## Voice and Case Phenomena in Lithuanian Morphosyntax

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> Dissertation Defense April 16, 2020

Advisor: Julie Anne Legate

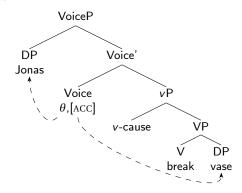
Dissertation committee: David Embick, Heidi Harley, Florian Schwarz

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- 2 Voice and Structural Accusative Case
- Marked Structural Case
- 4 Conclusion

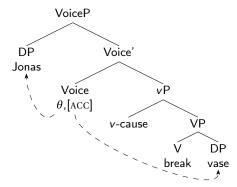
• This dissertation explores the relationship between Voice, case and subjecthood through the lens of Lithuanian, an understudied Baltic language.

- VoiceP introduces an external  $\theta$ -role and is the locus of accusative case assignment, whereas vP introduces causative semantics. <sup>1</sup>
  - (1) Jon-as sudauž-ė vaz-ą.
    Jonas-NOM break-PST.3 vaze-ACC
    'Jonas broke the vase.'
  - (2) Active Transitive



<sup>&</sup>lt;sup>1</sup>Pylkkänen 1999, 2008; Schäfer 2008; Harley 2013; Legate 2014; Alexiadou, Anagnostopoulou, and Schäfer 2015: i.a.

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 This dissertation provides a better understanding of how Voice impacts the assignment of case and what implications this interaction has for Case Theory.

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• What are the necessary or sufficient conditions for structural accusative case to be assigned?

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- Dependent Case Theory: the assignment of accusative case is dependent on a c-commanding DP with structural case.<sup>2</sup>

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### Proposal

• Revised Burzio's Generalization: while accusative case must be assigned by a thematic Voice which introduces an external  $\theta$ -role, the assignment of accusative case by Voice may vary independently from the selection of a specifier.

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What are the boundaries between structural and non-structural case, and when do these boundaries break down?

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- What are the boundaries between structural and non-structural case, and when do these boundaries break down?
  - Empirical work<sup>3</sup> on case has established a distinction between two cases:
    - Structural case is assigned on the basis of closest c-command to a DP in an A-position by a functional head.
    - Non-structural case is licensed thematically.

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#### Proposal

- Marked Structural Case: is an intermediate step between structural and non-structural case.
  - Like structural case, it is assigned by a thematic Voice head and is not related to  $\theta$ -marking.
  - Like non-structural case, it is assigned obligatorily regardless of the featural makeup of the Voice (passive vs. active)

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• What types of non-nominative subjects are there? Why do subjects vary as they do in terms of subjecthood properties they exhibit?

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- What types of non-nominative subjects are there? Why do subjects vary as they do in terms of subjecthood properties they exhibit?
  - Non-nominative subjects are normally assigned non-structural case lexically determined by a specific class of predicates.<sup>4</sup>
  - Languages differ in properties associated with a canonical subject e.g., binding of the subject-oriented anaphor, ability to be PRO.

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#### Proposal

- Non-nominative subjects do not form a homogeneous class and vary in terms of their case assignment.
  - The genitive subject of the evidential behaves like a canonical nominative subject and is assigned structural case by a functional head.
  - The dative subject of *lack*-class predicates shows only a subset of subjecthood properties and its case is non-structural assigned by a lexical verb.

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#### Outline of the dissertation

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- The dissertation consists of three main chapters and 8 case studies:
  - §2 Voice and Structural Accusative Case
    - Case Study 1 -ma/-ta Impersonal
    - Case Study 2 Active Existential
    - Case Study 3 Passive
  - §3 Marked Structural Case
    - Case Study 4 help-class Predicates
    - Case Study 5 Ditransitives
    - Case Study 6 serve-class Predicates
  - §4 Subjecthood and Case
    - Case Study 7 Evidentials
    - Case Study 8 lack-class Predicates

# Today

- Structural Accusative Case
- Marked Structural Case

Introduction

Voice and Structural Accusative Case

- Marked Structural Case
- Conclusion

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• What are the necessary or sufficient conditions for structural accusative case to be assigned?

#### Active Existential Construction

• The active existential<sup>5</sup> has an accusative theme, but lacks an overt nominative subject. The verb bears active morphology.

#### (3) Active Existential

Val-ių kvieč-ia į dekanat-ą
Valius-ACC invite-PRS. 3 to dean's office-ACC

'Someone is inviting Valius to the dean's office.'

(adapted from Kibort and Maskaliūnienė 2016:251)

<sup>&</sup>lt;sup>5</sup>The study is based on Šereikaitė's (to appear) paper in *Linguistic Inquiry*.

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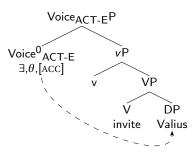
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- The active existential has a grammatical object marked with structural accusative case.
- However, it lacks a syntactically projected implicit external argument.

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## Proposal

- This construction is a violation of Burzio's (1986) Generalization and its later versions.
- The active existential Voice is a type of Voice which assigns accusative case, but whose external argument variable is bound at the level of Voice<sup>0</sup> by the existential operator.
- (4) Active Existential



#### Active Existential

Theme Grammatical Object

## ACC Theme = Grammatical Object

- I compare the accusative theme of the active existential with:
  - the accusative theme grammatical object of transitives
  - the nominative theme grammatical subject of passives

## ACC Theme = Grammatical Object

- I compare the accusative theme of the active existential with:
  - the accusative theme grammatical object of transitives
  - the nominative theme grammatical subject of passives
- The theme of the active existential behaves like a grammatical object of transitives constructions bearing structural accusative.

## Genitive of Negation

 When the verb is negated, the object bearing structural accusative case appears with genitive.6

#### Active Transitive

- a. Tėv-as kvieč-ia Val-iu/\*Val-iaus. father-NOM invite-PRS.3 Valius- ACC //Valius-GEN 'The father is inviting Valius.'
- h Tėv-as ne-kvieč-ia Val-iaus/\*Val-iu. father-NOM NEG -invite-PRS.3 Valius- GEN /Valius-ACC
  - 'The father is not inviting Valius.'

Arkadiev 2016; Sigurðsson and Šereikaitė 2018.

## Genitive of Negation

- The theme of the active existential also becomes genitive, and thus behaves like the object of the transitive.
- (6) Active Existential

Val-iaus/\*Val-ių ne-kvieč-ia į dekanat-ą Valius-GEN /Valius-ACC NEG -invite-PRS.3 to dean's.office-ACC

'It is not the case that someone is inviting Valius to the dean's office.

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Val-iaus/\*Val-ių ne-kvieč-ia į dekanat-ą Valius-GEN /Valius-ACC NEG -invite-PRS.3 to dean's.office-ACC 'It is not the case that someone is inviting Valius to the dean's office.

 In contrast, the theme subject of the passive or unaccusative does not allow genitive.

#### (7) Passive

Val-ius/\*Val-iaus nėra kviečia-m-as tėv-o. Valius-NOM /Valius-GEN NEG be.PRS.3 invite-PASS.PTCP-NOM father-GEN 'Valius is not being invited by the father.'

#### (8) Unaccusative

Traukin-ys/\*traukin-io ne-atvažuoj-a. train-NOM /train-GEN NEG -arrive-PRS.3 'The train is not arriving.'

