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Partitivity in Finnish and Lithuanian: object marking

DOCTORAL DISSERTATION

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To my Father

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TABLE OF CONTENTS

LI	ST OF TABLES	11
LIS	ST OF FIGURES	11
AF	BBREVIATIONS AND DATA SOURCES	12
IN	TRODUCTION	16
1	PARTITIVE CASES IN THE MARKING OF THE DIRECT OBJECT	16
1.	1.1. Aim and tasks of the dissertation	
	1.2. Data and research methods	
	1.3. Novelty of the dissertation.	
	1.4. Structure of the dissertation	
	1.5. Theses to be defended	
2.	THEORETICAL PREREQUISITES	25
	2.1. Key concepts and definitions	25
	2.2. Partitive as an areal phenomenon of Circum-Baltic languages	31
	2.2.1.Object marking in Finnish	35
	2.2.2.Object marking in Lithuanian	38
	2.2.3. Aspectual features in Finnish and Lithuanian	40
	2.3. Historical background of partitives	
	2.4. Functions of partitive case markers	55
	2.4.1. Negation	56
	2.4.2. Partiality and incremental quantification	58
	2.4.3. Partitive with quantifiers	59
	2.4.4. Indefiniteness	61
	2.4.5. Semantic groups and low transitivity predicates	62
	2.4.6.Other uses	62
3.	THE DIFFERENTIAL FEATURES OF PARTITIVITY IN FINNISH	
	AND LITHUANIAN	66
	3.1. (In)definiteness	66
	3.2. Partiality	70
	3.2.1. Incremental quantification	71
	3.2.2. Generic uses	76
	3.3. (Ir)resultativity	77
	3.4. Discussion	80
	3.5. Concluding remarks	83

4.	. OBJECT MARKING WITH DISCRETE OBJECTS IN FINNISH					
	AND LITHUANIAN	84				
	4.1. Background: the marking of discrete objects	86				
	4.2. Semantic classification	89				
	4.2.1. Temporally restricted usage	91				
	4.2.2. Surface-contact verbs	96				
	4.2.3. Scalar verbs	100				
	4.2.4.Conative verbs	107				
	4.3. Discussion	111				
	4.4. Concluding remarks	113				
5.	VARIATION IN OBJECT MARKING: A CORPUS BASED					
	CASE STUDY	115				
	5.1. Data for the study					
	5.2. Finnish data	122				
	5.2.1. Total objects for culmination	122				
	5.2.2. Partial objects for various interpretations of					
	non-culmination	124				
	5.3. Lithuanian data	127				
CO	ONCLUSIONS	132				
RI	EFERENCES	134				

LIST OF TABLES

Table 1. Contexts triggering the use of partial objects in	
some CB languages	34
Table 2. Object cases in Finnish	36
Table 3. Object cases in Lithuanian	38
Table 4. Prefixation in Lithuanian verb nešti 'carry'	41
Table 5. Local cases in Finnish (adapted fromKoptjevskaja-Tamm 2001: 534)	48
Table 6. Partitive functions in Finnic and Indo-European languages(adapted from Luraghi & Kittilä 2014: 51)	54
Table 7. Functions of PAR case marking	63
Table 8. Occurrences of verbs with GP for discrete objects in Lithuanian corpora and other sources	90
Table 9. Finnish and Lithuanian object cases, with number of filtered	
occurrences	119

LIST OF FIGURES

Figure 1: The traces of the old separative case in different meanings	
of the Finnish PAR (adapted from Larjavaara 2019: 67)	51
Figure 2. The hierarchies of the object-marking rules for Finnish	81
Figure 3. The hierarchies of the object-marking rules for Lithuanian	82
Figure 4. Hierarchical criteria governing the choice of the object	
in Finnish tested on a corpus	123
Figure 5. Hierarchical criteria governing the choice of the object	
in Lithuanian tested on a corpus	128

ABBREVIATIONS AND DATA SOURCES

2 second person

- 3 third person
- ACC accusative
- ABE abessive
- ABL ablative
- ADE adessive
- ADV adverbial
- AOR aorist
- ART article
- BEL_1 Avanesaŭ, R. I., K. K. Krapiva & Ju. F. Matskevich (eds.). 1963.
 Dyjalektalahichny atlas belaruskaj movy [A dialect atlas of the Belarusian language]. Vol. 3. Minsk: Vydavetstva Akademii Navuk BSSR, map 211.
- BEL_2 Avanesaŭ, R. I., K. K. Krapiva & Ju. F. Matskevich (eds.). 1963. Dyjalektalahichny atlas belaruskaj movy. Ustupnyja artykuly, davedchyja materyjaly i kamentaryi da kart [A dialect atlas of the Belarusian language. Introductory chapters, reference materials, and commentary on maps]. Minsk: Vydavetstva Akademii Navuk BSSR, 756–757.
- B2005 *BIBLIJA, arba Šventasis Raštas.* 2005. Ekumeninis leidimas. Lietuvos Biblijos Draugija, Vilnius.
- CAUS causative
- COM comitative
- COMP comparative
- COND conditional
- CONNEG connegative verb form
- CVB converb
- DAT dative
- DEF definite
- DEM demonstrative pronoun

ELA	elative		
F	feminine		
fiTenTen14	corpus of TenTen series ¹		
FOC	focus		
FREQU	frequentative		
FUT	future		
GP	genitive-partitive		
GEN	genitive		
ILL	illative		
IMP	imperative		
IMPFV	imperfective		
INE	inessive		
INF	infinitive		
INS	instrumental		
LOC	locative		
16			

lt 16 1547, Mazvydas Martinas, Catechismus; 1573, Wolfenbüttelio postilė, B; 1575, Vilentas Baltramiejus, Enchiridion z; 1585, Jonas Bretkūnas, Biblija, Patarlių knyga (Pat); 1586, Jonas Bretkūnas, Biblija, Mokytojo knyga (Mok); 1589, Jonas Bretkūnas, Giesmės Duchaunos; 1589, Jonas Bretkūnas, Kancionalas; 1589, Jonas Bretkūnas, Kolektos; 1590, Jonas Bretkūnas, Biblija, Antra metraščių (kronikų) knyga (2 Met); 1590, Jonas Bretkūnas, Biblija, Danieliaus knyga (Dan); 1590, Jonas Bretkūnas, Biblija, Giesmių giesmės knyga (Gg); 1590, Jonas Bretkūnas, Biblija, Izaijo knyga (Iz); 1590, Jonas Bretkūnas, Biblija, Jeremijo knyga (Jer); 1590, Jonas Bretkūnas, Biblija, Jobo knyga (Job); 1590, Jonas Bretkūnas, Biblija, Pirma metraščių (kronikų) knyga (1 Met); 1590, Jonas Bretkūnas, Biblija, Raudų knyga (Rd); 1585, Jonas Bretkūnas, Biblija, Josua; 1585, Jonas Bretkūnas, Biblija, Judges; 1585, Jonas Bretkūnas, Biblija, Kings 1; 1585, Jonas Bretkūnas, Biblija, Kings 2; 1585, Jonas Bretkūnas, Biblija, Ruth; 1585, Jonas Bretkūnas, Biblija, Samuel 1; 1585, Jonas Bretkūnas,

¹ On the series see Jakubíček et al. 2013

Biblija, Samuel 2; 1591, Jonas Bretkunas Altes Testament; 1591, Jonas Bretkunas, Postilla 1; 1591, Jonas Bretkunas, Postilla 2; 1595, Mikalojus Daukša, Katekizmas; 1599, Mikalojus Daukša, Postilė.

- LT 18 1700, Martinas Lutheris, Mažasis katekizmas; 1701, Samuelis Bitneris, Naujasis Testamentas: 1704, Danielius Kleinas, Frydrichas Šusteris, Naujos giesmių knygos, Naujos maldų knygelės; 1704, Danielius Kleinas, Frydrichas Šusteris, Naujos giesmių knygos; 1704, Danielius Kleinas, Frydrichas Šusteris, Naujos maldų knygelės; 1705, Jonas Jaknavičius, Ewangelie Polskie y Litewskie; 1706 Jokūbas Perkūnas, Wohlgegründetes Bedenken über die ins Litauische übersetzten zehn Fabeln Aesopi und derselben passionierte Zuschrift; 1706, Jonas Šulcas, Ezopo pasakėčios; 1706, Michaelis Mörlinas, Principium primarium in lingua Lithuanica; 1709, Martinas Lutheris, Mažasis katekizmas; 1716–1744, Jokūbas Brodovskis, Litauische Sprichwörter und Rätsel; 1727, Ruigis, Naujasis Testamentas; 1728, Psalteras Dovydo; 1729, Johannas Anastasijus Freylinghausenas, Davadnas mokslas apie dūšios išganymą; 1750, Jonas Jaknavičius, Ewangelie Polskie y Litewskie; 1775, Gotfridas Ostermejeris, Agenda.
- LT_19 1869, Motiejus Valančius; 1897, Pranas Vaičaitis; 1823, Silvestras Valiūnas; 1807, Johannas Arndtas, Šešios knygos apie tikrą krikščionumą (pirma knyga); 1815, Dionizas Poška, Mužikas Žemaičių ir Lietuvos; 1816, Juozapas Arnulfas Giedraitis, Naujas įstatymas; 1823, Simonas Stanevičius, Historija šventa; 1841, Keturios gražios giesmės; 1841, Ketury naujo giesmė; 1841, Penkis naujo giesmė; 1845, Eikš prie Jėzaus; 1859, Baranauskas, Anykščių šilelis; 1896, Antanas Baranauskas, Kalbomokslis lietuviškos kalbos
- LT_20 1896–1933, Vaižgantas; 1919, Basanavičius; 1913, Ignas Šeinius_Raštai_9; 1903, Lazdynų pelėda; 1933, Ignas Šeinius_ Raštai_10; 1937, Ignas Šeinius, Raštai_5; 1942, Ignas Šeinius_ Raštai_6
- M masculine
- MED middle voice

NEG	negation
NOM	nominative
PA	active participle
PAR	partitive
PASS	passive
PL	plural
PP	passive participle
PRFV	perfective
PRS	present
PST	past
РТСР	participle
PVB	preverb
РХ	(nth person) possessive suffix
Q	question particle
r1992	Raamattu. 1992, WSOY, Porvoo, Helsinki, Juva
RFL	reflexive
SG	singular
SUP	superlative
TR	translative
URB2013	Buteikytė-Urbanavičienė, Vanda. 2013. Pro Usioginę vieškeliu, tolin Ukmergė: Valdo leidykla.

INTRODUCTION

1. PARTITIVE CASES IN THE MARKING OF THE DIRECT OBJECT

Partitivity is a complex linguistic notion that, in various languages, refers to e.g. proper partitive or pseudopartitive constructions, quantified expressions, overt indefinite determiners or partitive pronouns (Giusti & Sleeman 2021: 1–2). For this study, it is important to determine what is meant here by the terms *partitive* and *partitivity*:

- 1. *partitivity* is a functional property that can be manifested in various ways;
- as an inflectional case *partitivity* is assigned to differential object marking that is characteristic of both Finnish and Lithuanian. This study will concentrate on object case marking in Finnish and Lithuanian from the perspective of *partitivity*;
- 3. grammatical traditions label this property differently because *partitivity* is contrasted with categories that manifest higher telicity/transitivity and definiteness of the object;

Inflecting languages may express partitivity through case. In the tradition of Indo-European scholarship the term 'partitive' is primarily associated with the genitive (Koptjevskaja-Tamm 2001: 525), although the term also covers phenomena that are not morphological partitives (for more discussion see Koptjevskaja-Tamm 2001: 525). In Lithuanian, the 'partitive' function of the genitive is one among the numerous functions associated with this case² (1). Finnish, which belongs to the Finnic branch of the Uralic languages³, has a morphological case that is referred to as the partitive.

² The other functions of the Lithuanian genitive are, for example, genitive proper (e.g., possession *brolio kambarys* brother.GEN.SG room.NOM.SG 'brother's room'; origin/ material *obuolių sultys* apple.GEN.PL juice.NOM.PL 'apple juice' etc.).

³ The Finnic group around the Baltic Sea is represented by Finnish, Estonian, Livonian, Veps, Karelian, Ingrian and Votic. These languages are related to other Finno-Ugric languages (found mainly in Russia) and share a common protolanguage, namely Proto-Finnic.

(Lithuanian)

(1) Iš kur tu ims-i gyv-oj-o from where 2.NOM.SG.M take.FUT-2SG living-DEF-GEN.SG.M vand-ens?⁴ water-GEN.SG 'Where can you get living water?'
(Finnish)
(2) [...] hän ant-o-i kala-a.⁵

s/he give-PST-3SG fish-PAR

'[Jesus came, took the bread and gave it to them, and] did the same with the fish.'

The use of 'partitive cases' (called simply 'partitive' or 'partitive genitive') in the case marking of the direct object is an areal phenomenon attested in several groups of languages, both Indo-European (Slavic and Baltic) and Finnic (Koptjevskaja-Tamm 2001: 531–544, 557–564, Ambrazas 2006: 229). In addition to (1) and (2), we give more examples to illustrate that alternations in object marking involving the notion of partitivity are applicable to more languages in the Baltic area:

```
(Estonian, p.c. Riho Grünthal)
(3) Ma ost-si-n
                       leih-a.
         buy-PST-1SG bread-PAR
    L
    'I bought some bread.'
(Veps, from Kettunen 1943: 99)
(4) mö
                      mei-le vina-d
                sä
    sell.IMP2SG you we-ALL alkohol-PAR
    'Sell us some alcohol.'
(Russian, from Seržant 2015: 354)
(5) On
                po-pil
                                    vod-v.
    3NOM.SG.M PVB-drink.PST.3SG water-GEN.SG
    'He drank some water.'
```

Finnish and Lithuanian belong to a wider areal continuum with a rich linguistic and historical background and language contacts (Koptjevskaja-Tamm & Wälchli 2001: 728). The Finnic branch (comprising Finnish,

⁴ Unless otherwise stated, Lithuanian examples are from B2005 (see Data Sources).

⁵ Unless otherwise stated, Finnish examples come from R1992 (see Data Sources).

Estonian, Karelian, Votic, Veps, Ingrian and Livonian) belongs to the group of Finno-Ugric languages, the majority of which are spoken in western Siberia and eastern Russia. Sami, the closest relative of the Finnic group, plays an important role in dating the earliest Baltic influences (Larsson 2001: 237). Early Germanic and Finnic contacts seem to have been studied much more than those between Baltic and Finnic (ibid)⁶.

Finnic and Baltic were in early and intensive contact in the Proto-Finnic era (Larsson 1984: 98; Koptjevskaja-Tamm & Wälchli 2001; Kallio 2008; Junttila 2012, 2015a, 2015b); the main evidence for this comes from numerous words borrowed from Baltic to Finnic that are not found in other branches of the Uralic languages (Laakso 2001: 201; Larsson 1981: 50; Larsson 2001: 238–242). Besides lexical influence, language contact is heavily involved in the development of Proto-Finnic phonology (Larsson 2001: 243–244; Hofstra 1985; Kallio 2012, 2015; LÄGLOS) and there are very clear syntactical similarities between Finnic and Baltic. Some grammatical features are also common to the Circum-Baltic languages as a whole and are considered to be a result of language contact (Koptjevskaja-Tamm & Wälchli 2001: 674–723).

Several studies (Larsson 2001, Klaas 1996 to mention just a few) have proved that the correspondences of the Lithuanian partitive genitive and Finnish partitive cover a wide semantic-syntactic area. *Despite their grammatical labels, the Lithuanian partitive genitive*⁷ and Finnish partitive⁸ share many functional properties, which will be shown later in this study.

There has also been some discussion about the Baltic influence on the Finnic object case alternation (Larsson 1981). However, recent research shows that the grammaticalization of the Western Uralic (= Proto-Finno-Volgaic) ablative(-partitive) had already started before the Baltic influence started (Grünthal 2022). There are different views about how exactly the functional distribution of case forms, including their aspectual differentiation, was established in Finnic. Some researchers (e.g., Larsson 1984: 98) believe that this happened because of Baltic influence, others (e.g., Larjavaara 1991; Grünthal 2022) point out that the rise

⁶ Since the end of the 20th century, it has been commonly held that the earliest Germanic borrowings entered the language at the same proto-language stage as Baltic borrowings (see, e.g., Junttila 2015b and Kallio 2008).

⁷ The Lithuanian case could be called genitive-partitive because in this study it is formally genitive but functionally partitive. An abbreviation GP will be used for Lithuanian genitive-partitive in order to indicate the morphological category first and functional property second.

⁸ For Finnish partitive, the abbreviation PAR will be used.

of the patterns of distribution of PAR and accusative⁹ as observed in the modern language, and the aspectual differentiation of case forms, are logical developments, although Baltic influence in early stages is indisputable.

Lithuanian and Finnish both display differential object marking involving the notion of partitivity. The notion of differential object marking (DOM), referring to variation in the formal marking of the object conditioned by the categorial features of the object or semantic distinctions in the verb phrase, was introduced by Bossong 1985. For more background, see, e.g. Dalrymple & Nikolaeva 2011, Næss 2007 and Sinnemäki 2014. This dissertation covers only differential object marking. However, PAR and GP occur also in differential subject marking both for Finnish as in (6a-b) and for Lithuanian, as in (7a-b):

(Finnish, from Luraghi & Kittilä 2014: 18)

- (6) a. *Naise-t tul-i-vat koti-in*. woman-PL come-PST-3PL home-ILL 'The women came home.'
 - b. *Nais-i-a tul-i koti-in.* woman-PL-PAR come-PST.3SG home-ILL 'Some women came home.'

(Lithuanian, from Seržant 2014: 261)

- (7) a. *Važiav-o žmon-ės.* drive-PST.3 people-NOM.PL 'People drove/rode.'
 - b. *Pri-važiav-o žmoni-ų*. PVB-drive-PST.3 people-GEN.PL 'There have arrived a lot of people.'

In Lithuanian, GP is triggered by verbal quantifiers *pri-, at-, per-* meaning 'a lot' (normally in combination with a reflexive suffix/prefix), also by some verbs that take a measure phrase, e.g., *daugėti* 'to increase' (for more discussion see Seržant 2014: 261–262). In Finnish, the quantifying function of the PAR is activated with plural count nouns and it comes close to the function of an indefinite article (for more discussion see Luraghi et al. 2020: 871–873).

Finnish has a morphological case that is referred to as the PAR. The meaning of the dedicated PAR case should be set apart from the comparative concept of partitivity, which is used for comparison of the semantics of grammatical forms related to the "part-of-N" (8a; 9a) and "amount-of-N" (8b; 9b) concepts.

⁹ For Finnish and Lithuanian accusative, the abbreviation ACC will be used.

The partitive concept comprises two metonymically related subconcepts: the PAR (N-of-the N), (9a) and the pseudopartitive (N-of-N, (9b) (Tamm 2014: 91). The notion of the pseudopartitive involves a noun phrase that includes two nominals with a quantifier. The partitive concept is thus broader than that of the notion of a part-whole relationship. Koptjevskaja-Tamm, in her detailed typological study (2001), clearly discriminates between PAR (8a), (9a) and pseudopartitive (nominal) constructions (8b), (9b). Both PAR and pseudopartitive constructions are noun phrases consisting of two nominals, one of which is a quantifier, but the quantifier play different roles: in partitive nominal constructions (PC) the quantifier indicates a subset of a presupposed set of items referred by one of the nominal quantifies over the kind of entity (Koptjevskaja-Tamm 2001: 527). A presupposed set vs. the kind of entity are illustrated by examples (8a–b) and (9a–b):

(from Koptjevskaja-Tamm 2001: 526–527)

(8) a. a pile of Mary's books

```
b. a pile of books
```

(Finnish)

(9) a. <i>ole-n</i>	perhee-mme	nuor-in
be-PRS.1SG	family-GEN.1PLPX	young-SUP
'I am the you	ngest of my family'	
(Lithuanian, persona	l knowledge)	
b. stiklinė	vand-ens	
glass.NOM.SC	G water-GEN.SG	
'a glass of wa	ater'	

PAR is a grammatical form that is conceptually related to the meaning of the partitive concept and is divided into functional (e.g., aspectual, (10a)) and structural categories (e.g., default case, (10b)), depending on the semantics of the PAR in the structure of the language at hand (Tamm 2014, 91):

```
(Finnish)
(10) a. [...] miehe-t sö-i-vät uhriliha-a [...]
man-PL eat-PST-3PL sacrificial_meal-PAR
'The people ate the sacrificial meal.'
(Finnish, from Tamm 2014: 90)
b. ilman raha-a
without money-PAR
'without money'
```

The origins of Finnic PAR lie in a spatial case with a separative meaning (Koptjevskaja-Tamm 2001: 531–544, 557–564), more discussion in chapter 2.3.

Alternations in object marking also apply to discrete objects such as those expressed by count nouns in the singular. However, there are some clear differences between Finnish and Lithuanian regarding the marking of discrete entities. Lithuanian does not normally mark discrete entities with GP, unless some specific conditions apply (e.g. temporally restricted usage). Possible conditions for the use of PAR and GP in Finnish and Lithuanian in resultative constructions (which indicate that the event brings about a change) will be discussed in more detail in a separate chapter.

1.1. Aim and tasks of the dissertation

The aim of the dissertation is to analyze and describe the differences and relevant features of object case marking in Finnish and Lithuanian. The aim is also to investigate what functions Finnish PAR shares with Lithuanian GP and to propose a unified semantic classification for these functions. In this synchronic study, some diachronic data will also be analyzed to discover possible older functions of the partitive no longer observed in the contemporary languages.

The tasks of the dissertation are as follows:

- 1. to describe the case of the object in Finnish and Lithuanian by formulating differential features setting apart these two languages;
- 2. to give a brief historical background of the development of the individual cases marking partitivity (Finnish PAR vs. Lithuanian GP);
- 3. to describe the polyfunctionality of the cases marking partitivity in Finnish and Lithuanian;
- 4. to develop a concept of irresultative construction (a notion used in Finnish grammar) subsuming a number of more peripheral constructions involving partitive marking in the two languages;
- 5. to propose a unified semantic classification of constructions involving Finnish PAR and Lithuanian GP with discrete objects;
- 6. to perform a corpus-based study in order to analyse the grammatical and semantic constraints of the use of Finnish PAR and Lithuanian GP.

1.2. Data and research methods

The dissertation contains examples of Finnish and Lithuanian data, exemplifying various aspects of usage of Finnish PAR or Lithuanian GP in

these languages. The main data comes from the corpus of the Lithuanian and Finnish biblical texts (see Data Sources). The Lithuanian and Finnish data also present samples from other sources, wherever there is a need to illustrate some specific feature of the PAR / GP or to point out some older features of the PAR that have been lost in the contemporary language. Examples for chapter 4 about the PAR marking of the discrete objects were checked against the old Lithuanian Corpus. The dissertation also draws upon examples from other languages, such as Russian, Estonian, and Belarusian. For dialectal data or data from neighbouring languages informants were consulted. The research presented in this dissertation is data-driven, both qualitative and quantitative. The methods of data collection and analysis are described in detail in the respective chapters. In chapter 5 a separate study is carried out on a wide dataset, which is then treated with an ID3 algorithm so that decision trees can be produced. The dissertation contains in all more than 200 examples mainly from Finnish and Lithuanian, but also from other languages. The examples cited in the dissertation are glossed in accordance with the Leipzig glossing rules¹⁰. The Lithuanian examples are glossed following the guidelines presented in Nau & Arkadiev (2015), which is a version of the Leipzig glossing rules adapted for the Baltic languages. Finnish examples are glossed according to the interlinear morphological glossing conventions developed by Christian Lehmann¹¹ which offer more accurate suggestions than the Leipzig Glossing Rules.

1.3. Novelty of the dissertation

Even though numerous works have been published mostly focusing on the complex nature of the Finnish PAR (Denison 1957, Heinämäki 1994, Huumo 2002, 2006, 2013, Kiparsky 1998, Larjavaara 2019, ISK 2004 §925–941 to mention just a few), the areal features of the Finnish PAR in comparison with the Lithuanian and Slavic GP have been insufficiently analysed. The most recent study on Finnish PAR was published in 2019 by Larjavaara (unfortunately accessible only to scholars reading Finnish), which will serve as a good basis for this dissertation. Some research has been done in order to compare Finnic and Slavic aspectual differences (e.g., Dahl & Karlsson 1976). Partitivity and

¹⁰ https://www.eva.mpg.de/lingua/pdf/Glossing-Rules.pdf

https://www.christianlehmann.eu/ling/ling_meth/ling_description/representations/ gloss/index.php

partitive elements across languages were investigated in Koptjevskaja-Tamm 2001, Giusti & Sleeman 2021 and Luraghi & Huumo 2014. Similarities in case marking of the object in Lithuanian and one of the Finnic languages -Estonian - were investigated in Klaas 1996. A study of the independent partitive genitive (IPG) in Lithuanian was conducted by Seržant 2014; he gave a semantic description of the independent partitive genitive in functional terms and used the notion of (un)boundedness, claiming that NP-internally the IPG has two main readings: an unbounded and a bounded reading (Seržant 2014: 257). He also argues that the imperfective interpretation of the clause induces an inherently unbounded reading, which is not compatible with the bounded reading of the IPG (ibid.). Seržant also briefly discusses intensional contexts and constructions that assign the partitive genitive. However, Seržant's study includes the widely discussed phenomena of differential subject and object marking and only touches upon the important features of Lithuanian object marking. This dissertation will give a more thorough understanding of the object marking in Lithuanian. Keeping in mind that there is a lack of research on the similarities and differences pertaining to differential object marking in Finnish and Lithuanian from an areal/typological viewpoint that would rest on a richer empirical basis, the present dissertation aims to fill this gap and to shed more light on the similarities and differences between (the) Finnish PAR and (the) Lithuanian GP. This research intends to contribute to current knowledge on the Finnish PAR, the Lithuanian GP and their functions from an areal perspective. This dissertation will bring in wider empirical data including sources from old Lithuanian and Lithuanian dialects, also checking and spelling out the clear differences in object case marking in Finnish and Lithuanian against the corpora of biblical texts.

1.4. Structure of the dissertation

This dissertation is structured as follows: chapter 2 deals with the theoretical background for the study. After a presentation of the key concepts and terms used in the dissertation, a detailed account of object marking systems in Finnish and Lithuanian is given, followed by an overview of the means of expression of the category of aspect in the languages studied. In addition, some historical background for the Finnish PAR and the Lithuanian GP is provided in the light of the development of partitives across languages (chapter 2.3). Finally, a brief introduction on the functions of PAR case markers is given which will

be discussed and developed further in subsequent chapters. In chapter 3, the notion of partitivity is discussed in more detail, also with some data from other languages. Chapter 3 also explains the differential features of object marking in Finnish and Lithuanian. A separate chapter (chapter 4) is devoted to object marking with discrete objects. Chapter 5 presents a corpus-based study of the factors mandating the use of the PAR in Finnish and GP in Lithuanian in an algorithmic form. Finally, chapter 6 contains some concluding remarks and outlines prospects for future research in the field.

