Mood and a transitivity restriction in Lithuanian: The case of the inferential evidential*

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The Inferential Evidential reports events not directly observed by the speaker. Evidentiality in Lithuanian is encoded by means of a non-finite main clause predication enforced by a modal head that selects a non-finite TP, similar to the neutralization of tense distinctions in other marked moods. Non-finite, non-agreeing T fails to assign nominative to the subject. In the Inferential Evidential, a VOICE head, below T, hosts a vestigial passive morpheme, serving as a source for oblique subject case, while stripping the predicate of its transitivity property. So while the predicate's valency is not altered, its accusative case-assigning potential is. This results in an oblique subject — nominative object construction, the morphosyntax of which is elucidated in a theory of case involving the key features of VOICE, CAUSE, and default object case. An analysis is presented for default nominative on the object, which has the added benefit of accounting for variation in speaker judgments concerning the acceptability of the nominative object and the preference for Inferential Evidential forms based on intransitive predicates.

Keywords: Inferential Evidential, non-finite Tense, Case and Agreement, ν -VOICE, ν -CAUSE, voice-bundling, transitivity restriction, default case

1. The Inferential Evidential

This paper is concerned with the morphosyntax of the Lithuanian Inferential Evidential, marked formally by a non-agreeing passive participle in the absence of a tense-marking auxiliary and a genitive-

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marked subject¹. In the case of two-place predicates, as in (1), the object is marked nominative.

(1) Ingos nuraminta vaikas.
Inga:GEN calm-down:[-AGR] child:NOM
'Inga must have calmed the child down.'

The example in (1) is felicitous in a situation in which the speaker infers that the child's observed calm state was caused by Inga, but has no personal or direct knowledge of the event. Compare the evidential in (1) with the indicative in (2), in which personal knowledge of the event on the part of the speaker is assumed in the absence of this evidential syntax. In (2) we observe the expected nominative–accusative pattern for transitive verbs.

(2) Inga nuramino vaiką.
Inga:NOM calm-down:3.PST child:ACC
'Inga calmed the child down.'

The examples in (1) and (2) differ solely in terms of mood, so we might expect the category of mood (or its morphosyntactic consequences) to play some role in determining tense and case-marking possibilities. Note, crucially, in (3) that accusative on the object in the case of the evidential in (1) is ungrammatical². Additional examples are given in (4–5).

(3) *Ingos nuraminta vaiką.
Inga:GEN calm-down:[-AGR] child:ACC

¹ This impersonal form is sometimes referred to as the 'Passive Evidential'. I will avoid this term, since I will argue against the idea that the Inferential Evidential realizes an extension of the passive proper (following Holvoet 2001 and Lavine 2006). As Holvoet (2007) notes, following Ambrazas *et al.* (1997), this form also allows quotative and mirative interpretations. Passive participial *-ma/-ta* is etymologically neuter (and remains tensed: *-ma*:PRES; and *-ta*:PST). The forms were reanalyzed as markers of non-agreement after all erstwhile neuter nouns in the language were assimilated to either masculine or feminine. As such, predicate-final *-ma/-ta* will be glossed simply as '[–AGR]'.

² The Inferential Evidential is a feature of East and South High Lithuanain dialects (Ambrazas 1990, 207, 228). To speakers of Samogitian Lithuanian, or others for whom this construction is not part of the living language, the non-finite predicate may be treated on a par with a transitive verb, thus admitting the accusative (See Schmalstieg 1988, 36, and sources cited therein, for further discussion).

- (4) Motinos sudeginta savo namas /
 motinos:GEN burn-down:[-AGR] own house:NOM
 *namq
 house:ACC
 'The mother apparently burned down her own house.'
- (5) Jo rašoma laiškas / *laišką. he:GEN write:[-AGR] letter:NOM letter:ACC 'He is evidently writing a letter.' [Ambrazas 1990, 207]

I will refer to the non-appearance of accusative in the evidential as the 'transitivity restriction'. While the Inferential Evidential is clearly not passive in voice, I will show that the transitivity restriction has something to do with (i) the residual predicate-final passive participial morphology; and (ii) the nature of the functional head ν , which dominates lexical VP in the syntactic representation, and provides information concerning the nature of voice, causation, and case-assigning possibilities. An odd fact about the distribution of the Inferential Evidential is its wider usage (and greater acceptance among speakers) in intransitive contexts. So while there is certainly no semantic restriction on the use of the Inferential Evidential in two-place predicates — i.e., there is no sense in which the evidential interpretation is incompatible with the presence of an object — there appears to be a restriction of a different sort, namely a syntactic restriction, having to do with the availability of 'internal case' for the object. As mentioned above, nominative is preferred to accusative for object case in this construction, but, as I will show, there is no straightforward case-assigning mechanism for the object, such that the construction by many is simply avoided. This is in sharp contrast to the use of the Inferential Evidential in one-place predicates, as in (6–7), which are uncontroversial on the inferential interpretation:

- (6) Eskimų tenai ne kartą gyventa.
 Eskimos:GEN there not once live:[-AGR]
 'Eskimos must have lived there more than once.'
 [adapted from Geniušienė 1973, 125]
- (7) Mano užmigta.
 me:GEN fall-asleep:[-AGR]
 'I must have dozed off.' [Holvoet 2007, 102]

2. An Excursus on Case and Agreement

The primary goal of this work is descriptive — to provide a description of the Inferential Evidential with special attention to the question of case, particularly as it concerns the transitivity restriction described above. Along the way, I will suggest a new approach to some previously published data, while at the same time contributing modestly to the empirical base itself.

