1997: 557) note that 'the infinitive may be … optional', offering the following example:

(48) Parvežėm lentų namui (apmušti).
we-brought boards-GEN house-DAT to-cover
'We brought some boards {for the house/to cover the house}.'

Alternatively, Ambrazas et al. (1997: 557) observe that elsewhere the omission of the infinitive may result in a combination that has no interpretation, as in (49b) based on grammatical (49a).

(49) (a) Iššovė žmonėms pagąsdinti.
(he)-fired people-DAT to-frighten
'He fired to frighten the people.'
(b) *Iššovė žmonėms.
'*He fired for people.'

With regard to the genitive supine construction, we have already seen parallel NP examples in (36). In the nominative psych construction, a nominative NP Theme argument may also occur alone (that is, without an embedded infinitive), in which Case agreement holds between the nominative Theme and the predicate. However, there is reason to believe that the Case-assigner for the nominative in the agreeing predicates in (50) does not

[25] The question of whether LE dative and genitive are actually arguments of the matrix verb will be taken up in section 4. The close relationship between LE dative, genitive, and nominative in the embedded clause and comparable matrix functions of these cases will play a central role in the analyses of the LE constructions put forward in section 5.

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extend to those instances of LE nominative case in the embedded infinitivals in (51).

(50) (a) Man nusibosta laikraštis.
me-DAT is-boring-3SG/PL newspaper-NOM.MASC
'I am tired of the newspaper.'
(b) Man yra nusibodęs tas pats
me-DAT AUX-PRES bored-PART.MASC same-NOM.MASC
laikraštis.
newspaper-NOM.MASC
'I have gotten tired of the same newspaper.'
(c) Tėvams yra jau nusibodusi ši tema.
parents-DAT AUX-PRES already bored-PART.FEM this theme-NOM.FEM
'The parents have already become tired of this topic.'

(51) (a) Man nusibosta [laikraštis skaityti].
me-DAT is-boring-[–AGR] newspaper-NOM to-read
'It is boring for me to read the newspaper.'
(b) Man yra nusibodę vis [tas pats
me-DAT AUX-PRES bored-PART.[–AGR] always same-NOM.MASC
laikraštis skaityti].
newspaper-NOM.MASC to-read
'I have gotten bored with always reading the same newspaper.'
(c) Tėvams yra jau nusibodę
parents-DAT AUX-PRES already bored-PART.[–AGR]
[ši tema svarstyti].
this theme-NOM.FEM to-discuss
'The parents have already become tired of discussing this topic.'

Compare the predicate-final agreement morphology in the examples in (50a–c) to the non-agreeing morphology on the same predicates when the object is embedded in an infinitival complement in (51a–c). To be sure, in the non-perfect tenses, as in the (a) examples of (50)–(51), agreement holds only for person, not gender and number, and there is no dedicated non-agreeing form (the third-person form also indicates non-agreement). However, in the present perfect examples in (50b–c) and (51b–c), the past active participle (PART) shows agreement for gender and number, and its paradigm includes a special marker for non-agreement (/ę/), the historical neuter (which is syncretic with masculine plural).[26, 27] Taking nominative in Lithuanian to be

[26] All erstwhile neuter nouns in Lithuanian have been assimilated to the masculine or feminine in the modern language; neuter singular morphology has been reanalyzed as a dedicated marker of non-agreement.

[27] Lithuanian participial agreement in perfect tenses is with the grammatical subject only; in the case of (50b–c), the grammatical subject is the post-verbal Theme argument. Lithuanian never displays any kind of overt object agreement on participles in compound tenses, in

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canonically assigned in association with subject–predicate agreement (that is, by a Tense projection with a full set of agreement features), the source for the nominative in non-agreeing (51) remains to be explained and, in any event, cannot *a priori* be assimilated to the Case-assigning strategy in (50). If the source for nominative in (51) were matrix Tense, then we would expect the same agreement relation to hold as in (50), yielding sentences such as (52), in which the matrix predicate agrees with the object of an embedded infinitival. Such sentences do not occur:

(52) *Man yra nusibodęs [laikraštis skaityti].
me-DAT AUX-PRES bored-PART.MASC newspaper-NOM.MASC to-read

The correlation of non-agreement in the matrix clause and the appearance of the LE nominative on the object of embedded infinitivals is, we suspect, no coincidence.

Finally, independent evidence for correlating LE nominative with non-agreement comes from the case marking of time and distance adjuncts in infinitival clauses. Such adjuncts are ordinarily in the accusative, but when they occur with infinitives, as in (53a–c), they can appear in the nominative instead.

(53) (a) Ne vaikui **kilometras** nueiti.
not child-DAT kilometer-**NOM** to-go
'It is not for a child to walk a kilometer.'(Ambrazas et al. 1997: 520)
(b) Ne jam **valanda** išlaukti.
not him-DAT hour-**NOM** to-wait
'It is not for him to wait an hour.' (Ambrazas et al. 1997: 520)
(c) Netrukus ir tau teks **kelios dienos**
soon PRT you-DAT will-be-necessary-[–AGR] several days-**NOM**
pasitraukti iš tarnybos.
to-retire from service
'Soon even you will have to leave work for a few days.'
(Jablonskis 1928/1957: 561)

Significantly, as Ambrazas et al. (1997: 520) observe, 'this usage of the nominative is restricted to impersonal sentences', further linking the appearance of the nominative downstairs (even for adjuncts) with the lack of agreement (hence lack of nominative) upstairs. A virtually identical nominative–accusative alternation is observed by Maling (1993) for time and distance adverbial adjuncts in Finnish non-finite and impersonal predicates (see Lee 1999 for similar facts in Korean). Crucially, what distinguishes Lithuanian is the striking fact that these nominative adjunct NPs precede

contrast to French and other languages. The present tense AUX element *yra* either marks third person (singular or plural) or patterns with dedicated non-agreeing morphology as a tense marker.

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rather than follow the verb, since their accusative counterparts most naturally follow:

(54) (a) Ne vaikui nueiti **kilometrą**.
not child-DAT to-go kilometer-ACC
'It is not for a child to walk a kilometer.'
(b) Lijo **valandą**.
rained hour-ACC
'It rained for an hour.' (Ambrazas et al. 1997: 501)
(c) Tau teks tarnauti **kelias dienas**.
you-DAT will-be-necessary-[–AGR] to-serve several days-ACC
'You will have to serve (for) a few days.'

These observations about word order, along with the nominative–accusative alternation itself, support Maling's (1993: 5of.) contention that these adverbial adjuncts are assigned Case structurally rather than as inherent Cases (as for example with certain inherently instrumental time-expression adjunct phrases in Lithuanian, which, predictably, occur following the verb).

3.2 *Phase impenetrability and intervention*

This section makes explicit the mechanisms involved in Case valuation and displacement. Recall from section 1 that we adopt the standard 'bottom–up' version of minimalism, which is a system in which structure is created by successive merger of elements at the top of the tree, continually 'extending' it. There is, however, also a crucial 'top–down' aspect of the model: when an element that values features is merged, this 'probe' searches DOWN the tree for the first element with potentially matching features, its 'goal', and values those features if it can. An important question thus raised by the probe and goal system is how far down the tree a probe can 'look for' its goal, i.e. how broadly a probe's search space is defined.