1.5. Theses to be defended

- Lithuanian and Finnish have completely different prototypes for assigning object cases. Finnish object case corresponds to clausal quantification (aspect) and Lithuanian object case corresponds to nominal quantification;
- 2) Despite some identical functions, Finnish PAR and Lithuanian GP play different roles in the grammatical systems of Finnish and Lithuanian;
- The demise of irresultative meaning of the GP in Lithuanian (and Slavic languages) might partly be due to changes in the relationship between partitivity and aspect;
- 4) Finnish and Lithuanian use different strategies for encoding irresultativity in discrete objects (Lithuanian has the possibility of expressing irresultativity with aspectual prefixes, Finnish expresses irresultativity with PAR marking); the GP strategy of expressing irresultativity for discrete objects never completely developed in Lithuanian;
- 5) Finnish and Lithuanian both have a way of morphologically marking partially affected discrete objects but do so differently: Lithuanian encodes aspect on the verb and so marks partial affectedness that way, but Finnish uses PAR instead. This is one of the central ideas of the relevant section of the thesis.

2. THEORETICAL PREREQUISITES

2.1. Key concepts and definitions

ACCUSATIVE (ACC) is one of the object cases (the other being the partitive) that are involved in object case alternations in Finnish and Lithuanian. Lithuanian has a dedicated morphological case referred to as the ACC. The ACC in Finnish is a non-autonomous case borrowing forms from other cases and is thus defined based on syntactic context. In this dissertation, the term ACC will be used as a blanket term for the non-partitive case forms. Examples are given for Finnish (11a) and Lithuanian (11b):

(Finnish, personal knowledge)
(11) a. Sö-i-n kaku-n. eat-PST-1SG cake-ACC
(Lithuanian, personal knowledge)
b. Su-valg-iau pyrag-q. PVB-eat-PST.1SG cake-ACC
'I ate a/the cake.'

AKTIONSART, or 'inherent aspectual meaning', is the property of verbal lexemes to differ in their "aspectual potential". One verb (e.g. *die*) normally denotes an event, while another verb like *sleep* normally means a state (Dahl 1985: 26–27). Aktionsart is sometimes termed *actionality*. Aktionsart is commonly associated with Vendler's classes (see below in ASPECT).

ASPECT covers two different terms: lexical aspect and grammatical aspect. LEXICAL ASPECT is usually associated with the classical Vendlerian (Vendler 1957, Mourelatos et al. 1978, more recently Croft 2012: 33–44) distinction between states (*hate*), activities (*walk*), achievements (*arrive*) and accomplishments (*build a house*). Three semantic properties, namely 'dynamicity', 'durativity' and 'telicity', can be used to distinguish these classes (for more details see Fleischhauer 2016: 68, cited by Czardybon 2017: 98). GRAMMATICAL ASPECT stands for the "different ways of viewing the internal constituency of the situation" (Comrie 1976: 3). Grammatical aspect is a grammatical category that includes oppositions between perfective and imperfective. Contrary to lexical aspect, grammatical aspect is about how we look at situations (Czardybon 2017: 99; cf. the notion of 'viewpoint aspect' in Smith 1991). PERFECTIVE ASPECT applies to complete events and the

situation is presented as a single unanalysable whole" (Comrie 1976: 3). The category of perfectivity typically includes 'perfectivity' and 'past time reference' (Dahl 1985: 23). As per Comrie, **IMPERFECTIVE ASPECT** explicitly refers to the internal temporal constituency of the situation (Comrie 1976: 4). Imperfective aspect can be further subdivided into continuous and habitual aspect (Comrie 1976: 26). To illustrate perfective and imperfective aspect, we give examples for Lithuanian. The perfective verb in (12a) expresses that the action was completed. The imperfective verb in (12b), on the contrary, denotes an ongoing event:

(Lithuanian, personal knowledge)

(12) a. *Iš-plovi-au* ind-us. PVB-wash-PST.1SG dish-ACC.PL 'I did the dishes.'
b. *Plovi-au* ind-us. wash-PST.1SG dish-ACC.PL 'I was doing the dishes.'

ASPECTUAL PARTITIVE is one of two functions of the Finnish PAR (the other functions of the Finnish PAR are NP-related) which are related to a class of verbs with a possibility to assign object cases in two different ways (ACC or PAR). The sentence will then have two different aspectual interpretations (see Kiparsky 1998: 266).

(Finnish, from Kiparsky 1998: 266)

(13) a. Ammu-i-n karhu-a. shoot-PST-1SG bear-PAR 'I shot at a/the bear.'
b. Ammu-i-n karhu-n. shoot-PST-1SG bear-ACC 'I shot a/the bear.'

BOUNDEDNESS is the aspectual function of the Finnish PAR, which some linguists refer to as resultativity. Aspectual (un)boundedness of the event (whether the event is interpreted as having an endpoint) is marked with the different object cases.

CONATIVITY is applied to constructions with verbs of certain semantic classes (Levin 1993, 42; Goldberg 1995: 63). In this work, the notion will refer to constructions describing complex processes of human interaction where the achievement of a result is not automatically given (as in *recommend that*

somebody should do smth.) to the extent that such entailments as to the result are reflected in object case alternation. For more discussion see chapter 4.2.4.

Finnish (from Larjavaara 2019: 232)

(14) a. *Kutsu-i-n* äiti-ä-kin mukaan, mutta hän invite-PST-1SG mother-PAR-FOC along but s/he ρi halu-nnut NEG.3SG want-pst.conneg 'I invited my mother to come along, but she did not want to.' b Kutsu-i-n äidi-n-kin mukaan. invite-PST-1SG mother-ACC-FOC along ia tuo-ssa hän nyt istu-u. and there-INESS s/he now sit-PRS.3SG 'I invited my mother to come along, and she is sitting over there now'

CULMINATION of the event is a precondition governing the choice between the Finnish object cases. Culmination involves total affectedness and affirmation (a detailed discussion will follow in chapter 2.2.1). Culmination is marked with the ACC, e.g.:

(Finnish)

(15) [...] *lieki-t sö-i-vät liha-n ja leivä-t.* flame-PL eat-PST-3PL meat-ACC and bread-ACC.PL
 '[Fire flared from the rock] consuming the meat and the bread.'

DISCRETE OBJECT in this study designates a discrete physical object, which is countable and not quantifiable with 'how much' quantifiers, e.g., *a house*, (16a). Discrete object is opposed to mass nouns, e.g. *water*, (16b):

(Finnish)

(16) a. *Minä rakenna-n nyt temppeli-ä Herra-lle,* I build-PRS.1SG now house-PAR Lord-ALL *Jumala-lle-ni* God-ALL-1SGPX
'I build a house to the name of the Lord my God.'
b. *Ota sie-ltä vet-tä* [...] take.IMP2SG there-ABL water-PAR
'Take some water from there [...]' GENITIVE (GEN) as a morphological case in the Indo-European languages, among other functions, also plays the role of a partitive case. For Lithuanian, only the 'partitive' function of the genitive will be discussed in this dissertation (example (1)).

An INCREMENTAL PARTICIPANT is seen in events when the object participates in the event gradually, while its components are affected in a sequence, as *temppeli* 'house' in (17):

(Finnish)

(17) Kun kuningas Salomo rakens-i Herra-n when king Solomon build-PST.3SG Lord-GEN temppeli-ä [...], hän määrä-si työvelvollisuu-den. house-PAR s/he raise-PST.3SG levy-ACC
'And this is the reason of the levy which king Solomon raised; for to build the house of the Lord [...]'

NON-CULMINATING aspect or unbounded quantity (or both together) is expressed by PAR object in Finnish. The general rule of using the PAR object for non-culminating aspect types (i.e., the aspectual PAR) applies for a certain group of verbs which are inherently *atelic*, as the action never reaches an endpoint, e.g., *rakastaa* 'love', *inhota* 'hate'. This group of verbs is not discussed in detail in the dissertation. The focus will be rather on the conditions determining the PAR object in Finnish where an opposition between two types of marking is available.

PARTIALITY (or partial affectedness) is a more specific meaning of PAR cases, appearing in sentences where a part of a larger reference mass is said to be affected by an action:

(Finnish)

(18)	Söi-si-n-kö	härk-i-en	liha-a,
	eat-COND-1SG-Q	bull-pl-gen	flesh-PAR
	joi-si-n-ko	vuoh-i-en	ver-ta?
	drink-COND-1SG-Q	goat-PL-GEN	blood-PAR
	'Will I eat the flesh	of bulls, or dri	nk the blood of goats?'

Partiality can also be seen in events involving an INCREMENTAL PARTICIPANT.

There is a distinction in Finnish tradition between the **PARTIAL OBJECT** and the **TOTAL OBJECT** (e.g., ISK 2004 § 925, Huumo 2013 etc.). Partial object in Finnish is morphologically marked with the PAR. Total object in Finnish is

marked with the ACC, which is a blanket term for the non-partitive case forms. In this dissertation, the terms ACC and PAR will be used.

PARTITIVE (PAR) is a morphological case, which in this dissertation is clearly distinguished from the comparative concept of partitivity (namely, "part-of-N" and "amount-of-N" concepts, Tamm 2014: 91). Finnish has a separate morphological case (PAR). In Lithuanian, the term is associated with the partitive function of the genitive (GP), which as a case, also has other functions than the marking of partitivity: to recognize the Lithuanian partitive, one needs to recognize a genitive and a certain clausal environment (objecthood, verbs where the genitive has a certain interpretation, etc). In this dissertation, only morphological cases referred to as partitives are investigated, see (19a) for Finnish and (19b) for Lithuanian:

(Finnish)

(19) a. [...] nälkäis-i-lle hän anta-a leipä-ä. hungry-PL-ALL s/he give-PRS.3SG bread-PAR
'[He upholds the cause of the oppressed and] gives food to the hungry.'

(Lithuanian, personal knowledge)

b. *Už-valgi-au pyrag-o.* PVB-eat-PST.1SG cake-GEN.SG 'I ate some cake.'

PSEUDOPARTITIVE is a noun phrase consisting of two nominals, the first of which functions as a quantifier. In the pseudopartitive nominal construction the quantifier quantifies over the kind of entity (Koptjevskaja-Tamm 2001: 527):

(Lithuanian, personal knowledge)
(20) *Puodelis pien-o* cup.NOM.SG milk-GEN.SG 'A cup of milk.'

Distinctions between **RESULTATIVE** and **IRRESULTATIVE** situations are reflected in the opposition between the Finnish object markers. The resultative situation indicates a transition to another state; the irresultative situation indicates that ultimately no such transition takes place. The aspectual distinction in Finnish sometimes is described as *resultative* vs. *irresultative* (Kiparsky 1998: 267). The oppositions between resultativity and irresultativity cover different *subtypes* of non-culminating aspect.

SCALAR verbs (also known as *degree achievement verbs*, e.g., *widen*, *lengthen*) are a group of verbs that can exhibit telic behavior not only with ACC but also with PAR object marking. While telicity is usually associated with culmination, the telicity of scalar verbs does not necessarily entail culmination. Such verbs will be discussed in detail in chapter 4.2.3.

Grammatical aspect is sometimes described as a **VIEWPOINT ASPECT**: "Aspectual viewpoints present situations with a particular perspective or focus, rather like the focus of a camera lens. Viewpoint gives a full or partial view of the situation talked about." (Smith 1997: 2–3). The viewpoint gives a full view in (21a) and (21c), a partial view in (21b). When compared to Aktionsart, the viewpoint aspect, in turn, refers to the properties that the speaker establishes in a particular utterance (Seržant 2014: 272). The distinction between perfective and imperfective aspect are applied when referring the viewpoint aspect (for perfective and perfective aspect see above at ASPECT).

(English, from Smith 1997: 3)

- (21) a. Mary walked to school.
 - b. Mary was walking to school.
 - c. *Mary walked in the park.*

SURFACE-CONTACT verbs refer to physical contact between two objects, but from the use of these verbs it is not always obvious that the objects have undergone some essential change, e.g.

(Finnish)

(22) Hän kosketta-a maa-ta [...] s/he touch-PRS.3SG ground-PAR 'He touches the ground [...]'

TELICITY is related to the property of a verb or a verb phrase to have a clear endpoint. Situations which have a clear endpoint, beyond which the situation cannot continue, are interpreted as being telic:

(Lithuanian, personal knowledge)
(23) *Per-raši-au* laišk-q. PVB-write-PST.1SG letter-ACC.SG
'I rewrote the letter.'

2.2. Partitive as an areal phenomenon of Circum-Baltic languages

The term "Circum-Baltic languages" was originally coined by Dahl & Koptjevskaja-Tamm (1992). The shared linguistic features of the CB area were of interest to many scholars (e.g., Dahl & Koptjevskaja-Tamm 1992, Raukko & Östman 1994, Koptjevskaja-Tamm & Wälchli 2001). It was shown that, as far as it can be reconstructed, in historical times the Baltic Sea region was the place where Indo-European (Baltic, Germanic and Slavic) met Uralic (Finnic and Sami) languages (Koptjevskaja-Tamm & Wälchli 2001: 617). The contacts between these languages and their influence on each other are indisputable. According to data from Finno-Ugric studies, the earliest Indo-European influences on Proto-Finnic were from Baltic languages (Larsson 2001: 237).

The linguistic situation in the CB area does not give grounds to support the idea of an area of linguistic convergence resulting from geographical proximity and language contacts or Sprachbund. However, discussing individual phenomena rather than looking for a notion of Sprachbund seems to be more justified (Koptjevskaja-Tamm & Wälchli 2001: 624). Specific language-contact-induced changes were discussed in e.g., Metslang 2001 for Estonian. Nau 1996 (cited by Koptjevskaja-Tamm & Wälchli 2001: 625) shows that complex phenomena usually show linguistic interaction in different ways and at different levels by introducing the case of verbal prefixes and particles, which serve as telicising bounders for the meaning expressed by a verb. She concludes that the CB area is very complex both synchronically and diachronically as a result of the frequency of semantic, functional and lexical convergence. However, Koptjevskaja-Tamm & Wälchli 2001 claim that frequent and intensive micro-contacts sometimes create the impression that there might have been macro-contact among the languages in a specific area, which is not always the case, and therefore they propose to use the term Contact Superposition Zone (Koptjevskaja-Tamm & Wälchli 2001: 626).

While leaving the question of the Sprachbund aside, Koptjevskaja-Tamm & Wälchli (2001: 626) concentrate on illustrating what kinds of areal convergence are found among the languages of the CB area (Koptjevskaja-Tamm & Wälchli (ibid). Generalization of latent constructions is one of the types of explanatory power for areal contacts. One of the examples for such generalization could be the analytic superlative of the type "better than all", which is found in Latvian, Estonian, Livonian and to some extent also in Russian. Finnic languages have five different constructions for the superlative degree (often co-occurring within one language), but the model "better than all" exists in all the Finnic and Baltic languages. The difference of Livonian, Latvian and Estonian vs. other languages is that this construction has a higher degree of grammaticalization. This development might have been influenced by language contacts (for a detailed discussion see Nau 1992/93, cited in Koptjevskaja-Tamm & Wälchli 2001: 626–627).

The frequency of certain constructions is also an important feature in areal linguistics. The comparison of lexical parallels of the verbal compound Rus. *žili-byli* 'they lived and were' in Finno-Ugric and Slavic fairy tales conducted by Tkačenko (1979) yielded interesting results. The relative frequency of these constructions varies not only among Russian, Belarusian and Ukrainian (percentages for Russian are much higher than for Ukrainian), but also among Russian dialects. The distribution of this construction reaches its peak in Russian dialects bordering on Finno-Ugric languages in Central Russian areas (for a detailed discussion see Tkačenko 1979 and the comments in Koptjevskaja-Tamm & Wälchli 2001: 627).

Typological studies have shown some structural similarities among the typical European languages. The linguistic area of what is known as "Standard Average European" (SAE) also involves CB languages, where they appear to be both at the core and on the periphery of SAE (Koptjevskaja-Tamm & Wälchli 2001: 629). CB languages show some interesting features which have been studied in connection with areal linguistics and general linguistic typology. However, it is not always easy to find a level of analysis that would satisfy the requirements of the typological view and the view of areal linguistics (Koptjevskaja-Tamm & Wälchli 2001: 629).

The CB area covers a wide area of languages, some of which barely have morphological case distinctions (like the Scandinavian languages), streching to another extreme, e.g., Estonian, which has 14 cases. One of the widely discussed common features of Slavic, Finnic and Baltic languages is the semantically and syntactically determined case alternation in the marking of objects (Koptjevskaja-Tamm & Wälchli 2001: 646). It was shown that the Finnic variation between ACC and PAR resembles the variation of ACC and GP in Baltic languages (Larsson 2001: 244): (Finnish¹²)

(24) a. Syö-n-kö omena-n vai omena-a? eat-PRS.1SG-Q apple-ACC or apple-PAR 'Should I eat the apple or some apple?'
(Lithuanian, personal knowledge) b. Ar man su-valgy-ti obuol-į

Q 1SG.DAT PVB-eat-INF apple-ACC.SG

ar už-valgy-ti obuoli-o?

Q PVB-eat-INF apple-GEN.SG

'Should I eat the apple or some apple?'

Such syntactic similarities are systematic and cannot be explained by coincidence, especially keeping in mind old Baltic contacts (about Baltic loanwords Larsson 2001: 246 as well as the updated information about the loanwords of the Baltic origin to be found in Junttila 2012, 2015b, where it is claimed that the semantics of the loanwords involves many open questions as regards the timing of the contacts). A change occurring in Proto-Finnic seems to have affected the case system, which became more like that of Baltic. In this gradual development towards a system closer to that of Baltic, Mordvinic and Finnic are seen as opposite ends in the scale reflecting the strength of the impact. Mutual influence would, however, need to be more evident in order to support the Sprachbund account. Baltic loanwords in Finnic languages speak in favor of a clear Baltic influence on Finnic languages, but there was no corresponding impact in the opposite direction (for a wider discussion see Larsson 2001: 246–247).

A direct comparison among the object case alternation in Finnic, Baltic and Slavic languages faces some problems: alternations are governed by different conditions, and they involve different cases (Koptjevskaja-Tamm & Wälchli 2001: 648). Only in Baltic are object cases (GP and ACC) clearly distinguished from each other. In Finnish, ACC borrows forms from other cases (for more details see chapter 2.2.1). In Estonian, even pronouns lack a special ACC form. Other Finnic languages have variations of either the Finnish or the Estonian system (for more discussion on object cases in Eastern and Western Slavic as well as in Finnic languages see Koptjevskaja-Tamm & Wälchli 2001: 649–650).

Example from https://www.kotus.fi/nyt/kotus-blogi/blogiarkisto/helena_kallio/ germaanista_ja_suomalaisugrilaista_rakkautta.6292.blog accessed on 11.2.2022

Alternations in object marking in Finnish and Lithuanian will be discussed in separate chapters (2.2.1 and 2.2.2). Here it would be important to also give an overview of the alternation in object marking in other languages belonging to the CB area.

The Polish system is reminiscent of the Lithuanian one first of all because the direct objects take the GEN if the verb is negated. There are some differences from the Lithuanian system in non-negated clauses. GEN objects occur with reference to quantitatively undelimited entities almost exclusively in the context of perfective verbs (Koptjevskaja-Tamm & Wälchli 2001: 653). Therefore, the Polish system significantly differs from that of the Finnic languages, which favors imperfective contexts for the PAR object marking. This leads to considerable differences in the types of entities that can be marked with PAR or GEN in non-negated clauses (Koptjevskaja-Tamm & Wälchli 2001: 654). Russian applies almost the same rules for the GEN marking. However, the choice between the object cases is sensitive to various factors, including definiteness (Timberlake 1975, cited by Koptjevskaja-Tamm & Wälchli 2001: 654). Northern Russian seems to combine GEN objects with imperfective verbs. Marking of the discrete entities in these languages is another interesting topic, which will be discussed separately in chapter 4.

The discussion about object alternation is summarized in Table 1 (adapted from Koptjevskaja-Tamm & Wälchli 2001: 655):

Contexts triggering the use of partial objects in some CB languages					
	Finnish	Lithuanian	Polish	Russian	Northern Russian
Negation	+	+	+	(+)	(+)
Aspect	Imp	-	(perf) ^a	(perf) ^a	-
Indeterminate quantity	+	+	+ ^a	+ ^a	+

Table 1. Contexts triggering the use of partial objects in some CB languages

^a Partial objects may occur only when both conditions ("perfective" and "indeterminate quantity") are met

As is shown in table 1, the only cases where all the languages would use PAR or GEN are triggered by perfective contexts and quantitatively indefinite objects (Koptjevskaja-Tamm & Wälchli 2001: 655). Finnish uses ACC for quantitatively definite objects that are affected entirely. Russian chooses the

opposite option: the ACC case is the default case, whereas the GEN should be justified with good reasons. Lithuanian, Northern Russian and Polish provide cases in between (Koptjevskaja-Tamm & Wälchli 2001: 656).

Further on, we will discuss object case alternation in Finnish and Lithuanian in more detail.

2.2.1. Object marking in Finnish

In Finnish, the case of the direct object of transitive verbs alternates between the 'total object' (marked with the ACC) and the 'partial object' (morphologically marked with the PAR). In the Finnic languages (likewise Mordvinic and most Saamic languages), the inherited ACC has merged with the GEN (see e.g. Hakulinen 2000: 98–99). Consequently, the same case suffix is used in both adnominal and adverbal functions. Finnic grammatical descriptions label it as the GEN. In the adverbial function as the case of object it is logical to label it as the ACC. The ACC plural is identical with nominative plural. Thus, the PAR is less ambiguous as the case of object because it displays both singular and plural (for examples see Table 2 below).

In this dissertation, the term 'ACC' will be used as a blanket term for the nonpartitive object case forms. The ACC has very little dedicated morphology and is thus largely a non-autonomous case borrowing forms from other cases (on the notion of non-autonomous case see Blake 2004, 22–24). For singular NPs, the object marker -*n* is homophonous with the GEN case;¹³ plural direct objects are marked with the nominative plural. A dedicated form (the -*t* accusative) is used for personal pronouns, for example *he* 'they.NOM.PL' : *heidä-t* 'they-ACC. PL'. The ACC case is thus defined based on syntactic context, cf. (25):

- (25) Tapas-i-n 'meet-PST-1SG'
 - genitive (*ystävä-n* 'friend-ACC = GEN') 'I met a friend';
 - nominative (*ystävä-t* 'friend-PL.ACC = PL.NOM') 'I met (my) friends';
 - dedicated ACC (*sinu-t* 'you-ACC') 'I met you'.

Finnish object cases are shown in Table 2 below:

¹³ Historically, the object-marking GEN was an ACC with the ending *-m, but it coalesced with the original genitive -n after a sound change whereby word-final *-m became -n (Huumo 2013: 91).

Table 2. Object cases in Finnish

	Singular		Plural	
	PAR	ACC	PAR	ACC
kala 'fish'	<i>kala-a</i> fish-PAR	<i>kala-n</i> (= GEN) fish-ACC	<i>kal-o-ja</i> fish-PL-PAR	<i>kala-t</i> (= NOM) fish-PL.ACC
avain 'key'	<i>avain-ta</i> key-PAR	avaime-n (= GEN) key-ACC	<i>avaim-i-a</i> key-PL-PAR	avaime-t (= NOM) key-PL.ACC
karhu 'bear'	<i>karhu-a</i> bear-PAR	<i>karhu-n</i> (= GEN) bear-ACC	<i>karhu-j-a</i> bear-PL-PAR	<i>karhu-t</i> (= NOM) bear-PL.ACC
hän 's/he'	<i>hän-tä</i> s/he-PAR	<i>häne-t</i> s/he-ACC	<i>hei-tä</i> they-PAR	<i>hei-dät</i> they-ACC

In Finnish grammar, the PAR case is described as the default case for the object of a transitive verb; a special feature is required for the assignment of ACC case (cf. Vainikka 1993, Heinämäki 1984). The PAR case has three interrelated and often overlapping functions (Vainikka & Maling 1996: 193): **quantitative unboundedness of the object referent,** which often correlates with an indefinite reading (26), **aspectual unboundedness** or lack of culmination in the designated event (27), or **negation** of the propositional content (28):

(Finnish, personal knowledge)

- (26) *Löys-i-n marjo-j-a.* find-PST-1SG berry-PL-PAR 'I found [some] berries.'
- (27) *Kuuntel-i-n radio-ta*. listen-PST-1SG radio-PAR 'I was listening to a/the radio.'
- (28) En rakenta-nut talo-a.
 NEG.1SG build-PST.CONNEG house-PAR
 'I did not build a/the house.'
 'I was not building a/the house.'

Among all these factors, negation is seen as the strongest rule that mandates the use of the PAR and overrides the other rules (aspect, quantification) in cases where they are in conflict. In some instances, the PAR is motivated by more
than one of the factors mentioned above. In example (29) given by Huumo (2013: 103), one finds three interpretations of the PAR object: aspectual progressive (29b), quantificational (29c), aspectual irresultative (29d). Various combinations of two interpretations are also possible.

(Finnish, from Huumo 2013: 103)

- (29) Lyhens-i-n hamee-t ~ hame-i-ta.
 shorten-PST-1SG skirt-ACC.PL ~ skirt-PL-PAR
 a. 'I shortened the skirts (= made them short)' [ACC]
 b. 'I was shortening [the] skirts' (progressive) [PAR]
 c. 'I shortened some skirts' [PAR]
 - d. 'I shortened the skirts (= made them [somewhat] shorter)' [PAR]

The ACC has a positive meaning, that of total affectedness, which entails quantification, culmination, and affirmation, and if these conditions are not met the language resorts to its default case, the PAR; see the difference between (30a) and (30b) for comparison:

(Finnish, personal knowledge)

- (30) a. *Rakens-i-n talo-n.* build-PST-1SG house-ACC 'I built a/the house.'
 - b. *Rakens-i-n talo-a*. build-PST-1SG house-PAR
 - (i) 'I built some of the house.'
 - (ii) 'I was building a/the house.'

In (30a) the phrase 'house' designates a discrete entity in its entirety. The object NP is therefore quantitatively bounded (but not necessarily definite), the action has culminated in a result (the house was built), and all these factors result in the use of the ACC.

Some researchers (e.g., Denison 1957: 143–159, Vainikka 1989: 322–324, Kont 1963: 79) have lists of Finnish verbs, indicating that they usually govern PAR. These lists might include e.g., verbs that express feeling, state of mind and assessment; such as 'love', 'hate' and 'fear' (31) (Larsson 1983: 92); verbs that express wish, planning and attempt (32). More recent studies have shown that instead of lexically ruled case government, aspectual features are important (see, e.g., ISK 2004 § 1510).

(Finnish, personal knowledge)

- (31) Inhoa-n sinu-a. hate-PRS.1SG you-PAR 'I hate you.'
- (32) Suunnittele-n matka-a. plan-PRS.1SG trip-PAR 'I am planning a/the trip.'

2.2.2. Object marking in Lithuanian

In Lithuanian, the case of the direct object of transitive verbs alternates between the ACC and the GP. The term 'partitive genitive'¹⁴ is usually used for a GEN that describes a part of some sets of objects or for an indefinite number of objects or persons (Ambrazas 2006: 215).