The discussion of case and agreement will be couched in a modified version of current minimalist syntax (Chomsky 2001). On this approach, structural case on NPs is licensed by a functional head with the appropriate matching features — agreement on T (Tense) for nominative; and features that relate to 'inner aspect' ([\pm TELIC]) or event structure ([\pm CAUSE]) on ν for accusative (Kratzer 2004, Borer 2005, Lavine 2010). Accusative is sometimes held to be licensed by mere association with a variety of ν that is argument projecting — namely, a ν head that projects an Agent argument in its specifier (Chomsky 1995, ch. 4; Kratzer 1996).

Let us now assess the Inferential Evidential in (1), repeated in (8), against the case licensing mechanisms just summarized.

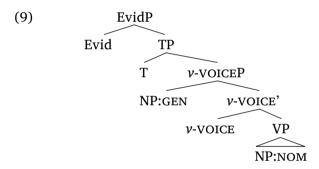
(8) Ingos nuraminta vaikas.
Inga:GEN calm-down:[-AGR] child:NOM
'Inga must have calmed the child down.'

Nominative fails to occur on the subject for the familiar reason that T is not active for agreement. In languages that have oblique subjects, such as Icelandic, agreement features in T license nominative on the object, usually under partial agreement (for number, but not person; see Boeckx 2000, among others). In the case of the Inferential Evidential in Lithuanian, T is non-agreeing and, thus, should be equally inert as a source for nominative case on the object. So while the object is nonetheless marked nominative, its source remains mysterious, at least on the theory outlined above. In fact, the object in (8) meets all the conditions outlined above for valuation as accusative by ν : the predicate is both telic and causative; and the predicate contains an Agent, suggesting that ν in this instance should be an active accusative assigner.

To summarize, nominative is not available on the subject in (8), as correctly predicted on a theory that treats nominative on an NP as a

reflex of agreement with T. The subject instead appears in the genitive. The object in (8) also fails to agree with T, although it still occurs in the nominative, exceptionally. Finally, there is no principled reason, *a priori*, to rule out accusative on the object — though it is judged ungrammatical by speakers of High Lithuanian, where the Inferential Evidential is used.

Within the theoretical literature, it has been known for some time that linking the argument-projecting property of ν (i.e., its projection of an Agent) with its transitivity property (i.e., its ability to assign accusative) is problematic. This is because accusative can occur in the absence of an Agent (Lavine 2000, 2005, 2010; Bowers 2002; Markman 2004; Pylkkänen 2008); and now we see in the case of the Inferential Evidential that accusative can FAIL to occur in the PRESENCE of an Agent. In (9), I schematize the structure outlined above, with some elaboration:



Note, first, that there is no evidential morpheme in Lithuanian. The inferential interpretation arises as a result of a non-finite predication, which, I will suggest, is enforced by a covert Evid head (EvidP is a modal variety of CP). Evidence for a modal head dominating the proposition (TP) is based on the observation that many languages show some kind of correlation between irrealis mood and non-finite morphology (see Section 3). As for the feature content of ν , note in (9) that I take the Agent-projecting property (VOICE) and the transitivity property (CAUSE) to be bundled into the single head: ν -VOICE (following Pylkkänen 2008)³.

³ Pylkkänen (2008) proposes that languages differ with respect to whether ν -VOICE and ν -CAUSE are bundled as a single head or projected as separate 'unbundled' heads. The significance of Pylkkänen's 'Voice-Bundling Parameter' is discussed in Section 5.

Recall that the principal concern of this paper is case. The lack of nominative on the subject of Inferential Evidentials is explained by non-finite, non-agreeing T. Meanwhile, the unexpected appearance of nominative on the object remains a problem for minimalist-style case-licensing mechanisms. It will be suggested that this instance of nominative is 'non-syntactic', in the sense that it is not associated with any feature, such as those discussed above. On this analysis, nominative on the object is an instance of 'default case', spelled-out post-syntactically. Finally, genitive on the subject NP will be treated as an intrinsic lexical property of the *-ma/-ta* morpheme, in the same way that the subject of the gerund (*padalyvis*) is lexically specified by the gerundive affix to realize dative. Matters of case are taken up in greater detail in Section 5.

3. Mood and Non-Finiteness

The effect of marked mood on tense is a rather general phenomenon⁴. Observe, for example, the link between epistemic modality and the neutralization of Tense in the case of English *can/could*, discussed by Stowell (2004, 625):

- (10) a. *Jack's wife can't be very rich*. [it is not possible that Jack's wife is very rich]
 - b. Jack's wife couldn't be very rich.[it is not possible that Jack's wife is very rich;*it was not possible that Jack's wife was very rich]

In both (10a-b) the epistemic modal evaluation holds at the actual utterance time (UT); *could* does not report a past tense (PT) interpretation. Compare the root (dynamic) modals in (11):

(11) a. *Jack can't move his hand*. [ability at UT] b. *Jack couldn't move his hand*. [ability at PT]

It is well known that marked moods often exhibit a reduction in tense

⁴ The discussion in this section relies, in part, on Lavine (2006).

distinctions (see Palmer 2001 for discussion). Consider the English subjunctive in this connection, exemplified in (12)⁵:

- (12) a. She requested [that he have a second chance].
 - b. They demanded [that he **produce** his identity card].
 - c. The nurse insisted [that he not **get** out of bed].

In the examples in (12), the subjunctive mood suppresses finite Tense—embedded T appears to be either plainly uninflected (that is, non-finite) or to contain a null modal with the direct consequence of suppressing any other form of inflection.

The evidential in Lithuanian likewise suppresses finite Tense⁶. It is wholly dependent on the combination of participial morphology and zero- or non-finite auxiliaries. In the case that an auxiliary occurs in the Inferential Evidential, it occurs in the same non-finite -ma/-ta form⁷:

(13) Tada mūsų jau **būta** atsigulta. then we:GEN already AUX: [-AGR] lie-down: [-AGR] 'We had evidently already gone to bed by then.' [Ambrazas et al. 1997, 284]

Note also that the Lithuanian evidential is not always passive in form, only non-finite. A second evidential form bears agreeing **active** participial morphology, marking it as a modified perfect tense construction, but crucially occurs either with no auxiliary (14a–b) or with the active participial form of the 'be' auxiliary (14c), mirroring the constructional template of the Inferential Evidential: a participle serving as the main predicate, optionally co-occurring with the same participial form of the auxiliary. The Perfect Evidential encodes reported speech or hearsay, as indicated in the English glosses in the examples below:

⁵ The examples in (12) are due to Radford (2009, 107). See Radford (107–109) for additional discussion.