Chomsky's (2001) answer makes use of the concept of PHASES. Phases are phrasal units, somewhat akin to the cycles of earlier transformational models, but which serve as domains of interpretation for the two interfaces, i.e. they define chunks of information to be shunted off to the phonological and semantic modules. Each phase consists of its phase-defining head, its edge (or specifier), and its complement. The complement is sent off to the interfaces upon completion of the phase (in other words, once its Case is valued). This material, once sent off, is no longer available to further syntactic processes. Thus, the domain of the phase-defining head is opaque to further syntax, a principle of grammar referred to as the PHASE IMPENETRABILITY CONDITION, given in (55).[28]

[28] In Chomsky's (2001) system only 'strong' phases are actually impenetrable. We will assume that the LE constructions involve a strong *v*P phase. The *v* head projects an external argument; V is neither unaccusative nor passive.

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(55) *Phase Impenetrability Condition* (Chomsky 2001: 13)
In phase α with head H, the domain of H (its complement) is not accessible to operations outside of α; only H and its edge are.

In order for an NP to be available for syntactic operations beyond its own piece of the derivation, it must move to the left-edge of its phase. This position, for accidental historical reasons known as the EPP POSITION, serves as an escape hatch for NPs that have not been valued for Case in their immediate phase. Given the notion of phases, it is easy to see that Object Shift and its ilk can be construed as movement of an object NP to some specifier position, crucially past V, in order for its Case to be valued.

Our teleological characterization of movement as occurring 'in order for' eventual Case valuation to succeed should, however, raise eyebrows. In the standard Germanic type of Object Shift discussed in section 1.3, the object moves to the specifier position of the same probe which values its Case, and there are compelling arguments, following e.g. Lasnik & Saito (1991/1999) and Lasnik (1995/1999), that this also takes place even in VO English. This kind of Object Shift can be understood locally, as a probe looking down the tree for Case features to value, targeting the closest goal, and attracting it up to the top of the tree, where it moves/remerges. However, if that probe is in a HIGHER phase, hence not yet merged into the structure, movement cannot be locally driven in the same way. This is the situation with our Lithuanian LE Object Shift: at the point in the derivation where movement takes place, there is no available probe which the object could be moving 'in order' to satisfy. So why does it move?

Our answer to this is that it moves agnostically. Intermediate *wh*-movement, as discussed with respect to example (9a) in section 1.2 (repeated here as (56)), is always to the left-edge of the phase:

(56) I wonder [$_{CP}$ what C [$_{TP}$ Karen thinks [$_{CP}$ ~~what~~ that [$_{TP}$ Luda brought ~~what~~]]]].

This now makes sense in light of the Phase Impenetrability Condition, since the left-edge is the only position a phrase can occupy and still be an accessible goal for some higher probe. Since the embedded *wh*-phrase has not had its [+wh] features checked by the end of the phase that is the embedded CP, it has no alternative but to move:[29] staying put would result in certain crash. So one way to understand such LE movement in local terms is that it is motivated as a kind of LAST RESORT operation at the end of each phase. At that point, any phrase with features that have not yet been valued must move to the left periphery of its phase in order to be in the search space of a potential probe. We argue that the displacement in Lithuanian LE Object

[29] This reasoning also applies to any smaller phase within CP, such as *v*P; hence the *wh*-phrase can be assumed to have undergone at least one such movement already.

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Shift constructions is precisely of this character: the direct object moves to the edge of its phase so that, eventually, its Case features might be valued by some higher appropriate head. If on the other hand it were to fail to vacate the complement position, then the derivation would be doomed to failure, since by the Phase Impenetrability Condition in (55) the complement position cannot be accessed from outside the phase. Object Shift in Lithuanian takes place, in other words, not for Case feature valuation directly, but rather in order to avoid an otherwise inevitable crash. In section 5, we will show exactly how the 'impenetrability' of the *v* domain forces the object to undergo displacement. In all three LE Cases, movement renders the object accessible to its Case-licensing probe in a way that it would not be otherwise. Thus, it will be argued, what the syntax of all three constructions has in common is movement of the object of the infinitive to the outermost position of its containing phase, i.e. *v*P's 'Left Edge'.[30]

One might nonetheless wonder why the relevant probe attracts the embedded object rather than the subject, since the subject is merged above the object and is thus a closer goal. This concern over 'intervention' effects arises since even a PRO subject should count as a closer goal. As an anonymous *JL* referee observes, the lack of any intervention effects in LE Case valuation is particularly noteworthy. However, the explanation for why the subject fails to intervene follows straightforwardly from the bottom–up nature of the minimalist model, which we have been adopting throughout. Crucially, under our agnostic movement account, the object has already shifted to a position above the subject BEFORE the higher probe is merged. Recall that it moves to the left edge at the end of the phase, putting it at the very top of the structure and thereby making it accessible from outside. In doing so, it necessarily crosses the subject. The subject, being lower when the probe that

[30] There may, in fact, be evidence that Lithuanian objects shift higher in some cases. This can be seen when the embedded infinitive appears with an overt dative subject. As in closely related Slavic languages such as Russian and Polish, the infinitive in Lithuanian is capable of assigning quirky dative to its subject position, as in (i).

(i) Jis nežino, [kada **jam** skaityti knygą].
he not-know when him-DAT to-read book-ACC
'He doesn't know when he should read the book.'

Thus, in principle, the purpose clause can appear with two dative NPs. This type of sentence is illustrated in (ii), where a dative subject is introduced into (5).

(ii) Pastatė daržinę [**šienui mums sukrauti**].
(they)-built hayloft-ACC hay-DAT us-DAT to-keep
'They built a hayloft for us to keep hay.'

What is interesting here is that the only possible word order is OSV (although, to be sure, native speakers generally avoid this construction, and, indeed, it is felicitous only with pronominal dative subjects). The object *šienui* 'hay' apparently moves above the subject *mums* 'us'. Thus, depending on the position of the infinitival head and its subject, the dative object, at least in this construction, may appear in a specifier position within the functional space between embedded *v*P and CP.

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values LE Case is merged, cannot possibly intervene. This is an important point, because it confirms critical aspects of the general architecture of our analysis. The lack of intervention effects tells us that movement must apply in a stepwise fashion: if there were no agnostic intermediate movement, if there were no movement step preceding merger of the probe, then the subject would indeed be higher than the object and it would intervene.

4. An alternative analysis

In this section we ask whether the constructions at hand might be more profitably analyzed without invoking movement. After outlining what such an analysis might look like, we present a variety of arguments against base-generating the NP in some quirky Case position within the matrix clause.

4.1 *Matrix clause generation rather than movement*

The base-generation account would claim that the LE Case NP is an argument of the matrix predicate, rather than of the embedded infinitival. That is, it disputes the syntactic bracketing (the theory of constituency) that we have been assuming all along. Compare, for example, the bracketing alternatives for the dative purpose construction in (57a–b), repeated from (5).

(57) (a) *Movement*
Pastatė daržinę [**šienui**$_{\mathbf{i}}$ sukrauti t_i].
(they)-built hayloft-ACC hay-DAT to-keep
(b) *Base generation* (*in matrix clause*)
Pastatė daržinę **šienui** [sukrauti].
'They built a hayloft to keep hay.'