## Binding

- The nominative grammatical subject binds the subject-oriented reflexive anaphor savo.
- (9) Grammatical Subject

**Domantas** $_i$  rūšiavo tarnautojus pagal **savo** $_i$  /\*jo $_i$  Domantas.NOM divided employees.ACC according.to self.GEN /\*his.GEN isitikinimus.

'Domantas; divided employees according to his; own beliefs.'

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'Domantas; divided employees according to his; own beliefs.'

• The grammatical object binds the anti-subject-oriented pronoun jų.

#### (10) Grammatical Object

Domantas rūšiavo **tarnautojus** $_i$  pagal **jų** $_i$  /\*savo $_i$  įsitikinimus. Domantas divided employees.ACC according.to their.GEN /\*self.GEN beliefs

'Domantas divided employees; according to their; beliefs.'

## Binding,

• The theme of the active existential patters like a grammatical object in that it binds the anti-subject-oriented pronoun.

#### (11)Active Existential

Val-iu; kvieč-ia i dekanat-a dėl **j-o**;/\*sav-o; prast-ų Valius-ACC invite-PST.3 to dean's office-ACC because his-GEN/self-GEN bad-GEN pažym-ių.

grades-GEN

'Someone is inviting Valius; to the dean's office because of his; bad grades.'

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'Someone is inviting Valius $_i$  to the dean's office because of his $_i$  bad grades.'

• In contrast, the theme of the passive binds the subject-oriented anaphor.

#### (12) Passive

**Tarnautoj-ai**; yra rūšiuoja-m-i Domant-o pagal Employees-NOM be.PRS.3 divide-PASS.PTCP-NOM Domantas-GEN according.to **sav-o**<sub>i</sub>/j-u<sub>i</sub> įsitikinimus. self-GEN/their-GEN beliefs

'The employees; are divided by Domantas according to their; beliefs.'

## Interim Summary

 The theme of the active existential lacks properties associated with a theme grammatical subject. It patterns like a grammatical object of an active transitive.

	Active Existential	Transitive	Passive
GEN of Negation	✓	✓	*
Binding of savo	*	*	<b>√</b>
Optional case transmission	✓	✓	*

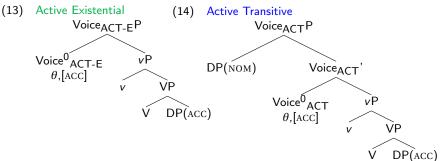
Table: Behavior of the theme across constructions

### Active Existential

Initiator

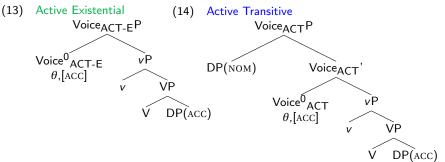
## Absence of the Projected Initiator

- The active existential has a thematic VoiceP a projection, which introduces an external argument  $\theta$ -role.
- However, it lacks a syntactically projected initiator unlike the active transitive.



# Absence of the Projected Initiator

- ullet The active existential has a thematic VoiceP a projection, which introduces an external argument heta-role.
- However, it lacks a syntactically projected initiator unlike the active transitive.



▶ The licensing of structural accusative case is dissociable from the presence/absence of the external argument, contradicting Burzio's Generalization.

### Thematic VoiceP

- The thematic VoiceP is signaled by material that points to the initiator, such as instruments or agent-oriented adverbials.<sup>7</sup>
- The active existential is compatible with both.

### (15) Active Existential

Lyg šaud-ė dien-ą mišk-e **su patrank-omis.** as.if shoot-PST.3 day-ACC forest-LOC with cannons-INS

'It seems that someone fired shots in the wood during the day with cannons.'

#### (16) Active Existential

Man atrod-o, kad Val-ių **tyčia** kvieč-ia į dekanat-ą. me.DAT appear-PST.3, that Valius-ACC intentionally invite-PRS.3 to dean's.office-ACC

'It appears to me that someone is inviting Valius to the dean's office intentionally.'

<sup>&</sup>lt;sup>7</sup>Bruening 2013; Alexiadou, Anagnostopoulou, and Schäfer 2015.

 There is an on-going debate whether implicit arguments are projected in the syntax.<sup>8</sup>

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- There is an on-going debate whether implicit arguments are projected in the syntax.<sup>8</sup>
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  - Passive lacks a projected initiator.
- ▶ The active existential patterns like the passive.

## Binding

• The unpronounced initiator of the -ma/-ta impersonal binds the subject-oriented anapahor savo.

### (17) -ma/-ta Impersonal

Dažnai **IMP**<sub>i</sub> praranda-m-a žmogiškum-ą dėl **sav-o**<sub>i</sub> kalt-ės. often lose-PASS.PTCP-[-AGR] humanity-ACC because.of self-GEN fault-GEN 'One often loses humanity because of one's own fault.'

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 The unpronounced initiator of the -ma/-ta impersonal binds the subject-oriented anapahor savo.

### (17) -ma/-ta Impersonal

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 The demoted initiator of a passive cannot bind the subject-oriented reflexive savo.

#### (18) Passive

Šiame fabrike darbuotoj-ai (yra) rūšiuoja-m-i pagal this factory employees-NOM be.PRS.3 divide-PASS.PTCP-NOM according.to (\*sav-o<sub>i</sub> įsitikinim-us). self-GEN beliefs-ACC

'In this factory, the employees are being divided according to his beliefs.' [according to the initiator's beliefs]

## Binding

• Like the initiator of the passive, the initiator of the active existential cannot bind the subject-oriented reflexive *savo*, thus it is not projected.

#### (19) Active Existential

Val-ių kvieč-ia į (\*sav-o; biur-ą).
Valius-ACC invite-PRS 3 to self-GEN office-ACC

'Someone; is inviting Valius to his; office.'

#### (20) Active Existential

Jon-ui ištryp-ė darž-ą su (\*sav-o<sub>i</sub> bat-ais). Jonas-DAT trample-PST.3 garden-ACC with self-GEN shoes-INS

'Someone; trampled on Jonas's garden with his; own shoes.'

## Depictives

• The nominative subject of the transitive agrees with the depictive in number, gender and case.

#### (21) Active Transitive

```
Kažk-as; pakviet-ė Valių į vakarėl-į išgėr-ęs;. someone-NOM.M.SG invite-PST.3 Valius-ACC to party drunk-ACT.PTCP.NOM.M.SG 'Someone; invited Valius to the party drunk;.'
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```

 It is ungrammatical for the depictive to predicate over the initiator of the passive.

#### (22) Passive

```
Val-ius buv-o pa-kvies-t-as į vakarėlį *išgėrus-io;. Valius-NOM be-PST.3 invite-PASS.PTCP-NOM to party drunk-ACT.PTCP.GEN.M.SG 'Valius was invited to the party by a drunk person.'
```

## Depictives

- If the initiator of the active existential is not projected, it should not be able to control a depictive.
- This prediction is borne out. The active existential patterns like the passive.

#### (23) Active Existential

Val-ių pakviet-ė į vakarėl-į \*išgėr-ęs<sub>i</sub>. Valius-ACC invite-PST.3 to party-ACC drunk-ACT.PTCP.NOM.M.SG

'Someone; invited Valius to the party drunk;.'

## Agreement

• In the perfective evidential, the grammatical subject agrees with the participle in number, gender and case or occurs with the neuter non-agreeing form.

#### (24) Active Transitive

```
Girdėjau, kažk-as buv-o pakviet-ęs /
hear someone-NOM.M.SG be-PST.3 invite-ACT.PTCP.NOM.M.SG /
pakviet-ę Val-ių į vakarėlį.
invite-ACT.PTCP.N Valius-ACC to party
```

'I heard that someone had invited Valius to the party.'

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pakviet-ę Val-ių į vakarėlį.
invite-ACT.PTCP.N Valius-ACC to party
```

'I heard that someone had invited Valius to the party.'