⁶ Peter Arkadiev (p.c.) points out that the treatment of evidentiality as a mood is not uncontroversial. Some fold evidentiality into epistemic modality, others treat epistemic modals as evidentials, and still others treat evidentials as a separate category altogether (see Portner 2009, 167–172, and sources cited therein). Note that I am treating the Inferential Evidential as a syntactic category, rather than a category of verbal morphology, consistent with Holvoet (2007, 90–91). The Inferential Evidential thus constitutes 'notional mood' (in the sense of Portner 2009, 259–262) in that it performs the same function as verbal mood, but is not expressed on the verb.

⁷ Recall that the tense distinction between PRES: -ma and PST: -ta is retained on non-finite T.

(14) Perfect Evidential

- a. *Jonas* rašęs laišką.

 Jonas:NOM.M written:PST.ACT.PART.M.SG letter:ACC

 'They say Jonas wrote the letter.'
- b. *Jis žinąs kelią.*he:NOM.M known: PRES.ACT.PART.M.SG way:ACC
 'He supposedly knows the way.' [Ambrazas 1990, 230]
- c. Jis esąs
 he:NOM.M AUX:PRES.ACT.PART.M.SG
 atsiskyręs nuo žmonos.
 divorced:PST.ACT.PART.M.SG from wife.
 'He is reportedly divorced from his wife.'
 [adapted from Schmalstieg 1988, 114]

We can speak, then, of a unified evidential system in the language, which hinges neither on passive participial nor on active participial morphology, but rather on predicative non-finite verb forms, with the optional 'support' of non-finite auxiliaries⁸. Let us suppose that the primary syntactic function of the Evidential projection in (9) is to select a non-finite T (similar to the suppression of inflection on T in the English epistemic modal in (10) and subjunctive in (12)).

It has been observed that this non-finite predication appears to be an areal feature found in genetically-unrelated languages of the Baltic region, where non-finite participial predicates are evidential for both Baltic (Lithuanian and Latvian) and Finnic (Estonian and Livonian) (Wälchli 2000, 194–197). Indeed, the pattern extends beyond contact to Bulgarian (South Slavic), which has a 'renarrated' perfect evidential formed by removing the third-person auxiliary from the perfect construction, as in (15)°. In (16), the auxiliary appears in participial form, giving an emphatic reading, which is identical, in both form and function, to the use of the auxiliary in the Lithuanian Inferential and Perfect Evidentials.

 $^{^8}$ Ambrazas *et al.* (1997, 282–284) and Holvoet (2001, 83) note that use of the participial form of the auxiliary reinforces the evidential reading. See also Wälchli (2000) for related discussion.

⁹ See Izvorski (1997) and Pancheva (2005) for much relevant discussion. Holvoet (2007, 92) suggests that the perfect evidentials in Lithuanian and Latvian are derived from a basic perfect, as in the case of the Balkan renarrated evidential.

(15) Bulgarian Renarrated Perfect Evidential

Maria (*e) celuvala Ivan.

Maria AUX kissed:PST.ACT.PART Ivan

'Maria apparently kissed Ivan.'

(#I witnessed it / #I know it for a fact) [Izvorski 1997]

(16) Bulgarian Emphatic Renarrated Perfect Evidential *Včera v Sofia bilo valjalo*.

yesterday in Sofia be:PST.ACT.PART rain:PST.ACT.PART 'It rained yesterday in Sofia.'

(I heard it said/I gather/#I witnessed it) [Pancheva 2005]

As Wälchli (2000) shows, the relation between a non-finite predication and a modal interpretation is of some typological significance. Whereas finite T asserts the truth of a proposition (it is either true or false), a non-finite predicate embedded under an Evidential Mood projection makes no such assertion (or, rather, as Peter Arkadiev suggests (p.c.), the evidential asserts truth as well, but qualifies it).

4. The Inferential Evidential is not Passive

At first blush, it appears plausible to explain the case pattern of the Inferential Evidential as 'passive' (see Gronemeyer 1997 for such an account). In the passive in (17), the underlying object is marked nominative by NP-Raising to subject position. The initial Agent appears in the genitive, the standard case in the language to mark the passive *by*-phrase:

(17) Passive

Hana buvo apgautà (savo Hana:NOM.F.SG AUX:PAST deceived:PASS.F.SG self sesių).

sisters:GEN.PL

'Hana was deceived by her sisters.'

We might then consider the Inferential Evidential in (18) a scrambled version of the passive in (17), motivated by familiar considerations of functional sentence perspective (topic–focus, etc.):

(18) Inferential Evidential

Jos sesių apgáuta Hana. her sisters:GEN deceive:[-AGR] Hana:NOM 'Her sisters apparently deceived Hana.'

The important difference to note between (17) and (18) is that one is not a paraphrase of the other ¹⁰. The Inferential in (18), for example, as a modal expression akin to epistemics, pertains to the speaker's knowledge, reporting a qualified assertion of truth. A second difference between the two sentences concerns thematic relations. In the passive in (17), 'sisters' is 'dethematized' and, it follows, appears in the genitive as an optional adjunct. By way of contrast, the same genitive NP 'sisters' in (18) is a fully-thematic Agent. That is, in (18) there has been no change in the predicate's basic valency or argument mapping.