The bracketing in (57a) shows the OV embedded structure that we have been assuming; the bracketing in (57b) treats the dative NP *šienui* 'hay' as an argument of the matrix predicate. The unbracketed segment in (57b) can indeed occur on its own, without the embedded infinitive, a fact that suggests an initial plausibility for this account:[31]

(58) Pastatė daržinę šienui.
(they)-built hayloft-ACC hay-DAT
They built a hayloft for the hay.'

Additional examples were given in (47a–c), repeated in (59).

(59) (a) turėti pinigų namui
to-have money-GEN house-DAT
'to have money for a house'

[31] We thank Mirjam Fried for suggesting this alternative analysis to us.

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(b) išsinuomoti kambarį mezgyklai
to-rent room-ACC knitting-shop-DAT
'to rent a room for a knitting shop'
(c) atnešti vandens daržams
to-bring water-PARTITIVE.GEN kitchen-garden-DAT
'to bring water for the kitchen-garden'

Similarly, as noted earlier, the genitive supine may also occur as an argument of the matrix predicate without an embedded infinitive.[32] The relevant examples given in (36) are repeated in (60).

(60) (a) Išėjo pieno.
(he)-went milk-GEN
'He went for milk.'
(b) Išsiuntė sūnų daktaro.
(he)-sent son-ACC doctor-GEN
'He sent his son for the doctor.'

Assuming for the sake of discussion the base-generation account given in (57b), let us refine the structure to accommodate its interpretation better. The dative NP, even if it is an argument of the matrix predicate, is still intuitively felt to be an object of the embedded infinitive at the same time. Under this account, (57b) would be reminiscent of the English '*tough*-movement' construction, as in *Mary is hard to please*, although nothing comparable exists in Lithuanian. Here, *Mary*, the subject of the adjective *hard*, is simultaneously felt to be the object of the infinitive *to please*. This relation of coreference is typically represented by a null operator construction, in which the object of the infinitive is a variable bound by a null operator (OP) which itself is coindexed with an argument of the matrix predicate, in this case, *Mary*.[33] In this way, let us now represent the base-generation account given in (57b) as (61).

[32] For the purposes of exploring this alternative approach, we will assume a structure in which there is no embedded infinitive in (59)–(60), rather than one in which an embedded infinitive is elided.

[33] An anonymous *JL* referee suggests a possible link with free relatives, in that the Case properties of our LE constructions might be reanalyzed in terms of Case Attraction. In languages such as Classical Greek or Gothic (but not Lithuanian!), the relative pronoun of a free relative bears either the case called for by the main clause or that expected by its role in the embedded clause, in keeping with an obliqueness hierarchy (roughly, OBL > ACC > NOM). We do not pursue this parallel for several reasons. First, of the two approaches to free relatives, one which takes the overt *wh*-pronoun to be the head of a nominal and assumes there to be a silent OP in the relative clause, and the other which takes the nominal to be headless (or non-existent) and the *wh*-pronoun to be an overt operator in the relative clause, the latter – with no OP – is greatly preferred, thus undermining any parallel with Lithuanian LE Case. Second, assimilating LE Case to Case attraction would give the wrong results empirically; e.g. accusative in the embedded clause should not cede to nominative in the main clause and there should be some instances of the embedded clause's

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(61) Pastatė daržinę šienui$_i$ [$_{CP}$ OP$_i$ [$_{TP}$ PRO sukrauti t_i]].

The only other possible representation of (57b) that captures the necessary semantics is that of a null object (or object pro-drop) construction, as in (62), where 'pro' is a phonologically null pronominal element, coreferential with *šienui* 'hay'.

(62) Pastatė daržinę šienui$_i$ [sukrauti *pro*$_i$].

Since Lithuanian is a subject pro-drop language, it is not altogether implausible that it might allow object pro-drop as well. However, while null object pronouns can always be substituted with overt pronouns, any attempt to do this here results in ungrammaticality.

(63) (a) *Dative Purpose Clause*
Pastatė daržinę šienui [sukrauti *jį /*jam].
it-ACC it-DAT
'They built a hayloft for hay in order to keep IT.'
(b) *Genitive supine*
Išsiuntė sūnų daktaro [pakviesti *jį /*jo].
(he)-sent son-ACC doctor-GEN to-get him-ACC him-GEN
'He sent his son for the doctor in order to get HIM.'

While the English sentence glosses in (63a–b) are awkward, these Lithuanian structures should in principle be possible if these constructions exhibited genuine object pro-drop. Let us imagine instead, therefore, that the coreferential object of the embedded infinitive is an A-bar-bound element, along the lines of (61) above. The advantage of this kind of base-generation analysis is that it does not involve movement, but its cost is that it introduces the extra machinery of an operator-variable construction in order to get the semantics right. Additional costs of the base-generation (non-movement) approach, as we will see in the next section, are (i) that it is subject to specific lexical constraints and (ii) that it assumes a syntactic bracketing that fails standard constituency tests.

An additional problem with the base-generation approach is that it cannot be extended to the LE nominative construction. Recall from the discussion in section 3.1, especially examples (50b–c), that a psych predicate (in the perfect tense) shows morphological agreement with the subject NP Theme argument whose nominative Case it values. An approach in which the LE nominative is an argument of the matrix predicate falsely predicts agreement between the

Case overriding that of the main clause, as it does with free relatives. Third, as argued below, we already have sufficient independent grounds to reject the null OP/base-generation account of LE Case. Indeed, one could take the lack of parallelism with other, more credible OP constructions as additional evidence against such an analysis for LE Case in Lithuanian.

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nominative object NP and matrix T, which, as shown in (52) (repeated in (64)), does not occur.

(64) *Man yra nusibodęs laikraštis skaityti.
me-DAT AUX-PRES bored-PART.MASC newspaper-NOM.MASC to-read

Compare (64) to (51b), repeated as (65), in which the structure converges only with dedicated non-agreement morphology on the matrix verb (that is, on the participle; the third person singular/plural present auxiliary *yra* shows no agreement for number and gender).

(65) Man yra nusibodę vis tas pats
me-DAT AUX-PRES bored-PART.[–AGR] always same-NOM.MASC
laikraštis skaityti.
newspaper-NOM.MASC to-read
'I have gotten bored with always reading the same newspaper.'

It follows that any base-generation account would have to exclude the LE nominative, necessitating a completely different kind of analysis than that offered for the LE dative and genitive constructions.

4.2 *Problems with a matrix quirky-Case account*

Setting aside therefore the nominative construction, let us consider briefly how well the higher base-generation approach might fare for the LE dative and genitive constructions. The first problem with the proposal that the LE dative and genitive are arguments of the higher predicate is that it fails to account for those embedded infinitivals whose purpose semantics cannot be straightforwardly conveyed by combination with the dative or genitive NP alone. In some cases, such as (57) above, the infinitive may either be elided or simply not occur, yielding (58). As noted in section 3.1, Ambrazas et al. (1997: 557) observe the same possibility of omitting the infinitive in some examples, while disallowing omission of the infinitive in others. One of their examples in which omission seems innocuous was given in (48) and is repeated in (66).