(Lithuanian, personal knowledge)

(33)	a.	J-is	rad-o	knyg-as.
		3-NOM.SG.M	find-PST.3	book-ACC.PL
		'He found the	e books.'	
	b	J-is	rad-o	knva_11
	0.	$J^{-}\iota S$	100-0	nnyg-ų.
	0.	0 10		book-GEN.PL

Lithuanian object cases are shown in table 3 below:

	Sing	gular	Plural	
	GP	ACC	GP	ACC
namas 'house'	nam-o	nam-ą	nam-ų	nam-us
vaisius 'fruit'	vaisi-aus	vaisi-ų	vaisi-ų	vaisi-us
dukra 'daughter'	dukr-os	dukr-ą	dukr-ų	dukr-as
marti 'daughter-in-law'	marči-os	marči-ą	marči-ų	marči-as
gėlė 'flower'	gėl-ės	gėl-ę	gėli-ų	gėl-es
senelis 'grandfather'	seneli-o	senel-į	seneli-ų	seneli-us
pilis 'castle'	pil-ies	pil-į	pili-ų	pil-is
dubuo 'bowl'	dub-ens	duben-į	duben-ų	duben-is

Table 3.	Object	cases in	Lithuanian
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¹⁴ Jablonskis uses another term for partitive genitive – the genitive of indefiniteness or the genitive of quantity (Lith. *nežymybės* arba *kiekio kilmininkas*) (Jablonskis 1957: 566–577). Nowadays, the usual term is 'genitive of indefinite quantity'.

The use of the Lithuanian GP differs from that of the Finnish PAR in many respects. As illustrated by example (33b), the most common use of the Lithuanian GEN is with indefinite non-incremental quantification (where the GEN is used to refer to an indefinite amount or quantity). The use of the ACC is much more predominant and is to be seen as the **default case of the Lithuanian object**. Whereas in Finnish it is the PAR that has a whole array of disparate functions, in Lithuanian this is true of the ACC, which is used with **incremental quantification**, when the object participates in the event gradually, and its components are affected in a sequential fashion (34), but also for **definite mass nouns** (35), and in **generic sentences** (36):

(Lithuanian, personal knowledge)

- (34) *Aš geri-u kav-ą.* 1SG.NOM drink-PRS.1SG coffee-ACC.SG 'I am drinking coffee.'
- (35) *Iš-gėri-au kav-ą.* PVB-drink-PST.1SG coffee-ACC.SG 'I drank up the coffee.'
- (36) *Geri-u tik kav-q.* drink-PRS.1SG only coffee-ACC.SG 'I drink only coffee.'

However, in line with Finnish (28), Lithuanian direct objects of transitive verbs (even those normally marked with the ACC) will take GEN case in negated clauses; this is the so-called GEN of negation, which historically evolved from the GP (Ambrazas et al. 1997: 500–506; 667–668, see also Kuryłowicz 1971 for the Slavic GEN of negation):

(Lithuanian, personal knowledge)

(37)	a.	Brol-is	nu-si-pirk-o	nauj-q	į	nam-ą.
		brother.NOM.SG	PVB-RFL-buy-PST.3	new-A	CC.SG	house-ACC.SG
		'[My] brother be	ought a new house.'			
	b.	Brol-is	ne-nu-si-pirk-o		nauj-o)
		brother-NOM.SG	NEG-PVB-RFL-buy-	PST.3	new-C	BEN.SG
		пат-о.				
	house-GEN.SG					
		'[My] brother di	id not buy a new hou	se.'		

As discussed in 2.2, the opposition between ACC and GP in Lithuanian is mainly based on definite/indefinite quantity oppositions (e.g., *išgėriau pieną*.

ACC.SG / pieno.GEN.SG 'I drank the milk / some milk'). However, the use of GP is triggered not by the verb, but by the object, which can be divided and is quantifiable (Ambrazas 2006: 218). ACC / GP oppositions are not possible for some transitive verbs, e.g., for objects that can not be divided (*mylėti* 'love', *gerbti* 'respect', *mėgti* 'like') (for more details of non-prefixed verbs that do not take GP objects see Ambrazas 2006: 218–219). It has also been noticed that GP is more frequent with verbs denoting a non-continuous event (Švambarytė 1996: 47).

In Old Lithuanian, certain verbs used to govern the GP (contemporary Lithuanian allows only ACC), e.g., with *verba memoriae* such as *atminti* 'remember', *užmiršti* 'forget': *atmena Dievo.GEN.SG* 'remembers God' (for more details see Ambrazas 2006: 219). There are also certain other groups of verbs which take GP in old Lithuanian, e.g. verbs expressing invitation, expectation, attempt or surface-contact (Ambrazas 2006: 220–222). However, in contemporary Lithuanian the verbs like *norėti* 'wish', *ieškoti* 'seek', *geisti* 'desire' are not associated with the GP and do not form oppositions between ACC and GP (Bulygina 1959: 104–105). Surface-contact verbs refer to physical contact between two objects, but this contact does not necessarily lead to some essential change. For a more detailed discussion on surface-contact verbs see 4.2.2.

As mentioned above, verbs denoting a single event are more likely to take GP. But there is also a tendency for certain verbs to take GP instead of ACC. This applies for verbs whose prefix denotes the completeness of the action or the exceeding of a normative quantity. Such verbal prefixes are *per-, pri-, at-,* e.g.,

(Lithuanian, personal knowledge)

(38) *pri-valgi-au* saldaini-ų PVB-eat-PST.1SG candy-GEN.PL 'I ate my fill of candies'.

The examples above illustrate that the oppositions between GP and ACC are fading away and there is a clear tendency to generalize only one object case based on the verb semantics (Ambrazas 2006: 224).

2.2.3. Aspectual features in Finnish and Lithuanian

This subchapter gives an overview of the aspectual systems in Finnish and Lithuanian. The topic is very complex and deserves a separate study; therefore this subchapter intends to give only basic correspondences and differences between the two languages.

The Lithuanian aspectual system, in line with the Slavic system, is based on verbal prefixes, which function as 'bounders' with perfectivising effect (Holvoet, Daugavet & Žeimantienė 2021: 249 and the literature mentioned therein).

Lithuanian operates with many verbal prefixes that change the aspectual character of a verb. Examples are given for the verb *nešti* 'carry' and its various prefixed pairs. However, it will be shown later that in some cases only one verb is available rather than a pair of verbs:

	<i>į-nešti</i> 'carry in'	
	<i>iš-nešti</i> 'carry out'	
	per-nešti 'carry along'	
n očti ⁽ oormu)	pri-nešti 'bring up to'	
nešti 'carry'	su-nešti 'carry to'	
	<i>už-nešti</i> 'carry up'	
	ap-nešti 'carry around'	
	nu-nešti 'carry to'	

Table 4. Prefixation in Lithuanian verb nešti 'carry'

Although the perfectivizing prefixes in Lithuanian superficially resemble the system of verbal aspect of Slavic languages, recent research on Baltic aspect follows two different views. Arkadiev (2011) denies the existence of verbal aspect in Lithuanian. Other researchers (Holvoet 2014, Holvoet, Daugavet & Žeimantienė 2021) argue that Lithuanian has a grammatical category of aspect, though weakly grammaticalised. The description of the Lithuanian aspectual system in this chapter is based on the latter view.

For a long time Baltic aspect has been seen and discussed in parallel to that of Slavic. The Slavic derivational aspect with perfectivizing prefixes has been held as an example of verbal aspect and Baltic languages were understood to share this feature (Holvoet 2014: 89). Typological studies of aspect (e.g., Dahl 1985) show that Slavic and Baltic aspect rests on 'grammaticalized lexical classes' provided that the grammaticalized nature of Baltic aspect could be established at all (Holvoet 2014: 89). Some researchers have tried to refute the view that Baltic aspect is similar to Slavic (e.g. Safarewicz 1938, cited by Holvoet 2014: 89). Holvoet follows the view that both the degree of grammatical relevance of aspectual oppositions, and the degree of their generality, is smaller in Baltic than in Slavic (ibid.) In Lithuanian, different prefixes introduce different Aktionsarten (Holvoet 2014: 90):

rašyti 'write' : *pa-rašyti* 'write' (the prefixed verb would be completive) *pykti* 'be angry': *su-pykti* 'get angry' (the prefixed verb would be inceptive).

Slavic aspect is based on distributional classes, where simple distributional tests are applied (combination with the phasal verb like 'begin' or the ability to have some inflectional forms). Based on these tests, imperfective verbs are distinguished from perfective verbs (Holvoet, Daugavet & Žeimantienė 2021: 250). However, these tests cannot be easily applied to Lithuanian. Lithuanian has many bi-aspectual verbs, which do not appear very often in Slavic languages. For this reason some authors (Arkadiev 2011) prefer not to accept the existence of verbal aspect in Lithuanian. Example (39) is given for a situation, where speech and reference time (or reference time only) are included in the temporal interval covered by the event described:

(Lithuanian, from Holvoet, Daugavet & Žeimantienė 2021: 250)

(39) *Mes kaip tik su-organizuoj-a-me konferencij-q.
 1PL.NOM right_now PVB-organise-PRS-1PL conference-ACC.SG Intended meaning 'Right now we're organizing a conference.'

The prefix *su*- conveys the achievement of a natural boundary of the process; thus the verb has a grammatical feature that can be characterized as perfectivity (Holvoet, Daugavet & Žeimantienė 2021: 250–251). Some Lithuanian prefixed verbs can be called perfective because they cannot have all the functions in present tense: *pa-rašau* 'I write' cannot refer to a homogeneous interval of time including the moment of speaking (Holvoet 2014: 90). It should be also noted that sometimes only one verb is available instead of a pair of verbs, e.g., *su-prasti* 'under-stand' (which does not stand alongside a simplex **prasti*) can be used both in the inceptive sense (40) but also with reference to a state and therefore it will have a normal present tense (41):

(Lithuanian, from Holvoet 2014: 90)

- (40) Staiga suprat-au, kas į-vyk-o.
 suddenly understand-PST.1SG what.NOM.SG PBV-happen-PST.3
 'I suddenly understood what had happened.'
- (41) *Suprant-u, kas j-vyk-o.* understand-PRS.1SG what.NOM.SG PVB-happen.PST.3 'I understand what happened.'

It has also been shown that many meanings of prefixed verbs differ from that expressed by the corresponding simplex, cf. *pri-pažinti* 'recognize, acknowledge' as against *pažinti* 'know, be acquainted'. Such prefixed verbs are viewed as bi-aspectual as well (for more explanations see Holvoet 2014: 90).

Lithuanian differs from Slavic languages in the restriction of the lexical basis for aspectual oppositions to a much smaller number of verbs (Holvoet 2014: 91). Lithuanian perfective verbs comprise (as per Holvoet 2014: 91–92):

- Accomplishment verbs denoting an incremental process, e.g., *pa-rašyti* 'write.PRFV' vs. *rašyti* 'write.IPFV';
- Achievement verbs denoting a non-incremental change in state, e.g., *nupirkti* 'buy.PRFV' vs. *pirkti* 'buy.IPFV';
- Inceptive verbs, e.g., *su-pykti* 'get angry' vs. *pykti* 'be angry';
- Delimitative verbs, which are derived from stative or activity verbs and denote a state or activity not having a natural final boundary e.g., *padirbėti* 'work for some time' vs. *dirbti* 'work' and *pa-gulėti* 'lie for some time' vs. *gulėti* 'lie';
- Semelfactive verbs vs. state, activity or iterative verbs, e.g., *žvilgt-erė-ti* 'cast a look' vs. *žvelgti* 'look'.

Verbal prefixes function as natural boundaries telicising atelic verbs (Holvoet, Daugavet & Žeimantienė 2021: 254). Telicising prefixes could function as a precondition for the rise of an aspectual system, but they are not a sufficient condition for this (ibid.). However, the opposition between telic and atelic verb is one of lexical, but not grammatical aspect. Telicising prefixes turn verbs into telic, but non-prefixed verbs can also be telic. Lithuanian predicates like *skaityti knygą* 'read a book' can be seen both as activity and as accomplishment. Adding the prefix *per- (per-skaityti knygą* 'read a book, read the book through') to *skaityti* in its telic sense does not telicise the verb any further (Holvoet, Daugavet & Žeimantienė 2021: 254).

The Finnish PAR is sometimes described as marking aspectuality¹⁵. Contrary to e.g., Slavic languages, Finnish aspect is not expressed morphologically in the verb. Some exceptions to this rule might occur, for instance for verbs with some suffixes, but it all depends on how one defines aspect (Dingley 2003: 3). The suffix *-ahta-* produces semelfactive meaning, e.g. *laulaa* 'to sing' ~

¹⁵ Another function is NP-related (Kiparsky 1998: 266). For all the functions of the Finnish PAR see chapter 2.2.1

laulahtaa 'to sing for a moment'; the suffix *-ele-* produces iterative meaning, e.g., *kysyä* 'to ask' ~ *kysellä* 'to keep on asking'.¹⁶ However, these examples are rather examples of Aktionsarten (Dingley 2003: 4).

There have been studies comparing the instantiation of aspect in e.g., Russian and Finnish (Dahl & Karlsson 1976, Dingley 2003, Kiparsky 1998, 271–272). For a thorough discussion of aspect in Finnish see e.g Heinämäki 1984, 1994; Kiparsky 1998.

One of the main roles of the object case alternation in Finnish is to signal aspectual (un)boundedness of the event¹⁷, i.e., whether the event is interpreted as having an endpoint (Heinämäki 1984: 153). The ACC / PAR case alternation on the object shows that the event is completed or ongoing and therefore the situation is presented as either bounded or unbounded (Heinämäki 1994: 211–213). Finnish expresses boundedness by means of the ACC (42a) and and non-boundedness by means of the PAR (42b):

(Finnish, personal knowledge)

(42)	a. Mies	ost-i	auto-n.
	man	buy-PST.3SG	car-ACC
	'The I	man bought a/t	he car.'

- b. *Mies ost-i auto-a.* man buy-PST.3SG car-PAR 'The man was buying a car.'
- c. *Mies ost-i auto-n tunni-ssa.* man buy-PST.3SG car-ACC hour-INESS 'The man bought the car in an hour.'
- d. * *Mies ost-i auto-n tunni-n.* man buy-PST.3SG car-ACC hour-ACC 'The man bought the car for an hour.'

An essential difference between (42a) and (42b) is that the buying activity in (42a) is terminated by the reaching of an endpoint. After this endpoint (the completion of the act of buying) the situation cannot be prolonged any more.

¹⁶ Another scale to discuss the role of derivatives is the distinction between bounded and unbounded (continuous) verbs, which is considered as important in Finnish grammatical descriptions. Below, the concept of bounded/unbounded is adopted from Heinämäki 1994.

¹⁷ The aspectual function, which is characterized as boundedness, has been criticised by some researchers, which prefer to use the term "resultativity" (Larjavaara 1992: 279–281; Huumo 2006: 511).

The duration of the bounded situation might be indicated by such a bounding element as adverbials, which set a certain time-span within which the event is completed (42c). In Finnish, time-span adverbials take inessive case (Huumo 2013: 105; 2010: 90; ISK 2004 § 1498).

Under Dahl & Karlsson's 1976 interpretation, the ACC case in Finnish is possible when the object has undergone or is about to undergo a "crucial change". This term was criticized by Dingley as some verbs of cognition and/or perception do not indicate any crucial change, but they take the ACC (Dingley 2003: 5):

(Finnish, personal knowledge)

(43) *Poika tunte-e häne-t.* boy know-PRS.3SG s/he-ACC 'The boy knows him/her.'

Aspectual boundedness in Finnish can either be lexically coded in the verb stem (for verb lists of verbs that usually take PAR see e.g., Denison 1957: 143–159; Vainikka 1989: 322–324) or further specified in the sentence. Finnish has verbs that are inherently unbounded (such as "love") and verbs that are inherently bounded (such as "find"). Most Finnish verbs belong to one of these classes (Kiparsky 1998: 266). However, in Finnish some verbs might prefer a certain object case for a certain meaning, e.g., the Finnish verb *silittää* (Sands 2000: 47, Lees 2015: 38); the meaning 'to stroke' is favoured only by PAR (44a) and with the ACC / PAR it means 'to iron' (44b-c):

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(Finnish, from fiTenTen14)
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(44) a. *Men-i-n kyykky-yn ja silit-i-n kissa-a.* go-PST-1SG squat-ILL and stroke-PST-1SG cat-PAR 'I went into a squat and stroked a cat.'

(Finnish, from Sands 2000: 47)

b. *Silit-i-n* housu-t.

iron-PST-1SG trousers-ACC.PL

'I ironed the trousers.'

(Finnish, from fiTenTen14)

c. Sö-i-n hyvin, pes-i-n pyykki-ä, eat-PST-1SG well make-PST-1SG laundry-PAR silit-i-n vaatte-i-ta. iron-PST-1SG clothe-PL-PAR 'I was eating well, doing the laundry, ironing clothes.' The aspectual distinction in Finnish is sometimes described as *resultative* vs. *irresultative* (for more details see e.g., Heinämäki 1984: 153, Kiparsky 1998: 266–267; also chapter 3.3 for further discussion). Certain verbs in Finnish may assign two different types of object marking, which prompts a different aspectual interpretation. In (45a) the result was achieved (the cow died) and (45b) with the PAR no result was achieved as the cow did not die. The object in itself does not entail any particular result, it entails the existence of the boundary; the situation is interpreted as telic and has a clear endpoint beyond which the situation cannot continue. Therefore the telic endpoint is inferred to be the actual endpoint unless another boundary is given as in (45c), which is not an independent boundary but rather a specification of the boundary, which was given before (Heinämäki 1984: 159):

(Finnish, from Heinämäki 1984: 153, 159)

(45)	a. Metsästäjä	ampu-i	vahingo-ssa	lehmä-n.
	hunter	shoot-PST.3SG	accident-INESS	cow-ACC
	'The hunter shot a cow by accident.'			

- b. *Metsästäjä ampu-i vahingo-ssa lehmä-ä.* hunter shoot-PST.3SG accident-INESS cow-PAR 'The hunter shot (at) a cow by accident.'
- c. *Metsästäjä ampu-i lehmä-n silmäpuole-ksi.* hunter shoot-PST.3SG cow-ACC eye_half-TR 'The hunter shot and blinded the cow in one eye.'

The unbounded version (45b) with the PAR is aspectually irresultative; the bounded version (45a) with the ACC object is aspectually resultative and denotes an accomplishment (Kiparsky 1998: 267).

However, this explanation of resultativity does not work in all instances, as the PAR sometimes also indicates some change (for more discussion see chapter 4.2.3). Both sentences (46a) and (46b) indicate some change:

(Finnish, personal knowledge)

(46)	a.	Hän	siirs-i	kaappi-a	irti	seinä-stä.
		s/he	move-PST.3SG	cupboard-PAR	from	wall-ELAT
		'He m	noved the cupboar	rd a bit away fro	m the v	vall.'

b. *Hän siirs-i kaapi-n kamari-in.* s/he move-PST.3SG cupboard-ACC bedroom-ILL 'He moved the cupboard into the bedroom.' NP-related partitivity is in close connection with aspectual partitivity, e.g., bounded verbs such as *saada* "get" will have the object in PAR when they are quantitatively indeterminate (for examples see Kiparsky 1998: 267). Aspectually unbounded verbs normally assign PAR case to all their objects. Interestingly, a PAR bare plural object could have both a definite reading and an indefinite reading (ibid):

(Finnish, personal knowledge)
(47) *Etsi-n kirj-o-ja.* seek-PRS.1SG book-PL-PAR
'I am looking for (the) books.'

In (47) the meaning of the sentence could be "I am/was looking for the books" (aspectual partitivity), or "I am/was looking for books" (both aspectual partitivity and NP-related partitivity). For more comments see Kiparsky 1998: 267–268. (In)definiteness in Finnish and Lithuanian will be discussed separately in chapter 3.1.

2.3. Historical background of partitives

Partitives often originate from separative cases (ablatives) or genitives (Heine & Kuteva 2004: 32–33). Historically, the PAR in Finno-Ugric was a spatial case with separative ("from") meaning (see table 5 below). It is generally assumed that the development of the PAR goes back to the Volga-Finnic period when the ablative case was used to express partially affected objects. Later on the new composite elative and ablative cases took over the local functions of the original separative case in *-ta*, whose meaning ceased to be spatial and became associated with quantification: 'to eat of/from the bread' came to mean 'to eat some (of the) bread'. In Mordvinic the ablative case occurs on objects of a certain class of verbs similar, but not quite identical, to that taking a PAR object in the Finnic languages (Kiparsky 1998: 294, Koptjevskaja-Tamm 2001: 534–535). In the latest research, it was also shown that the conceptual difference between the Mordvinic ablative and Finnic PAR has not been defined on the basis of a comparative analysis: "both branches have preserved some archaic morphosyntactic characteristics of the Proto-Uralic ablative *-ta/-tä in comparative clauses, certain adpositional phrases and the case government of individual verbs, such as 'fear'. These features have been transferred to the synchronic (ablative-) partitive" (Grünthal 2022: 27). The other inherited local cases of Proto-Uralic also lost their spatial meanings and acquired grammatical functions: the 'essive' and the 'translative' now mark temporary state and change-of-state respectively whereas the system of spatial cases was compensated by secondary local cases. Most contemporary Finnic languages have at least two distinct local case sets. The developments in the Finnic case system are shown in Table 5 below:

		Modern Finnish local cases	
	Interior local cases	Exterior local cases	Grammaticalized inherited local cases
Location	Inessive	Adessive	Essive
Goal	Illative	Allative	Translative
Source	Elative	Ablative	Partitive

 Table 5. Local cases in Finnish (adapted from Koptjevskaja-Tamm 2001: 534)

In modern Finnish, the spatial usage of these cases is seen only in postpositions or adverbs, e.g. PAR: *kauka-a* 'from far away'; essive: *kauka-na* 'far away'; translative: *ulo-s* 'out', *kaua-ksi* '(towards) further away'. Essive and translative in modern Finnish are mainly used on noun predicates and adjective predicates (Koptjevskaja-Tamm 2001: 534, also cf. Hakulinen 1957: 63–65; Denison 1957: 21–22).

(Finnish, personal knowledge)

- (48) *Hän o-n tutkija-na.* s/he be-PRS.3SG researcher-ESS '(S)he is a researcher.'
- (49) *Poika kasv-o-i iso-ksi.* boy grow-PST-3SG big-TR 'The boy grew big.'

The new elative and ablative cases took over the spatial functions of the old PAR *-t;*, it retained only the meaning "part of" and thus became a strictly *partitive* case (Kiparsky 1998, 299). Hakulinen (2000: 535) compares the development of the Finnish PAR with the development of French preposition *de* (as in *J'ai mangé du poisson* 'I ate some fish.') and gives some examples of the PAR referring to *motion from* or *separation* (50).¹⁸

¹⁸ It is to be noticed that in Finnish dialects an inner local case, elative, is still used instead of PAR:

⁽Finnish dialect, from Hakulinen 2000: 535)

Mitä hän minu-sta pelkä-ä, [en ole enenkään ihmisiä syönyt]. what s/he I-ELAT be_afraid-PRS.3SG [I have not eaten humans before]. 'Why is s/he afraid of me, I have not eaten humans before.'

(Finnish, from Hakulinen 2000: 535)
(50) a. Minä sö-i-n kala-a. I eat-PST-1SG fish-PAR 'I ate some fish.'
b. * Minä sö-i-n kala-sta¹⁹. I eat-PST-1SG fish-ELAT 'I ate from fish.'

The Finnish aspectual object itself is a formation which has no complete equivalent outside Finnic languages. Two explanations are given for the aspectual object in Finnish: it could have developed because of the influence of the neighbouring languages (e.g., Kont 1959, 1961, 1963; Kiparski 1969; Larsson 1983, 1984, 2001) or it could have been an internal development within Finno-Ugric languages themselves (e.g., Itkonen 1982). Larsson's hypothesis of Baltic influence on the Finnic PAR (e.g., Larsson 1983: 141–143) was recently criticized by Seržant, who argues that the interaction between the PAR and aspectuality was taken over by Baltic from Finnic (Seržant 2015: 392–404). Nevertheless, the older hypothesis advanced by Larsson seems to be receiving more support from other researchers: the authors of the recent article Luraghi et al. 2020 strongly believe that the main direction of influence was from Balto-Slavic to Finnic (Luraghi et al 2020: 883). The arguments are as follows: Baltic GP has clear Indo-European roots (Finnic PAR, on the contrary, does not have equivalents outside Saami and Mordvinic); the Balto-Slavic origin of Finnic PAR finds explanations in both what we know about Baltic-Finnic contacts and their chronology; besides the morphosyntactic feature of possible Baltic-Slavic influence, there might be also other features of possible Balto-Slavic influence on Finnic, which need to be investigated (for more discussion see Luraghi et al 2020: 883–887). Leinonen (2015) shows that the GP in Baltic languages, especially as a subject, is on the fringe of syntax (Leinonen 2015: 198). It is a fact that the Finnic PAR certainly has more functions than Baltic GP, but this does not serve as a proof of the directionality of influence (Luraghi et al. 2020: 886). The borrowed feature might extend its usage in a replica language (ibid) and this view is highly supported by

 ¹⁹ Note that, if an adverb is added, the construction is possible: *Minä sö-i-n vähän kala-sta.* 1SG eat-PST-1SG little fish-ELAT 'I ate a little from the fish.'

Larjavaara (1991), who claims that the variation of the object case in Finnish has developed in a logical and semantically motivated manner, however there was some Baltic influence at the early stages of the development. Further on we give a brief account of the development of Finnish aspectual PAR, which is based on Larjavaara 1991: 383–399; 2009: 50–115.

The original separative case, which was discussed above, was a spatial and directional case, which refers to *motion from* or *separation* (Larjavaara 2019: 64). The traces of the ablative origins of the PAR are very visible in many of its uses in the modern language; to mention a few here (Larjavaara 2019: 64–66): a) *motion from* meaning:

(Finnish, adapted from Larjavaara 2019: 64) (51) *Lähd-i-n koto-a.* leave-PST-1SG home-PAR 'I left from home '

b) meaning of the *cause* or *the starting point*:

(Finnish, personal knowledge)

(52) *Maailma pelkä-ä sota-a.* world be_afraid-PRS.3SG war-PAR 'The world is afraid of the war.'

The example is given with the verb *pelätä*²⁰ 'to be afraid of'; war is the cause of the fear, it serves as a background that "pushes" the world away from itself. The war is the cause of the world's fear (Larjavaara 2019: 65). Some of the Finnish PAR objects, which date back to Proto-Finnic and which are common with Mordvinic, express such a kind of cause (see also Hakulinen 2000: 535).

c) *source* meaning, when something is taken from something, measured, drawn or extracted in indefinite amount (see Larjavaara 2019: 65 and Tamm 2014: 119–123 for more discussion on this meaning):

(Finnish, adapted from Larjavaara 2019: 65)

(53) *Jo-i-n vet-tä.* drink-PST-1SG water-PAR 'I drank some water.' (I drank *from* water)

²⁰ In the given example, Finnish *pelätä* 'to be afraid of' is an inherited Uralic verb. Traces of the old case government are seen in the case government of cognates in various Uralic languages.