On the view that the Inferential Evidential is a kind of passive, it is surprising that the most frequently encountered Inferential Evidentials in the language are formed from unaccusatives and weather verbs — that is, predicate types that have no passive counterpart. As Holvoet (2001, 83) observes, "the 'nucleus' of the category of the evidential passive [i.e., the Inferential Evidential] does not coincide with the 'nucleus' of the passive proper...". The examples in (19–20) are not to be interpreted as "exotic passives" (*pace* Timberlake 1982), but rather as well-behaved evidentials, similar only in form to the passive.

(19) Unaccusatives

- a. Čia turbūt ir grybų esama.

 here evidently even mushrooms:GEN be:[-AGR]

 'There must be mushrooms here.'

 [Ambrazas et al. 1997, 282]
- b. Ledo staiga ištirpta.ice:GEN suddenly melted:[-AGR]'The ice must have suddenly melted.'

¹⁰ Note the use of stress marks on *apgauta* in (17) and (18). The grave stress on *apgauta* in (17), which indicates short intonation, marks the feminine singular (and, thus, agreement for gender and number with *Hana*). The acute stress on the stem of *apgauta* in (18), which indicates falling intonation, marks the non-agreeing (neuter) -ma/-ta form.

c. Panašių atsitikimų būta ir kituose kraštuose. similar events:GEN be:[-AGR] and other areas:LOC 'There were apparently similar events in other areas as well.' [Geniušienė 1973,123]

(20) Weather Verb

Čia būta pasnigta. here AUX:[-AGR] snowed:[-AGR] 'It must have snowed here.'

An Inferential Evidential can even be formed from a passive, itself a derived unaccusative, yielding, on the passive analysis, a typologically unknown "repassivized" form, as in (21) (based on the passive in (17)):

(21) 'Repassivization'

Hanos būta (savo sesių) Hana:GEN.F.SG AUX:[–AGR] self sisters:GEN apgautos.

deceived:PASS.GEN.F.SG

[Lit: 'by Hana it is been deceived by her sisters'] 'Hana has apparently been deceived by her sisters.'

In (21), the passive 'be' auxiliary ($b\bar{u}ta$) is itself non-finite and passive in form. The main verb appears as a predicate nominal, agreeing in case, gender, and number with the sentence-initial genitive NP. Note that 'passive' $b\bar{u}ta$ belongs to the Inferential Evidential construction, i.e., whenever $b\bar{u}ta$ appears with a genitive subject the reading is evidential.

To summarize the discussion in this section thus far, the Inferential Evidential, as a variety of the passive, would resolve the anomalous casemarking pattern, where the subject is marked genitive and the object is marked nominative. On such a passive analysis, the genitive subject would be interpreted as a preposed (topicalized) passive by-phrase, while the nominative object would be understood as a derived subject, where it would be assigned nominative by T. Among the problems for the passive analysis marshaled thus far, perhaps most fatal is the problem of relying on a non-agreeing, non-finite T to license nominative on the underlying object. Non-agreeing T is not a case assigner. Other problems for the passive analysis include the fact that only the Inferential Evidential, but not the passive, receives a modal interpreta-

tion; the Inferential Evidential does not alter the verb's basic valency; and the Inferential Evidential is most frequently formed on the basis of precisely those verb types that are not passivizable: unaccusatives and zero-place ('weather') predicates. The Inferential Evidential can even be applied to verbs that have already been passivized, yielding typologically unknown 'repassivized' forms (Lavine 2006).

Before concluding this section, note that the Inferential Evidential requires the absence of a finite auxiliary (as discussed in Section 3). Finite, tense-marking auxiliaries are incompatible with the evidential reading, as indicated in (22):

(22) *Vaiko* (*buvo / *yra) sudaužyta puodelis. child:GEN AUX:PST AUX:PRES broke:[-AGR] cup:NOM 'The child apparently broke the cup.' [Gronemeyer 1997]

For additional evidence that the sentence-initial genitive NP in the Inferential Evidential is a genuine subject, and not a passive *by*-phrase, compare the anaphor binding facts in (23a–b):

(23) Inferential Evidential

a. $Motinos_i$ sudeginta $savo_i$ / $jos_{*i/j}$ mother:GEN burned-down:[-AGR] REFL her namas.

house:NOM

'Mother apparently burned down her own house.'

Passive

b. Motinos_i buvo sudegintas mother:GEN AUX:PAST burned-down:M.SG ??savo_i / jos_{i/j} namas. REFL her house:NOM.M.SG 'By mother was burned down her own house.'

The example in (23a) indicates that the sentence-initial genitive NP binds the possessive reflexive only in the case of the Inferential Evidential. The preposed *by*-phrase of the canonical (agreeing) passive in (23b) does not show this subject property, indicating that it occupies a higher (A-bar) position (presumably a topic position), from which anaphor binding is not possible.

Up to this point, it has been demonstrated only that the Inferential

Evidential is not a kind of passive, **in voice** (following Holvoet 2001, 2007 (4.3), and Lavine 2006, among others). That is, the Inferential Evidential does not rearrange, add to, or reduce from the predicate's basic argument structure. However, the extension of the Lithuanian evidential from the active participial paradigm to the passive carried with it the crucial consequence of reducing not the valency of the predicate, but its case-marking potential. Inferential Evidentials of the type in (1), repeated below as (24), are two-place predicates coerced into a syntactic frame that provides only a single case (subject genitive):

(24) Ingos nuraminta vaikas.

Inga:GEN calm-down:[-AGR] child:NOM

'Inga must have calmed the child down.'

On the analysis to follow directly, -ma/-ta, as part of the passive paradigm (even if not voice-altering), is generated as the head of v-VOICE, where it has the dual function of serving as a genitive-case assigner to its most local argument and suppressing the predicate's accusative case-assigning potential. Nominative, on this analysis, occurs by default, an awkward strategy, to be sure, but one that accounts for the less-than-robust judgments on the part of native speakers for the nominative object and the related preference for intransitive Inferential Evidentials (i.e., the transitivity restriction).