 There is no agreement between the initiator of the active existential and the participle. Only the non-agreeing form is available.

#### (25) Active Existential

```
Gridėjau, Val-ių buv-o pakviet-ę /*pakviet-ęs į hear Valius-ACC be-PST.3 invite-ACT.PTCP.N / invite-ACT.PTCP.NOM.M.SG to vakarėlį.
party
```

'I heard that someone had invited Valius to the party.'

## Scope

• The overt subject kažkas 'someone' may take a wide scope over negation.

Context: there is a committee of 10 people that can nominate Valius for a scholarship. We count the votes for the nominations and see that 9 out of 10 anonymous committee members nominated Valius for the scholarship. Then we can report the results by saying...

(26) Kažk-as ne-nominav-o Val-iaus.
Someone-NOM NEG-nominate-PST.3 Valius-GEN
'Someone has not nominated Valius'



## Scope

In the active existential, negation must take a wide scope over the existential.
 This is predicted if the subject is unprojected and bound at the level of VoiceP

Context: there is a committee of 10 people that can nominate Valius for a scholarship. We count the votes for the nominations and see that 9 out of 10 anonymous committee members nominated Valius for the scholarship. Then we can report the results by saying...

(27) #Val-iaus ne-nominav-o.
Valius-GEN NEG-nominate-PST.3
'No one nominated Valius.'

$$\# \neg > \exists$$
, \* $\exists > \neg$ 

 The active existential lacks a projected initiator just like the passive, whereas the -ma/-ta impersonal has a projected initiator.

Table: Behavior of the initiator across different constructions

Diagnostic	Active Existential	Passive	-ma/-ta Impers.	Active Trans.
binding of 'savo'	*	*	<b>√</b>	<b>√</b>
allows depictives	*	*	N/A	✓
allows agreement	*	N/A	N/A	✓
wide scope of negation	*	N/A	N/A	✓

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allows depictives	*	*	N/A	✓
allows agreement	*	N/A	N/A	✓
wide scope of negation	*	N/A	N/A	✓
allows unaccusatives	*	*	<b>√</b>	<b>√</b>
binding of 'each other'	*	*	✓	✓
binding of 'sau'	*	*	✓	✓
binding of 'jo'	*	%	N/A	objects/adjuncts
control into adjuncts	*	*	N/A	✓
word order	theme-V	theme-V	InitV-theme	InitV-theme

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	Theme	Initiator	BG
-ma/-ta Impersonal	ACC object	projected Initiator	<b>√</b>
Passive	NOM subject	no projected Initiator	<b>√</b>
Active Existential	ACC object	no projected Initiator	unexpected

Table: Theme and Initiator across constructions

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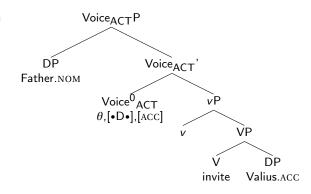
Table: Theme and Initiator across constructions

The active existential contradicts Burzio's Generalization.

### Active Existential

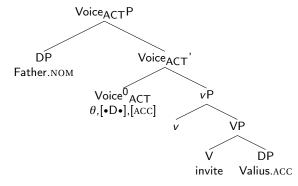
Analysis

(28) Active Transitive



<sup>&</sup>lt;sup>9</sup>Müller 2010

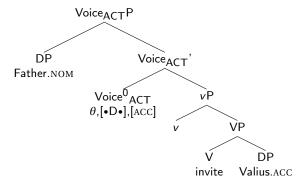
(28) Active Transitive



ullet The active transitive has a thematic Voice, VoiceACT, which introduces an external argument variable represented by heta.

<sup>&</sup>lt;sup>9</sup>Müller 2010

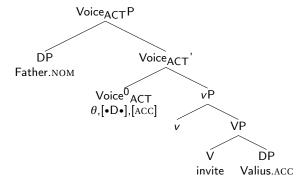
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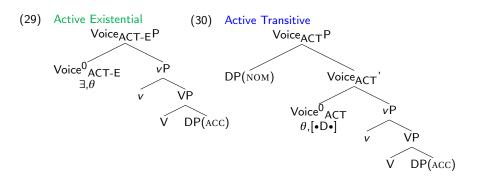
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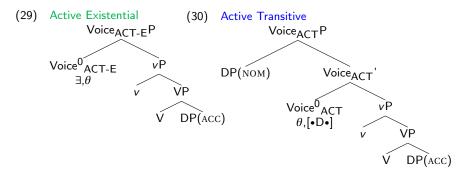
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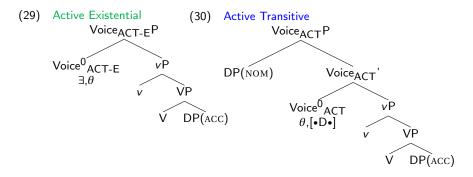
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<sup>&</sup>lt;sup>9</sup>Müller 2010

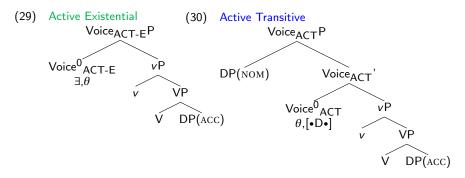




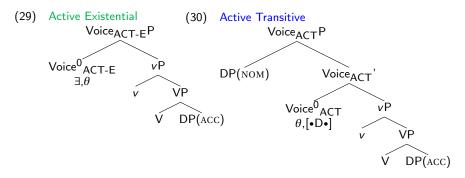
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### **Analysis**

 The existential operator that binds the external argument variable is a part of the lexical entry of this Voice head.

(31)Voice ACT\_FP  $\lambda e.\exists x[Initiator(x)(e)\&inviting(e)\&Theme(e,Valius)]$ Voice<sub>ACT-E</sub>  $\lambda e.\exists x[Initiator(x)(e)]$  $\lambda e.inviting(e)\&Theme(e,Valius)$  $\lambda e.inviting(e)\&Theme(e,Valius)$ ĎΡ  $\lambda x. \lambda e. inviting(e) \& Theme(e, x)$ Valius

## Analysis: Why in the lexicon?

• In passives, the Voice head also enters the derivation with an external argument variable.

<sup>&</sup>lt;sup>10</sup>Roberts 1987; Williams 1987; Bruening 2013; Legate 2014; Bruening and Tran 2015; Sigurðsson 2017: Schäfer 2017

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- Given that by-phrases are optional, the external argument can be saturated by a by-phrase, or when no by-phrase is present, by the Existential Closure in the post-syntactic LF component.<sup>10</sup>

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- (32) Val-ius buv-o pakvies-t-as (tev-o).

  Valius-NOM be-PST.3 invite-PST.PASS.PTCP-NOM.M.SG father-GEN

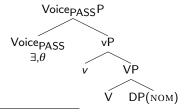
  'Valius was invited (by the father).'