The *source* meaning developed later into the two main meanings of the Finnish PAR, namely:

d) indefinite meaning

(Finnish, adapted from Larjavaara 2019: 65)

(54) *Saa-t* ohra-a, kun se ensin puida-an. get-PRS.2SG barley-PAR when it first thresh-PASS 'You will get some barley when it has been threshed.'

e) partial meaning or the specified amount of a bigger quantity:

(Finnish, adapted from Larjavaara 2019: 66)
(55) Saa-t toki tä-tä kala-a. get-PRS.2SG sure this-PAR fish-PAR

'Of course, you will get some of this fish.'

f) meristic (or 'part of the part') meaning is about the quality of the reference object: when we talk about something meristically, we are talking about the quality of the 'part of the part' (Larjavaara 2019: 66):

(Finnish, adapted from Larjavaara 2019: 66)

(56) *Tämä o-n puu-ta*. this be-PRS.3SG wood-PAR 'This is wood (this is made of wood).'

Separative or <i>motion</i> from meaning (now only in adverbs <i>koto-a</i> 'from home') \rightarrow	Source meaning (Join vet-tä.PAR 'I drank some \rightarrow water')	<i>Partial</i> meaning (<i>Saat nä-i-tä</i> <i>kal-o-ja.PL.PAR</i> 'You will get these fish.')
\downarrow	\downarrow	7
<i>Cause</i> meaning (<i>Säikähdin</i> <i>karhu-a.PAR</i> 'I was frightened by the bear.')	Indefinitemeaning(Täälläpä onkala-a.PAR /kal-o-ja.PL.PAR'There is some fish	<i>Meristic</i> meaning (<i>Tämä on puu-ta.PAR</i> 'This is wood.')
	here/there are some fish[es] here'	

Figure 1: The traces of the old separative case in different meanings of the Finnish PAR (adapted from Larjavaara 2019: 67)

The following step from the original separative case of the time of Volga-Finnic was the development of a quantitative opposition, in early Proto-Finnic, between the separative case and the old subject and object cases (whole vs. part). This happened most probably because of Baltic influence. The quantified object of resultative verbs expressed some kind of incompleteness in the process (Larjavaara 1991, 384–385):

(Finnish, adapted from Larjavaara 1991: 384–385)

(57)	a. <i>Rakens-i-n</i>	si-tä	talo-a.
	build-PST.1SG	this-PAR	house-PAR
	(i) I have been	n building	the house (part of it)
	(ii) I have buil	t some of t	he house.'
	b. Rakens-i-n	se-n	talo-n.
	build-PST.1SG	this-ACC	house-ACC
	'I built the hou	se (comple	tely).'

During the next stage, the PAR spread from processes that were themselves complete but affected only part of the object referent, to progressive sentences. Finnish aspect became grammaticalized (Larjavaara 1991: 385–386). The PAR came to mark the imperfective aspect in a sentence with a resultative verb and a divisible object (a shift from (58a) to (58b)):

(Finnish, from Larjavaara 1991: 386)

(58)	a. <i>Sö-i-n</i>	nii-tä	nauri-i-ta.
	eat-PST-1SG	these-PAR	turnip-PL-PAR
	'I have been	eating some	of these turnips at some moment in the
	past.'		
	b. <i>Sö-i-n</i>	nii-tä	nauri-i-ta.
	eat-PST-1SG	these-PAR	turnip-PL-PAR
	(i) 'I ate som	ne of these t	urnips at some moment in the past.'
	(ii) 'I was ea	ting these tu	irnips at some moment in the past.'
	(progress	sive)	

At the same time, the ACC case was now a marker of the completed action, which affects the whole object referent (shift from (59a) to (59b)) (Larjavaara 1991: 386–387; Hakulinen 2000: 536):

(59) a. *Sö-i-n ne naurii-t.* eat-PST-1SG these turnip-PL.ACC

- (i) 'I ate all of these turnips at some moment in the past.
- (ii) 'I was eating these turnips at some moment in the past.' (progressive) /

(Finnish, from Larjavaara 1991: 386)

b. Sö-i-n ne naurii-t.

eat-PST-1SG these turnip-PL.ACC

'I ate all of these turnips at some moment in the past.'

At a later stage the development spread to all resultative verbs and began to express completed vs. uncompleted action (Larjavaara 1991: 387–390):

(Finnish, from Larjavaara 1991: 387–390)

(60) a. Ammu-i-n hirve-n. shoot-PST-1SG elk-ACC 'I shot (and killed) an elk.'
b. Ammu-i-n hirve-ä. shoot-PST-1SG elk-PAR 'I shot (without killing) an elk'.

In line with resultative verbs, the objects of irresultative verbs, began to be marked with the PAR (Larjavaara 1991: 390):

(Finnish, from Larjavaara 1991: 390)
(61) a. *Rakasta-n sinu-a*. love-PRS.1SG you-PAR
b. * *Rakasta-n sinu-t*. love-PRS.1SG you-ACC
'I love you.' (originally ACC case was grammatical)

Partial quantification became open quantification. This change most probably had taken place in sentences with divisible object: 'away from something' (> 'part of something') > 'open quantity of something' (Larjavaara 1991: 395–397):

(Finnish, from Larjavaara 1991: 395–397)

```
(62) Rakens-i-n talo-a.
build-PST-1SG house-PAR
'I was building a house' > 'I built a part of all the house'
(instead of the earlier meaning 'I built a part of the house')
```

The last stage of the development of the aspectual PAR was the negation PAR. Most probably it developed under Baltic influence (Larjavaara 1991: 397–399).

The development of PAR²¹ in Indo-European languages is different from the developments in Finnic. PAR is one of the meanings of the GEN case, and GEN cases allow synchronic polysemy (Luraghi & Kittilä 2014: 50). The fundamental difference between Finnic on the one hand and Indo-European languages on the other lies in the development of the PAR (Luraghi & Kittilä 2014: 51). Finnic languages have both an independent PAR (which has roots in the ablative), and a GEN, which is both formally and functionally distinct from the PAR (ibid). Indo-European languages have a GEN, which also functions as a PAR, but also an independent ablative, which is distinct from the GP (ibid). This is illustrated in table 6 below:

Table 6. Partitive functions in Finnic and Indo-European languages (adapted fromLuraghi & Kittilä 2014: 51)

Туре а.	Finnic: partitive # genitive # ablative
Type b.	Latin, Italian: partitive = genitive # ablative
Туре с.	ancient Greek, French: partitive = genitive = ablative (the origin situation was as type b)

The comparative evidence of the ancient Indo-European languages (e.g., Gothic, Greek) shows that the PAR use of the GEN was inherited from Proto-Indo-European (Kuryłowicz 1964: 189–190; 1977: 142–143). The Lithuanian GP is the etymological and functional continuation of the Proto-Indo-European GP widely attested across the ancient Indo-European languages (see, *inter alia*, Seržant 2012; Ambrazas 2006: 216–218). The PAR meaning of the GEN was widely used in old Slavic (Ambrazas 2006: 216).

Constructions with GEN (eg. possession *brolio.GEN.SG kambarys* 'brother's room'; origin/material *obuolių.GEN.PL sultys* 'apple juice') are semantically very close to constructions with prepositions (*iš* 'from') (Ambrazas 2006: 215), therefore ablatival meaning of the genitive was most probably the basis for the development of the GEN into GP (Kuryłowicz 1964: 189–190; 1977: 142–143).

²¹ There is a clear distinction between the Finnic PAR as a bounded morpheme and inflectional category and the Indo-European PAR as a functional property with divergent morphological realizations.

The use of the GP is widely attested in Old Lithuanian with certain groups of verbs (Ambrazas 2006: 217–218):

1) Verbs denoting possession, giving or getting smth., e.g.,

- (63) *Iei malon-es rad-au po tawa aki-m* If grace-GEN.SG find-PST.1SG under your eye-INS.PL 'If I have found some favor in your sight.'
- 2) Verbs denoting knowing, experiencing, receiving information etc.
- (64) Prisakim-ų szin-ai
 order-GEN.PL know-PRS.2SG
 'You know commandments.'
- 3) Verbs denoting eating, drinking, tasting etc.
- (65) *důn-os walg-e ir wanden-io ger-e* bread-GEN.SG eat-PST.3 and water-GEN.SG drink-PST.3 '[he/they] ate some bread and drank some water.'
- 4) Verbs denoting other actions, which might affect other objects or people
- (66) *Ei-ki-te, ir nu-pir-ki-te mumus Iaw-u* go-IMP-2PL and PVB-buy-IMP-2PL 1PL.DAT grain-GEN.PL 'Go there and buy some grain for us.'

2.4. Functions of partitive case markers

This chapter is devoted to core functions of PAR case markers across languages. Finnish has a dedicated PAR case, which usually indicates partial affectedness of patients (Blake 2001: 151). Some functions of Indo-European GP, and also the Lithuanian GP, resemble the functions of, e.g., the Finnish dedicated PAR case. A similar function of 'partial' meaning can be seen in some other languages, as in the GP of various Indo-European languages (Luraghi & Huumo 2014: 1). Russian has a separate PAR, although lexically restricted. The term 'partitive' is also used to refer to partitive constructions or pseudopartitive constructions (e.g. *a piece of that cake/ a piece of cake* as described in Koptjevskaja-Tamm 2001), however, such constructions are not discussed in this chapter. The focus of this chapter stays on the PAR as an object case²². Other functions of

²² This approach has more in common with approaches that look at verb classes than with those that look at noun phrase properties. Here I follow the approach taken in Estonian linguistics but also Luraghi & Huumo 2014.

the PARs are discussed only briefly. At the end of the chapter, the table of the core functions of PARs will be given with references to subsequent chapters, where PAR alternation in object case marking in Finnish and Lithuanian will be further developed.

2.4.1. Negation

The alternation of case marking between ACC and the case which has a partitivemarking function (PAR or GP) is an areal phenomenon, which applies to both Indo-European and Uralic languages. The phenomenon is often referred to as the PAR of negation and is well studied in European languages (Miestamo 2014: 63). The same phenomenon has been reported also for some language groups outside Europe, e.g., Oceanic languages (Miestamo 2014: 74–80).

The use of the GEN of negation in contemporary standard Russian is relatively restricted: its use depends on several lexical, semantic, syntactic, grammatical, morphological and stylistic criteria. Hierarchies in the GEN of negation are discussed by Timberlake (1986), where he first divides the hierarchies into substantive and stylistic, and substantive hierarchies are further subdivided into those involving the participant and those involving the event (Timberlake 1986: 339). The semantic hierarchies of the participant, which refer to the individuation of the participant, are the following: proper/common; concrete/abstract; count/mass; animate/inanimate; singular/plural; definite/indefinite; neutral/emphatic negation; topicalized/neutral; modified/unmodified (Timberlake 1986: 339–344).

PAR of negation is grammaticalized in all Finnic languages (Lees 2015: 34). Under negation, the PAR case in Finnish replaces the ACC:

(Finnish, personal knowledge)

(67) a. *Ost-i-n kirja-n.* buv-PST-1SG book-ACC

'I bought a/the book.'

b. *En osta-nut kirja-a.* NEG.1SG buy-PST.CONNEG book-PAR 'I did not buy a/the book.'

The PAR object indicates incompleteness of the event in one way or another (Huumo 2009, 95). The PAR is used if the event does not take place at all (negation or negative meaning of the event) (Ingo 2000: 127):

(Finnish, personal knowledge)

(68)	a. <i>En</i>	saa-nut		lahja-a-si	i.	
	NEG.1S	G get-PST.	CONNEG	present-PA	ar-2sgpx	
	'I did not get your present.'					
	b. Mies	luopu-i	raken	ta-ma-sta	talo-a.	

- man quit-PST.3SG build-INF-ELAT house-PAR 'The man quit building the house.'
- c. *Mies men-i pois sana-a sano-ma-tta*. man go-PST.3SG away word-PAR say-INF-ABE 'The man left without saying a word.'

In the same way, negation is marked with GP in Lithuanian (69a–b). It occurs also if the negation is implied by lexical meaning (as in the case of *luopui* or the abessive infinitive). However, the negation must be explicit in Lithuanian: example (69d) is ungrammatical:

(Lithuanian, personal knowledge)

- (69) a. *Pirk-au* knyg-q. buy-PST.1SG book-ACC.SG 'I bought a/the book.'
 - b. *Ne-pirk-au* knyg-os. NEG-buy-PST.1SG book-GEN.SG I did not buy a/the book.'
 - c. *Ne-imanoma nu-slėp-ti miest-o*, NEG-possible PVB-hide-INF town-GEN.SG *kuris pastaty-tas ant kaln-o*. which build-PPA on hill-GEN.SG 'A town built on a hill cannot be hidden.'
 - d. **J-is met-ė staty-ti palapin-ės*.
 3-NOM.SG.M quit-PST.3 build-INF tent-GEN.SG 'He quit building the tent.'

PAR of negation in Lithuanian is attested in old Lithuanian since the very beginning of published Lithuanian books, namely the 16th century (Ambrazas 2006: 231–237). While some researchers (e.g., Brugmann 1911: 611–613) consider the PAR of negation as the further development of initial partial meaning, others (e.g., Ambrazas 2006: 238–239) do not see a direct link between the PAR of negation and the partitive meaning of the GEN.

According to Arkadiev (2019: 1) PAR of negation as an areal phenomenon has some shared characteristics in Finnish, Polish and Lithuanian: 1) PAR of negation applies only for direct objects and not for indirect objects or obliques; 2) PAR of negation is obligatory and does not depend on the semantics of the transitive verb or the object; 3) PAR of negation applies also to the so-called long distance PAR of negation, when PAR is assigned to the object of a nonfinite verb depending on a negated finite verb (for more detailed discussion see Arkadiev 2016):

(Lithuanian, personal knowledge)

(70) *Mergaitė ne-nor-i pirk-ti knyg-os.* girl.NOM.SG NEG-want-PRS.3 buy-INF book-GEN.SG 'The girl does not want to buy a/the book.'

With non-finite constructions negation of the matrix verb usually affects the non-finite clause in all Finnic languages (Kont 1963: 112–113):

(Finnish, from Kiparsky 2001: 357)

(71) *En anta-nut sinu-n nähdä karhu-a.* NEG.1SG let-PST.CONNEG you-GEN see.INF bear-PAR 'I did not let you see the bear.'

2.4.2. Partiality and incremental quantification

Another meaning of partitivity, or *partiality*, appears in sentences where part of a discrete object or a larger reference mass is affected by an action, as in 'to eat of/from the bread':

(Lithuanian, personal knowledge)

(72)	Su-valgi-au	riek-ę	riek-ę			
	PVB-eat-PST.	1sg slice-ACC.s	slice-ACC.SG			
	tos	duon-os/	Su-valgi-au	duon-ą.		
	this.GEN.SG	bread-GEN.SG/	PVB-eat-PST.1SG	bread-ACC.SG		
	'I ate a slice of this bread. / I ate a (the) bread.'					

The use of the ACC indicates that the whole bread was eaten, while the GP is used when only a slice of bread was consumed. The difference from total affectedness follows from the fact that the whole entity was not targeted, and the rest remains unaffected (Luraghi & Kittilä 2014: 41). A number of uses of the PAR in Finnish occur with predicates describing physical actions affecting discrete objects in situations where the object remains undivided but the activity covers only its parts (for a more detailed discussion see 3.2).

Partiality (or partial affectedness) can also be seen in events involving an incremental participant (see e.g., Luraghi & Kittilä 2014: 42, Laugalienė 2020). In such events the referent of the object participates in the event gradually, and its components are affected in a sequence. In Finnish example (73), the PAR appears only when part of the book was affected by the event of reading (Luraghi & Kittilä 2014: 41).

(Finnish, personal knowledge)
(73) Lu-i-n kirja-a. read-PST-1SG book-PAR
'I was reading a/the book.'

In (73) PAR can have two meanings: a *progressive* meaning, where the event is ongoing – 'I was reading a/the book (at that particular moment)', or a *cessative* meaning, where the event is terminated before it reaches its potential end point – 'I read a part of the book'. The meaning can be disambiguated if a wider context is given, as in example (74):

(Finnish, personal knowledge)

(74) *Lu-i-n kirja-a, kun alk-o-i sataa.* read-PST-1SG book-PAR when begin-PST-3SG rain.INF 'I was reading a/the book when it began to rain.'

The quantification of the object can be relevant for case marking and this is illustrated by $(74)^{23}$: the reading of the book has proceeded to cover the book partially, but not completely. For more discussion about the incremental theme in Finnish and Lithuanian see 3.2.1.

2.4.3. Partitive with quantifiers

Partitives by default occur with quantifiers in a group of languages. In Lithuanian, some groups of GP depending on quantifiers could be established (Ambrazas 2006: 229), e.g. with "amount-of-N" constructions (75a), and indefinite amount constructions with indefinite amount quantifiers, such as 'some' (75b). (75a) represents a subconcept of the partitive concept, namely the pseudopartitive (N-of-N) (Tamm 2014: 91):

²³ For analogies between the aspectual (verbal) and quantificational (nominal) domains and how clause-level aspect depends on the contribution of many clausal elements, not just the verb, see Huumo 2010: 2 and the literature mentioned therein.

(Lithuanian, personal knowledge)

(75)	a. Pa-ėmi-au	puodel-į	kav-os.
	PVB-take-PST.1SG	cup-ACC.S	G coffee-GEN.SG
	'I took a cup of co	ffee.'	
	b. Gav-au	šiek tiek	vand-ens.
	receive-PST.1SG	some	water-GEN.SG
	'I received some v	vater.'	

In Finnish, there is a series of measure nouns (such as *lasi* 'glass', *kori* 'basket', *pullo* 'bottle') governing PARs. This is a function related to the use of the PAR with many kinds of quantifying expressions to indicate the quantified mass (*kaksi poikaa.PAR* 'two boys'). PAR occurs not only with certain quantifiers (76a), with numerals (76b), but also with certain postpositions²⁴ (76c):

Finnish

(76)	a. <i>Ja</i>	joka		anta-a		yhd	e-lle-kin	nä-i-stä
	and	anyone	NOM	give-Pl	rs.3sg	one	-ALL-FOC	this-PL-ELA
	vähä	is-i-stä	malja	llise-n	raikas	-ta	<i>vet-tä</i> [.]
	little	-PL-ELA	cup-	ACC	fresh-1	PA	water-PA	R
	'And	if anyon	e gives	even a	cup of t	fresh	water to o	one of these
	little	ones []]'					

b. *Nä-i-llä neljä-llä olenno-lla ol-i ku-lla-kin* this-PL-ADE four-ADE beast-ADE be-PST.3SG each-ADE-FOC *kuusi siipe-ä*.

six wing-PAR

'And the four beasts each had six wings.'

c. <i>I</i>	sä,	minä	ole-n	teh-ny)t	synti-	ä
f	ather	Ι	be-1sG	do-PT	СР	sin-PA	AR
t	aivas-t	a	vastaan	ja	sin	и-а	vastaan.
h	neaven-	-PAR	against	and	you	1-PAR	against
,	Father,	, I have	e sinned ag	gainst h	eave	en and	against you.'

Numerals favor partitive constructions²⁵ (76b), as they select a certain number of entities from a whole (Luraghi & Kittilä 2014: 35). For example,

²⁴ However, they are more common with prepositions, which can be considered as the default morphosyntactic structure whereas postpositions typically govern a GEN complement (see (ISK 2004 § 687); for more details more generally with respect to Finnic: Grünthal 2003, 2019.

²⁵ In Russian, there is a special form that is used with numerals 2–4. It resembles GEN, but the stress is sometimes on a different syllable (e.g.. *četyre šagá* 'four steps'; *v širinu šága* 'of a step's width' (p.c. Anna Daugavet).

'six wings' would mean 'six entities from the universal group of wings'. The PAR with numerals also shows naturally the grammaticalization process of PAR from the ablative: 'six wings' (PAR) originates from 'six of the wings' (ablative) (ibid). Quantifiers (76a) are functionally close to numerals.

2.4.4. Indefiniteness

Some languages do not have grammaticalized means to mark (in)definiteness (e.g., Finnish and Lithuanian). Therefore, PAR case markers may also express indefiniteness. Indefiniteness implies that there is a parallel way of expressing definiteness as well, assuming that the latter one is the default feature. In Lithuanian, the direct object with GP, in combination with the perfective value of the verb, introduces indefinite quantification. ACC, in contrast, defines a definite amount of the direct object. Example (77) is given to illustrate this contrast:

(Lithuanian, personal knowledge)

- (77) a. *Iš-gėri-au vand-ens*.
 PVB-drink-PST.1SG water-GEN.SG
 'I drank some water.'
 b. *Iš-gėri-au vanden-į*.
 PVB-drink-PST.1SG water-ACC.SG
 - 'I drank the water.'

In (77a) with the GP, no reference is made to a definite set, but rather the NP plays a non-referential role (Luraghi & Kittilä 2014: 29). The ACC in (77b), on the contrary, would make the object referential and definite (ibid.) However, this rule applies only for mass and abstract nouns. Count nouns in ACC can be either definite or indefinite (for a discussion about definiteness in Lithuanian see chapter 3.1):

(Lithuanian, personal knowledge)

(78) *Iš-kepi-au pyrag-ą.* PVB-bake-PST.1SG cake-ACC.SG 'I baked a/the cake'.

Indefinites are usually referential if they are specific and non-referential if they are non-specific (Luraghi & Kittilä 2014: 30). In Finnish and some other languages (e.g., Russian) non-specific indefinites cover two different categories: indefinites that refer rather to a certain quantity than to a previously identified set and indefinites that refer to a class, not to a quantity (ibid., also ISK 2004 §1421–1422).

2.4.5. Semantic groups and low transitivity predicates

In some cases, PAR might appear with low transitivity predicates (Luraghi & Kittilä 2014: 43). In Finnish, there is a certain group of atelic verbs which take the PAR case for their objects. Such verbs usually denote emotional states, cognition, or experience (e.g., *rakastaa* 'love', *ajatella* 'think' etc.):

(Finnish, personal knowledge)
(79) *Minä ajattele-n sinu-a.* I think-PRS.1SG you-PAR 'I am thinking about you.'

Certain factors belonging to lexical and grammatical semantics give rise to the variation in the case-marking. In this dissertation, semantic groups of *surface-contact verbs, scalar verbs, conative verbs* and *temporally restricted usage* were established. They all will be discussed separately in chapter 4.2.

2.4.6. Other uses

Other uses of PAR cases have also been discussed in the literature. One of the uses, which is closely linked with negations, is the PAR's occurence with moods other than indicative or with non-assertive modality (Luraghi & Kittilä 2014: 37–38). Finnish shows instances where conditional mood is more natural:

(Finnish, from Lurag	shi & Kittil	ä 2014: 38)
(80) Oli-si-ko	sinu-lla	tä-tä	kirja-a?
have-COND-Q	you-ADE	this-PAR	book-PAR
'Would you/do	you happe	n to have t	this book?'

In (80) the speaker has in mind a specific book, therefore PAR here is not determined by indefiniteness (for a thorough discussion see Luraghi & Kittilä 2014: 38).

The PAR cases are also used to mark a decrease in agency (Luraghi & Kittilä 2014: 44).

(Finnish, from Luraghi & Kittilä 2014: 44)
(81) a. *Aino* laula-a. Aino.NOM sing-PRS.3SG
'Aino is singing.'
b. *Aino-a* laula-tta-a. Aino-PAR sing-CAUS-PRS.3SG
'Aino feels like singing.' The degree of agency in (81b) is lower than in (81a), which contains a normal intransitive construction with a subject referent taking a willful action. In (81b), the participant feels like singing, but is not necessarily singing (for a thorough discussion see Luraghi & Kittilä 2014: 44–45).

The PAR is occasionally governed by postpositions (82c). There is a variation in Finnish between GEN and PAR with bipositions, which can function both as prepositions and postpositions (Luraghi & Kittilä 2014: 46, also ISK 2004 § 703). The PAR is associated with unboundedness as (82a) means 'around the country'. (82b) with GEN has links with boundedness as the meaning is 'travel around the world, circle the world'. (82a) has a preposition, whereas (82b) is a GEN-governing postposition:

(Finnish, adapted from Luraghi & Kittilä 2014: 46)
(82) a. Hän kulk-i ympäri maa-ta. s/he go-PST.3SG around country-PAR 'He went around the country.'
b. Maa-n ympäri 80 päivä-ssä. world-GEN around 80 day-INESS 'Around the world in 80 days.'

All these uses of PARs do not relate to object case marking and therefore will not be further discussed in this dissertation. Functions of PAR case marking are shown in Table 7 below.

Function of the partitive	Example	Chapters for more details
Negation	(Lithuanian) (69b) <i>Ne-pirk-au knyg-os.</i> NEG.buy-PST.1SG book-GEN.SG 'I did not buy a/the book.'	2.4.1
Partiality and incremental quantification	 (Finnish) (74) Lu-i-n kirja-a, kun read-PST-1SG book-PAR when alk-o-i sataa. begin-PST-3SG rain.inf 'I was reading a/the book when it began to rain.' 	2.4.2 3.2.

Table 7. Functions of PAR case marking

Function of the partitive	Example	Chapters for more details
Numerals and quantifiers	 (Finnish) (76a) Ja joka anta-a and anyone.NOM give-PRS.3SG yhde-lle-kin nä-i-stä vähäis-i-stä one-ALL-FOC this-PL-ELA little-PL.ELA maljallise-n raikas-ta vet-tä [] cup-ACC fresh-PAR water-PAR 'And if anyone gives even a cup of fresh water to one of these little ones []' 	2.4.3 5.1.
Indefiniteness	(Lithuanian) (77a) <i>Iš-gėri-au vand-ens.</i> PVB-drink-PST.1SG water-GEN.SG 'I drank some water.'	2.4.4 3.1.
Low transitivity predicates	(Finnish) (79) <i>Minä ajattele-n sinu-a.</i> I think-PRS.1SG you-PAR 'I am thinking about you.'	2.4.5 3.3 5.1
Surface-contact verbs	 (Finnish) (150d) Hän koskett-i miehe-n s/he touch-PST.3SG man-GEN korva-a ja parans-i häne-t. ear-PAR and heal-PST.3SG s/he-ACC 'He touched the man's ear and healed him.' 	4.2.2
Scalar verbs	(Finnish) (152a) <i>Lämmit-i-n sauna-a.</i> warm-PST-1SG sauna-PAR 'I warmed the sauna a bit.';	4.2.3
Temporally restricted usage	(Polish) (136) <i>Da-j mi ołówk-a.</i> give-IMP 1SG.DAT pencil-GEN.SG 'Hand me a pencil (for a while).'	3.3. 4.2.1
Conative verbs	 (Finnish) (171a) Käsk-i-n hän-tä sauna-an. order-PST-1SG s/he-PAR sauna-ILL 'I ordered him to go to a sauna (and he most probably went).' 	4.2.4
Non-assertive modality	 (Finnish) (80) Oli-si-ko sinu-lla tä-tä kirja-a? have-COND-Q you-ADE this-PAR book-PAR 'Would you/do you happen to have this book?' 	-

Function of the partitive	Example	Chapters for more details
Decrease in	(Finnish)	-
agency	(81b) Aino-a laula-tta-a.	
	Aino-PAR sing-CAUS-PRS.3SG	
	'Aino feels like singing.'	
Partitives with	(Finnish)	-
prepositions	(82a) Hän kulk-i ympäri maa-ta.	
	s/he go-PST.3SG around country-PAR	
	'He went around the country.'	