5. Toward a Syntax of the Inferential Evidential

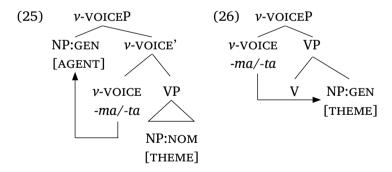
As described above, the distinguishing feature of the Inferential Evidential is the co-occurrence of the non-agreeing participle with a genitive subject. What remains is to account for the anomalous case pattern, to which I now turn in the syntactic terms previewed in Section 2.

5.1 Subject Case and -ma/-ta

Let us consider first the status of predicate final -ma/-ta. It might be argued that -ma/-ta, an erstwhile token of the passive paradigm, has been reanalyzed as a marker of evidentiality. An analysis in which the Evidential head is realized as -ma/-ta is immediately undermined by the fact that the Lithuanian evidential is not always passive (in form),

only non-finite. Recall that the Perfect Evidential, exemplified in (14), is based on a non-finite predication involving an **active** participle. The sole purpose, then, of the (covert) Evid head is to select a non-finite T, regardless of how the predicate might eventually be spelled out.

We now turn to the question of -ma/-ta and subject case. Upon the assimilation of all neuter nouns in the language as either masculine or feminine, erstwhile neuter (now, non-agreeing) -ma/-ta ceased to belong to a productive paradigm, rendering the morpheme available for reanalysis. Holvoet (2007, 92–94, 104) speculates that once the Perfect Evidential became established in the language on the basis of the active participle, this participial predication then spread to the passive paradigm, now providing a new function for the 'old' -ma/-ta morpheme. As an erstwhile marker of the passive, let us place -ma/-ta in the head of ν -VOICE, the syntactic position that would otherwise alter the predicate's ability to project a subject argument in its specifier, bearing in mind that -ma/-ta now has no effect whatsoever on the verb's underlying argument structure. In the case of two-place agentive predicates and unergatives, a subject appears in Spec, v-VOICE; in the case of unaccusatives, Spec, v-VOICE is not projected. A principal function of -ma/-ta is its genitive case-assigning property. The relevant structure in (9) is now repeated in (25) and (26):



(25) schematizes the idea that -ma/-ta assigns genitive as an intrinsic lexical property. The -ma/-ta morpheme assigns genitive locally, to its specifier. In the absence of an argument in Spec,v-VOICE — that is, for unaccusatives — genitive is assigned 'long-distance' to V's NP-complement, as in (26). The thematically most prominent argument subsequently moves to Spec,TP to satisfy T's EPP requirement, which states that T must have a subject of some sort, regardless of its theta role.

Note finally that the mechanism of lexical case assigned by predicate-final morphology is not limited to this single construction. Gerundive -ant/-us, for example, assigns dative to its subject, as in (27–28) 11:

(27) Gerund (padalyvis)

Mums besišnekant atsidarė durys.
us:DAT talk:GER.PRES opened door:NOM
'While we were talking, the door opened.'
[Ambrazas et al. 1997, 675]

(28) Gerund (padalyvis)

Broliui grįž**us**, aš atsiguliau. **brother:DAT** returned:GER.PST I:NOM lay-down 'Brother having returned, I went to bed.' [Ambrazas *et al.* 1997, 675]

5.2 The Nominative Object

The relationship between mood and the transitivity restriction in the Inferential Evidential trades on the idea that the Evidential head selects a non-finite predicate, realized on the verb by a vestigial passive morpheme, which suppresses accusative. Thus, it would be overly facile to describe the Inferential Evidential as entirely unrelated to the passive (see Holvoet 2007, 105). As suggested above, while not voice-altering, -ma/-ta has morphosyntactic consequences, namely removing the predicate's internal structural case-assigning potential. Meanwhile, non-finite, non-agreeing T is just as incapable of assigning nominative to the object as it is to the subject. The result is that the nominative object has no source for case, structural or lexical, and is thus syntactically 'detached'.

¹¹ When embedded, the gerundive subject is assigned accusative, rather than dative, superficially resembling an ECM or raising-to-object construction. See Arkadiev (to appear) for an analysis of these facts that does not rely on gerundive morphology as a lexical case assigner.

5.2.1 On the Failure of Accusative

Let us first examine the effect of -ma/-ta on v's accusative case-assigning potential. v-voice is standardly held to combine two properties in a single head: (i) the argument-projecting property; and (ii) the transitivity property. The argument-projecting property refers to the syntactic merger of an external argument, typically, an Agent. If projected, the Agent will occupy the Spec, v-VOICE position. On some theories, the mere presence of an external argument is sufficient to guarantee the second property of ν , transitivity — the accusative case-assigning property (Chomsky 1995, Kratzer 1996). Other work on ν (such as Harley 1995, Folli & Harley 2005, Pylkkänen 2008, and Lavine 2010) identifies the transitivity property with causation. Causative ν , on this theory, assigns accusative; non-causative ν , such as the ν projected in the case of passives and unaccusatives, fails to assign accusative. Indeed, ν was first proposed to host the overt causative morpheme for languages that have productive causativization. Other languages were assumed to 'activate' causative ν via covert causative morphology, so as to distinguish, for example, English causative and inchoative break, burn, freeze, drown, etc. 12 The idea is that the transitivity property (in the case of eventive verbs) is linked to the presence of a causative subevent. The root verb BREAK, for example, enters the structure neither inchoative nor causative. If ν is causative, then a second argument with causative semantics is necessarily projected. Causative ν may be said to host the Lithuanian causative morphemes -(d) in- and -(d)y-, distinguishing, for example, degti 'burn' from deginti 'make burn, fry'; and pykti 'be angry' from pykdyti 'make angry, enrage'.