<sup>&</sup>lt;sup>10</sup>Roberts 1987; Williams 1987; Bruening 2013; Legate 2014; Bruening and Tran 2015; Sigurðsson 2017: Schäfer 2017

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- (33) Short Passive



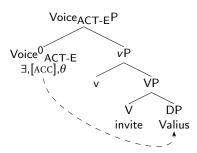
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- In the active existential, by-phrases are always blocked.
- (34) \*Val-ių kvieč-ia į dekanat-ą kažkien-o.
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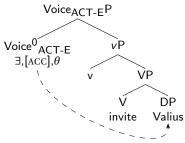
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  - The active existential Voice head does not enter the derivation with a open argument slot like the passive Voice.
  - The existential operator, which binds the initiator variable, is built into the active existential Voice head lexically rather than being introduced by an unselective binding operation of the Existential Closure that applies at LF.

(35) Active Existential

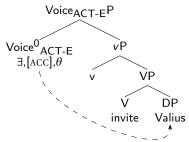


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- The active existential has a thematic active Voice head, namely Voice<sup>0</sup><sub>ACT-E</sub>, which is a source of the accusative case.
- However, there is no initiator in SpecVoice<sub>ACT-E</sub>P which indicates that no external argument is necessary in the specifier position for the accusative case to be assigned by this Voice head.

• The active existential counterexemplifies Burzio's Generalization and Dependent Case Theory whereby the assignment of accusative is dependent on the co-occurrence of higher clause-mate DP with structural case.

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- I propose a revised version of Burzio's generalization where the assignment of accusative case is not dependent on the presence of a projected initiator.

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- I propose a revised version of Burzio's generalization where the assignment of accusative case is not dependent on the presence of a projected initiator.

#### Revised Burzio's Generalization

• While accusative case must be assigned by a thematic Voice which introduces an external  $\theta$ -role, the assignment of accusative case by Voice may vary independently from the selection of a specifier.

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- Introduction
- 2 Voice and Structural Accusative Case
- Marked Structural Case
- 4 Conclusion

## Research Questions

What are the boundaries between structural and non-structural case?

### Case Studies

- §2 Voice and Structural Accusative Case
  - Case Study 1 -ma/-ta Impersonal
  - Case Study 2 Active Existential
  - Case Study 3 Passive
- §3 Marked Structural Case
  - Case Study 4 help-class Predicates
  - Case Study 5 Ditransitives
  - Case Study 6 serve-class Predicates
- §4 Subjecthood and Case
  - Case Study 7 Evidentials
  - Case Study 8 *lack-class Predicates*

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### Proposal

 Marked Structural Case: is an intermediate step between structural and non-structural case.

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## Help-class Constructions

- Help-class predicates 12 take a dative direct object which:
  - advances to a nominative subject → behaves like structural case
  - is retained in the passive → behaves like non-structural case

 $<sup>^{12}</sup>$ The study is based on my joint work with Einar Freyr Sigurðsson and Marcel Pitteroff, see Sigurðsson et al. 2018.

## Help-class Constructions

- Help-class predicates<sup>12</sup> take a dative direct object which:
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- (36)a. Vaik-as padėj-o tėv-ui/\*tėv-a. Child-NOM help-PST.3 father-DAT /father-ACC 'The child helped the father.'
  - b. Tėv-as buv-o vaik-o padeda-m-as. Father- NOM be-PST.3 child-GEN help-PASS.PTCP-NOM

'The father was (being) helped by the child.'

Agreeing Passive

c. Tėv-ui buy-o vaik-o padeda-m-a. Father-| DAT | be-PST.3 child-GEN help-PASS.PTCP-[-AGR]

Impersonal Passive

'The father was (being) helped by the child.'

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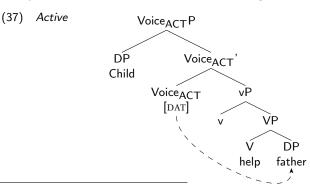
• Help-class constructions do not have two distinct datives: i) structural dative and ii) inherent dative.

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- Help-class constructions do not have two distinct datives: i) structural dative and ii) inherent dative.
- The dative case of *help*-class predicates is marked structural case.
- Like structural accusative case, the dative of *help*-class predicates is assigned by a thematic Voice head rather than along with a  $\theta$ -role. <sup>13</sup>



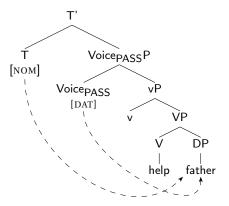
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• Like inherent case, the dative of *help*-class predicates is assigned obligatorily regardless of the featural makeup of the Voice (passive vs. active).

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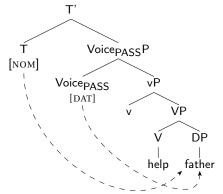
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 Once this case is assigned, it can optionally be overwritten by nominative and become a grammatical subject.<sup>14</sup>

 $<sup>^{14}\</sup>mathrm{For}$  case overwriting/replacement accounts see Babby 1980; Pesetsky 2013.

# Help-class Constructions

**Passives** 

## Passives with Help-class Predicates

#### *Help*-class predicates

- atstovauti 'to represent', kenkti 'to harm', padėti 'to help', pirmininkauti - 'to chair', pritarti - 'to approve, to give support to', vadovauti - 'to govern, manage'
- Help-class constructions form two types of passives which differ from each other in terms of the grammatical function of the theme.<sup>15</sup>
  - Agreeing Passives the theme advances to a nominative subject
  - Impersonal Passives the theme retains its dative case and behaves like an object rather than a quirky subject.

• The nominative grammatical subject binds the subject-oriented reflexive anaphor savo.

#### (39) Grammatical Subject

**Domantas** $_i$  rūšiavo tarnautojus pagal **savo** $_i$  / \*jo $_i$  Domantas.NOM divided employees.ACC according.to self.GEN / \*his.GEN isitikinimus. beliefs

'Domantas; divided employees according to his; own beliefs.'

• The grammatical object binds the anti-subject-oriented pronoun jų.

#### (40) Grammatical Object

Domantas rūšiavo **tarnautojus** $_i$  pagal **jų** $_i$  /\*savo $_i$  įsitikinimus. Domantas divided employees.ACC according.to their.GEN /\*self.GEN beliefs

'Domantas divided employees; according to their; beliefs.'

• In agreeing passives, the nominative theme binds the subject-oriented anaphor *savo*, and behaves like a grammatical subject.

#### Agreeing Passive

(41) **Tėv-as**; buv-o vaik-o padeda-m-as **sav-o**;/**jo**; namuose. Father-NOM be-PST.3 child-GEN help-PASS.PTCP-NOM self-GEN/his.GEN house. 'The father; was being helped by the child in his; house.'

• The dative theme in the impersonal binds the anti-subject oriented pronoun jo and behaves like a grammatical object.

#### Impersonal Passives

(42) **Tėv-ui**, buv-o vaik-o padeda-m-a \*sav-o<sub>i</sub>/**jo**; namuose. father-DAT be-PST.3 child-GEN help-PASS.PTCP-[-AGR] self-GEN/his.GEN house 'The father; was being helped by the child in his; house.'

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#### Impersonal Passives

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  - The dative quirky subject of lack-class predicates binds the subject-oriented anaphor.

#### Quirky Dative Subject

(43) **Jon-ui**; trūkst-a pinig-ų **sav-o**; reikm-ėms Jonas-DAT lack-PRS.3 money-GEN self-GEN needs-DAT 'Jonas lacks money for his own needs.'