3. THE DIFFERENTIAL FEATURES OF PARTITIVITY IN FINNISH AND LITHUANIAN²⁶

As described in chapter 2, several factors have been invoked in the literature as affecting the use of the PAR in Finnish and GP in Lithuanian. Further on, their relevance and relative ranking in Finnish and Lithuanian will be discussed in more detail. We will discuss to what extent (in)definiteness, partiality and (ir)resultativity are relevant for object marking both in Finnish and Lithuanian.

3.1. (In)definiteness

As explained before, both Lithuanian and Finnish lack dedicated grammaticalized means to mark the (in)definiteness of an NP. In Lithuanian there is no choice between *a house, the house, houses, the houses; tea, the tea.* The differences in interpretation are here expressed by a variety of morphological, syntactic, prosodic, and lexical devices: word order, determiners and quantifiers and various other lexemes that modify nouns (for a detailed study of definiteness in Lithuanian see Sprauniene 2011).

(Lithuanian, personal knowledge)

(83) Pa-stači-au nam-ą.
 PVB-build-PST.1SG house-ACC.SG
 'I built a/the house.'

In (83) *namq.ACC.SG* 'house' could be interpreted both as definite or indefinite. The determiners *tas* 'this', *anas* 'another', *vienas* 'one' or *šitas* 'this' modifying *namq.ACC.SG* would entail the definiteness of the object:

(Lithuanian, personal knowledge)

(84)	Pa-stači-au	t-ą	nam-ą.
	PVB-build-PST.1SG	DEM-ACC.SG.M	house-ACC.SG
	'I built this house.'		

However, certain morphosyntactic features can also enforce a definite interpretation of the noun phrase (a so-called "definiteness effect"; on this

²⁶ This chapter, with some updates and modifications, is based on the article: Laugalienė, Asta. 2020. Partitivity and object marking in Finnish and Lithuanian. *Philologia Estonica* 5, 236–267. https://doi.org/10.22601/PET.2020.05.08

notion see Lyons 1999, 227–252), e.g., with mass nouns and plurals of count nouns the use of the ACC for the direct object induces a definite reading, as in (85) for mass nouns and (86) for plurals of count nouns:

(Lithuanian, personal knowledge)
(85) *Iš-gėri-au kav-q*,
PVB-drink-PST.1SG coffee-ACC.SG *kuri buvo ant stal-o*.
which be.PST.3 on table-GEN.SG

'I drank up the coffee that was on the table.'

(86) Su-valgi-au obuoli-us.
PVB-eat-PST.1SG apple-ACC.PL
'I ate the apples.'

An indefinite mass noun would have to be marked with the GP, as it would naturally be interpreted as an unbounded NP. The GP, in combination with the perfective value of the verb, introduces indefinite quantification (see below for further discussion):

(Lithuanian, personal knowledge)

(87) Kavinė-je iš-gėri-au kav-os.
 café-LOC.SG PVB-drink-PST.1SG coffee-GEN.SG
 'I had some coffee in a café.'

This means that definiteness, apparently through the bounded reading it imposes, induces the use of the ACC. However, the GEN (historically also a GP) is used for both count nouns and mass nouns if there is a negation, which ranks hierarchically higher than definiteness in determining case marking (see chapter 2.2.2):

(Lithuanian, personal knowledge)

- (88) Ne-gėri-au kav-os.
 NEG-drink-PST.1SG coffee-GEN.SG
 'I did not drink coffee.'
- (89) Ne-pa-stači-au nam-o.
 NEG-PVB-build-PST.1SG house-GEN.SG
 'I did not build a/the house.'

In Finnish, as well, definiteness does not have any dedicated marking. Instead, definiteness effects connected with word order and case in Finnish correspond in irregular ways to the expression of definiteness in English²⁷. With Lithuanian example (85) we could compare (90), where the object is a count noun and refers to a bounded entity (hence a closed quantity), so that in this case the use of the ACC does not automatically induce a definite reading:

(Finnish, personal knowledge)

(90) *Kirjoit-i-n kirjee-n, jonka lähet-i-n ystävä-lle.* write-PST-1SG letter-ACC which.GEN send-PST-1SG friend-ALL 'I wrote a/the letter, which I sent to a friend.'

Since definiteness is only a default reading that typically correlates with boundedness of the quantity expressed by the ACC object, (in)definiteness cannot be associated directly with the function of the PAR/ACC cases as regards mass nouns (91) (the same applies for plurals). In example (91a) the ACC *veden* 'water' conveys that the quantity is bounded, and (most likely) that the object NP is definite ('the water'), but definiteness is only a default reading. An indefinite reading is possible if the object, for example, refers to a serving of water, as in a café ('Jukka ordered a water'). In example (91c) the indefinite reading is excluded by the relative clause that modifies the object NP (in fact, it is the relative clause that triggers the definite reading in (91c)):

(Finnish, personal knowledge)

(91)	a.	Poika	jo-i	vede-n.
		boy	drink-PST.3SG	water-ACC
		'The bo	y drank up (a) the	e water.'
	b	Poika	tilas-i	vede-n.
		boy	order-PST.3SG	water-ACC
		'The bo	y ordered a water	r.'
	c.	Poika	jo-i	vede-n,
		boy	drink-PST.3SG	water-ACC
		joka	ol-i	pöydä-llä.
		which	be-PST.3SG	table-ADE
		The he	r drank un tha w	ator that was an

'The boy drank up the water that was on the table.'

²⁷ Chesterman (1977), among others, suggests that the Finnish case selection, word order, stress, concord and function words such as *joku* ('some'), *eräs* ('one'), *se* ('it'), and *tietty* ('certain') express different aspects of the English article system. Chesterman states that in Finnish, function words such as those listed above are used to mark identifiability, i.e., the known/unknown status of a referent.

The GP in Lithuanian operates on NPs that are by themselves unbounded. In addition to example (87) above, I give examples for a mass noun with an indefinite and non-specified quantity reading (92) (the same applies to plurals). The NP *vanduo* 'water' is in itself unbounded, but the perfective aspect of the verb requires boundedness, which is introduced by the GEN. Actual quantification (bounded or unbounded) is then expressed by the case:

(Lithuanian, personal knowledge)

(92) *Pa-gėri-au vand-ens.* PVB-drink-PST.1SG water-GEN.SG 'I drank (some) water.'

The indefinite quantification of the object may correlate with the use of verbal prefixes such as: *pri*-, meaning 'a lot, enough', *per*- meaning 'a lot, too much' as well as *už*- 'a little bit', also in combination with the reflexive marker *-si-* (*už-si-kąsti duonos* 'to eat a little bit of bread', *per-si-valgyti obuolių* 'eat too many apples') (Seržant 2014: 261). With verbs containing these prefixes the object NP must be indefinite and the use of the ACC is impossible:

(Lithuanian, personal knowledge)

(93) At-si-géri-au/ pri-si-géri-au
PVB-RFL-drink-PST.1SG/ PVB-RFL-drink-PST.1SG
kav-os (*kav-q).
coffee-GEN.SG (*coffee-ACC.SG)
'I drank some coffee./I drank my fill of coffee.'

With the Lithuanian quantifying verb prefixes an NP-related meaning (quantification) is expressed in the verb structure while Finnish in turn expresses a verb-related meaning, i.e., aspect, by the case of the object.

Finnish example (94) shows that a PAR object is able to indicate indefinite quantity ('a certain quantity of water'), but only in aspectually bounded situations:

(Finnish, personal knowledge)

(94) *Lapse-t jo-i-vat vet-tä.* child-PL drink-PST-3PL water-PAR 'The children drank some (of the) water'.

This sentence also has an imperfective, i.e., aspectually unbounded, reading: 'The children were drinking (the) water':

(Finnish, personal knowledge)

(95) Lapse-t jo-i-vat vet-tä, child-PL drink-PST-3PL water-PAR kun puhelin so-i. when phone ring-PST.3SG
'The children were drinking (the) water when the phone rang.'

The influence of aspect on object marking will be discussed in detail below, but the compatibility with verbs receiving an imperfective reading suggests the PAR case is not in itself bounded.

3.2. Partiality

Another meaning of partitivity²⁸, which, for greater clarity, we will henceforth refer to as *partiality*, is to be seen in instances where part of a discrete object or a larger reference mass is affected by an action, as in 'to eat of/from the bread', or 'to drink from the water'. It is only in instances like these that we can speak of a part-to-whole relationship:

(Finnish, personal knowledge)

(96) Lapsi sö-i viipalee-n leipä-ä/ leivä-n.
 child eat-PST.3SG slice-ACC bread-PAR/ bread-ACC
 'The child ate a slice of bread/ a(the) bread.

The example contains verbs of consumption. The use of the ACC indicates that the whole bread was eaten, while the PAR is used when only a slice of bread was consumed. The affected part has been thoroughly affected: the given piece of bread has been fully consumed, but the difference from total

²⁸ The notion of 'partitivity' has been used in different ways in the literature. As discussed above, 'partitive' has to do with reference to subsets of definite (super)sets (N-of-the-N, see examples (8a), (9a) above, indication of the quantity that is singled out by a nominal quantifier (N-of-N, examples (8b), (9b) above also with reference to indefinite quantity or 'partial objects' of certain verbs (for a more detailed list see Koptjevskaja-Tamm 2001: 525–526 and the literature mentioned therein).

One of the meanings of 'partitivity' is indefinite quantification, already discussed in chapter 3.1. Note that Finnish example below indicates indefiniteness and does not refer to a part of a previously identified whole:

⁽Finnish, personal knowledge) *Opettaja ost-i kirj-o-ja.* Teacher buy-PST.3SG book-PL-PAR 'The teacher bought some (indefinite quantity and not previously identified) books.'

affectedness follows from the fact that the whole entity was not targeted, and the rest remains unaffected (Luraghi & Kittilä 2014: 41).

3.2.1. Incremental quantification

Partiality (or partial affectedness) can also be seen in events involving an incremental participant. Such events display the participation of the referent of the object in the event in a gradual way, while its components are affected in a sequence. The quantity indicated by an NP is affected by clausal aspect if the referent of the NP participates in the event incrementally:

(Finnish, personal knowledge)

(97) *Kirjoit-i-n kirje-ttä.* write-PST-1SG letter-PAR 'I was writing a/the letter.'

In this Finnish example, PAR in the whole construction can indicate a progressive meaning, where the event is ongoing – 'I was writing a letter (at that particular moment)', or it can indicate a cessative meaning, where the event is terminated before it reaches its potential end point – 'I wrote a part of the letter', 'I've been working on that letter'. In order to disambiguate the sentence, a wider context is needed, as in example (98):

(Finnish, personal knowledge)

(98) *Kirjoit-i-n kirje-ttä, kun puhelin so-i.* write-PST-1SG letter-PAR when phone ring-PST.3SG 'I was writing a/the letter when the phone rang.'

Since the object NP is incremental in (98), this determines a certain type of quantification of the object, which can be relevant for case marking: the writing of the letter has proceeded to create the letter partially, but not completely. A count noun ('a/the letter') referring to a bounded entity, is accessible to quantification because of the incremental participation in the event as the activity brings the letter into existence gradually and reaches its endpoint when the whole letter has been written (Huumo 2013: 93). The quantity of the letter sets certain boundaries to the duration of the process as the writing of the letter cannot take any longer than the time needed to write the letter.²⁹

²⁹ Huumo (2010) refers to such dependence of clausal aspect on nominal quantity as nominal aspect.

In such a sentence, the ACC indicates the combination of bounded aspect and closed quantity (example (90). The event thus reaches the endpoint (the potential continuation of the event is excluded as the event has been brought to its endpoint) and the closed quantity is affected in full. Once the whole letter is ready, the total event of 'writing the letter' is over, which is grammatically marked with the ACC.

The quantifying function of the ACC is seen in sentences that indicate an achievement (90). Such events are indisputably bounded, which excludes the use of the PAR as in (98). Since achievements (e.g., *löytää* 'find', *huomata* 'notice') are strictly punctual and indicate events that culminate instantly, the PAR cannot be used for its aspectual function where it indicates non-culmination (for example, a progressive meaning).

However, slightly different criteria for determining the object case apply in Finnish for iterative situations. The case of the object is determined by the nature of the component situations, even though there may be other aspectual elements present (e.g., durative modifiers) that relate to the event at the more abstract level of the habitual state. If the component situations fulfill the criteria for using ACC, then ACC is used even though the overall situation is unbounded. The aspectual unboundedness of the overall habitual situation is shown by the fact that a direct durative modifier (vuoden ajan 'for a year') can be used despite the presence of the ACC, which is otherwise incompatible with the unboundedness of the situation (Huumo 2010: 101–105). It is widely attested in different languages that durative modifiers are only compatible with clauses that refer to unbounded situations and not with bounded situations (Huumo 2013: 105 and the literature mentioned therein). In Finnish, the durative modifiers are marked with the same case as the (total) object (99a). The duration of the bounded situation is indicated by adverbials, which set a certain time-span within which the event is completed (99b). In Finnish, timespan adverbials take inessive case (Huumo 2010: 90; 2013: 105):

(Finnish, from Huumo 2010: 101)

(99) a. Ole-n luke-nut lehde-n kirjasto-ssa be-1SG read-PTCP paper-ACC library-INESS jo vuode-n aja-n. already year-GEN time-ACC
'For a year already, I have been reading the newspaper in the library.'
(Finnish, personal knowledge)

b. *Lu-i-n lehde-n tunni-ssa.* read-PST-1SG paper-ACC hour-INESS 'I read a/the newspaper in an hour.'

The conceived boundedness of the higher-level habitual situation follows from the presence of the durative modifier, not from the boundedness of the component events (99a). At the habitual level, the situation is static and thus unbounded: the person has the habit of reading the paper in the library. As such, the habitual situation is unbounded (because the bounded component event can be repeated innumerable times). The durative modifier indicates that the habit of reading the paper in the library has lasted for a year. Boundedness is indicated at two different levels: ACC indicates the boundedness of each component situation (i.e. the reading of the whole paper), whereas the durative modifier sets temporal boundaries to the overall habitual state (Huumo 2010: 101).

As shown above, in Finnish the aspect is encoded in the case marking of the object: the ACC indicates the bounded aspect as in (90), PAR with count nouns refers to incremental participation in the event as in (98). In Lithuanian, the difference in aspect is marked in imperfective/perfective verbs as in examples (100) and $(101)^{30}$. Incremental quantification is not distinguished from holistic quantification in Lithuanian, which is perhaps associated with the inherently unbounded character of incremental quantification:

(Lithuanian, personal knowledge)
(100) Pa-raši-au laišk-q. PVB-write-PST.1SG letter-ACC.SG
'I wrote a/the letter.'
(101) Raši-au laišk-q. write-PST.1SG letter-ACC.SG

'I was writing a/the letter.'

As pointed out in chapter 2.2.1 on object marking in Finnish, the PAR case has three interrelated and often overlapping functions: negation, unbounded aspect and quantification, where negation is the strongest criterion and quantification the least important criterion for PAR object. ACC can only be used if the sentence does not meet any criterion of the PAR (for some exceptions

³⁰ For more details see (Holvoet, Čižik 2004: 142–145).

see a discussion below) as in (91). With mass nouns, basic functions of the PAR object apply: it expresses either non-culminating aspect or unbounded quantity (or both together). Example (102) is taken to illustrate this:

(Finnish, personal knowledge)
(102) Jo-i-n kahvi-a. drink-PST-1SG coffee-PAR
(i) 'I was drinking (the) coffee.'
(ii) 'I drank some (of the) coffee.'

With the progressive reading, the example does not tell us whether the projected endpoint of the event would involve a closed or an open quantity of the coffee (the opposition between 'I was drinking coffee' and 'I was drinking the coffee'). With the cessative interpretation, as well, the example does not tell us whether the event had been proceeding towards an endpoint involving a closed quantity ('I drank some of the coffee') or not ('I drank some coffee'). Therefore (91) shows that the ACC is used only if the situation has both reached its endpoint and has affected a closed quantity ('The boy drank up the water that was on the table', as in (91c)). The Finnish PAR is of a multifunctional nature, and when indicating a more dominant function (incremental theme) the PAR conceals less dominant features which it can encode in other contexts (e.g., quantity) (Huumo 2010: 91).

In Lithuanian, examples for the influence of aspect on the semantic properties of nominal arguments are found in sentences that contain mass NPs without a determiner (such as a demonstrative):

(Lithuanian, personal knowledge)

- (103) *Gėri-au vanden-į.* drink-PST.1SG water-ACC.SG 'I drank (the/some) water.'
- (104) *Iš-gėri-au vanden-į.* PVB-drink-PST.1SG water-ACC.SG 'I drank up (all) the water.'

(103) and (104) contain the same mass noun *vanduo* 'water'. Formally, these two sentences only differ in aspect, marked on their main verbs. But this aspectual difference entails a difference in the interpretation of their direct object NPs. (104) contains the prefixed perfective verb *iš-gėriau* and entails that the event ended when the agent finished drinking all the water. Moreover,

the speaker presupposes that the hearer can identify the relevant portion of water in discourse. Nevertheless, the imperfective verb *geriau* could also be used with the GP as in (105):

(105) [Tada Dievo vyras sugrįžo su juo, ir] j-o namuos-e
[...] 3-GEN.SG.M home-LOC.SG valg-ė duon-os ir gėr-ė vand-ens
eat-PST.3 bread-GEN.SG and drink-PST.3 water-GEN.SG
'[And the man of God went back with him], ate food in his house, and drank water.'

*'[And the man of God went back with him], was eating food in his house, and drinking water.'

This example (105) suggests that there was a *bounded* amount of water which the person drank. Unlike in the case of (104), where the perfective verb introduces boundedness, no boundedness is entailed by the imperfective verb in (105). We assume therefore that the GEN marking imposes boundedness on a NP with imperfective verbs. It should be pointed out, that (105) cannot have progressive (and incremental) reading ('they were eating (the) bread and drinking (the) water'), otherwise the ACC would have to be used. It is not clear how the imperfective verb gere 'drank' in (105) differs from the perfective *pa-gerti* 'drink a little bit, have a sip' as in (92); this seems to be an instance of the so-called 'factual' use of the imperfective past, which is well known from Russian (cf. Grønn 2003) and is also possible in Lithuanian, though it has never been described for this language. Factual imperfective is a use of the imperfective that functions on the territory of the perfective (which, in turn, is associated with complete events). The differences between factual uses of imperfective past, imperfective and perfective readings are illustrated by Lithuanian examples (106a) and (106b):

(Lithuanian, personal knowledge)

(106)	a. <i>Jonas</i>	skait-ė	'Hamlet-q'.	
	Jonas.NOM	read-PST.3	Hamlet-ACC.SG	
	(i) Jonas wa	was reading 'Hamlet'. (processual imperfective		
	(ii) Jonas ha	is read 'Haml	et'. (factual imperfective reading)	
	b. Jonas	per-skait-ė	'Hamletą'.	
	Jonas.NOM	PVB-read-PS	T.3 Hamlet-ACC.SG	
	'Jonas (has)	read 'Hamle	t'. (perfective reading)	

Factual imperfective and perfective readings both refer to complete events of reading 'Hamlet'. The factual imperfective reading can either assert or presuppose the existence of an event of the verbal predicate (Grønn 2003: 11).

3.2.2. Generic uses

Differences between the two languages appear also in the marking of the object in generic statements. Generic use is ungrammatical with the GEN in Lithuanian with mass nouns, even though the verb *gerti* 'to drink' combines with the GEN elsewhere, for example for indefinite quantification (*pa-geriau vandens.GEN.SG* 'I drank (some) water'):

(Lithuanian, personal knowledge)

(107) *Visada geri-u arbat-q (*arbat-os).* always drink-PRS.1SG tea-ACC.SG (*tea-GEN.SG) 'I always drink tea.'

The same applies to plural discrete objects: even though GEN is possible for indefinite quantification (as in *Nupirkau gėlių.GEN.PL* 'I bought some flowers'), only ACC is possible with generic use:

(Lithuanian, personal knowledge)

(108) Valg-au tik obuoli-us. eat-PRS.1SG only apple-ACC.PL 'I eat only apples.'

In Finnish generic sentences, PAR is used both with mass nouns (109) and plural discrete objects (110):

(Finnish, personal knowledge)

(109)	a. <i>Juo-n</i>	aina	tee-tä.		
	drink-PRS.1SG	always	tea-PAR		
	'I always drink	tea.'			
	b. <i>Juo-n</i>	aina	tee-n.		
	drink-PRS.1SG	always	tea-ACC		
	'I always have	a tea.'			
(110)	a. <i>Syö-n</i>	vain	omeno-i-ta.		
	eat-PRS.1SG	only	apple-PL-PAR		
	'I eat only appl	es.'			
	b. <i>Syö-n</i>	vain	omena-t.		
	eat-PRS.1SG	only	apple-ACC.PL		
	'I only eat the a	'I only eat the apples.'			

However, the ACC is acceptable in generic sentences if the situation type of which the generic generalization is made is of a bounded type in terms of aspect and quantification. Sentence (109b) is grammatically correct if the quantity of the tea is bounded in the situation type that underlies the generic expression. For example, if the speaker always has a (serving of) tea when he/she goes to the café ('I always have **a** tea'). Even in (110b), 'I only eat the apples' the ACC object is possible in a generic context where, for example the speaker's grandmother always brings him apples and bananas when she visits, but he only eats **the** apples (that she brought). Thus, genericity as such does not prohibit the use of the ACC, though it is certainly true that the PAR is the default case for the object in such examples.

Such examples also show that in Finnish generic statements culmination is possible in instances when the generic predication concerns a culminating situation type (therefore the ACC object can be used). In fact, the earlier example (99) is the evidence of this (assuming that habitual sentences are classified as generic).

3.3. (Ir)resultativity

In addition to (in)definiteness and partiality functions, there is another function for the Finnish PAR referred to as (ir)resultativity. The resultative situation indicates a transition: the event brings about a change, after which it does not return to its original state but enters another one. The irresultative situation indicates that no such transition takes place and after completion of the event the situation returns to the original state or to a state that is conceptualized as similar to the original state. Such distinctions are also reflected in the opposition between the Finnish object markers.

The general rule of using the PAR object for non-culminating aspect types (i.e., the aspectual PAR) applies to all verbs discussed under this chapter of irresultativity. However, the oppositions between resultativity and irresultativity cover different *subtypes* of non-culminating aspect, which will be discussed below in more detail.

A certain group of verbs are inherently *atelic* (or, according to Vendlerian classification, denoting *state*), and take the PAR case for their objects, as the action never reaches an endpoint. These verbs are instances of unbounded, non-culminating aspect and the use of the PAR thus follows from their aspectual nature. Kiparsky (1998: 15) gives lists of atelic verbs that assign PAR case

to all their objects as per general aspectual object-marking rule. Such verbs usually denote psychological and emotional states or attitudes, cognition or experience (e.g., *rakastaa* 'love', *inhota* 'hate', *ihailla* 'admire', *kadehtia* 'envy', *kunnioittaa* 'honor', *väsyttää* 'tire', *ajatella* 'think' etc.)³¹:

(Finnish, personal knowledge)

(111) Jukka rakasta-a Anna-a. Jukka love-PRS.3SG Anna-PAR 'Jukka loves Anna.'

Based on the resultativity vs. irresultativity opposition, Finnish *punctual* verbs can be divided into two groups: resultative (accomplishment / achievement) verbs like *tappaa* 'kill', *ostaa* 'buy', *huomata* 'notice' and *löytää* 'find' that take the aspectual ACC object, and irresultative (*semelfactive*) verbs like *tönäistä* 'nudge', *mulkaista* 'glance' and *lyödä* 'hit' that take the aspectual PAR object (Huumo 2010: 92). For *semelfactive* verbs, the situation ends in time but fails to bring about a culmination (a fundamental change in the object referent) to trigger the ACC. Some achievement verbs, like *ampua* 'shoot', allow both a resultative and an irresultative reading, which is then reflected in the case marking of their object. The aspectual nature of the verb *ampua* 'shoot' and the aspectual oppositions expressed by the case of the object have been discussed at length by many authors (for example, Heinämäki 1984: 153, Kiparsky 1998: 266–267). It is stated that the resultative (112a) *versus* irresultative oppositions (112b) indicate either the achievement or a lack of a result:

(Finnish, from fiTenTen14)

(112) a. *Tuomari ampu-i linnu-n.* judge shoot-PST.3SG bird-ACC
'The judge shot (down) the bird.'
b. *Metsästäjä ampu-i lintu-a.* hunter shoot-PST.3SG bird-PAR
'The hunter shot at a/the bird (the bird did not die)'.

Irresultative marking also applies to situations where the original state is almost the same as the target state, therefore there is no distinction between the two:

³¹ For the full lists of verbs indicating which case they usually take, see Denison 1957: 143–159, Vainikka 1989: 322–324, Kiparsky 1998.

(Finnish, from fiTenTen14)

(1

13)	a. <i>Maailma</i>	kumars-i	ја	
	world	bow-PST.35	SG and	
	nost-i	hattu-o	a Stalin	i-lle.
	raise-PST.	3SG hat-PA	R Stalin	-ALL
	'The worl	d bowed and	d raised a	hat for Stalin.'
	b. Hän nos	st-i	hatu-n	pöydä-ltä.
	s/he rais	se-PST.3SG	hat-ACC	table-ABL
	'S/he took	the hat from	n the table	

In (113a) the world raises its hat for a moment and puts it back: the target state does not significantly differ from the original state. (113b) would indicate a transition from one state to another (for more details see Leino 1991: 171–172).

Some Finnish verbs allow two readings differing in the temporal stability of the resultant state. One of such verbs would be *lainata* 'borrow, lend'. Depending on the speaker's implications, both PAR and ACC are possible. In (114a) the girl is expecting to get her watch back in a while, whereas in (114b) the event of lending the watch is completed in the sense that there are no expectations as to whether and when she will receive the watch back:

(Finnish, personal knowledge)

(114)	a.	Tyttö	lainas-i	kello-a.
		girl	lend-PST.3SG	watch-PAR
	b.	Tyttö	lainasi	kello-n.
		girl	lend-PST.3SG	watch-ACC
		'The g	girl lent a(the) w	vatch [to somebody].

Irresultative use of GEN is very rare in Lithuanian. In Eastern Lithuanian dialects, the GEN may be used instead of ACC object of the verbs of transfer to encode that the result of transfer is to be temporally delimited (Seržant 2014: 286). The GP in (115a) has the implication of temporariness of the results of the transfer; the ACC object in (115b) has no such implication. The use of the GEN in (115a) relates to the short time the knife is needed.

(Lithuanian, Eastern dialect, from Ambrazas et al., 1976: 25)
(115) a. *Pa-skolin-k peili-o!* PVB-lend-IMP.2 knife-GEN.SG 'Lend (me) a/the knife for a moment!'
(Lithuanian, personal knowledge)
b. *Duo-k peil-i!* give-IMP.2 knife-ACC.SG 'Give (me) a/the knife!' The temporally restricted usage across languages (Lithuanian and neighbouring languages) will be discussed in 4.2.1.