(66) Parvežėm lentų namui (apmušti).
we-brought boards-GEN house-DAT to-cover
'We brought some boards {for the house/to cover the house}.'

Here we would argue that the acceptability of either variant is a spurious consequence of the ACCIDENTAL entailment 'We bought some boards for the house' from 'We bought some boards to cover the house'. Dative *namui* 'house' can either be the Theme argument of *apmušti* 'cover', where it is the recipient of the boards, or a main clause Benefactive, where it is also the

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recipient of the boards. This was contrasted with their (49), repeated as (67), in which omission of the infinitive is not felicitous.[34]

(67) Iššovė žmonėms *(pagąsdinti).
(he)-fired people-DAT to-frighten
'He fired {*for people/to frighten people}.'

The reason the infinitive is required in (67) is that, while the matrix dative continues to have a Benefactive interpretation, this interpretation is not compatible with dative *žmonėms* 'people' as an argument of *pagąsdinti* 'frighten'. The following LE dative examples similarly range from the bizarre to the unacceptable, because there is no such accidental Benefactive entailment:

(68) (a) Mes pastatėme ligoninę ligoms *(gydyti).
we built hospital-ACC diseases-DAT to-treat
'We built a hospital {*for diseases/to treat diseases}.'
(b) Jie pasidavė ilgam karui *(užbaigti).
they surrendered long war-DAT to-end
'They surrendered {*for the long war/to end the long war}.'
(c) Jis paspruko auksui *(paslėpti).
he escaped gold-DAT to-hide
'He escaped {*for gold/to hide the gold}.'

In the LE genitive construction, the embedded infinitive can similarly only be omitted when its meaning is recoverable from the purpose semantics of the clause. Otherwise, omission of the infinitive leads to uninterpretable combinations, such as those in (69a–b).

(69) (a) Išvažiavo kelio *(taisyti).
(they)-went road-GEN to-repair
'They went {*to fetch the road/to repair the road}.'
(b) Visi puolė rankų seneliui *(bučiuoti).
all fell hands-GEN old-man-DAT to-kiss
'All fell {*to get (bring) the old man's hands/to kiss the old man's hands}.'

These facts clearly show that whenever the quirky-Case NP appears with an infinitive it receives its theta-role from that infinitive. Its status in the absence of an infinitive depends on its semantic appropriateness in the main (and sole) clause; the acceptability of the quirky NP in no way correlates with a hypothetical, deleted infinitive. In sum, an analysis in which the LE dative and genitive NPs in these sentences are arguments of the matrix predicate would grossly undergenerate the range of possible structures that

[34] Note that in the English sentence glosses in (67)–(69), the curly brackets contain first the deviant 'default' interpretation, followed by the reading in which the infinitive is not omitted.

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actually occur. Such an account would be limited to a finite set of accidental exceptions. Crucially, as we saw in (67)–(69), it admits as constituents structures that receive no interpretation. That these structures are 'saved' by the embedded infinitive demonstrates that the offending dative and genitive NPs are indeed syntactic constituents of the embedded clause. That is, the bracketing should appear as in (70).

(70) (a) Mes pastatėme ligoninę [ligoms gydyti].
we built hospital-ACC diseases-DAT to-treat
(b) Išvažiavo [kelio taisyti].
(they)-went road-GEN to-repair

Establishing the constituency to be as in (70) is crucial for our analysis of these LE objects as participating in OV structures resulting from Object Shift. An additional empirical argument for this bracketing comes from widely accepted constituency tests: if elements can be coordinated or pronominalized, appear alone as fragments, or be moved, then they form a coherent syntactic unit (a constituent), and thus are dominated by a single node in the tree. For reasons of space, these constituency tests will be applied here only to the LE dative construction, the most productive of the three constructions under consideration.

We return to the familiar LE dative construction in (5), repeated in (71).

(71) Pastatė daržinę šienui sukrauti.
(they)-built hayloft-ACC hay-DAT to-keep
'They built a hayloft to keep hay.'

Considering first the fact that only constituents can be coordinated, we note that coordination of *šienui sukrauti* 'hay to keep' with a conjunct of the same category yields a perfectly grammatical sentence, as in (72).

(72) Pastatė daržinę [šienui sukrauti] ir [grūdams apsaugoti].
(they)-built hayloft-ACC hay-DAT to-keep and grain-DAT to-protect
'They built a hayloft to keep hay and protect grain.'

Next, constituency can be identified by the substitution of a pro-form. In (73), *šienui sukrauti* is replaced by the dative form of the pronoun *tas* 'this'.

(73) Pastatė daržinę tam.
(they)-built hayloft-ACC this-DAT
'They built a hayloft for this (purpose).'

Only constituents can appear alone, as sentence fragments, such as in the reply in (74b) to the question in (74a)

(74) (a) Kam pastatė daržinę?
for-what (they)-built hayloft-ACC
'Why (for what purpose) did they build a hayloft?'

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(b) Šienui sukrauti.
hay-DAT to-keep
'In order to keep hay.'

A final diagnostic of constituency is whether or not a group of words can be moved in the clause as a unit. For example, in the 'cleft' construction in (75), *šienui sukrauti* is moved to the front of the clause to receive special focus.

(75) Tai [šienui (mums) sukrauti] pastatė daržinę.
it hay-DAT we-DAT to-keep (they)-built hayloft-ACC
'It is (for us) to keep hay that they built a hayloft.'

To review, constituency tests argue robustly for treating the LE dative as an argument of the embedded infinitival.[35] More generally, we found that any alternative approach seeking to treat Lithuanian LE quirky-Case NPs as base-generated within the matrix predicate would encounter a series of conceptual and empirical problems not faced by the theory of constituency we have assumed throughout and represented in (70). Moreover, even if these problems could somehow be overcome, a base-generation account would not extend to the LE nominative and to infinitives that govern LEXICAL dative, genitive, or instrumental (since these require this particular Case and preserve VO order). We therefore conclude that Lithuanian has a genuine derived OV structure for certain embedded infinitivals. The details of this analysis for each construction are presented in the following section.

5. Analysis: the constructions revisited

This section brings together the three LE constructions under a formal analysis. It is argued that in each construction the direct object of the infinitive shifts to left-adjoin to its containing *v*P, thereby making it accessible for Case valuation from a higher probe. In those instances in which a dative or genitive NP appears felicitously without the embedded infinitive, we will argue that its Case has the same source as the LE object itself. The Case-assigning head (or probe) for each construction can assign this Case either to an NP directly or to a left-edge element of a clause it contains. For the psych predicate construction, we will compare the shifted nominative object of the embedded infinitival with the *in situ* nominative object of participial *-ma*/*-ta* clauses. We will argue that in both nominative object constructions, the

[35] Mark de Vries points out to us that a version of the base-generation account that treats these LE constructions as matrix obliques containing infinitival relative clauses would also be compatible with the constituency facts. Such an approach is, however, problematic, since infinitival relatives cannot be constructed on adjuncts and, in any case, it would suffer from the same kind of entailment problems discussed earlier in this section.