#### Ditransitives

 In ditransitive constructions, the indirect object is assigned inherent dative which is retained under passivization. It is ungrammatical to promote the dative indirect object to a nominative subject.

#### Ditransitives (44)

Tėv-as

- obuol-i. father-NOM give-PST.3 child- DAT apple-ACC
  - (Ambrazas et al. 1997:279) 'The father gave the child an apple.'
- b. \*Vaik-as buy-o tėy-o duo-t-as obuol-į. child- NOM be-PST.3 father-GEN give-PASS.PTCP-NOM apple-ACC
  - 'The child was given an apple by the father.'

vaik-ui

dav-ė

- c. Vaik-ui buy-o tėv-o duo-t-as obuol-vs. child- DAT be-PST.3 father-GEN give-PASS.PTCP-NOM apple-NOM
  - 'The child was given an apple by the father.' (Sigurðsson et al. 2018:1)

• In the passive of ditransitives, the dative object does not advance to a subject. It binds the anti-subject-oriented pronoun *jo* and behaves like an object.

#### (45) Ditransitives

- a. Tėv-as dav-ė **motin-ai**; vaik-ą **jos**;/\*sav-o; namuose. father-NOM give-PST.3 mother-DAT child-ACC her.GEN/self.GEN house 'The father gave the mother; the child in her; house.'
- b. **Motin-ai**; buv-o duo-t-as vaik-as **jos**;/\*sav-o; mother-DAT be-PST.3 give-PASS.PTCP-NOM child-NOM her.GEN/self.GEN namuose. house

'The mother; was given the child in her; house.' (Sigurðsson et al. 2018:5)

The inherent dative is invisible for A-movement, a DP marked with this case retains its grammatical status.

## Interim Summary

	Theme in Agreeing PASS with help-class	Theme in Impersonal PASS with help-class	IO in PASS with ditransitives
binding of savo	✓	*	*
ability to be PRO	✓	*	*
agreement	✓	*	*

Table: Passives of help constructions and ditransitives

- The dative theme of help-class is retained in the impersonal passive. It is not visible for A-movement and does not become a grammatical subject.
  - The dative of help-class behaves like inherent dative.
- The theme advances to nominative and patterns like a grammatical subject in the agreeing passive.
  - It behaves like a DP marked with structural case.

# Help-class Constructions

Nominalizations

- In nominalizations, the theme with structural accusative case advances to genitive and precedes the deverbal noun.<sup>16</sup>
- The nominative agent also bears genitive. 17
- (46) a. Jon-as sunaik-in-o augal-us per kelias minutes.

  Jonas-NOM destroy-CAUS-PST.3 plants-ACC within couple minutes

  'Jonas destroyed the plants in a couple of minutes.'
  - b. Jon-o augal-ų sunaik-in-im-as per kelias minutes Jono-GEN.H plants-GEN.L destroy-CAUS-NMLZ-NOM within couple minutes 'Jonas' destruction of the plants in a couple of minutes'

<sup>&</sup>lt;sup>16</sup>Pakerys 2006; Vladarskienė 2010; Zaika 2016

 $<sup>^{17}</sup>$ The two genitives in nominalizations are morphologically identical for 3rd person, but distinct for 1st and 2nd person singular.

- The inherent dative cannot be replaced by genitive. It retains its case and occurs post-nominally.
- (47) Vaik-as netikėtai dav-ė tėv-ui obuol-į. child-NOM unexpectedly give-PST.3 father-DAT apple-ACC 'The child unexpectedly gave the father the apple.'
- (48) vaik-o netikėtas obuol-io **dav-im-as** tėv-ui/\*tėv-o child-GEN unexpected apple-GEN give-NMLZ-NOM father-DAT /father-GEN 'child's unexpected giving of the apple to the father'
- (49) \*vaik-o netikėtas tėv-o/tėv-ui obuol-io **dav-im-as**child-GEN unexpected father-GEN/father-DAT apple-GEN give-NMLZ-NOM
  'child's unexpected giving of the apple to the father'

  (Adapted from Sigurðsson et al. 2018:9)

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• The dative of *help*-class predicates is retained when in situ, thus behaves like inherent case.

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- (50) a. Parlamentas pritar-ė projektui.
  parliament-GEN approve-PST.3 project-DAT

  'The parliament approved the projected.'
  - b. [Parlament-o greitas **pritar-im-as** projekt-ui/\*projekt-o parliament-GEN quick approve-NMLZ-NOM project-DAT /project-GEN 'Parliament's quick approval of the project'
  - c. Parlament-o greitas projekt-o/\*projekt-ui **pritarimas**parliament-GEN quick project-GEN /project-DAT approve-NMLZ-NOM
    'Parliament's quick approval of the project'

# Help-class Constructions

Preposition po

### Marked Structural: Between structural and non-structural

• Evidence from the preposition po demonstrates that: 18

<sup>&</sup>lt;sup>18</sup>Anderson 2013; 2015; Sigurðsson et al. 2018

### Marked Structural: Between structural and non-structural

- Evidence from the preposition po demonstrates that: 18
- Help-class predicates do not have two distinct datives: i) structural dative and ii) inherent dative.

<sup>&</sup>lt;sup>18</sup>Anderson 2013; 2015; Sigurðsson et al. 2018

### Marked Structural: Between structural and non-structural

- Evidence from the preposition po demonstrates that: 18
- Help-class predicates do not have two distinct datives: i) structural dative and ii) inherent dative.
- The dative of help-class predicates is a type of structural case, but it is marked in that it is assigned obligatorily like inherent case.

<sup>&</sup>lt;sup>18</sup>Anderson 2013; 2015; Sigurðsson et al. 2018

- The preposition po roughly means 'each'. It imposes a distributive reading. 19
- (51) a. Jie su-valg-ė obuol-į. they.NOM PFV-eat-PST.3 apple-ACC 'They ate an apple.'
  - b. Jie su-valg-ė po obuol-į. they.NOM PFV-eat-PST.3 DISTR apple-ACC

'They ate an apple each.'

(Anderson 2015:305)

 $<sup>^{19}</sup>$ The Russian preposition po exhibits similar characteristics to the Lithuanian po; see Pesetsky 1982; Borik 1995; Franks 1995; Harves 2003; Bailyn 2012.

- The distributive *po* can also function as a subject e.g., a subject of passives.
- The preposition assigns accusative case to its complement.
- (52) Plantacijoje nuo kiekvieno medžio darbinink-ų buv-o nuskin-t-os plantation from each tree workers-GEN be-PST.3 pick-PASS.PTCP-NOM kriauš-ės/\*kriauš-es.

  pears-NOM / pears-ACC

'In the plantation, pears were picked by workers from each tree.'

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'In the plantation, a (different) pear was picked by workers from each tree.'

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	po + DPACC
thematic subject of transitives	<b>√</b>
thematic subject of unergatives	✓
grammatical subject of unaccusatives	<del>-</del>
grammatical subject of passives	<b>√</b>
accusative grammatical object	<del>-</del>
nominative grammatical object	✓

Table: The list of DPs compatible with the preposition po

• DPs with inherent case cannot be complements of  $po.^{20}$  The inherent dative needs to be obligatorily assigned, but its assignment is blocked by po.

#### **Ditransitives**

(54) \*Jon-as dav-ė po vaik-ą/vaik-ui obuol-į.