3.4. Discussion

In this chapter, object marking in Finnish and Lithuanian was compared. The hierarchies of the object-marking rules are represented in Figures 2 and 3. For Finnish (Figure 2), the strongest rule for using the PAR is any kind of negation of propositional content. The second condition for the choice between the PAR and the ACC is aspect. *Any kind of non-culmination of the event* results in the PAR. This rule applies also for atelic verbs (as state verbs like *love* or *hate* do not denote a culmination of the event/point) and incremental themes (as with the progressive reading *I am writing a/the letter* the event is ongoing and just reaching the culmination point). Irresultativity discussed under chapter 3.3 results in PAR: there is no significant difference between the target state and original state and no culmination point of the event (*He shot at a/the bird*). The least important condition for the choice between PAR and ACC is the quantification of the object: ACC emerges only when the closed quantity is affected in full (*I wrote a/the letter*).

For Lithuanian (Figure 3), the strongest condition for using GP is negation (like for Finnish). The second condition to be considered is the incremental participation in the event. With incremental quantification, the default case of the Lithuanian object (ACC) is triggered (*I was writing a/the letter*). Indefinite quantification of the object results in the GP (*I drank some water*). Non-incremental bounded events are marked with the default case of the object - ACC (*I wrote a/the letter*). Some exceptions are made only for time-restricted irresultative events (*Lend me a/the knife for a moment!*), but such use of the GP in Lithuanian is attested only in dialects.

Some functions of Finnish PAR and Lithuanian GP in object marking are identical, but some are very different:

- In the context of negation both Lithuanian and Finnish have PAR or GP case marking;
- Partiality, a situation where a part of a discrete object or a larger reference mass is affected by an action ('to eat of/from the bread' or 'to write a part of the letter') is a feature of Finnish, but not Lithuanian;
- Incremental participation in the event is relevant for case marking only in Finnish: since the object NP is incremental, it is exposed to quantification and marked with the PAR. In Lithuanian, the distinction between incremental and non-incremental quantification is conveyed by oppositions between perfective and imperfective verbs.







Figure 3. The hierarchies of the object-marking rules for Lithuanian

3.5. Concluding remarks

Lithuanian and Finnish have completely different prototypes for assigning object cases. In Finnish the prototype is **culmination** (or the absence of culmination); in Lithuanian the prototype is **quantification**. In Finnish grammar the PAR case is described as the default case for the object of a transitive verb. In Lithuanian, the ACC is the default case of the Lithuanian object. The point of departure for the development of the object cases in the two languages was most probably the same at the beginning (indefinite quantification of the object referent), but Finnic and Baltic languages developed in two different directions. The differences could have arisen because of the different developments of the aspectual systems in languages. Lithuanian object marking seems to be closer to the original object marking system as we can reconstruct it for both languages. To conclude, PAR or GP plays different roles for Finnish and Lithuanian.

4. OBJECT MARKING WITH DISCRETE OBJECTS IN FINNISH AND LITHUANIAN³²

Both Finnish and Lithuanian make the resultative *versus* irresultative distinction in object marking. The resultative situation is interpreted in this study as a transition in which the event brings about a change, after which there is no return to the original state but entry into another one. Its opposite, the irresultative situation, implies that no such transition takes place and after completion of the event the situation returns to the original state or to a state that is conceptualized as similar to the original state.

The resultative and irresultative readings of some Finnish achievement verbs, such as *ampua* 'shoot' have been discussed at length by many authors (for example, Heinämäki 1984: 153, Kiparsky 1998: 266–267). It is stated that the resultative (116a) *versus* irresultative opposition (116b) indicates the achievement or absence of a result:

(Finnish, from Kiparsky 1998: 266–267)

a. Ammu-i-n	karhu-n.
shoot-PST-1SG	bear-ACC
'I shot the (a) b	ear.'
b. Ammu-i-n	karhu-a.
shoot-PST-1SG	bear-PAR
'I shot at the (a)) bear (without killing it).
	shoot-PST-1SG 'I shot the (a) b b. <i>Ammu-i-n</i> shoot-PST-1SG

In Lithuanian, the irresultative use of the GP seems to be very rare. Many scholars (for example, Larsson 1983: 135, Koptjevskaja-Tamm & Wälchli 2001: 654, Seržant 2014: 286; 2015: 389) mention the fact that in Eastern Lithuanian dialects the GP may be used instead of the ACC to encode the temporariness of the result of a transfer (117a–b). The ACC object in (117c) has no implications of temporariness and is used in standard Lithuanian:

³² This chapter, with some updates and modifications, is based on the article: Laugalienė, Asta. 2021. Object Marking with Discrete Objects in Finnish and Lithuanian. *Finno-Ugric Languages and Linguistics*, Vol 10, no 1-2 (2021), 27–50. http://full.btk.ppke. hu/index.php/FULL/article/view/94

(Lithuanian, from Jablonskis, 1957: 578) (117) a. *Duo-k peili-o!* (neilgam, tuoj sugražinsiu) man give-IMP2 1SG.DAT knife-GEN.SG 'Give (me) a/the knife (for a while, I will shortly give it back to you)!' (Lithuanian, from Ambrazas et al., 1976: 25) b Pa-skolin-k peili-o! PVB-lend-IMP2 knife-GEN SG 'Lend (me) a/the knife!' (Lithuanian, personal knowledge) c. Duo-k peil-i! give.IMP2 knife-ACC.SG 'Give (me) a/the knife!'

Interestingly, both examples with the GP (117a–b) come from the same two sources (Jablonskis, 1957: 578 (117a) and Ambrazas et al., 1976: 25 (117b)) and are cited again and again by scholars. Moreover, in Ambrazas et al. 1976 there is a reference to the example given by Jablonskis 1957: 578, which is basically the same as the one cited by Ambrazas et al. 1976. This use does not exist in Standard Lithuanian. This observation was one of the starting points for this research, which aims to answer the question in which situations PAR or GP is interpreted as encoding an irresultative event in Lithuanian compared to other neighbouring languages. The focus will be on Lithuanian and Finnish, the latter – as will be shown – having much wider criteria to encode irresultative events than Lithuanian.

The idea was to bring a new perspective to the widely investigated research domain of Finnic and Baltic object marking by concentrating on object marking with discrete objects as a separate topic, but also by using Lithuanian diachronic and dialectal data to show that irresultative PAR marking must once have been more widespread in both Finnic and Baltic, though standard Lithuanian has almost completely lost it.

The goal of this chapter is to describe the semantic factors that give rise to the variation in the case-marking of discrete objects in Finnish, Lithuanian and the neighbouring languages (Polish, Russian, Estonian etc.), with a comparison between Lithuanian and Finnish in the foreground. Another research question, which this chapter aims to answer, is to confirm the hypothesis that Lithuanian and Finnish might have different strategies for encoding irresultativity in discrete objects (aspectual prefixes vs. PAR marking). If so, no consistent marking of irresultativity via case-marking would be expected in Lithuanian.

Examples for this research are taken from various sources, each of them marked separately next to the example. Old Lithuanian was checked against the old Lithuanian Corpus.³³ In the absence of electronic corpora of dialectal Lithuanian of all regions, the dialectal data was checked against the sources which were available at hand; also some informants were consulted.

Chapter 4.1 gives some background information about the marking of discrete objects. Chapter 4.2. discusses the semantic classification of irresultative constructions and gives further observations. Chapters 4.3 and 4.4 are devoted to discussion and concluding remarks.

4.1. Background: the marking of discrete objects

The general rules of the object marking in Finnish and Lithuanian were explained in chapters 2.2.1. and 2.2.2. For this chapter it is important to outline the rules of object marking, which play an essential role for the object marking of discrete objects not only for Finnish and Lithuanian, but also for neighbouring languages.

In a nutshell, the multifunctional nature of the alternation between Finnish total and partial objects could be described as follows (Larjavaara 2019, 199): the object of the sentence is **total** whenever and only when a positive sentence expresses a complete change of the event that has reached (or is reaching) its endpoint (118)³⁴. In all other instances (including transitive sentences denoting some extent of change, e.g., *lämmitin saunaa.PAR* 'I heated the sauna (a bit)' or no change at all, e.g., *katsoin televisiota.PAR* 'I was watching TV'), the **partial** object is used as in (119):

'It is unlikely that Jukka killed a/the mouse.'

³³ The Old Lithuanian corpus contains texts from the 16th to the 20th centuries; each century is represented by about 1 mln words. A list of verbs which could be expected to have GP with discrete objects was drawn up based on the occurrences of partitive objects in neighbouring languages. Both prefixed and non-prefixed verbs were checked against the corpus in question. For more explanations about the data see chapter 4.2.

³⁴ Negation logically falls under this condition as the propositional content of the sentence is negated, which means that there was no culmination of the event (for more details on negation see e.g., Miestamo 2014: 67–70 or ISK 2004: § 932). The same applies to sentences where the actuality of the propositional content is doubtful, e.g., *Tuskin Jukka tapp-o-i hiir-tä*. Unlikely Jukka kill-PST-3SG mouse-PAR

(Finnish, personal knowledge)

- (118) *Rakens-i-mme talo-n.* build-PST-1PL house-ACC 'We built a/the house.'
- (119) Rakenna-mme talo-a.
 build-PRS.1PL house-PAR
 'We are building a/the house.'

As already discussed in previous chapters, the use of the Lithuanian GP differs from that of the Finnish PAR in many respects. The most common use of the Lithuanian GEN is with indefinite non-incremental quantification (where the GEN is used to refer to an indefinite number or quantity):

(Lithuanian, personal knowledge) (120) *J-is rad-o draug-ų.* 3-NOM.SG.M find-PST.3 friend-GEN.PL 'He found some friends.'

In Lithuanian ACC is used in the case of incremental quantification, when the object participates in the event in an incremental, gradual way, and its components are affected sequentially (121) (for other uses see chapter 2.2.2. and Laugalienė 2020):

(Lithuanian, personal knowledge)

(121)	Аš	geri-u	kav-ą.
	Ι	drink-PRS.1SG	coffee-ACC.SG
	'I a	m drinking coff	ee.'

The difference in aspect is marked in imperfective/perfective verbs as in examples (122) and (123), but the case marking is not in itself a device used to differentiate aspect. The GP is mostly possible only with perfective verbs (for more details about aspectual features in Lithuanian see chapter 2.2.3):

(Lithuanian, personal knowledge)

- (122) *Pa-raši-au laišk-ą.* PVB-write-PST.1SG letter-ACC.SG 'I wrote a/the letter.'
- (123) *Raši-au laišk-ą.* write-PST.1SG letter-ACC.SG 'I was writing a/the letter.'

In Polish, as in Lithuanian, direct objects are encoded by GEN in negated clauses. GEN objects refer to quantitatively unbounded entities almost exclusively in the context of perfective verbs, therefore aspect in Polish is relevant for the occurrence of partial objects (Koptjevskaja-Tamm & Wälchli 2001: 653). In Finnish both indefinite quantity and imperfectivity can, independently of each other, trigger PAR marking on objects. Finnish doesn't have verbal prefixes. Thus both the GEN in Polish and PAR in Finnish are sensitive to aspect, but Finnish and Polish systems take completely opposite directions with respect to object marking for imperfective and perfective clauses: Finnish PAR is favoured by imperfective contexts and Polish GEN is favoured by perfective contexts (Koptjevskaja-Tamm & Wälchli 2001: 653–654). In Finnish, an imperfective context automatically triggers (thus it is a syntactic rule) the PAR marking of the object whereas in Polish aspectual characteristics provide an additional restriction on the occurrence of the GEN object (ibid.)

Even though the alternation between total and partial objects is well known from some of the older Indo-European languages (Brugmann & Delbrück 1897–1990:575ff, cited by Koptjevskaja-Tamm & Wälchli 2001: 663), aspectual considerations are not mentioned as influencing the choice between the two cases at this stage. They appear as a factor in both Finnic and Balto-Slavic, but the developments were separate and led to different results.

At first glance, there are considerable differences in the types of entities that could be treated as partial objects in Finnish, Lithuanian and Polish (Slavic). For Finnish mass nouns, the basic function of the PAR object is either non-culminating aspect or bounded non-specific quantity (or both):

(Finnish, personal knowledge)

(124) Jo-i-n kahvi-a.

drink-PST-1SG coffee-PAR

(i) 'I was drinking (the) coffee.'

(ii) 'I drank some (of the) coffee.'

In (125a) *kirje* 'letter' designates a quantitively bounded discrete entity, and the action has not culminated in a result (either only a part of the letter was written or the process of the writing of the letter is still ongoing). The discrete object remains undivided, but the activity covers only its parts. In (125a), the PAR appears only when part of the letter was affected by the event of the writing. The difference with respect to total affectedness follows from

the fact that the whole entity was not targeted, and the rest remains unaffected (Luraghi & Kittilä 2014: 41):

(Finnish, personal knowledge)

(125) a. *Kirjoit-i-n kirje-ttä*. write-PST-1SG letter-PAR
(i) 'I wrote some of the letter.'
(ii) 'I was writing a/the letter.'
b. *Kirjoit-i-n kirjee-n*. write-PST-1SG letter-ACC
'I wrote a/the letter.'

Partial affectedness of the discrete object in Lithuanian is encoded not in the object marking (both partially and fully affected objects are marked with the ACC), but in different prefixes on the verb, see (126a) vs. (126b):

(Lithuanian, personal knowledge)

(126) a. *Pa-skaiči-au* knyg-q.
PVB-read.PST-1SG book-ACC.SG
'I read some of the book.'
b. *Per-skaiči-au* knyg-q.
PVB-read.PST-1SG book-ACC.SG
'I read a/the book.'

To conclude, Finnish positive clauses allow PAR object marking for discrete entities. Neither Lithuanian nor Polish (or Russian) normally allow discrete entities in affirmative positive clauses to be marked with GEN. Some exceptions to this rule will be discussed in chapter 4.2.

4.2. Semantic classification

The collection of the data for this research was firstly obtained from various sources from Slavic and Finnic to investigate the possibilities for discrete objects to be marked with GP or PAR. Based on this research, lists of verbs expected to license PAR object marking with discrete objects were drawn up. These lists contained verbs in all tenses (both prefixed and not), which were checked against the Old Lithuanian corpus and against available Lithuanian dialectal data in order to check whether and how GP marking with discrete objects is (or was) possible. Even though the examples from Lithuanian

sources are not very numerous, the results show clear traces of such GP uses with discrete objects both in old Lithuanian and dialects.

Further below we suggest a classification of the semantic factors that give rise to the variation of the case marking of discrete objects in the languages examined. The classification is based on verbs which normally assign ACC to discrete objects and with which the use of PAR or GP is rather exceptional. The focus stays on the Lithuanian data, but other neighbouring languages are also considered. Based on the areal data (Baltic, Slavic and Finnic languages), four semantic groups could be established: temporally restricted usage, surfacecontact verbs, scalar verbs and conative verbs. The Lithuanian data shows that temporally restricted usage is attested both in old Lithuanian and dialectal examples. Surface-contact and scalar verbs are not very well attested in old Lithuanian (there are no traces in the dialects), whereas the conative type is not attested at all (see table 8).

Semantic group	Verb	Translation	Number of occurrences	Source
Temporal restricted	skolinti	lend	1	Ambrazas 1976
usage ¹	duoti	give	1	Jablonskis 1957
	užimti	take	1	URB 2013
	regėti	see	2	LT_16
	pamatyti	see	1	LT_20
Surface-contact verbs ²	prigriebti	grab	1	LT_18
Scalar verbs ³	-	-	_	_
Conative verbs ⁴	_	_	_	—

Table 8. Occurrences of verbs with GP for discrete objects in Lithuanian corpora and other sources

³⁵ Keywords *turėti* 'have', *daryti* 'open', *gauti* 'get', *padėti* 'put', *paguldyti* 'lay down', *nunešti* 'take', *pastatyti* 'put', *palikti* 'leave', *pririšti* 'tighten up', *išleisti* 'let out' yielded 0 results in the Old Lithuanian corpus.

³⁶ Keywords *plauti* 'wash', *tepti* 'spread', *valyti* 'clean', *remti* 'back up', *traukti* 'pull' gave 0 results in the Old Lithuanian corpus.

³⁷ Keywords *gadinti* 'spoil', *kelti* 'lift', *stabdyti* 'stop', sudaužyti 'break' gave 0 results in the Old Lithuanian corpus.

³⁸ Keywords *irodinėti* 'argue, try to prove' *įkalbinėti* 'try to persuade' gave 0 results in Old Lithuanian corpus.

4.2.1. Temporally restricted usage

Some discrete entities in some languages (Lithuanian, Polish, Finnish) can be marked with the PAR with certain verbs when the corresponding referent is given to someone "for a little while" (Koptjevskaja-Tamm & Wälchli 2001: 654). This rule applies to a series of verbs like 'give'. Therefore, these verbs allow two readings differing in the temporal stability, e.g., Finnish verb *lainata* 'borrow, lend' would have two readings depending on the speaker's implications. In (127a) the boy is expecting to get his pen back (in a while), whereas in (127b) there are no expectations as to whether and when he will receive the pen back:

(Finnish, personal knowledge)

(127)	a. <i>Poika</i>	lainas-i	kynä-ä.	
	boy	lend-PST.3SG	pen-PAR	
b. <i>Poika</i>		lainas-i	kynä-n.	
	boy	lend-PST.3SG	pen-ACC	
	'The b	boy lent [his] pen [to somebody].		

In Lithuanian discrete entities can be marked with GP with certain verbs when there is a need to emphasize that the corresponding referents are given in someone's possession "for a little while" (Koptjevskaja-Tamm & Wälchli 2001: 654). A series of verbs like 'give' can take GEN, if the object is to be given for a limited time, i.e., some verbs allow two readings differing in the temporal stability of the resultant state.

Such a type of GP object seems to survive in Eastern Lithuanian dialects, where it has the implication of temporariness of the results of the transfer. Informants confirm more examples:

(Eastern Lithuanian, p.c. Vytautas Kardelis) (128) *Duo-k kirvi-o!* give-IMP2 axe-GEN.SG 'Give (me) an/the axe!'

Example (129) is taken from a book written in a local dialect of the Ukmerge region. Two informants confirmed that such use of the GEN object is normal and widespread in situations where the discrete object is placed in someone's possession for a certain limit of time. In (129) *užimti kieno nors posto* means 'stand in for somebody' and the situation describes a temporary situation in which one person stands in for another.

(Lithuanian, from URB 2013, 12)

(129) Po vien-q bijo-dav-om užim-ti
by one-ACC.SG be_afraid.-FREQ-PST1PL occupy-INF
j-o post-o, [kad nepraganytume karvių- dviese vis drąsiau.]
3-GEN.SG.M post-GEN.SG [so the cows wouldn't go astray - we were braver when there were two of us]
'Each on our own we were afraid to take his post, <so the cows wouldn't go astray - we were braver when there were two of us.>'

In addition, it is attested, both for older Russian (Koptjevskaja-Tamm & Wälchli 2001: 655) and Polish (Kempf 1970: 90), that there are certain verbs of perception or cognition that regularly combine with genitive. One such verb would be *regėti* 'see', which also takes the GEN object in old Lithuanian as in (130) and (131)³⁹:

Lithuanian (from LT_16)

- (130) [Herodas Iesu ischwidens didei prassidʒuga nesa] iau
 [Herod was very happy to see Jesus, because] already
 senei i-si-geid-e i-o rege-ti.
 long_time PVB-RFL-want-PST.3SG 3-GEN.SG.M see-INF
 '[Herod was very happy to see Jesus, because] he had been
 wanting to see him for a long time.'
- (131) Ir iéβkoi-o regé-t' Iés-aus and look_for-PST.3SG see-INF Jesus-GEN.SG [kas bût ir ne galéio vž miniós nes' búwo mâžo augléus].
 'And he sought to see Jesus [and he was not able to see him amid the crowd as he was short of stature].'

These two examples are taken from the 16th century biblical texts. This GP would be unusual for modern Lithuanian, which would have the ACC as in (133). In both (130) and (131) the GEN object could have been used to refer to a restricted time span, so that the meaning could have been 'cast a glance'⁴⁰. It

³⁹ Animate objects regularly assume genitive marking in Russian and other Slavic languages. It is impossible to say whether animacy plays a role in Lithuanian as the old Lithuanian corpus did not give any results with inanimate objects.

⁴⁰ Certainly sentences (130–131), also (132–133) could be interpreted in the light of specific requirements imposed by directional verbs/verbs of motion proper or constructions with the *genitive of purpose*, where purpose is expressed by the GEN or the GEN with the infinitive (*atėjau pusryčių.GEN.PL* 'I came for breakfast'). For more details about constructions with the genitive of purpose see Ambrazas 2006: 222–223,

seems that this temporally restricted usage of the GEN object survived until the 20th century, as in (132) (in contrast with (133), which has the more frequent ACC):

Lithuanian (from LT_20)

(132) [Prieangyje laukia moteris su mažyčiais verksniais kūdikėliais, [In the entrance hall, there is a woman waiting with small crying *mergaitės, atėjusios savo mylimujų aplankyti, ir*] babies, girls who came to see their beloved ones and] vvr-ai. nor-i pa-maty-ti draug-u. man-NOM PL want-PRS-PA-NOM PL M PVB-see-INF friend-GEN PL broli-u ir savo žmon-ų. brother-GEN.PL and own wife-GEN.PL ' <At the entrance hall, there is a woman waiting with small crying babies, girls who came to see their beloved ones and> men wishing to see [their] friends, brothers and wives."

(Lithuanian⁴¹)

(133) Portugalas Lietuvo-je labiausiai norėj-o
 Portuguese.NOM.SG Lithuania-LOC.SG most want-PST.3SG
 pa-maty-ti draug-us.
 PVB-see-INF friend-ACC.PL

'A Portuguese man wanted most of all to see friends in Lithuania.'

It has been claimed that ACC object marking can replace the *genitive-of-purpose* because of the analogy with other predicates that are not motions (Seržant 2014: 292). Therefore, both options are available in Lithuanian: ACC and GEN.

In Finnish, a series of verbs like *lainata* 'borrow, lend' can take PAR, if the object is given for a limited amount of time. Depending on the speaker's implications, both PAR and ACC are possible. In (134a) the owner of the book is expecting to get his/her book back in a while (Päivi borrowed the book for a while), whereas (134b) does not have such an implication:

also Valiulytė 2001. The verb of motion might also add the intentional component and trigger GEN (see Seržant 2014: 289–293). However, the purpose of these examples is not to interpret the preconditions for such a use of the GP (also keeping in mind influences from the source languages, from which the old texts were translated), but to show that none of these uses with GEN would be possible in modern Lithuanian.

⁴¹ from https://www.delfi.lt/verslas/verslas/cepelinai-ir-saltibarsciai-uzsieniecius-i-lietuvavilioja-labiau-nei-merginos-ar-krepsinis.d?id=50816602, accessed on 12.12.2019

(Finnish⁴²)
(134) a. Päivi lainas-i kirja-a Päivi borrow-PST.3SG book-PAR ja kiittä-ä siitä. and thank-PRS.3SG it.ELA 'Päivi borrowed the book [for a while] and is grateful for it.'
(Finnish, from fiTenTen14)
b. Ystävä lainas-i kirja-n minu-lle. friend lend-PST.3SG book-ACC I-ALL

'The friend lent [his-her] book to me.'

Irresultative marking in Finnish applies to situations where the original state is almost the same as the target state. In (135a) the man raises his hat for a moment and puts it back: the target state does not significantly differ from the original state and expresses the temporally restricted effect of the event. The sentence (135b), on the contrary, would indicate a transition from one state to another:

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(Finnish, from Leino 1991: 171–172)
(135) a. Mies nost-i hattu-a.
man raise-PST.3SG hat-PAR
'The man raised (his) hat.'
Finnish (from fiTenTen2014)
b. Vincent nost-i hatu-n pää-stä-än.
Vincent raise-PST.3SG hat-ACC head-ELA-3PX
'Vincent took off his hat.'
```

In Old Polish, the concept of the temporal partiality was often present, and the partial genitive instead of the ACC appears very consistently. A series of verbs was oriented towards action limited in time, especially such as *dobyć* 'draw forth', *poprosić* 'ask', *(za)wołać* 'call', *udzielać* 'grant', *pożyczyć* 'borrow', e.g., *pożyczyć ksiąźki.GEN* 'give someone a book for a while, let him use it' (Kempf 1970: 192). However, GEN has remained productive in modern Polish with the verbs *dać* 'give' and *pożyczyć* 'lend'.

⁴² https://books.google.lt/books?id=nWAqDwAAQBAJ&pg=PT35&lpg=PT35&dq =lainasi+kirjaa&source=bl&ots=VkgWbm7EUN&sig=ACfU3U0xrs4HP3iG8B13_ QvqbAcOSMXyow&hl=en&sa=X&ved=2ahUKEwi2582AkN_4AhWRxosKHW YpDN8Q6AF6 BAgYEAM#v=onepage&q=lainasi%20kirjaa&f=false, accessed on 1.7.2022

(Polish, from Holvoet 1991:110)
(136) *Da-j mi ołówk-a.* give-IMP 1SG.DAT pencil-GEN.SG
'Hand me a pencil (for a while).'

Verbs like 'give' can also take the GEN object in clauses with the meaning of temporal restricted use in Russian and Ukrainian (for Russian Buslaev 1959: 461, Kempf 1970: 190, for Ukrainian Shevelov 1963: 167, cited by Holvoet 1991: 110). In Northern Russian typical verbs are 'take', 'get', 'send', 'ask for' etc.

(Russian, from Koptjevskaja-Tamm & Wälchli 2001: 655)

(137) *Voz'm-u topor-a u vas.* take-FUT.1SG axe-GEN.SG from you 'I will take the axe from you (for a while).'

The usage of GEN when the action is explicitly temporary ((138a) vs (138b)) is also noted for some North-Western Belarusian dialects, spoken in the area adjacent to the Lithuanian border:

(Belarussian, from BEL_1 and BEL_2):
(138) a. *pry-njas-i no3* PVB-bring-IMP2 knife.ACC.SG
'Bring me the knife (implicitly: for a longer time).'
b. *pa-da-j na3-a* PVB-give-IMP2 knife-GEN.SG
'Hand me the knife (just for a moment)'

Temporally restricted usage could also be illustrated by another type of clauses, where the GEN object refers to a specific purpose that is restricted in time. The meaning of temporal restriction is seen in *uchylić kapelusza.GEN* 'lift off one's hat', *dać buzi.GEN* 'give a kiss', *zapomnieć języka.GEN* 'forget one's tongue' (Kempf 1970: 193). But the connection of GEN with a specific purpose can be seen in *dobyć miecza.GEN* 'draw a sword', where the sword is drawn with the aim of engaging in a fight. Holvoet cites the term *genetivus partitivus intentionalis*, originally coined by Marian Jurkowski, for a type of use referring to situations where the object is taken for the purpose of performing a well-defined, concrete action and illustrates this with an example for Polish dialect provided by Kempf (Holvoet 1991: 110):

(Polish, from Kempf 1970: 191)
(139) Zlapi-e warzech-y, wybij-e ci zęb-y.
grab-FUT.1SG ladle-GEN.SG knock_out-FUT.1SG you tooth-ACC.PL
'I'll grab a ladle and knock out your teeth.'

Holvoet mentions that the different degrees of affectedness (which could be realized in slightly different ways as 'slight affectedness', 'temporal affectedness' or 'partial affectedness' expressed by GP) has the roots in Indo-European (Holvoet 1991: 111, Kempf 1970: 191). Different rules were applied for discrete objects and mass nouns; for discrete objects, it was probably a genuine GP, like that of Finnic. Later, with the rise of the opposition between variable and constant quantification, the PAR was transformed into a GEN of quantity and the two meanings (genuine GP and GEN of quantity) became dissociated from each other. For discrete objects, the GEN could now denote a slight or superficial affectedness (for more details on the hypothesis of the historical development see Holvoet 1991: 111–112).

4.2.2. Surface-contact verbs

In several cases the use of the PAR or GP can be associated with a specific lexical class. An important difference is that between change-of-state and surface-contact verbs. Change-of-state verbs (such as English *break*) are verbs denoting a change from one state to another. Surface-contact verbs (like English *hit*) refer to physical contact between two objects, but from the use of these verbs it is not always obvious that the objects have undergone some essential change (Fillmore 1970, 130–131). In an abstract sense, surface-contact verbs identify *some* change as the person who was hit by someone is different from the person they were before the hitting occurred.

A syntactic difference between change-of-state verbs and surface-contact verbs can be seen in English when the object is a body-part noun. The sentences with surface-contact verbs have paraphrases in which the possessor of the body part appears as the direct object and the body-part noun appears in a "locative prepositional phase" (Fillmore 1970, 131–132). Compare (140a, 141a) with the surface-contact verb to (140b, 141b) with the change-of-state verb:

(English, from Fillmore 1970: 132)

- (140) a. I hit his leg. I hit him on the leg.
 - b. I broke his leg. *I broke him on the leg.

(141) a. I slapped his leg. I slapped him on the leg.
b. I bent his leg. *I bent him on the leg.

Surface-contact verbs with PAR marking appear also in Baltic, Slavic, and Finnic languages. Archaic Indo-European languages also have genitives:

Classical Greek (from Goodwin 1898: 234) (142) *Elábeto tês cheiròs autoû.* take.AOR.MED.3SG ART.GEN.SG.F hand.GEN.SG 3.GEN.SG.M 'He took hold of his hand.'

In older modern Polish, some surface-contact verbs could also take GEN object:

(Polish, from Juliusz Słowacki, 19th c.)

(143) zarzuciwszy wylot-ów i throw_back.CVB mock_sleeve.GEN.PL and pogłaskawsz-y wąs-a, zaintonowa-ł [...] litany-ą stroke-CVB moustache-GEN.SG intone-PST.3.M.SG litany-ACC.SG 'Having thrown back his mock sleeves and stroked his moustache, he intoned a litany.'

The lexical meaning of the verb, rather than aspect, implies the slight degree of affectedness (Holvoet 1991: 109). An indirect trace of GP with verbs of surface-contact might also be seen in Russian:

(Russian, personal knowledge)

(144) *kosnut'-sja neb-a* touch.INF-RFL sky-GEN.SG 'to touch the sky'.

In modern Lithuanian, GP seems to be possible only with reflexive verbs as in (145a). Non-reflexive verbs would take ACC as in (145b). Normally the preference would be given to ACC (145b), but in some specific situations, when the person gets some impact, experience, knowledge about the nature of the object, GP would be used instead as in (145a):

(Lithuanian, personal knowledge)⁴³

(145) a. pri-si-lies-ti dang-aus PVB-RFL-touch-INF sky-GEN.SG
b. pa-lies-ti dang-ų PVB-touch-INF sky-ACC.SG
'to touch the sky'

Empirical data from older Lithuanian texts, e.g., from the 18th century, show clear traces of slight/partial affectedness expressed by GP, as in (146):

(Lithuanian, from LT_18 corpus)

(146) [Bet priėjom wieną Sallą, Klaudą wadinnamą],
[But we have reached one island, which is called Klaud],
cʒonay wôs ne wôs Walti-ês gallėj-ome prigrieb-ti.
here scarely boat-GEN.SG can-PST.1PL grab-INF
'[But we reached an island called Clauda], here we could scarcely get hold of our boat.'

The sentence describes a situation in which a person could barely get hold of a boat, which was about to be carried away by water. The effort with which the object is seized is rendered using the GEN marker for partial or superficial affectedness.

Surface-contact verbs are also attested in older Lithuanian by other authors:

(Lithuanian, from Ambrazas 2006: 220-221):

- (147) Ischties-k rank-a sawa, reach_out-IMP2 hand-ACC.SG own ir nu-tver-k ghi Odeg-os and PVB-grab-IMP2 3GEN.SG.M tail-GEN.SG 'Reach out your hand and take it by the tail.'
- (148) Moterischke [...] palitej-a sterbli-es woman.NOM.SG touch-PST.3 elk-GEN.SG rub-a iô cloak-GEN.SG 3GEN.SG.M 'The woman touched the edge of his cloak.'

 ⁴³ Such use is also attested in old Lithuanian (Ambrazas 2006: 221): *Kas ira kuris man-es liteia-se.* who.NOM be.PRS.3 which.NOM 1SG-GEN touch-PST.3-RFL 'Who touched me?'

(149) *palitêi-o kârst-o* touch-PST.3 coffin-GEN.SG '(He) touched the coffin.'

Finnish displays much wider use of surface-contact verbs with PAR, see (150a–d):

(Finnish)

(150) a. Jeesus koskett-i häne-n kät-tä-än. Jesus touch-PST.3SG s/he-GEN hand-PAR-3PX 'Jesus touched his hand.'

> b. *Enkeli koskett-i hän-tä [ja sanoi hänelle: "Nouse ja syö!"]* angel touch-PST.3SG s/he-PAR

'An angel touched him [and said, "Get up and eat."]

(Finnish⁴⁴)

- c. Hän vanha-n selkä-ä taputt-i naise-n s/he pat-PST.3SG old-GEN back-PAR woman-GEN piene-llä käde-llä-än ja sano-i pehmeästi [...] small-ADE hand-ADE-3PX and say-PST.3SG kindly 'He patted the old woman's back with his small hand and said kindly [...] d Hän koskett-i miehe-n korva-a ja
- d. *Han koskell-l miene-h korva-a ja* s/he touch-PST.3SG man-GEN ear-PAR and *parans-i häne-t.* heal-PST.3SG he-ACC 'He touched the man's ear and healed him.'

Examples (150a–d) contain the surface-contact verbs *koskettaa* 'touch' and *taputtaa* 'pat'. There is some physical contact between two objects, marked with the PAR. It is difficult to describe the nature of the change which the person undergoes when someone (e.g., an angel in (150b)) touches their hand.

Even though the use of the PAR object with Finnish surface-contact verbs is a default, there are some exceptions; compare the difference between hitting something in (151a) (marked with the PAR) and hitting someone in such a way that the hitting causes death as in (151b), marked with the ACC. (151b) is clearly resultative, emphasized by the adverbial *kuoliaaksi* 'dead'. Without that word, the verb would behave like any irresultative verb:

⁴⁴ From https://tales.xperimentalhamid.com/fi/novel/the-proxy-bride-of-the-billionairechapter-531/, accessed on 5.11.2019

(Finnish)

(151)	a.	Mooses	kohott-i	sauva-nse	a	ja
		Mooses	raise-PST.3SG	staff-ACC	.3px	and
		lö-i	Niili-n	vet-tä	[]	
		strike-PS	T.3SG Nile-GI	EN water-	PAR	
		Moses 1	raised his staff	and struck	the wa	ater of the Nile.'
	b.	Baesa	lö-i	häne-t	kuolia	aa-ksi []
		Baasha	beat-PST.3SG	s/he-ACC	dead-	·TR
		'Baasha	beat him to dea	ath.'		

In the well-known example from Finnish involving shooting at someone and shooting someone dead (example (116) repeated here for the sake of convenience) different types of telic interpretation of the situation apply. The impact of the initial shooting intention is not clear. The verb *ampua* 'shoot' is a surface-contact verb whose meaning does not in itself imply a change. The opposition between two possible interpretations of the situation is marked with different object cases:

(Finnish, from Kiparsky 1998: 266–267)

(116) a. Ammu-i-n karhu-n. shoot-PST-1SG bear-ACC
'I shot the (a) bear.'
b. Ammu-i-n karhu-a. shoot-PST-1SG bear-PAR
'I shot at the (a) bear (without killing it).'

4.2.3 Scalar verbs

The culmination of the event, where the event reaches an endpoint, is the most important criterion for the choice between ACC and PAR for the Finnish direct object. This culmination is normally associated with telicity, but not every form of telicity entails culmination. In Finnish many verbs can show a distinction between *culminating* and *non-culminating telic behavior*. In most languages the non-culminating type would be represented by *telic scalar verbs*. This type is also known as a group of so-called *degree achievement verbs*. The term "degree achievement verbs" was first proposed by Dowty (1979) and has been criticized for inaccuracy as "degree achievements" show little evidence of being achievements at all (Hay, Kennedy, Levin 1999, 143). Dowty claims that these verbs could be classified as achievements on certain

semantic and syntactic grounds; Hay, Kennedy, Levin argue that these verbs show the characteristics of accomplishments and activities (ibid)⁴⁵.

In English *degree achievement verbs* are represented by verbs like *widen*. *lengthen.* It was observed that these verbs have both telic and atelic properties: whilst atelic predicates are entailed by their progressive forms (Dowty 1979), some verbs in this group behave differently, e.g., the verb *lengthen* behaves like the atelic verbs (Kim was lengthening the rope entails Kim has lengthened the rope), whereas straighten behaves as telic in this respect (Kim was straightening the rope does not entail Kim has straightened the rope) (for more details see Hay, Kennedy, Levin 1999, 127). The affected argument of telic scalar verbs undergoes a change in some property. In deadjectival verbs the change is in the property associated with the meaning of the adjectival base (Hay, Kennedy, Levin 1999, 129)⁴⁶. The terminal point of the event can be identified by the following calculation: "the endpoint is that point at which the affected argument possesses a degree of the measured property that equals the initial degree to which it possessed this property plus the degree denoted by the difference value" (Hay, Kennedy, Levin 1999, 133). When the difference value is not provided by overt linguistic material, it should be somehow inferred and boundedness is determined in other ways. Degrees are formalized as positive or negative intervals on a scale, where a scale is a set of points totally ordered along some dimension (Hay, Kennedy, Levin 1999, 130–131), e.g., temperature, length, bad quality, strength etc.

Finnish verbs like *lämmittää* 'to warm up' are classified under telic scalar verbs (Larjavaara 2019: 229–231). The special feature of these verbs lie in their ability to have both PAR and ACC objects in sentences with discrete objects (e.g., accomplishment verbs (*read a book*) can also have discrete objects and have both ACC and PAR objects, but ACC and PAR would express differences

⁴⁵ Scalar verbs for Estonian were discussed in Tamm 2012. However, since Estonian has a stronger lexical component in Aktionsart or aspect, that is, Aktionsart or aspect seems to be much more lexicalized in Estonian than Finnish verbs, it is an interesting question to what extent Finnish verbs have scalar aspectual behavior with PAR objects.

⁴⁶ English adjectives fall into two classes: closed-range adjectives, which are associated with a scale with a maximal value, where maximality is relative to the adjective's polarity (e.g., straight, empty, dry) and open-range adjectives (e.g., long, bad, strong), for which it is not possible to identify maximal values on the scale (see Hay, Kennedy, Levin 1999, 135–136 for a discussion about English adjectives). The telicity of degree achievements depends on the open-/closed range distinction. Degree achievements derived from open-range adjectives normally demonstrate atelic behavior.

in aspect)⁴⁷. The verb *lämmittää* has two telic readings, one with the PAR (the non-culminational reading) and one with the ACC (the culminational reading). The use of the PAR in (152a) as opposed to the ACC in (152b) can be associated not only with an imperfective reading, but also with an irresultative reading:

(Finnish, personal knowledge)

(152) a. *Lämmit-i-n* sauna-a warm-PST-1SG sauna-PAR i. 'I warmed the sauna a bit.': ii. 'I was warming up the sauna.' b Lämmit-i-n sauna-n warm-PST-1SG sauna-ACC 'I warmed up the sauna.' (Finnish, from Larjavaara 2019: 230) (153) a. Vahvist-i-n talo-n perustuks-i-a. strengthen-PST-1SG house-GEN foundation-PL-PAR 'I strengthened the foundations of the house (a bit).' b Vahvist-i-n talo-n perustukse-t.

strengthen-PST-1SG house-GEN foundation-ACC.PL 'I strengthened the foundations of the house.'

In (152a), there was a change from the initial state, but the change was not significant enough to reach the resultative end phase (Huumo 2013: 101). Telic scalar verbs usually allow a maximum possible effect, which is normally the optimal outcome of the event (Larjavaara 2019: 280–281). The progressive PAR as in (125a) and the irresultative PAR as in (152a) (or (153a)) are similar in that the progressive PAR refers to an event that, if continued, finally reaches the endpoint (e.g., the book is read until the last page) and the same expectation could be linked with the irresultative PAR (the sauna can be warmed up to a point when it is warm enough). The irresultative PAR also indicates that the expected endpoint was never projected or never reached, because e.g., the action was interrupted by some outside event (for more details see Huumo 2013: 102).

⁴⁷ The use of Finnish telic scalar verbs is often dependent on the context or even on the dialectal background of the speaker. Sometimes direct object alternations between ACC vs. PAR with some certain telic scalar verbs could be seen as strange or even impossible. This serves as evidence that the group of telic scalar verbs is flexible and subjective interpretations of the events apply (Larjavaara 2019: 281).

The Finnish examples in (154), (155), (156) and (157) have the scalar structure of the adjectival base (*pitkittää* 'to lengthen', *pahentaa* 'to worsen', *vahvistaa* 'to strengthen', *lyhentää* 'shorten'). For a more detailed discussion of this type of verbs see Larjavaara 2019: 305–324):

(Finnish⁴⁸)

(154) [Ja mikä tulee olemaan loppuni, että vielä] pitkittäi-si-n
[And what will be my end] prolong-COND-1SG
tämä-n kaltaise-n sielu-ni elämä-ä?
this-GEN alike-GEN soul-GEN.1SGPX life-PAR
'[And what will be my end] to further prolong the life of my soul like this?'

(Finnish)

- (155) Jos yritä-t apu-un, vain pahenna-t asia-a. If try-PRS.2SG help-ILL only worsen-PRS.2SG case-PAR 'If you try to help, you will just make the case worse.'
- (156) *Nyt voi-t puhu-a, herra-ni, sinä ole-t* now can-PRS.2SG talk-INF lord-1SGPX you be-2SG *vahvista-nut minu-a.* strengthen-PTCP me-PAR

'Speak, my Lord, for you have strengthened me.'

(Finnish⁴⁹)

(157) *Lyhens-i-n* hiuks-i-a-ni. shorten-PST-1SG hair-PL-PAR-1SGPX 'I shortened my hair.'

In some instances, e.g., *pahentaa* 'worsen', the use of the ACC does not seem to be possible, probably because there is no absolute or normative degree of badness, which precludes the culminative use. The reason for the absence of an accusatival construction is obviously pragmatic in this instance. For other verbs of this group alternations with ACC (representing the culminational reading) are possible, as in (158) and (159):

⁴⁸ From https://unski.blogaaja.fi/tuhlattu-aika/, accessed on 15.10.2020

⁴⁹ From http://www.saratickle.fi/paksummat-terveemmat-hiukset-testissa-hiusravintolisa/ comment-page-3/, accessed on 5.7.2022

(Finnish, p.c. Kirsi Podshivalow)

(158) Puheenjohtaja venytt-i puhee-nsa speaker stretch-PST.3SG speech-ACC.3PX kahde-n tunni-n mittaise-ksi two-GEN hour-GEN long-TR 'The chairman stretched his speech out over two hours.' (159) Vahvist-i-n aida-n niin pitävä-ksi, strengthen-PST-1SG fence-ACC so firm-TR villisia-t ettei-vät pääse siitä läpi. that-NEG.3PL wild boar-PL pass.CONNEG this.ELAT through 'I made the fence stronger so that the wild boars wouldn't get through it.'

The scalarity of verb meaning (and subjective expectations about the complete event) play an important role in morphosyntactic aspectual encoding (Tamm 2012: 19). In some cases, the exact endpoint cannot be verified by perception (for more examples and interpretations concerning endpoints see Larjavaara 2019: 217–230). Note, however, that the endpoints are categorized differently in subjective terms (which shows a clear link with pragmatics). Examples (160) and (161) are given to illustrate that the exact endpoint is difficult to determine. In (160), the difference value of healthy and unhealthy lifestyle could be inferred (if generally accepted that there is always a chance to make one's life healthier and healthier). In (161), with the verb *tahrata* 'to make something dirty', the exact endpoint of 'being dirty a bit' or 'being very dirty' is difficult to determine. Therefore in (161) only an abstract change is observed: when a person's hand becomes dirty because of iniquity, the person is not the same as before:

(Finnish⁵⁰)
(160) [...] he voi-vat muutta-a elämäntap-o-ja-an they can-PRS.3PL change-INF lifestyle-PL-PAR-3PX terveellise-mm-i-ksi healthy-COMP-PL-TR
'[...] they can change their lifestyles to healthier ones.'

⁵⁰ from https://sansa.fi/kambodzalainen-nem-lin-haluaa-rakentaa-kirko/, accessed on 3.11.2020

(Finnish)

(161) Jos käsi-ä-si tahra-a synti,
If hand-PAR-2SGPX get_dirty-PRS.3SG iniquity
heitä se pois, [älä anna pahan asua majassasi.]
throw.IMP2 it.ACC away, [...]
'If iniquity be in thine hand, put it far away, [and let not wickedness dwell in thy tabernacles].'

In some situations the difference value is based on the context. For example, the length of the hair which I am shortening as in (157) might depend on some knowledge about hair during different periods of fashion (for more discussion on context-dependent telicity see Hay, Kennedy, Levin 1999, 136–138).

Culminational telic and non-culminational telic uses in Finnish are further extended to other verbs that are not normally assigned to the class of telic scalar verbs, such as *avata* 'open'. An opposition between a culminational and a non-culminational reading is also observed here:

(Finnish, adapted from Kiparsky 1998: 272)

- (162) a. *Hän avas-i ove-n*. s/he open-PST.3SG door-ACC 'He opened the door.'
 - b. *Hän avas-i ove-a*.
 s/he open-PST.3SG door-PAR
 'He opened the door for a while; he opened the door partly, set the door ajar; he was opening the door.'

Example (162b), which is widely cited in literature (inter alia Larsson 1983: 87, Holvoet 1991: 109), can have progressive meaning (where the object is an incremental theme: 'he was opening the door'), but also several other meanings: 'he opened the door for a while', and also 'he partly opened the door' referred to as telic and perfective (as suggested by Kiparsky 1998: 272 in a similar example with opening the window; also Larjavaara 2019: 229). Example (162a) with the ACC object, is also characterized as telic, bounded and perfective, and the semantic difference between these two sentences lies in identifying different endpoints. The telicity of these verbs in Finnish cannot be completely specified in terms of semantic or syntactic features and often derives from syntactic context:

(Finnish, from Leino 1991: 171) (163) *Auto vaihto-i kaista-a.* car change-PST.3SG lane-PAR 'The car changed lanes.' (Finnish, from Larjavaara 2019: 229)

(164) Kirist-i-n ruuvi-a.

tighten-PST-1SG screw-PAR

- i. 'I tightened the screw (a bit)
- ii. 'I was tightening the screw.'

In example (163) with verb *vaihtaa* 'change' the endpoint is based on other measurements (contrary to examples like with the verb *kirjoittaa* 'to write' (125a), where the writing event is linked with the last written sign of the letter being written) — changing the driving lane (but still staying on the road), tightening the screw to some extent, but not too much as in (164).

Estonian scholars also single out degree achievement verbs. Estonian transitive degree achievement verbs occur with the PAR object naturally, as is the case with activity or accomplishment verbs (e.g., *build, paint, read* etc.); thus these verbs occur context-neutrally with PAR objects in durative sentences like (166) and primarily denote activities. Sentences (165–166) would qualify as accomplishments and activities, sentence (167) illustrates an achievement-like reading (for more details on Estonian see Tamm 2012: 174–175):

(Estonian, from Tamm 2012: 175–176)

- (165) *Firma laienda-s tee ühe tunni-ga.* firm.NOM widen-PST.3SG road.ACC one.GEN hour-COM 'The firm widened the road in an hour.'
- (166) *Firma laienda-s tee-d kaks tundi.* firm.NOM widen-PST.3SG road-PAR two.NOM hour.PAR 'The firm was widening/widened the road for two hours.'
- (167) *Firma laienda-s tee-d ühe tunni-ga.* firm.NOM widen-PST.3SG road-PAR one.GEN hour-COM 'The firm widened the road (a bit) in an hour.'

In Russian dialects and Polish a few verbs can occasionally behave like the Finnish scalar telic verbs as well and take GP as object case. The examples are given for North Russian (168) and Polish (169):⁵¹

⁵¹ In modern Polish most such partitive genitives are now obsolescent or obsolete (Holvoet 1991: 107, Kempf 1970: 193). Kempf gives some examples from older Polish: *przytępić kosy.GEN* 'blunt a scythe', *przystrzyc czupryny.GEN* 'trim somebody's hair', where the action does not cover the whole object, but only parts of the object.

(North Russian, from Seržant 2020: 49)
(168) Ja otvorj-u dver-ej.
1SG.NOM open-FUT.1SG door-GEN.PL
'I will somewhat/partly open the door(s).'
(Polish, from Holvoet 1991: 107)
(169) Uchylil okn-a.
open.PST.3SG window-GEN.SG
'He half-opened the window.'

In the case of Polish *uchylić* 'to open' the non-culminational telic meaning is lexicalized and case is also assigned lexically: GEN in older Polish and ACC in contemporary Polish. However, GEN case assignment is probably a trace of a former productive case alternation.

4.2.4. Conative verbs

The term *conative*⁵² has been used in the literature in different ways⁵³. The term *conative alternation* was introduced by Levin for an alternation in argument encoding (see Levin 1993: 41–42). In this chapter, we will concentrate on the conative alternation, which is a type of verb alternation between a verb construction indicating the completion of the action and a conative variant representing "an attempted action without specifying whether the action was actually carried out" (Levin 1993, 42, see also Goldberg, 1995: 63). Here this term is used in a different sense from that of Levin and covers alternations in case marking. We give examples with the Finnish verb *koettaa* 'try, attempt':

- a. *On rešil zadač-u.* He solve.PRFV task-ACC.SG 'He solved the problem.'
- b. On rešal zadač-u.
 He solve.IMPFV task-ACC.SG
 'He worked on the problem; he tried to solve the problem.'

⁵² The term *conative* comes from Latin *conor/conari* 'try, attempt'.

⁵³ Conative might e.g., refer to contexts in Sanskrit, Greek or Latin, to so called *imperfectum de conatu*, literally 'imperfect of trying'. This imperfect is interpreted as implying the attempt and not the completed action. In the Slavic grammatical tradition, conative is used to describe the implicature of the imperfective forms of some achievement verbs, see Russian examples below (Vincent 2013: 271). These examples are not discussed in this chapter as they do not have alternations in the object case marking.

(Finnish, from fiTenTen14)

(170) a. Lauri koetta-a pelasta-a Sosiaalidemokraati-t
 Lauri try-PRS.3SG save-INF Social Democrats-ACC.PL
 totaalise-lta tappio-lta!
 total-ABL defeat-ABL
 'Lauri is trying to save the Social Democrats from total defeat.'

b. Alpine Rescue Team ol-i [kopterista roikkuvin Alpine Rescue Team be-PST.3SG [with a rope hanging from the köysin] koetta-nut pelasta-a kado-nnut-ta, helicopter] try-PTCP save-INF go_missing-PTCP.PST-PAR mutta ilman tuloks-i-a. but without result-PL-PAR 'Alpine Rescue Team had tried to rescue the missing person with a rope hanging from the helicopter, but without any results.'

As illustrated by examples (170a–b), in Finnish conativity can be reflected in the form of the object. (170a) with the ACC illustrates a probable successful completion of the action and a conative variant (170b) with the PAR represents an attempted action without specifying whether the action was actually carried out.

Another example is given in (171). The alternation between PAR (171a) and ACC (171b) has nothing to do with partial affectedness: the person involved does not go 'a little bit' to a sauna, but either obeys the order or not:

(Finnish, from Larjavaara 2019: 231)

(171) a. Käsk-i-n hän-tä sauna-an. order-PST-1SG (s)he-PAR sauna-ILL
'I ordered him to go to a sauna (and he most probably went).'
b. Käsk-i-n häne-t sauna-an. order-PST-1SG (s)he-ACC sauna-ILL
'I ordered him to go to a sauna (and he went).'

Therefore, the difference between (171a) and (171b) is in the outcome of the event. In (171a) the emphasis is put on the action of giving the order to someone to go to a sauna (and the person most probably went to a sauna) while in (171b) the emphasis is both on the action and the outcome of the event (the person went to a sauna). For more explanations and examples see Larjavaara 2019: 231–232, where such verbs are classified under the group of telic fruition verbs (*teelis-suksessiiviset* in Finnish).
An analogous example involves the verb *suostutella* 'persuade', where the difference between the outcomes of the action is also rendered by case marking:

(Finnish, from Lauranto 2017: 157)
(172) a. *Liisa suostuttel-i Matti-a* Liisa persuade-PST.3SG Matti-PAR *lähte-mä-än Espanja-an*. go.INF-ILL Spain-ILL
'Liisa tried to persuade Matti to go to Spain.'
b. *Liisa suostuttel-i Mati-n* Liisa persuade-PST.3SG Matti-ACC *lähte-mä-än Espanja-an*. go-INF-ILL Spain-ILL
'Liisa persuaded Matti to go to Spain (and he went).'

In dialectal Finnish, frequentative verbs may involve an explicit sense of trying, as in example (173):

(Finnish, from Vincent 2013: 274)
(173) *Mies ost-el-i hevos-ta.* man buy-FREQU-PST.3SG horse-PAR