Now if causative morphemes (overt or covert) co-occur in the same head position with other material in ν -voice, we get the reading dictated by the voice morphology, which structurally dominates the former, giving passives, for example, typically without accusative. See (29), where overt causative -(d) ν - combines with the voice head -ma/-ta, predictably suppressing the transitivity (accusative) property — again, not because -ma/-ta is passive, but due to its vestigial position as the head of ν -voice:

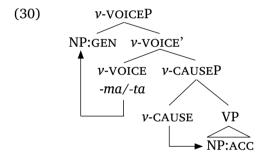
¹² See Pesetsky (1995) for background on covert causative morphology.

(29) Jono užpykdyta Tomas / *Tomą.

Jonas:GEN make-angry:[-AGR] Tomas:NOM Tomas:ACC

'Jonas must have angered Tomas.'

Note that -ma/-ta is not accusative-suppressing by itself. If the two properties of ν were teased apart, such that ν -VOICE was concerned solely with the status of the external argument (and matters of voice, more generally), and ν -CAUSE was concerned solely with the predicate's transitivity property, then we could imagine a predicate type in which accusative occurred regardless of the predicate's specification for voice, so long as the predicate were causative. In fact, this, in principle, would be the only way to overcome the transitivity restriction on the Inferential Evidential. This idea of a 'split- ν ' is schematized below in (30):



According to Pylkkänen (2008), languages differ on the very dimension of whether ν occurs as a single head (where VOICE and CAUSE are 'bundled') or as two 'unbundled' heads, whereby ν -CAUSE occurs independently of ν -VOICE. The tree in (30) creates the logical possibility of accusative in the presence of passive morphology (since ν -CAUSE functions independently). Indeed, this is precisely the case for a cognate construction in neighboring Polish and Ukrainian, as given in (31–32), respectively: ¹³

¹³ Polish and Ukrainian '-no/-to' constructions are discussed extensively in Lavine (2005). The forms /-no/ and /-to/ are allomorphs of the neuter singular past passive participle, corresponding to the short form (nominal) declension of adjectives, which is otherwise no longer in use in the languages, thus rendering these forms morphologically isolated in the exact sense of Lithuanian -ma/-ta. The present passive form, corresponding etymologically to Lithuanian /-ma/, is not used.

(31) Polish

- a. Znaleziono niemowlę w koszu. found:[-AGR] baby:ACC in basket 'They found a baby in a basket.'
- b. Wsadzono cudzoziemca do więzienia. placed:[-AGR] foreigner:ACC to prison 'They put a foreigner in prison.'

(32) Ukrainian

- a. Kulju bulo rozirvano cvjaxom.balloon:ACC was pierced:[-AGR] nail:INST'The balloon was pierced by a nail.'
- b. Xatu bulo spaleno blyskavkoju.
 house:ACC was burned-down:[-AGR] lightning:INST
 'The house was burned down by a strike of lightning.'

Like the Lithuanian forms in -ma/-ta, these constructions are not passive. The Polish form is active, with a human agentive subject, plural in reference, but not pronounced (equivalent to arbitrary PRO). Ukrainian does form a genuine passive in -no/-to, however the forms given in (32) are 'causative unaccusatives'. They are not passive because they originate without an Agent argument. ν -CAUSE is identified as active by a non-Theme argument with causative semantics (the instrumental NPs). In both cases, ν -CAUSE is not argument-introducing (so occurs without a specifier, as in (30)). In the Polish examples in (31), the unpronounced Agent is introduced by ν -VOICE. The point for our purposes is that the transitivity restriction is lifted precisely under these circumstances — when ν 's VOICE and CAUSE features appear unbundled (Lavine 2010).

It follows that the transitivity restriction in the Lithuanian Inferential Evidential is a function of the setting for the Voice-Bundling Parameter. Accusative does not occur in the Inferential Evidential because ν -CAUSE in the language does not function independently of ν -VOICE. If it did, we would expect the Lithuanian variants of Ukrainian (32) to appear licitly, as in (33), where such forms are patently ungrammatical ¹⁴:

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 $^{^{14}}$ To avoid confusion with default passive forms in -ma/-ta, the hypothetical forms in

- (33) Lithuanian (cf. (32a-b))
 - a. *Balioną pradūrė vinimi.
 balloon:ACC pierced:3.SG nail:INST
 [Intended: 'The balloon was pierced by a nail.']
 - b. *Namą sudegino žaibu.
 house:ACC burned-down:3.SG lightning:INST
 [Intended: 'The house was burned down by a strike of lightning.']

To be sure, the examples in (33a–b) are ungrammatical only on the reading in which there is no unstated Agent that is manipulating the nail or the lightning. The example in (33b) is judged as particularly deviant due to the pragmatic impossibility of human control over lightning. In Lithuanian (33), in contrast to Ukrainian (32), the instrumental NPs must occur with an Agent (e.g., *Kas pradūrė balioną vinimi?*). Note, in contrast, that in Ukrainian (32a), *kulju* 'balloon:ACC' and *cvjaxom* 'nail:INST' are the sole arguments of the two-place predicate *rozirvaty* 'pierce'; there is no implied Agent manipulating the nail. Notice, more generally, that the Instrument (and Natural Force) role varies across languages as to whether it can function as the primary cause of an event or only secondarily, through the action of an Agent. It is only in those languages in which *v*'s transitivity property (*v*-CAUSE) occurs independently that an Instrument or Natural Force alone is sufficient to cause an event to be initiated.

The examples in (33) appear grammatically as in (34):

- (34) Lithuanian (cf. (33a-b))
 - a. Balioną pradūrė vinis.
 balloon:ACC pierced:3.SG nail:NOM
 'A nail pierced the balloon.'

Travu vyžglo solncem. grass:ACC burned:[-AGR] sun:INST 'The grass was scorched by the sun.'