Jonas-NOM give-PST.3 DISTR child-ACC /child-DAT apple-ACC

'Jonas gave each child an apple.' (Sigurðsson et al. 2018:8)

<sup>&</sup>lt;sup>20</sup>Anderson 2013, 2015

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  - If the dative of the *help*-class were ambiguous between inherent and structural, then we would expect it to be compatible with *po*.

#### help-class

(55) \*Advokat-ai padėj-o po darbinink-ą/darbinink-ui lawyers-NOM help-PST.3 DISTR worker-ACC /worker-DAT 'The lawyers helped one worker each.'

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#### help-class

- (55) \*Advokat-ai padėj-o po darbinink-ą/darbinink-ui lawyers-NOM help-PST.3 DISTR worker-ACC /worker-DAT 'The lawyers helped one worker each.'
  - The dative of help-class predicates is not possible with po, thus it behaves like an inherent case in that it needs to be assigned obligatorily.

<sup>&</sup>lt;sup>20</sup>Anderson 2013, 2015

The preposition po can be applied to the nominative subject of passives.

(56) Plantacijoje nuo kiekvieno medžio darbinink-ų buv-o nuskin-t-a plantation from each tree workers-GEN be-PST.3 pick-PASS.PTCP-[-AGR] po kriauš-ę/\*kriauš-ė.

```
DISTR pear- ACC /pear-NOM
```

'In the plantation, a (different) pear was picked by workers from each tree.'

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DISTR pear- ACC /pear-NOM

'In the plantation, a (different) pear was picked by workers from each tree.'

 The theme of help-class predicates also becomes a nominative subject under passivization.

#### Agreeing Passive with help-class

(57) Darbinink-ai buv-o padeda-m-i advokat-ų. workers-NOM be-PST.3 help-PASS.PTCP-NOM lawyers-GEN

'The workers were helped by the lawyers.'

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 The theme of help-class predicates also becomes a nominative subject under passivization.

#### Agreeing Passive with help-class

- (57) Darbinink-ai buv-o padeda-m-i advokat-ų. workers-NOM be-PST.3 help-PASS.PTCP-NOM lawyers-GEN 'The workers were helped by the lawyers.'
  - The preposition po should be compatible with the agreeing passive of help-class predicates.

• It is ungrammatical to apply the preposition *po* to the theme of *help*-class predicates under passivization!

Agreeing Passive with help-class and po

(58) \*Advokat-ų buv-o padeda-m-a po darbinink-ą/darbinink-ui lawyers-GEN be-PST.3 help-PASS.PTCP-[-AGR] DISTR worker-ACC/worker-DAT 'Each worker was being helped by the lawyers.'

• It is ungrammatical to apply the preposition *po* to the theme of *help*-class predicates under passivization!

#### Agreeing Passive with help-class and po

- (58) \*Advokat-ų buv-o padeda-m-a po darbinink-ą/darbinink-ui lawyers-GEN be-PST.3 help-PASS.PTCP-[-AGR] DISTR worker-ACC/worker-DAT 'Each worker was being helped by the lawyers.'
  - ▶ The dative of *help*-class predicates behaves like an inherent case in that it needs to be assigned obligatorily not only in the active, but also in the passive!

## Interim Summary

	ACC object	DAT object	DAT object
		<i>help</i> -class	ditransitives
NOM case in Passives	✓	√(optional)	*
<b>GEN</b> in Nominalizations	✓	√(optional)	*
NOM with evidentials		*	*
GEN of Negation	$\checkmark$	*	*
allows preposition po	✓	*	*

Table: Summary of Diagnostics

 The dative case of help-class predicates can be replaced by other structural cases in passives and nominalizations, thus patterns like structural case.

## Interim Summary

	ACC object	DAT object help-class	DAT object ditransitives
NOM case in Passives	<b>√</b>	√(optional)	*
GEN in Nominalizations	$\checkmark$	√(optional)	*
NOM with evidentials		*	*
GEN of Negation	$\checkmark$	*	*
allows preposition po	✓	*	*

Table: Summary of Diagnostics

- The dative case of help-class predicates can be replaced by other structural cases in passives and nominalizations, thus patterns like structural case.
- However, this case is marked: the dative case must be obligatorily assigned in the active and passive, which is a characteristic behavior of inherent case.

### Marked Structural Case

Analysis

#### Locus of Marked Structural Case

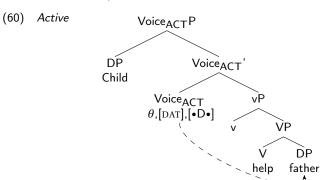
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- (61) Tėv-ui buv-o vaik-o padeda-m-a.
  Father-DAT be-PST.3 child-GEN help-PASS.PTCP-[-AGR]

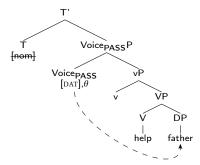
  'The father was being helped by the child.' Impersonal Passive

- The dative of the *help*-class predicates is obligatory in the passive.
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- (61) Tėv-ui buv-o vaik-o padeda-m-a.
  Father-DAT be-PST.3 child-GEN help-PASS.PTCP-[-AGR]

  'The father was being helped by the child.' Impersor

Impersonal Passive

(62)



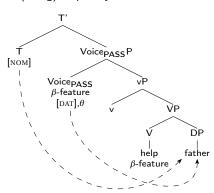
### Passives with help-class predicates

- The dative theme can optionally be overwritten by nominative and become a grammatical subject forming the agreeing passive.
- (63) Tėv-as buv-o vaik-o padeda-m-as.
  Father-NOM be-PST.3 child-GEN help-PASS.PTCP-NOM

  'The father was (being) helped by the child.'

  Agreeing Passive

(64)



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- Introduction
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- 4 Conclusion

#### Conclusion

• This dissertation provided new empirical discoveries with consequences both for how case is assigned and the range of possible types of cases.

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- I have provided important insights about conditions that govern the assignment of structural accusative case, suggesting that Burzio's Generalization is not a linguistic universal but a typological tendency.
- Specifically, I have proposed a new flavor of active Voice: one that assigns
  accusative case and yet semantically introduces the initiator as existentially
  bound rather than projecting a specifier.

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- Marked structural case is an intermediate step between structural case and non-structural case.
- I have established various syntactic tests to distinguish between different types of datives in the language. Specifically, I have identified three distinct datives in Lithuanian:
  - Marked Structural Dative
  - Inherent Dative
  - Quirky Dative

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## References I

Alexiadou, Artemis, Elena Anagnostopoulou, and Florian Schäfer. 2015. External arguments in transitivity alternations: A layering approach. Oxford: Oxford University Press.

Ambrazas, Vytautas, Emma Geniušienė, Aleksas Girdenis, Nijolė Sližienė, Dalija Tekorienė, Adelė Valeckienė, and Elena Valiulytė. 1997. Lithuanian Grammar.

Vilnius: Baltos lankos.

Anderson. Cori. 2013. Case and event structure in Russian and Lithuanian.

Doctoral dissertation, Princeton University. Anderson, Cori. 2015. Passivization and argument structure in Lithuanian. In Voice and argument structure in Baltic, ed. Axel Holvoet and Nicole Nau,

289–322. Amsterdam: John Benjamins Publishing. Arkadiev, Peter. 2016. Long-distance Genitive of Negation in Lithuanian. In Argument Realization in Baltic, ed. Axel Holvoet and Nicole Nau, 37-81.

Amsterdam: John Beniamins.