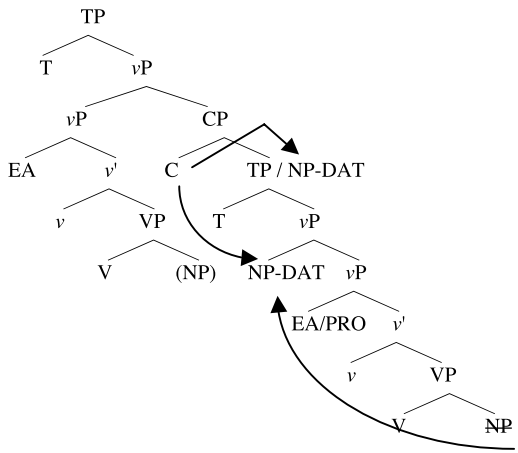
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valuation of nominative is linked to the presence of a non-agreeing matrix predicate.

5.1 *The dative*

The structure for the LE dative purpose clause is given in (76); EA = external argument.[36]

(76)



Note that the purpose clause enters the structure as a CP adjoined to *v*P. As a 'reason' or 'why' 'unselected' purpose clause, we expect this adjunct to enter the structure higher than other purpose clauses, such as the vestigial supine clause to be discussed shortly. Its head C, a 'prepositional complementizer' akin to English *for* (Emonds 1985) but silent, as in Kayne's (1981) approach to English ECM (exceptional case marking), is responsible for both the purpose semantics of the embedded clause and the assignment of dative case. In the simple case (which is not our focus here), C merges with an NP, rather than a TP, and assigns dative directly to its complement, resulting in a dative of purpose nominal argument, as discussed in section 4.1. As noted earlier, the ability of this prepositional complementizer to merge directly with an NP is dependent on lexico-semantic restrictions that we will not further examine.

Our primary concern is what happens when C merges with TP, the maximal projection of the embedded infinitival. Recall our observation from section 1.4 that structural, though not lexical, Case need not be assigned,

[36] Although irrelevant movements are suppressed here and in sections 5.2 and 5.3, we assume that V raises to *v* (but not to the infinitival T, since it follows the shifted object) and that EA/PRO raises to Spec-TP.

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even in the presence of an NP unvalued for Case. As discussed, a head that assigns structural Case may be merged either with or without its Case-assigning potential. Under agnostic movement, an object with unvalued Case features has no recourse but to move to the left edge of its phase in order to be accessible to a Case-assigning head that may potentially be merged. According to the Phase Impenetrability Condition in (55) above, an NP in complement position is opaque to higher syntax. It follows that the failure of *v* to assign accusative in (76) is not fatal to the derivation, provided that the object NP moves to *v*P's outer edge, its so-called 'EPP position'.[37] Such agnostic movement is not feature-driven in the standard sense: its sole purpose is to allow an NP unvalued for Case to remain syntactically active as the derivation proceeds. After the object adjoins to *v*P, infinitival T is merged. Infinitival T in Lithuanian lacks agreement features and, as such, cannot probe down into *v*'s specifier and assign nominative. As a result, the probe C, which merges next, has a 'clear path' to value Case on the object.

Note finally that if *v* had its full Case-assigning potential, the infinitive's complement would appear in the accusative and the purpose semantics would be lost, since the dative marking is the sole indicator of an Agree relation between the object and null C. It is precisely the combined effect of a non-Case-assigning *v* and the availability of agnostic movement that allows the purpose clause to converge. In this connection, recall from section 2.1 the alternative strategy that exploits the overt purpose clause complementizer *kad*. Crucial to us is the claim that *kad* occupies the same position as the null complementizer in (76). The difference between them is that overt *kad* has no Case-assigning property (it is not prepositional) and thus, as expected, induces neither LE Case nor movement. This can be seen in (20a–b), where the object within the purpose clause appears in the accusative and follows the verb.

5.2 *The genitive*

As remarked earlier, the LE genitive is a vestigial supine construction. It was a purpose phrase that consisted of an adnominal genitive construction headed by an accusative-marked NP. While bare accusative adjuncts continue to occur in modern Lithuanian, they are now primarily limited to adjuncts of time and distance. In the modern language, the supine ultimately fell together morphologically (though, to be sure, not syntactically) with the infinitive. That is, the modern supine is superficially a TP,[38]

[37] Recall that the *v*P phase is strong since it projects an external argument (EA in (76)); *v* is neither passive nor unaccusative.

[38] Possibly the supine is a bare *v*P, i.e. lacking any tense structure, which would then be what distinguishes it from the true infinitival. If so, the structure in (77) can be modified accordingly.

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like any other infinitive and, as such, does not bear Case. Yet the problem remains of how exactly to represent the distinctive supine syntax for the modern speaker.

Let us assume that verbs of motion in Lithuanian are embedded in a functional shell that includes aspectual information relevant to the semantics of motion (see e.g. Piñón 1997 on neighboring Polish). To capture the fact that motion verbs have a particular event structure that non-motion verbs lack, we include an Aspect head in the functional domain of the matrix clause that dominates lexical V. Motion verbs are intuitively felt to incorporate infinitival *to* with complement infinitivals in a way that is awkward with 'reason' purpose clauses, as in the LE dative construction discussed above.[39] Consider the following contrast in English: (i) 'they went to repair the road→they went AND REPAIRED the road' and (ii) 'they built a hayloft to keep hay→ *they built a hayloft and kept hay'. Coordination in the motion-verb example in (i) allows for a single-event interpretation, whereas in (ii) *and* functions (awkwardly) as a conjunction. Our intent here is not to provide a theory of aspect or event structure, but rather to suggest that aspect plays a role in purpose clauses dependent on matrix motion verbs in a way that it does not in other purpose clauses. Our proposal for the Lithuanian LE genitive construction is that the introduction of an Aspect head with motion semantics has the morphosyntactic reflex of selecting 'supine syntax'. In other words, the source of the genitive case on the LE object is the main clause motion verb's aspectual features.

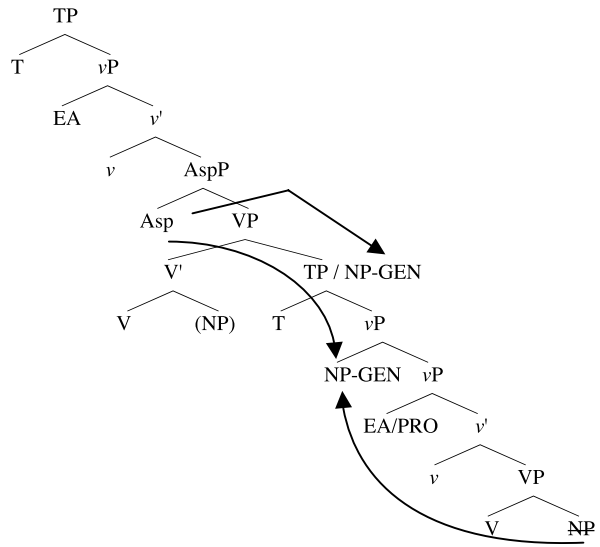
The structure for the LE genitive construction is given in (77).[40]

[39] In section 2.2 it was suggested that motion verbs and their infinitival complements may be best regarded as complex (or 'multi-headed') predicates, particularly in the case of the innovative 'V+O-GEN' structure. As noted by Durie (1997: 310), serialization always encompasses motion verbs: 'Every serializing language I have encountered includes a category of motion serialization where a verb of motion is combined with some other verb in such a way that the motion comes first and the moving argument is the agent of the second verb'. While treating the Lithuanian motion verb and its infinitival complement as a single complex event is consistent with our proposal to analyze the infinitival complement as an argument of the motion verb (in contrast with the adjunct status of the dative purpose clause), a careful treatment of complex predicate formation remains beyond the scope of this article. We suspect, however, that this process is facilitated by the reduced functional structure above these infinitivals, which we posit to be TP (or even *v*P, as in the previous footnote).