⁽³³⁾ are built on finite predicates with default third-person morphology, mirroring the causative unaccusative construction in Russian in (i):

⁽i) Russian

b. Namą sudegino **žaibas**.
house:ACC burned-down:3.SG lightning:**NOM**'A strike of lightning burned down the house.'

It is precisely the requirement for nominative *vinis* and *žaibas* in (34a–b) that illustrates the bundling of ν -VOICE and ν -CAUSE: arguments projected by ν -VOICE are traditional subjects, as indicated in the English translations. In ungrammatical (33), there is no independent ν -CAUSE and, thus, no interpretation for the instrumental NP as the primary initiator of the event (and no source for accusative on the object NP, since there is also no argument-projecting ν -VOICE). In the case of the Inferential Evidential, to review, the question is whether passive participial morphology can co-occur with accusative, as it does in Polish and Ukrainian. We see that accusative fails in the Inferential Evidential for the same reason it fails in (33): there is no causative sub-event, independent of the value of VOICE, which instantiates the transitivity property¹⁵.

5.2.2 On Nominative as Default

On the analysis presented here, the transitivity restriction in the Inferential Evidential is a restriction on accusative assignment, rather than a preference for nominative. I will argue in this section that nominative in the Inferential Evidential is not determined by the syntax — there is no feature that assigns nominative on the object. Nominative is assigned, instead, by default. Default spell-outs of inflectional morphology are pervasive in the world's languages. In certain morphologically-impoverished languages, like English, accusative is the default, while in certain morphologically-rich languages, like Lithuanian, the default is nominative (Schütze 2001, 229)¹⁶. By way of example, consider default case under IP (= TP) ellipsis, a classic environment for default case on the subject since the elided TP removes the source for subject case (Schütze 2001, 211–212). Compare the English examples (35–36) with their Lithuanian counterparts in (37–38):

 $^{^{15}}$ On this account, those speakers who admit the accusative in the Inferential Evidential must no longer treat -ma/-ta as a VOICE morpheme.

¹⁶ This is by no means a statement as to what determines a default value cross-linguistically, about which I make no claim.

- (35) Q. Who wants to play this game?
 A. Just me/*I
- (36) Who will take care of him if not us/*we?
- (37) Q. *Kas nori žaisti šį žaidimą?*'Who wants to play this game?'
 A. *Tik aš / *mane.*just I:NOM me:ACC
- (38) Kas juo rūpinsis jeigu ne mes / *mus?
 who him:INST will-care-for if not we:NOM us:ACC

Note that not all nominative objects are assigned by default. In the well known case of nominative objects in Icelandic, nominative is clearly assigned by finite Tense, since there is overt agreement between the object and T for number (though not person) (see Boeckx 2000 for details). In Lithuanian, Franks & Lavine (2006) argue that nominative objects in infinitival complements of Experiencer predicates show 'object shift' over the verb to become 'visible' for case assignment by a higher nominative-assigning head. If nominative case on the object here were assigned by default, there would be no motivation for the object to shift'. Observe in (39–40) that these predicates are therefore strictly OV, in an otherwise VO language:

- (39) Man nusibosta [laikraštis skaityti].

 me:DAT is-boring:[-AGR] newspaper:NOM to-read

 'It is boring for me to read the newspaper.'
- (40) Jiems buvo neįdomu [radijas klausyti]. them:DAT was uninteresting:[-AGR] radio:NOM to-listen 'It was boring for them to listen to the radio.'

Lithuanians who do not employ this nominative object substitute the accusative. The object now appears **after** the verb, discourse-neutrally, as in (41–42):

¹⁷ See Franks & Lavine (2006, 257–259) for details. To be sure, while this construction is accepted by grammarians, it is on the decline historically and its productive use in the modern language is restricted. For more examples and discussion, see Ambrazas *et al.* (1997, 638); and Jablonskis (1928/1957, 560–561).

- (41) Man nusibosta [skaityti laikraštį].

 me:DAT is-boring:[-AGR] to-read newspaper:ACC
- (42) *Jiems* buvo neįdomu [klausyti **radiją**]. them:DAT was uninteresting:[-AGR] to-listen radio:ACC

The point is, when dealing with nominative objects, we are concerned first with whether the agreement features in T might be responsible for object case (as in Icelandic) and, second, in the absence of agreement with T, if there is any other syntactic activity that might indicate that the nominative-marked object is in a case-marked environment, as in the case of Lithuanian object shift. In the Inferential Evidential, the evidence suggests instead that the nominative object is not syntactically active.

The non-syntactic nature of the nominative object in the evidential construction is demonstrated by its failure to undergo genitive of negation, otherwise obligatory for all structurally case-marked direct objects of transitive verbs¹⁸. The genitive of negation is illustrated in (43a–b):

- (43) a. *Jis matė šį filmą.* he:NOM saw:3.SG this film:ACC 'He saw this film.'
 - b. *Jis* **ne**matė **šio filmo**.

 he:NOM **NEG**-saw:3.SG **this film:GEN**'He did not see this film.'

For speakers who accept only the nominative on the object of the Inferential Evidential, genitive of negation is ungrammatical, as indicated in (44–45):

- (44) Ingos nenuraminta *vaiko / ✓ vaikas.

 Inga:GEN NEG-calm-down:[–AGR] child:GEN child:NOM
- (45) Jono nenustebinta *tėvo / √ tėvas.

 Jonas:GEN NEG-surprise:[-AGR] father:GEN father:NOM

 $^{^{18}}$ To be clear, I am assuming that genitive of negation is sensitive to the structural position of the object, rather than the object's morphological marking. That is, genitive of negation is not mere ACC > GEN conversion. On this view, genitive of negation as applied to accusative-marked temporal adjuncts must also be treated syntactically, I assume by relation to aspectual features.