Babby, Leonard. 1980. The syntax of surface case marking. Cornell working

papers in linguistics 1:1–32. Bailyn, John Frederick. 2012. The syntax of Russian. Cambridge: Cambridge University Press.

## References II

Bhatt, Rajesh, and Roumyana Pancheva. 2006. Implicit arguments. In *The Wiley* Blackwell Companion to Syntax, Second Edition, ed. Martin Everaert and Henk van Riemsdijk, 554–584. Blackwell. Borik, Olga. 1995. Sintaktičeskij priznak neakkuzativnosti glagola (na materiale

russkogo javzka). M.A. Thesis, Dept. of Theoretical and Applied Linguistics,

Moscow State University. Bruening, Benjamin. 2013. By phrases in passives and nominals. *Syntax* 16:1–41. Bruening, Benjamin, and Thuan Tran. 2015. The nature of the passive, with an

analysis of Vietnamese. *Lingua* 165:133–172. Burzio, Luigi. 1986. *Italian syntax: A government-binding approach*, volume 1.

Springer Science & Business Media. Chomsky, Noam. 1981. Lectures on government and binding: The Pisa lectures.

9. Walter de Gruvter.

Chomsky, Noam. 1986. 1986: Knowledge of language: its nature, origin and use.

New York: Praeger.

Franks, Steven. 1995. Parameters of Slavic morphosyntax. Oxford: Oxford

University Press.

Harley, Heidi. 2013. External arguments and the mirror principle: On the distinctness of voice and v. Lingua 125:34-57.

### References III

Harves, Stephanie. 2003. Getting impersonal: Case, agreement, and distributive po-phrases in Russian. In Formal Approaches to Slavic Linguistics, volume 11, 235-254.

Holmberg, Anders. 2005. Is there a little pro? Evidence from Finnish. Linguistic

Inquiry 36:533–564. Holmberg, Anders. 2010. Null subject parameters. In Parametric variation: Null subjects in minimalist theory, ed. Theresa Biberauer, Anders Holmberg, Ian Roberts, and Michelle Sheehan, 88–124. Cambridge, MA: Cambridge University Press.

Holmberg, Anders, Aarti Nayudu, and Michelle Sheehan. 2009. Three partial null-subject languages: a comparison of Brazilian Portuguese, Finnish and

Marathi. Studia Linguistica 63:59–97. Landau, Idan. 2010. The explicit syntax of implicit arguments. Linguistic Inquiry

41:357-388.

Legate, Julie Anne. 2014. Voice and v: Lessons from Acehnese. Cambridge, MA: MIT Press.

### References IV

- Marantz, Alec. 1991. Case and licensing. In *Proceedings of ESCOL '91*, ed. German F. Westphal, Benjamin Ao, and Hee-Rahk Chae, 234-253. Columbus: The Ohio State University, Department of Linguistics, ESCOL Publication Committee.
- McCloskey, James. 2007. The grammar of autonomy in Irish. Natural Language &
- $\begin{array}{l} \textit{Linguistic Theory } 25:825-857. \\ \textit{McFadden, Thomas. } 2004. \ \textit{The Position of Morphological Case in the Derivation:} \end{array}$ 
  - A Study on the Syntax-Morphology Interface. Doctoral Dissertation, University

- of Pennsylvania, Philadelphia. McGinnis, Martha. 1998. Locality and inert case . Müller, Gereon. 2010. On deriving ced effects from the pic. *Linguistic Inquiry* 41:35-82
- Pakerys, Jurgis. 2006. Veiksmo pavadinimo konstrukcija lietuvių kalbos gramatikoje. In Daiktavardinio junginio tyrimai [Lietuvių kalbos gramatikos darbai], ed. Axel Holvoet and Rolandas Mikulskas, 121–149. Vilnius: Lietuvių kalbos instituto leidykla.
- Pesetsky, David. 1982. Paths and categories. Doctoral Dissertation, MIT. Pesetsky, David. 2013. Russian Case Morphology and the Syntactic Categories. Cambridge, MA: MIT Press.

### References V

- Pesetsky, David, and Esther Torrego. 2011. Case. In The Oxford Handbook of Linguistic Minimalism, ed. Cedric Boeckx, 52-72. Oxford: Oxford University Press.
- Preminger, Omer. 2014. Agreement and its failures. Cambridge, MA: MIT Press. Pylkkänen, Liina. 1999. Causation and external arguments. MIT Working Papers
- in Linguistics 35:161–183. Pylkkänen, Liina. 2008. Introducing arguments, volume 49. Cambridge, MA: MIT
- Rizzi, Luigi. 1986. Null objects in Italian and the theory of pro. Linguistic inquiry 17:501-557.
- Roberts, Ian. 1987. The representation of implicit and dethematized subjects,
- volume 10. Dordrecht: Walter de Gruyter. Roeper, Thomas. 1987. Implicit arguments and the head-complement relation.
- Linguistic Inquiry 18:267–310. Schäfer, Florian. 2008. The syntax of (anti-) causatives: External arguments in change-of-state contexts, volume 126. Amsterdam: John Benjamins Publishing. Schäfer, Florian. 2017. Romance and Greek medio-passives and the typology of
- Voice. In The Verbal Domain, ed. D'Alessandro Roberta, Irene Franco, and
  - Angel J. Gallego, 129–153. Oxford: Oxford University Press.

### References VI

Sigurðsson, Einar Freyr. 2017. Deriving case, agreement and Voice phenomena in syntax. Doctoral Dissertation, University of Pennsylvania, Philadelphia. Sigurðsson, Einar Freyr, Milena Sereikaite, and Marcel Pitteroff. 2018. The structural nature of non-structural case: On passivization and case in

Lithuanian. *Proceedings of LSA* 3:1–15. Sigurðsson, Einar Freyr, and Milena Sereikaitė. 2018. Lithuanian Genitive of

Negation. Ms. Sigurðsson, Halldór Ármann. 2002. To be an oblique subject: Russian vs.

Icelandic. Natural Language & Linguistic Theory 20:691–724. Sigurðsson, Halldór Ármann. 2004. Icelandic non-nominative subjects. In Typological studies in language, ed. Peri Bhaskararao and Karumuri V.

Subbarao, volume 61, 137–160. Amsterdam/Philadelphia. Šereikaitė, Milena. to appear. Active Existential in Lithuanian: Remarks on

Burzio's Generalization. *Linguistic Inquiry* . Vladarskienė, Rasuolė. 2010. Linksnių vartojimas veiksmažodžių abstraktų junginiuose [the use of cases in abstract phrases of verbal nouns]. Kalbos Kultūra 83:173-184.

Williams, Edwin. 1987. Implicity arguments, the binding theory, and control.

Natural Language & Linguistic Theory 5:151–180.

### References VII

Woolford, Ellen. 2003. Burzio's generalization, markedness, and locality constraints on nominative objects. In New Perspectives on Case Theory, ed. Ellen Brandner and Heike Zinzmeister, 299–327. Stanford: Center for the Study of Language and Information. Woolford, Ellen. 2006. Lexical case, inherent case, and argument structure.

Linguistic inquiry 37:111–130. Zaenen, Annie, Joan Maling, and Höskuldur Thráinsson. 1985. Case and grammatical functions: The icelandic passive. Natural Language & Linguistic Theory 3:441–483.

Zaika, Natalia. 2016. Lithuanian nominalization and the case marking of their arguments. In Argument Realization in Baltic, ed. Axel Holvoet and Nicole Nau, 523–551. John Benjamins Publication.