[40] Structure (77), while expressing our intuitions about the role of main clause Aspect in assigning genitive to the embedded object, raises certain technical questions and should be regarded as tentative. One obvious issue that needs to be addressed is how the matrix direct object, when present, avoids being a potential target for genitive case. The solution depends on how one treats case assignment to direct objects in general. We assume, as suggested in section 3.2, that all direct objects undergo 'short' movement, so that they at least vacate VP. In the present case, we would assume that the matrix direct object shifts to a position where it is too high to be probed by Asp.

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(77)



Note that this structure contains a matrix lexical verb dominated by an Aspect projection with which it shares particular features related to the event structure of motion verbs. The supine purpose clause is a TP within the matrix VP headed by the motion verb. Situating the supine purpose clause under VP, rather than adjoining it to the higher *v*P as proposed for the LE dative purpose clause, captures the intuition that the supine purpose clause is in some sense a complement of the verb. Motion verbs are inherently goal-directed. The purpose clause occurring with a motion verb expresses this telicity by justifying the end-point. The LE genitive addresses the question *To do what?*, while the LE dative is simply a reason adjunct, answering the question *Why?*

If we are correct that the LE genitive differs from the LE dative in being an argument, then we predict a contrast between extraction from dative vs. genitive purpose clauses. Extracting from the former should have the status of an ECP violation, since these are hypothesized to be adjuncts, whereas extraction from the latter, as arguments, should be acceptable. These are indeed the reported judgments. Compare the unacceptable attempts to question the dative object in (78) with the perfectly grammatical structures in (79).

(78) (a) *Kam pastatė daržinę [*t* sukrauti]?
what-DAT (they)-built hayloft-ACC to-keep
'What did they build a hayloft (in order) to keep?'

(b) *Kam atnešė vandens [*t* palaistyti]?
what-DAT (he)-brought water-PARTITIVE.GEN to-pour
'What did he bring some water (in order) to pour (on)?'

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(79) (a) Ko išvažiavo [*t* taisytí]?
what-GEN (they)-went to-repair
'What did they go to repair?'
(b) Ko atėjo [*t* aplankyti]?
whom-GEN (he)-came to-visit
'Whom did he come to visit?'

This contrast is precisely the kind of asymmetry predicted by our account of these two kinds of purpose clauses, since complements but not adjuncts are valid extraction domains.

As outlined earlier, the object of the embedded infinitive in (77) may remain unvalued for Case after *v*P is merged. Hence, in order to be probed by the matrix Asp head, it must undergo movement to the left edge of *v*P (its outer specifier). When, on the other hand, *v* assigns accusative to its complement, the sentence surfaces as in (31a–b), repeated in (80).

(80) (a) Atėjo [**aplankyti draugą**].
(he)-came to-visit friend-ACC
'He came to visit a friend.'
(b) Parvažiavo [**pasiimti suknelę**].
(she)-came-back to-take dress-ACC
'She came back to take the dress.'

The supine is on the decline and admits a full-fledged, Case-assigning *v* with an accusative object. Crucially, when this 'canonical' Case-assigning strategy emerges, the basic order is VO, precisely for the reasons laid out in this paper. There is no reason for an object that is already assigned Case locally to undergo the kind of movement we are describing. Finally, recall that, though semantically restricted, the genitive goal in the supine construction can appear without the embedded infinitive. When this happens, as shown in (77) above, the genitive NP adjoins to the matrix VP just as TP does for embedded infinitivals. The Asp head then probes down directly to this NP and assigns it genitive case, in the same way as it would the shifted object of a supine purpose clause.

5.3 *The nominative*

The question of nominative objects involves a rich literature, to which we intend to contribute here only modestly.[41] The LE nominative construction adds to the empirical paradigm in several important ways: (i) it exhibits a

[41] On nominative objects in Lithuanian, note, in particular, Timberlake (1974). See Babby (1991) for a related discussion of nominative objects in Old Russian. A selective sample of other work includes Yip et al. (1987), Marantz (1991), Schütze (1993), Harley (1995), Taraldsen (1995), Ura (2000), Alexiadou (2003), and Woolford (2003).

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fixed OV word order in an otherwise VO language; (ii) it admits adjuncts, which exhibit the same preverbal word order; and (iii) it occurs only in the infinitival complement of non-agreeing predicates. Our account of the source of the LE nominative will exploit the third, and most unusual, aspect of the construction. We will argue that the relevant property of Lithuanian Case marking is the ability of a functional head distinct from the tense/agreement system to license nominative on objects.

Our analysis of the nominative object in embedded infinitival clauses will be similar to that put forward for the other LE constructions: the nominative object moves to the left edge of its phase, thereby entering into the search space of some higher licensing head. There are a number of reasons why we believe these phenomena should be assimilated. Most significant is the fact that, as with the dative and genitive constructions, these nominative objects appear (discourse-neutrally) only in preverbal position. Furthermore, nominative time and distance adjuncts, which we take to be assigned Case syntactically, display exactly the same LE nominative property, as was seen in (53), repeated in (81).

(81) (a) Ne vaikui **kilometras** nueiti.
not child-DAT kilometer-**NOM** to-go
'It is not for a child to walk a kilometer.'

(b) Ne jam **valanda** išlaukti.
not him-DAT hour-**NOM** to-wait
'It is not for him to wait an hour.'

(c) Netrukus ir tau teks **kelios dienos**
soon PRT you-DAT will-be-necessary-[–AGR] several days-**NOM**
pasitraukti iš tarnybos.
to-retire from service
'Soon even you will have to leave work for a few days.'

This option is also restricted to infinitival complements of non-agreeing predicates, implying that the same Case-licensing head is at work here too, comporting well with our phase-based agnostic movement analysis of LE Case.[42] Our goal in this section will therefore be to identify the Case licensing mechanisms likely to be involved. This is not to deny the possibility that some instances of morphological case are not assigned syntactically at all, but rather post-syntactically in the Morphological Component of the grammar, perhaps by means of a morphological default value (see Marantz 1991, Schütze 2001). However, if the LE nominative were assigned default Case in another component of the grammar, it would have no obvious

[42] The non-agreeing matrix predicate in (81c) is headed by the overt modal *teks* 'it will be necessary'. In (81a–b) we assume the presence of covert modals heading the matrix clause, with similar non-agreeing morphology, as indicated by the dative subjects.