That the genitive of negation fails to apply in (44–45) indicates that the nominative NP is not treated by speakers as a syntactically-licensed object. Instead, the nominative object functions as if detached from the syntax in a way that the accusative object in (43a) isn't.

Note, thus far, that all examples of the Inferential Evidential have been given with nominative objects in the 3rd person. Examples with 1st- and 2nd-person objects, though nominative, are clearly deviant, as in (46–47)¹⁹:

- (46) *Ingos nuraminta aš.

 Inga:GEN calm-down:[-AGR] I:NOM

 [Intended: 'Inga must have calmed me down.']
- (47) *Ingos tu nuraminta.

 Inga:GEN you:NOM calm-down:[-AGR]

 [Intended: 'Inga must have calmed you down.']

The ineffability of (46–47) is clearly not a function of the semantics of the evidential mood, but rather a quirky aspect of the syntax of the construction, also pointing to the nominative object as assigned by default. It has been argued widely, particularly in discussions concerning the Person Case Constraint (PCC) (a ban on 1st- and 2nd-person pronouns in certain environments), that the 3rd-person is distinguished from the 1st and 2nd person by lacking person (or [person] features) altogether²⁰. So while 1st- and 2nd-person nominative objects require agreement for person with T, which is clearly impossible under non-agreeing T in the Inferential Evidential, 3rd person imposes no such requirement. This militates against the use of 1st- and 2nd-person nominative objects, as in (46–47), while arguing in favor of the 3rd-person, as 'non-person', as the perfect candidate for the default form²¹.

 $^{^{19}}$ Note that the word order in (46–47) does not affect grammaticality. The sentences are deviant regardless of whether the 1st- and 2nd-person pronouns follow or precede the verb.

 $^{^{20}}$ See Boeckx (2000), Adger & Harbour (2007), Nevins (2007), and sources cited therein for more on the PCC.

²¹ Peter Arkadiev (p. c.) observes that in the Perfect Evidential in (14), the subject appears in the nominative in the absence of person agreement with T, thereby casting doubt on the role of [person] in nominative valuation. Note, however, that the nominative subject of the Perfect Evidential agrees with T for gender and number, which I take to be sufficient for case valuation (cf. the '*l*-participle' of the Russian past tense).

The following arguments have been adduced in favor of the default nominative analysis: (i) the unavailability of structural accusative as assigned by ν ; (ii) the unavailability of structural nominative as assigned by T: (iii) use of nominative in the language in other default case environments; (iv) insensitivity to the genitive of negation; and (v) a 3rd-person restriction on the object. There are several other considerations that turn in favor of the default case analysis. The first, as mentioned earlier, is the fact that the Inferential Evidential is clearly preferred in intransitive contexts. If there were a genuinely syntactic means of assigning nominative on the object of a two-place predicate, we might speculate that this preference would disappear. Note also the fact that judgments do vary as to which case is most felicitous on the direct object. Most speakers of East and South High Lithuanian I have consulted prefer nominative and report a strong dispreference for accusative. Others show no preference for nominative or accusative and allow both: still others allow neither, and accept the construction exclusively with intransitive verbs. This is exactly the kind of variation that we would expect to find in the absence of syntactically-determined case, where prescriptive rules and alternative case-assigning strategies are more likely to override a non-syntactic case designation (Schütze 2001, 220).

6. Summary and Conclusion

The Lithuanian evidential system is marked by a non-finite auxiliariless participle in a position in which we would expect a finite verb. We have seen that the irrealis mood, broadly construed, can have the effect of neutralizing tense distinctions within the core proposition. This is tied to the idea that non-assertion (or qualification) of truth is supported by non-finiteness, where a finite predication asserts that the event described by the speaker has actually occurred. In syntactic terms, this non-finite predication is enforced by a modal head (Evid) that selects a non-finite TP, general enough to account for both the Inferential Evidential and the Perfect Evidential.

This paper has sought to provide an explicit theory for the casemarking pattern of the Inferential Evidential. The genitive marking on the subject is specific to the Inferential Evidential, rather than to the evidential system in general, which suggests as a source for genitive the -ma/-ta morpheme itself, rather than the Evid head, which patterns with nominative subjects in the Perfect Evidential. The question of nominative on the object is considerably more complex, and further confounded by variation in judgments, suggesting a case-assigning mechanism that is not firmly rooted in the syntactic system, proper. The crucial issue surrounding case on the object is not the source for nominative, per se, but rather the prohibition on accusative, for most speakers, which I have dubbed the 'transitivity restriction'. This lack of accusative is particularly problematic in light of the fact that the predicate-final erstwhile passive marker -ma/-ta is no longer voicealtering in the language. The key point in the analysis is that while the object position is not absorbed by -ma/-ta, its case marking is. This follows, by hypothesis, from a crucial difference in the lexical verb's extended functional projection, v. In languages in which the properties of VOICE and CAUSE are fused (bundled) into a single functional head (ν -VOICE), accusative will normally be suppressed by passive voice, even if the passive marker is no longer operative in the voice system of the language. The result is the curious predicament in which the predicate's basic valency is not altered by -ma/-ta, but the case-assigning potential of ν -voice on the direct object is.

Nominative objects elsewhere, as in the much-studied case of Icelandic, retain some form of diminished agreement with T. In the case of the Inferential Evidential, the absolute non-agreeing status of T militates against any such relationship with the object. Nominative, on the present account, is assigned by default. Several arguments are adduced for the syntactic isolation of the nominative object, including, most importantly, its resistance to genitive of negation and the 3rd person restriction. As noted earlier, case assigned by default explains (i) the preference for intransitive forms of the Inferential Evidential over forms based on two-place predicates and (ii) the general instability of the nominative object form, giving rise, as it does, to a wider degree of variability in speaker judgments than would be predicted by a grammatical form firmly rooted in the syntax of the language.

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