## Appendix: Partial pro-drop

- Lithuanian is a partial pro-drop language. <sup>21</sup> Its 1st and 2nd definite subject pronouns are optionally null.
- (65) (Aš) kvieč-iau Val-ių į dekanat-ą.

  I.NOM invite-PST.1SG Valius-ACC to dean's office-ACC

  'I was inviting/invited Valius to the dean's office.'
  - 3rd person definite pronouns cannot be null unless they have a previously mentioned linguistic antecedent.
- (66) \*(Jis/jie) kviet-ė Val-ių į dekanat-ą. he.NOM/they.NOM invite-PST.3 Valius-ACC to dean's.office-ACC 'He/they was/were inviting/invited Valius to the dean's office.'
- (67) **Jon-as**; sak- $\dot{\mathbf{e}}$ , kad (**jis**;) nupirk-o motin-ai nam-ą. Jonas-NOM say-PST.3 that he-NOM buy-PST.3 mother-DAT house-ACC 'Jonas; said that he; bought the mother a house.'

<sup>&</sup>lt;sup>21</sup>Holmberg 2005, 2010; Holmberg, Nayudu, and Sheehan 2009

## Appendix: Active Existential

- However, when the initiator is interpreted as the indefinite pronoun 'someone' or 'some people', the subject can be null.
- The initiator can be either animate or inanimate.

#### (68) Active Existential

- a. Lyg šaud-ė dien-ą mišk-e. as.if shoot-PST.3 day-ACC forest-LOC
  - 'It seems that (someone) fired shots in the wood during the day.'
- b. Jam pavog-ė arkl-į. he.DAT steal-PST.3 horse-ACC
  - 'Someone stole a horse from him.'
- val-iui atsiunt-ė pakvietim-ą į vakarėl-į.
   Valius-DAT send-PST.3 invitation-ACC to party-ACC
  - 'Someone has sent Valius an invitation to the party.'
- d. Man atrod-o, kad mane su-kandžioj-o.
   me.DAT appear-PST.3 that me.ACC PRF-bite-PST.3
   'It appears to me that something bit me (all over).' (e.g., mosquitoes)

## Appendix: Topicalized Object

 In fact, the theme of the active existential bears identical binding relations to a topicalized grammatical object meaning that it has undergone A-bar movement to a projection above TP.

#### (69) Topicalized Object

**Val-ių**; tėv-as mat-ė **j-o**;/\*sav-o; namuos-e. Valius-ACC father-NOM see-PST.3 his-GEN/self-GEN house-LOC.

'It was Valius; that the father saw in his; house.'

#### (70) Active Existential

**Val-ių**; kvieč-ia į dekanat-ą dėl **j-o**;/\*sav-o; prast-ų Valius-ACC invite-PST.3 to dean's.office-ACC because his-GEN/self-GEN bad-GEN pažym-ių. grades-GEN

'Someone is inviting Valius; to the dean's office because of his; bad grades.'

## Appendix: Unaccusatives

 The active existential is incompatible with unaccusative predicates which lack a thematic VoiceP.

#### (71) Active Existential

\*Per žin-ias mes sužinojo-me, jog šiandiena mir-ė nuo grip-o. through news-ACC we.NOM learn-PST.1PL that today die-PST.3 from flu-GEN.

'On the news we have learned that today someone/some people died from flu.'

## Appendix: Word Order

- Word order in Lithuanian may vary depending on the 'communicative intention'. Ambrazas et al. (1997) note that in Lithuanian, old information precedes new information.
- The active existential is similar to passives in that it is also used in situations where the initiator is unknown, less relevant to the hearer.
- In the active existential, the Topic of the sentence is the grammatical object, and therefore it occupies the pre-verbal position.
- (72) Jon-as man sak-ė, kad vakar **vien-ą student-ą pakviet-ė** į Jonas-NOM me.DAT say-PST.3 that yesterday one-ACC student-ACC invite-PST.3 to dekanat-ą.

  dean's.office-ACC
  - 'Jonas told me that yesterday someone invited one student to the dean's office.' (theme-verb)

## Appendix: Why in the lexicon?

- The English implicit object may also be existentially bound in the lexicon.
- (i) has an interpretation where there is no one that I read a book to. The implicit object cannot take scope over 'to no one' instead it scopes beneath the PP.
- The implicit object's inability to have a wide scope over the PP can be accounted for if we assume that the implicit object is bound in the lexicon.
- (i) I read to no one. (Kyle Johnson (pc))

## Appendix: Restructuring

- Bandyti 'to try' is a restructuring predicate whose complement is no bigger than vP, and thus lacks VoiceP.
- The theme of the infinitive becomes the nominative grammatical subject of the matrix verb forming a long-distance passive.

#### (73) Long-distance Passive

- a. Jon-as band-ė [aug-in-ti šiuos augal-us miške]. Jonas-NOM try-PST.3 grow-CAUS-INF these plants-ACC forest 'Jonas tried to grow these plants in the forest.'
- b. Šie augal-ai; buv-o Jon-o bando-m-i [aug-in-ti  $t_i$  these plants-NOM be-PST.3 Jonas-GEN try-PASS.PTCP-NOM grow-CAUS-INF miške].

forest

'These plants were tried to grow in the forest by Jonas.'

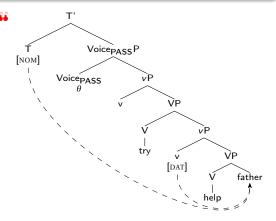
## Appendix: Restructuring

- The theme of *help*-class predicates can become a nominative subject.
- (74) Tèv-as buv-o padeda-m-as Jono. father-NOM be-PST.3 help-PASS.PTCP-NOM Jonas-GEN 'The father was (being) helped by Jonas.'
  - If the dative were obligatorily assigned by v in the infinitive, then it should be possible for the theme to optionally advance to a grammatical subject of the matrix and form a long-distance passive.
  - However, it is ungrammatical to form a long-distance passive!
- (75) Long-distance Passive with help-class predicates
  - Jon-as band-ė padė-ti tėv-ui.
     Jonas-NOM try-PST.3 help-INF father-DAT
     'Jonas tried to help the father.'
  - b. \*Tėv-as; buv-o bando-m-as [t; padė-ti Jon-o]. father-NOM be-PST.3 try-PASS.PTCP-NOM help-INF Jonas-GEN 'The father was tried to help by Jonas.'

## Appendix: Restructuring

The marked structural dative must be assigned by a thematic Voice. The complement of restructuring lacks VoiceP. As a result, the dative cannot be assigned and the derivation crashes.

#### (76) \*Long-distance Passive with help \*\*\*

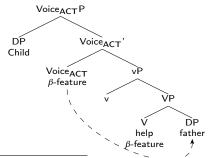


## Appendix: Selection

#### Appendix

- The thematic Voice head assigns dative case when a matrix verb belongs to help-class predicates.
- To ensure that the Voice head assigns dative rather than accusative case, I propose that the Voice head and the predicate enter into agreement relationship.
- Voice head enters the derivation with uninterpretable  $\beta$ -feature which is checked by another feature of the same kind on the verb.<sup>22</sup>

(77) Active



 $<sup>^{22}</sup>$ For a similar type of slectional relationship between T and  $\stackrel{\frown}{\text{v}}$  in Irish see McCloskey 2007.