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motivation to shift in the syntax.[43] And if it were moving for some reason completely independent of syntactic Case valuation, then formal unification of the LE nominative with the other two LE Cases would be lost. Finally, we will see that the LE nominative is part of a larger pattern of nominative objects in Lithuanian under [–AGREEMENT]. Invoking default Case for the nominative and then having to drive object shift here with some feature other than Case, as suggested to us by an anonymous *JL* referee, would mean introducing two special mechanisms to accommodate facts that, we will argue, fall out from independent properties of Lithuanian syntax already, namely, agnostic movement leading to Case valuation by some probe in the matrix clause.

The question is what element might be doing this. The fact that the LE nominative object (and adjunct) occurs only with non-agreeing predicates strongly suggests that it is licensed by some head other than T, the locus of subject–predicate agreement. Recall that if the LE nominative were licensed by T, we would expect overt agreement, as in the present perfect with an NP Theme argument; cf. (50b), repeated in (82). Instead, the LE nominative occurs obligatorily with a non-agreeing matrix clause, as in (51b), repeated in (83).

(82) Man yra nusibodęs tas pats
me-DAT AUX-PRES bored-PART.MASC same-NOM.MASC
laikraštis.
newspaper-NOM.MASC
'I have gotten tired of the same newspaper.'

(83) Man yra nusibodę vis [tas pats
me-DAT AUX-PRES bored-[–AGR] always same-NOM.MASC
laikraštis skaityti].
newspaper-NOM.MASC to-read
'I have gotten bored with always reading the same newspaper.'

If, along with Harley (1995), Taraldsen (1995), and Alexiadou (2003),[44] we assume that nominative case can be valued by more than one head in the clause, then we can accommodate the fact that the LE nominative in (83) takes part in a narrow-syntactic process (Object Shift) despite the fact that it shows no morphological relationship with T.

[43] A 'Case in tiers' approach (Yip et al. 1987) would make the correct prediction, namely that nominative will surface on the first available structurally Case-marked NP, but it would face the same problems of not being able to explain the correlations with the other LE Case constructions or why Object Shift should apply (since Case is assigned by simple left-to-right association with an autonomous Case Tier).

[44] And contra e.g. Schütze (1993), Ura (2000), and Woolford (2003), who argue that all instances of nominative are licensed by T/Infl.

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The remaining problem is to identify the relevant head, an area where the Lithuanian data allow us to proceed only speculatively. Although the complete lack of agreement militates against Tense as the nominative object's source of Case in Lithuanian,[45] we have uncovered syntactic (rather than morphological) evidence that some higher head indeed serves this purpose. This syntactic evidence is movement of the nominative object to *v*P's left edge. The nominative object *in situ*, as in (84), is strongly disfavored, a fact which we take to indicate the object's lack of accessibility to its Case assigner:

(84) ?*Man yra nusibodę vis [skaityti tas pats
me-DAT AUX-PRES bored-[–AGR] always to-read same-NOM.MASC
laikraštis].
newspaper-NOM.MASC

As expected, the object can appear grammatically in complement position only in the accusative, as in (85), in which its Case is assigned locally by *v*.

(85) Man yra nusibodę vis [skaityti tą patį
me-DAT AUX-PRES bored-[–AGR] always to-read same-ACC
laikraštį].
newspaper-ACC
'I have gotten bored with always reading the same newspaper.'

Our proposal takes advantage of the fact that the LE nominative is not the only nominative-object construction in Lithuanian. Interestingly, as discussed in Lavine (1999, 2000) and Blevins (2003), and references cited therein, nominative objects also occur in the evidential *-ma*/*-ta* construction. These are non-agreeing predicates, in that the *-ma*/*-ta* participle is frozen as such.[46] The subject is expressed in the genitive and, crucially for us, the object appears in the nominative.[47]

(86) (a) Tėvo kviečiama svečiai.
father-GEN inviting-MA guests-NOM
'Father is apparently inviting guests.'
(b) Studento sudeginta namas.
student-GEN burned-down-TA house-NOM
'The student apparently burned down the house.'

[45] Lithuanian differs from Icelandic, for example, by failing to exhibit even partial subject–predicate agreement with nominative objects.

[46] Historically, /-m-/ and /-t-/ are the present and past passive participial morphemes, respectively, and /-a/ is etymologically the neuter ending, which is no longer productive since all neuter nouns in the language have been assimilated to masculine and feminine. Erstwhile neuter morphology is thus a clear indication of non-agreement in the modern language.

[47] Lavine (1999, 2000) argues, contra Blevins (2003), that Lithuanian *-ma*/*-ta* is personal, with an oblique genitive subject.

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(c) Mokytojo ištaisyta klaidos.
teacher-GEN corrected-TA mistakes-NOM
'The teacher apparently corrected the mistakes.'

The key difference between evidential *-ma/-ta* and the psych construction is the placement of the object under conditions of neutral discourse: only the embedded infinitival of the psych predicate appears discourse-neutrally in OV order. It follows under our account that the nominative object of evidential *-ma/-ta* is valued for Case locally. Note that what the two constructions share is the obligatory absence of agreement. It is, we contend, the [–AGR] property of both *-ma/-ta* and the psych verb construction that allows nominative to be licensed on the object (crucially by a head other than T).

What remains to be explained is what causes Object Shift in the psych construction but not in the *-ma/-ta* construction. We begin by provisionally assuming that matrix Aspect is the licensing head for the nominative object (following similar work on nominative objects in Icelandic; see Taraldsen 1995, Alexiadou 2003). Let us conceive of Aspect here as a cover term for the functional head between *v*P and VP that bears features for mood, voice, and transitivity, in addition to more conventional aspectual features.[48] It follows that modal Aspect is the most appropriate head to host the evidential *-ma/-ta* morphology.[49] In the psych construction, Aspect is invoked to mark a lack of transitivity: nominative is assigned to the Theme argument NP or to the object of an embedded infinitive. In the case of time and distance adjuncts appearing in the nominative, we would expect Aspect to be implicated in licensing modifiers (adjuncts) that delimit how the event is partitioned. Finally, notice that adopting a Koizumi-type split VP in non-agreeing predicates yields the observed contrast in Object Shift between the evidential *-ma/-ta* and the psych construction;[50] compare (87) and (88). Object Shift (agnostic LE movement) for accessibility to the licensing head is necessary only in the latter; in the former, Aspect can probe the object *in situ*.

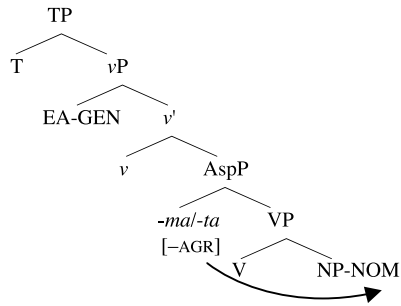
[48] Notice that the Aspect head discussed here occurs only in non-agreeing predicates. Recall that a structurally-similar Aspect head, which appears as part of a motion verb's functional shell, values genitive in the supine construction.

[49] In dialects that do not admit nominative objects, *-ma/-ta* can be followed by an object in the accusative. Here, we still assume the presence of Asp, but without its Case-assigning property; *v* assigns accusative in such instances, without causing object shift.

[50] See Koizumi 1995. Notice that in our account, an AspP, rather than an AgrP, intervenes between the two verbal projections.

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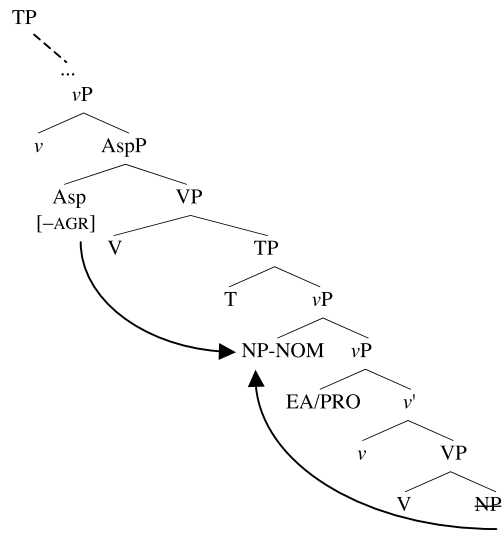
(87)



Notice now that the lack of agnostic movement in the evidential construction follows from the fact that the nominative object in (87) is in the same phase as the Asp head that we take to be the probe valuing nominative. Thus, no Object Shift is necessitated and the unmarked word order remains SVO.[51]

The hypothesized structure for the LE nominative construction can then be schematized in the tree in (88).

(88)



All essential differences between (87) and (88) derive from the fact that in (88), but not (87), the goal of the Asp probe is contained within the complement of the lower phase head (the embedded *v*). Hence, exactly as in the LE dative and genitive constructions, agnostic movement to the left edge of *v*P must take place. That is, as observed earlier, the embedded infinitival T in (88) is defective and thus (i) is not a potential nominative Case assigner and

[51] Although, as always, stylistic permutations of this basic order as necessitated by functional sentence perspective are common.

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(ii) is transparent with respect to higher syntax (namely, with respect to the Asp probe). The Phase Impenetrability Condition, however, still pertains to the lower *v*P phase, rendering the embedded object invisible to any higher probe which may be subsequently merged to value its Case (since it is contained within the complement to *v*). The object NP therefore undergoes agnostic movement to avoid otherwise inevitable crash, shifting to the left edge of the *v*P phase, as indicated in (88). In this way, the properties of the LE nominative follow from the same principles that are at work in our analysis of the other two LE constructions treated in this paper.

To sum up, let us respond to the following questions generally encountered in the nominative-object literature: (i) Are all instances of nominative (or for that matter, any) case necessarily syntactic? (ii) Is T/Infl the licensing source for ALL instances of nominative? and (iii) What kind of evidence might suggest alternative sources for nominative? First, we argued that the existence of LE nominative, that is, nominative plus Object Shift, provides strong support for treating this particular instance of nominative assignment on the object as syntactic. Next, we showed that the LE nominative does not enter into an Agree relation with matrix T, which precludes the latter as a credible source for its Case. We took our observation that the Lithuanian LE nominative is syntactic, but unrelated to T, to provide additional empirical support for the idea that nominative may be licensed by elements other than T. We then introduced the evidential *-ma*/*-ta* construction, which shares with psych-verb participles the absence of agreement and the unexpected licensing of nominative case on the object. We proposed that the relevant Case-licensing head is Aspect, with the crucial difference being that in the evidential the probe is within the same phase as the object, so that the Phase Impenetrability Condition does not come into play. The LE nominative is thus profitably analyzed by exploiting the same sort of Case-licensing mechanism involved in the LE dative and genitive constructions.

6. Concluding remarks

Our analysis of LE non-canonical object Case constructions in Lithuanian raises a number of important conceptual issues. In this concluding section, we briefly summarize our findings and examine them within their larger theoretical context.

6.1 *Recapitulation*

We have considered three distinct constructions in Lithuanian, all of which involve the assignment of some unexpected case to the direct object of an infinitive. In each construction, regardless of whether the case of the object NP is dative, genitive, or nominative, the object appears discourse-neutrally

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at the left edge of *v*P, giving rise to OV order. We argue that the object moves to the outer specifier of *v*P in order to be within the search space of a higher Case-assigner. This movement is the only option, once the *v*P phase is completed, if the object's Case features have not yet been valued. Thus, an NP unvalued for Case moves not for direct, minimalist-style feature-checking, but rather agnostically, to avoid an otherwise inevitable crash. Subsequently, a higher functional head is merged that can probe down and value the Case features of the NP which, by virtue of having raised to a position outside the complement to *v*, remains accessible to further syntax in accordance with the Phase Impenetrability Condition.

6.2 *On the nature of Object Shift*

If the account presented in this paper is correct, then the phenomenon known descriptively as 'Object Shift' must have a variety of origins. While Zwart (1997) argues that Object Shift in Dutch and German is obligatory, since it is driven by the formal requirement that Case be licensed, other well-known instances are famously optional. In Icelandic, for example, Object Shift applies only to definite NPs and to indefinites with a non-existential or quantificational interpretation (Diesing 1996). If the semantics of the construction are controlled for, Icelandic Object Shift does not appear to be triggered by a feature of a higher probe; it is not 'Case-driven', in the usual sense, and, in particular, in the sense that we have in mind for Object Shift in Lithuanian, which is neither optional nor dependent on semantic interpretation. In canonically SVO Lithuanian, the object does not normally cross the verb (or the [$_{v\text{P}}$ V *v*] complex). In the LE constructions, the Case-licensing process that gives rise to the SVO order fails (to varying degrees in the various constructions). What this means is that the object must 'shift' in order to have its Case valued. However, unlike in the more familiar Germanic types of Object Shift, the displacement we have encountered in Lithuanian does not place the object NP within the search space of some local probe, but rather places it at the edge of the *v*P phase, rendering it accessible from a higher clause. In this sense, the Lithuanian LE constructions share properties with the Germanic Object Shift phenomenon but differ from it formally.

6.3 *On the nature of structural Case*

Structural, but not lexical, Case can be divorced from theta-role assignment. Consequently, like English ECM, LE Case in Lithuanian serves as an excellent litmus test for distinguishing the two types of abstract Case. The analysis put forward in this paper therefore leads to the conclusion that the LE dative, genitive, and nominative must be structural Cases. We do not see this claim as controversial. A second property of lexical Case, again related

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to theta-theory, is the idea that it must be discharged in order for the associated theta-role to be visible at LF. Even so, there is no reason that this kind of 'Inverse Case Filter' should carry over to structural Cases. Franks (2002) specifically argues that it does not. Non-Case-assigning *v* must independently be available for phenomena such as the genitive of negation in Baltic and Slavic and, more generally, for unergative verbs. It is not therefore particularly problematic that, in the Lithuanian LE constructions, accusative can fail to be assigned to the direct object, which merges into the structure unvalued for Case and (depending on the verb) does not need any particular case. As we have suggested, the derivation can be implemented without invoking look-ahead. An NP complement not assigned Case by some local mechanism (i.e. structural accusative by *v* or lexical Case by V) will have to move to a position in which it can be assigned Case by long-distance Agree, in this way accounting for the OV order of Lithuanian LE Case. We dub this movement to the outer specifier of the containing phase 'agnostic' movement, in that it is forced by the NP's need to remain syntactically active. Failure to shift to the left edge of *v*P would leave the Caseless NP in an opaque environment, resulting in certain fatality, whereas movement may lead to valuation of its Case features and eventual salvation of the derivation.

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