'The man wanted/tried/would have wanted to buy a horse.'

It was also noted that with Finnish verbs of trying the choice between the two cases is optional (Kiparsky 1998 cited by Vincent 2013: 274):

(Finnish, from Kiparsky 1998: 287)
(174) Matti koett-i tappa-a karhu-n/karhu-a. Matti try-PST.3SG kill-INF bear-ACC/bear-PAR
'Matti tried to kill a/the bear.'

The ACC in (174) identifies *karhu* 'bear' as the direct object within the predicate *tappaa karhun* 'to kill the bear' while the PAR signals the potentially irresultative outcome of the predicate *koetti tappaa karhua* 'tried to kill the bear' (Vincent 2013: 274).

In Lithuanian, one could also find a few instances of lexical distinctions along the conativity dimension, like Lith. *irodinėti* 'argue, try to prove' vs *irodyti* 'prove', *ikalbinėti* 'try to persuade' vs *ikalbėti* 'persuade'. In Russian, conative meanings are coded, in some instances, with the alternation between imperfective/perfective verbs. In (175a) with the imperfective verb, the event of giving the money was not successful (the other person did not take the money); in (175b) with the perfective verb the result is a success (the other person took the money):

(Russian, p.c. Sergei Podshivalow)
(175) a. Ja daval emu den'gi, 1SG.NOM give.PST.1SG 3SG.DAT money.ACC.PL [no on ne bral ih].
'I gave him money, [but he did not take it.]'
b. Ja dal emu den'gi. 1SG.NOM give.PST.1SG 3SG.DAT money.ACC.PL
'I gave him money.'

All the constructions discussed above describe a complex event involving at least two participants, where one is giving and another is (not necessarily) taking money as in (175a–b), one is giving the order and another either obeying or not (as in (171a–b), one is trying to persuade another person to do smth. and the result is either successful or not (as in (172a–b). As a result, the irresultativity cannot be quantified, as in the case of degree achievements: in a long causal chain of successive sub-events, any of the necessary events can remain unrealized, leading to the irresultative character of the whole complex event.

In English, the notion of conative alternation is applied to certain semantic fields, e.g., verbs of contact by impact (*hit, kick*), see Levin 1993, 41):

(176) a. James kicked the ball.b. James kicked at the ball.

Construction (176a) entails that the ball was hit while the corresponding conative construction (176b) does not imply that this aim was achieved. The conative construction marked with the preposition *at* signals that the event of kicking took place irrespective of the result or success of the action (James may have missed while trying to kick the ball). In other words, the conative construction (86b) can be paraphrased as something like *James tried to kick the ball* (Levin, 1993: 6). Conative alternations also convey different meanings in terms of intentionality (Anscombe 2000) and affectedness (Beavers 2006).

4.3. Discussion

In the previous chapter a classification of the semantic factors that give rise to the variation of the case marking of discrete objects in Lithuanian and Finnish (and also other neighboring languages) was examined. The classification was based on verbs which normally assign ACC to discrete objects and the use of PAR or GP with such verbs is rather exceptional.

As Finnish does not have overt aspect marking on the verb, PAR on the discrete object triggers the interpretation of an unbounded event (imperfective aspect or irresultativity). Only plural and mass nouns can occur as objects, denoting indeterminate quantity, therefore the marking of discrete objects by GP in Lithuanian becomes problematic.

The question then arises whether the Finnish PAR case is used in situations/ constructions where Lithuanian has overt aspect marker on the verb. The resultative and irresultative readings of Finnish achievement verbs are marked with the ACC (= achievement) or PAR (= absence of the result) (see example (116a–b) repeated here for the sake of convenience):

(Finnish, from Kiparsky 1998: 266–267)

(116)	a. Ammu-i-n	karhu-n.
	shoot-PST-1SG	bear-ACC
	'I shot the (a) b	ear.'
	b. Ammu-i-n	karhu-a.
	shoot-PST-1SG	bear-PAR
	'I shot at the (a)) bear (without killing it).'

In Lithuanian, the achievement or the absence of the result would be marked not on the object, but with different verbal prefixes as in (177a–b), which marks a difference in actionality:

(Lithuanian, personal knowledge):
(177) a. Nu-šovi-au lok-į.
PVB-shoot-PST.1SG bear-ACC.SG
'I shot the (a) bear.'
b. Pa-šovi-au lok-į.
PVB-shoot-PST.1SG bear-ACC.SG
'I shot at the (a) bear (without killing it).'

Lithuanian verbal prefixes may offer a full range of possibilities to describe the event in a very detailed manner regarding the outcome of the result. To illustrate this, we give a non-prefixed Lithuanian verb *nešti* 'carry' with possible prefixes which modify the meaning of the verb and also the description of the result: *i-nešti* 'carry in', *iš-nešti* 'carry out', *per-nešti* 'carry along', *pri-nešti* 'bring up, bring a lot', *su-nešti* 'carry to', *už-nešti* 'carry up', *ap-nešti* 'carry around', *nu-nešti* 'carry to'. The opposition between *nešti* 'carry': *i-nešti* 'carry in' is also one of quantification. Apart from the description of the result of the event, prefixes may also reflect actional differences (i. e. differences in lexical aspect or Aktionsart), e.g., the prefix *pa-* in *pa-nešti* 'carry for some time' renders the verb perfective but atelic, and the boundedness associated with perfectivity is achieved through indication of an arbitrary boundary in time rather than through a change of state.

Larjavaara (1991) shows that the object case variation in Finnish has developed in a logical manner, although there was some Baltic influence in the early stages. He argues that quantification is an older criterion than aspect and most probably the starting point from which the aspectual uses have developed. Whatever the factors involved in the historical development, the object marking of contemporary Finnish is based on the culmination (or non-culmination) of the event: "the object of the sentence is total (= ACC) whenever and only when a positive sentence expresses a complete change of the event that has reached (or is reaching) its end-point. In all other cases (including transitive sentences denoting some extent of change, e.g., *lämmitin saunaa. PAR* 'I heated the sauna (a bit)' or no change at all, e.g., *katsoin televisiota.PAR* 'I was watching TV'), the partial (= PAR) object is used" (Larjavaara, 2019, 207). Therefore, for Finnish the culmination of the event (which historically might have its roots in quantification) is the most important criterion for the assignment of the object case.

Could the Finnish PAR have taken over the same functions as the verbal aspectual marker in Lithuanian? The non-availability of irresultative meaning of the GP in Lithuanian and other Slavic languages might have something to do with the overt marking of aspect and Aktionsart on the verb. The irresultative reading of the object can often be marked in Baltic by a prefix reflecting an atelic Aktionsart.

This preliminary exploration of GP marking with discrete objects in Lithuanian shows inconsistent marking of irresultativity via case-marking. More diachronic research as well as research on the Lithuanian dialects would be needed to get a better picture of PAR marking of discrete objects in Lithuanian. However, the present research shows that there is a clear difference between Finnish and Lithuanian for encoding irresultativity in discrete objects: Lithuanian strategy is to use aspectual prefixes, Finnish uses PAR marking. This conclusion confirms that instead of a parallel way of differential object marking, there are also fundamental differential differences between the transitive clause of Finnish and Lithuanian.

4.4. Concluding remarks

In this chapter, the treatment of discrete objects in relation to object marking in Lithuanian and Finnish was investigated. As GP (or PAR) in object marking with discrete objects is also present in neighbouring languages (e.g., Polish *dać buzi.GEN* 'give a kiss', Karelian *antaa suuta.PAR* 'give a kiss', Russian *otvorit' dverej.GEN* 'partly open the door(s)'), one of the aims of this research was to investigate in which situations PAR or GP is interpreted as encoding an irresultative event in Lithuanian compared to other neighbouring languages, with a special focus on Lithuanian GP and Finnish PAR.

As was already shown in previous research, Lithuanian and Finnish have completely different criteria for assigning object cases (Laugaliene 2020). In Finnish the most important factor is the resultativity of the event (or the absence of the endpoint and therefore no result), in Lithuanian quantification plays the most important role. In this chapter it was also shown that the endpoints in Finnish are of different types and could be categorized in subjective terms (i.e. the exact endpoint cannot be traced by perception, the result of the change in the mental state of the experiencer cannot be exactly verified, the event has temporal boundaries or it is not completed according to the judgment of the speaker etc.), which opens up an array of possibilities to use PAR marking for discrete objects very widely. As quantification plays the most important role for the object marking in Lithuanian, the possibilities to quantify discrete objects (versus mass nouns) are much more limited. In Lithuanian, GP can denote a slight affectedness (which could also be realized as affectedness limited in time). In modern Lithuanian, GP with discrete objects is obsolescent or obsolete, found only in some dialects. However, data from older Lithuanian show that it might have been more frequent than at present. In Finnish, variable quantification is associated with progressive and imperfective readings. Quantification undoubtedly plays an important role in the Finnish aspect both from the diachronic and synchronic point of views (Larjavaara 2019: 209).

Finnish does not have overt aspect marking on the verb, whereas Lithuanian has markers on verbs (mainly prefixes). Hence, Finnish PAR on the discrete object triggers the interpretation of an unbounded event (imperfective aspect or irresultativity). As Lithuanian has overt marking of aspect and actionality (lexical aspect, Aktionsart) on the verb, marking of irresultativity in the case form of the object often becomes redundant. Therefore, the non-availability of irresultative meaning of the GP in Lithuanian (and other Slavic languages) might partly be due to overt marking of aspect and actionality on the verb.

5. VARIATION IN OBJECT MARKING: A CORPUS BASED CASE STUDY

In chapter 3, the hierarchies of the object-marking rules for Finnish and Lithuanian were discussed in detail. It was shown that the strongest rule for using PAR for Finnish or GP for Lithuanian is negation. The second condition for the choice between the PAR and ACC in Finnish is the culmination of the event. Meanwhile, for Lithuanian the incremental participation in the event is the second condition governing the choice between GP and ACC (see Figures 1 and 2 for Finnish and Lithuanian object marking rules). In chapter 4, the focus was on the object marking with discrete objects: the aim was to give an overview of possible conditions for the use of GP in resultative constructions in modern and older Lithuanian in comparison with their counterparts in Finnish and Slavic. Chapter 4 also gave a description of the semantic factors that give rise to the variation in the case-marking of discrete objects in Finnish and Lithuanian. It also confirmed the hypothesis that Lithuanian and Finnish have different strategies for encoding irresultativity in discrete objects (aspectual prefixes vs. PAR marking).

The present study looks at the wider empirical data from Finnish and Lithuanian with the goal of testing the hierarchical criteria of object marking rules described in previous chapters on a large corpus of data and justifying the rules (or exceptions to the rule triggered by e.g. some semantic factors) with some qualitative results.

5.1. Data for the study

The empirical data for this study comes from the translation of the Bible into Lithuanian (2005)⁵⁴ and the Finnish edition of the Bible (1992)⁵⁵. As the empirical data from the whole Bible turned to be far too big to cover in this study, only the texts of the New Testament were treated. The translation of these texts comes from the original Greek. All objects in PAR and ACC for Finnish or GP and ACC for Lithuanian were identified. The data was further scanned manually in order to eliminate the redundant examples as explained below.

⁵⁴ BIBLIJA, arba Šventasis raštas. 2005. Ekumeninis leidimas. Lietuvos Biblijos Draugija, Vilnius.

⁵⁵ Raamattu. 1992, WSOY, Porvoo, Helsinki, Juva.

As discussed in 2.4.3, PAR by default comes with quantifiers like *paljon* 'a lot', *vähän* 'a bit', *runsaasti* 'plenty', *hiukan* 'little, slightly' for Finnish or *daug* 'a lot', *mažai* 'a bit', *šiek tiek* 'slightly' for Lithuanian etc.

Finnish

(178)	[] hän ant	t-o-i runsa	asti almu-ja	!
	s/he giv	ve-PST-3SG plenty	alms-PA	R.PL
	juutalais-i-lle	ja rukoil-i	alati	Jumala-a.
	jewish-PL-ALL	and pray-PST.3	SG always	God-PAR
	'He gave gener	rously to those in r	need and pray	yed to God regularly.'
(179)	[] vain mu	uutam-i-a saira-i-	ta hän	parans-i
	only fev	w-PL-PAR sick-PL	-PAR s/he	heal-PST.3SG
	pane-ma-lla k	äte-nsä	heidän	päälle-en
	put-INF-ALL h	and-ACC.PL.3PX	s/he.PL.GEN	on-3PX
	'Except that he	laid his hands on a	few sick peop	ple and healed them.'
(Lithu	anian)			
(100)	T:	1:	•	

(180) *Tėv-o* vali-a esu jums
father-GEN.SG will-INS.SG be.PRS.1SG 2PL.DAT *pa-dar-ęs* daug ger-ų darb-ų.
PVB-make-PST.PA.NOM.SG.M many good-GEN.PL work-GEN.PL
'I have shown you many good works from the Father.'

It was also shown that, despite the PAR case, mass and number quantifiers typically designate the quantity as bounded and the aspect as culminating (for a more detailed discussion see Huumo 2016). Therefore, all the examples with quantifiers both for Finnish and Lithuanian⁵⁶ were not further treated in this study.

- a. *Mači-au kelet-ą j-o koleg-ų.* see-PST.1SG some-ACC.SG 3-GEN.SG.M colleague-GEN.PL 'I saw **some** of his colleagues.'
- b. *Mači-au j-o koleg-ų*. see-PST.1SG 3-GEN.SG.M colleague-GEN.PL 'I saw (**some**) of his colleagues.'
- However, the omission of the indefinite pronominal quantifier is not possible as example

c. *Mači-au jo koleg-as.* see-PST.1SG 3SG.GEN colleague-ACC.PL 'I saw his colleagues.'

⁵⁶ It has been claimed that Lithuanian tends to drop the indefinite pronominal quantifier in the head position. The claim was illustrated by the example (Seržant 2021: 119–120):

⁽b) becomes ungrammatical. The presence of the quantifier is the presupposition of the

GP. If the quantifier is omitted, the object will be in ACC as in (c):

The empirical data from Finnish and Lithuanian also shows PAR which represents a subconcept of the partitive concept, namely the pseudopartitive (N-of-N, (9b), as discussed in chapter 1.1) or measure nouns as in (181). PAR also occurs with certain numerals as in (181):

(Finnish)

(181) He anto-i-vat häne-lle pala-n they give-PST-3PL s/he-ALL piece-GEN paiste-ttu-a kala-a. fry-PST.PASS.PTCP-PAR fish-PAR 'They gave him a piece of fried fish.'

(Lithuanian)

- (182) J-is su-būr-ė apie ketur-is
 3-NOM.SG.M PVB-gather-PST.3SG about four-ACC.SG šimt-us šalinink-ų.
 hundred-ACC.PL supporter-GEN.PL
 'About four hundred supporters joined him.'
- (183) O kiek tu skolingas?' Anas atsak-ė:
 And how 2sG indebted.NOM.SG he.NOM.SG reply-PST.3sG
 'Šimt-q saik-ų kvieči-ų.'
 hundred-ACC.SG bushel-GEN.PL wheat-GEN.PL
 ''And how much do you owe?'' ''A hundred bushels of wheat'', he replied.'

(Finnish)

(184) [...] *saa-t* hallinta-a-si kymmenen kaupunki-a. get-PRS.2SG authority-ILL-2SGPX ten city-PAR 'You shall get authority over ten cities.'

All examples of this kind with numerals were left out of the further treatment of data.

Finnish and Lithuanian objects also included negation. As discussed in chapter 2.2.1, negation in Finnish is the strongest factor that mandates the use of the PAR. Negation always triggers PAR in Finnish as in (185) or in Lithuanian (as in (188)). But negation in Finnish might also involve doubtful result as in (186) or abessive (a grammatical case in Finnish, which indicates the absence of smth.) (187). All the examples with any kind of negation were removed from the Finnish and Lithuanian corpora.

(Finnish)

- (185) Miksi ette ole rakenta-neet minu-lle whv NEG.2PL be.CONNEG build-PTCP I-ALL setripuis-ta asunto-a? cedar wood-PAR house-PAR 'Why have you not built me a house of cedar?' (186) Mutta kuinka kukaan kvken-is-i rakenta-ma-an someone can-COND-3SG build-INF-ILL But how häne-lle asunto-a? s/he-ALL house-PAR 'But who may have strength enough to make a house for him.' teh-neet synti-ä iotka (187) Ne, ovat this.NOM.PL who.NOM.PL be.3PL do-PTCP sin-PAR laki-a tunte-ma-tta. law-PAR know-INF-ABE 'All who sin apart from the law.' (Lithuanian) (188) Skubiai pasitrau-k iš Jeruzal-ės, nes j-ie
- (188) Skubial pastrau-k is Jeruzal-es, nes J-le quickly leave-IMP2 from Jerusalem-GEN because 3-NOM.PL.M ne-priim-s tavo-jo liudijim-o apie mane. NEG-accept-FUT.3 your-DEF testimony-GEN.SG about 1SG.ACC 'Quick! Leave Jerusalem immediately, because the people here will not accept your testimony about me.'

In Finnish, a certain group of verbs are inherently irresultative and take PAR objects (see chapter 3.3 for more explanations). Therefore, such verbs as Finnish *rakastaa* 'to love', *ajatella* 'to think', *inhota* 'to detest', *hävetä* 'to be ashamed', *vihata* 'to hate', *tutkia* 'to investigate' were also taken out of our calculations⁵⁷. A group of Lithuanian verbs taking only GP as *siekti* 'strive for', *trokšti* 'desire', *klausyti* 'listen', *laukti* 'wait', *ieškoti* 'seek' etc. were

⁵⁷ Some atelic verbs might indeed be used also in bounded sentences, e.g.: (Finnish, from Larjavaara 2019: 195) *Katsel-i-n kymmene-ssä minuuti-ssa Ateneumi-n kaikki taulu-t.* look-PST-1SG ten-INESS minute-INESS Ateneum-GEN all painting-ACC.PL 'In ten minutes I looked at all paintings in the Ateneum.' But such exceptional uses of atelic verbs were not found in corpora, therefore atelic verbs were treated as automatically taking the PAR as the object.

also taken out of further treatment of the data. These verbs can be grouped under the verbs which license Intensional Genitive (for more discussion about Intensional Genitives see Kagan 2010; for a full list of verbs which require GEN in Lithuanian see Ambrazas et al. 2006: 486).

Therefore the criteria for the choice of the collection of the verb sample are as follows:

- Non-negated sentences;
- Finnish verbs which are not inherently atelic (and therefore would always take the PAR);
- Lithuanian verbs which do not take Intensional Genitive;
- Finnish and Lithuanian verbs which show variation between PAR/GP and ACC in the corpora;
- Verbs which have at least two or more occurrences.

Table 9 below shows the amount of data studied in this research.

	Finnish	Lithuanian
Objects in affirmative sentences:		
ACC	1009	939
PAR / GP	628	123
Total (to be treated in the analysis)	1637	714
Objects in negated sentences (= PAR / GP)	1114	450
Sentences with inherently atelic verbs (= PAR)	1066	-
Sentences with ACC (no alternation with GP)	-	1613
Sentences with GP (no alternation with ACC)	-	236
Total sentences with objects in the corpora	5454	4075

Table 9. Finnish and Lithuanian object cases, with number of filtered occurrences

After eliminating the above-mentioned instances from the database, the obtained samples from Finnish and Lithuanian were further annotated. It was decided to group examples according to predicates. A predicate-related approach to aspect and object case marking was also favoured by other researchers (e.g., Tamm 2012: 29 for Estonian, which shows that the alternation in object marking is not directly linked with the differences in the properties of the object NP).

The aim of this study initially was to check whether the hierarchical criteria of object marking rules for Finnish and Lithuanian discussed in previous chapters function without any exceptions. The hypothesis for Finnish was that the semantics of some verbs might be an important condition which governs the choice of the PAR despite the fact that following the general criteria of object marking rules the expected case would be the ACC. Therefore, each Finnish sample was annotated for *perfectivity* vs. *imperfectivity, boundedness* vs. *unboundedness, predicate* of the clause and, if applicable, the *semantic group* (see Figure 2). The results were grouped according to the frequency of the predicates: the most frequent predicates came on the top, the less frequent with only one or two occurrences were at the bottom of the list. The whole list of predicates having at least two or more occurrences is the following:

tehdä 'do, make', antaa 'give', saada 'get', ottaa 'take', nähdä 'see', tuoda 'bring', lähettää 'send', tuntea 'feel', svödä 'eat', kutsua 'invite', viedä 'take', tuottaa 'produce', esittää 'present', panna 'put', pyytää 'ask', käskeä 'order', kantaa 'carry', ajaa 'drive', löytää 'find', rakentaa 'build', kerätä 'gather, collect', jättää 'leave', murtaa 'break', vahvistaa 'strengthen', parantaa 'heal', nävttää 'show', koskettaa 'touch', synnyttää 'give birth', ostaa 'buy', juoda 'drink', osoittaa 'point, show', lukea 'read', tuomita 'judge', periä 'inherit', lausua 'say, speak', hankkia 'acquire, get', koota 'assemble', voittaa 'win', karkottaa 'drive away', julistaa 'declare, pronounce', myydä 'sell', avata 'open', laskea 'count', muistaa 'remember', kehottaa 'recommend, urge', herättää 'awaken', kuulla 'hear', kylvää 'sow', tavata 'meet', puhdistaa 'clean', maksaa 'pay', valmistaa 'prepare, make, produce', kastaa 'baptize', korjata 'fix', suoda 'give, grant', vietellä 'lure, tempt', toimittaa 'deliver', valaista 'light, illuminate', lyödä 'hit', tarjota 'offer', levittää 'spread', hakea 'search, seek', saastuttaa 'pollute', kieltää 'break up', hajottaa 'break up', luoda 'creat', rikkoa 'break, violate', vetää 'pull' koskea 'touch', surmata 'kill', polttaa 'burn', päästää 'release, let go', katkaista 'cut off', liittää 'join, connect', hävittää 'destroy, demolish', saavuttaa 'reach, achieve', riistää 'snatch, wrench', uhrata 'sacrifice', polkea 'stamp', tahtoa 'want', hoitaa 'take care', nostaa 'lift, raise', täyttää 'fill', vaatia 'demand', asettaa 'put, place', kirjoittaa 'write', kohdata 'meet, encounter', voidella 'grease, oil', taivuttaa 'bend, persuade', kumota 'revoke, annul', käyttää 'use', toteuttaa 'execute, fulfil', noutaa 'collect, fetch', lisätä 'add, augment', ruoskia 'whip, lash', iskeä 'hit', ojentaa 'admonish', maistaa 'taste', rangaista 'punish, penalise', pidättää 'arrest', *katkoa* 'cut', *etsiä* 'search, seek', *kertoa* 'tell', *tappaa* 'kill', *tuoda* 'bring', *vapauttaa* 'set free', *jakaa* 'divide, share', *uskoa* 'believe, entrust', *tuhota* 'damage, destroy', *määrätä* 'prescribe, order', *havaita* 'perceive, detect, notice', *ansaita* 'earn, merit', *tietää* 'know', *ilmoittaa* 'announce, notify, report', *vihmoa* 'drizzle', *tutkia* 'investigate, study', *heittää* 'throw', *johtaa* 'lead, guide', *pieksää* 'beat, thrash', *valmistuttaa* 'make smb. prepare', *punoa* 'intertwine', *villitä* 'incite', *haalia* 'gather, collect', *kasvattaa* 'bring up, raise', *varata* 'reserve, book', *loukata* 'hurt, wound', *eksyttää* 'lead astray', *paimentaa* 'herd', *huutaa* 'shout', *valella* 'pour', *sivellä* 'pet', *laittaa* 'put', *varoittaa* 'warn'.

For Lithuanian, the scanning of the data was as follows: all the GPs and ACCs were identified. The samples were further annotated for *predicates, prefixes, incrementality, (im)perfectivity* and *(un)boundedness* (as per Figure 3). Lithuanian data showed a big block of occurrences, which actually do not have variations in object case marking and are always marked with the ACC, e.g., *skelbti* 'to preach', *atleisti* 'to forgive', *šlovinti* 'to praise', etc. These samples were treated separately.

The results with predicates having alternations in object marking were grouped according to the frequency of the predicates: the most frequent predicates came on the top, the less frequent with only one or two occurrences were at the bottom of the list. The whole list of Lithuanian predicates having at least two or more attestations is the following:

turėti 'have', duoti 'give', gauti 'get', pa-daryti 'make', valgyti 'eat', pa-imti 'take', su-teikti 'give, grant', rasti 'find', daryti 'make', pamatyti 'see', pa-rodyti 'show', imti 'take', iš-gerti 'drink', su-rinkti 'gather', nu-siųsti 'send (away)', siųsti 'send', teikti 'give, grant', atnešti 'bring', pa-žadinti 'raise up', at-siųsti 'send', pa-ruošti 'prepare', nu-pirkti 'buy', j-gyti 'get', iš-kelti 'lift up', pa-sėti 'seed', iš-lieti 'shed', su-rasti 'find', pa-si-kviesti 'invite', pirkti 'buy', pa-siūlyti 'propose', iš-gerti 'drink (up)', į-dėti 'put (into)', į-vesti 'introduce, bring'.

The list of verbs seems to be shorter than the one for the Finnish predicates. But the list includes variations of verbs with different prefixes. A more detailed discussion will follow in chapter 5.3.

The dataset from Finnish and Lithuanian will be further treated with the ID3 algorithm, which is used to induce a decision tree from a dataset (Kelleher,

Mac Namee & D'Arcy 2020: 117). Decision trees are a fundamental structure used in information-based machine learning, which are used to generate a prediction by carrying out a series of tests on the values of the descriptive features describing a query instance and use the answers to these tests to determine the prediction (Kelleher, Mac Namee & D'Arcy 2020: 121). As such, any decision tree generated by the ID3 algorithm is an algorithm in its own right. Structurally, a decision tree consists of a root node (or starting node), interior nodes, and leaf nodes (or terminating nodes) that are connected by branches (Kelleher, Mac Namee & D'Arcy 2020: 122). In the diagrams in figures which will be presented below the labels on each branch indicate one of the possible feature levels that the descriptive feature at the node above can take (ibid). Concretely, only binary ("ves" or "no") features are employed in the present work; therefore, for any given node, the number of outgoing branches will always be exactly two. The right-hand branch corresponds to the presence of the descriptive feature, and the left-hand one to the absence thereof.

5.2. Finnish data

The initial aim of the study was to induce an algorithm in the shape of a decision tree, which governs the choice of the object for Finnish and which could be applied universally to any sentence with any predicate. Therefore, it was important to check the algorithm on some data, which would include different samples. The algorithm was applied to the Finnish corpora. The outcome shows that the most important governing criterion for the choice between the PAR and the ACC is the *boundedness* or *unboundedness* of the situation. At the initial step, the algorithm step checks for the possibility of applying the criterion "bounded = ACC". If it turns out not to be possible, it checks the possibility of applying "bounded = ACC" at the following step. The semantic class of the verb plays an important role; more details will be discussed below. The outcome of the results is presented in Figure 4.

5.2.1. Total objects for culmination

It was pointed out in previous chapters that the total object in Finnish appears under certain conditions (in affirmative sentences with quantitatively bounded objects and with a verb that expresses a bounded action). Bounded action is a combination of perfectivity and telicity (not only the completedness of



Figure 4. Hierarchical criteria governing the choice of the object in Finnish tested on a corpus

the situation, but also the existence of the inherent terminal endpoint). Or, if reformulated, the object of the sentence is total whenever and only when a positive sentence expresses a complete change of the event that has reached (or is reaching) its endpoint (Larjavaara 2019, 199). Therefore, some special conditions are needed in order to use a total object; the PAR case in Finnish has often been seen as a default case (Vainikka & Malling 1996). Our corpora contained 1009 samples with the ACC, which fulfill the criteria to use the ACC: a quantitatively bounded object in a bounded action having an endpoint. Some examples are given below:

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- (189) Hän tek-i minu-lle hyvä-n teon.
 s/he do-PST.3SG I-ALL good-ACC thing-ACC
 'She has done a beautiful thing to me.'
 (190) Joosef anto-i poja-lle nime-n Jeesus.
- Joseph give-PST.3SG boy-ALL name-ACC Jesus 'Joseph gave him the name Jesus.'

5.2.2. Partial objects for various interpretations of non-culmination

Our corpora contained 628 samples with partial objects. Some of these partial objects fall completely under the basic rules of determination of the Finnish object. Others seem to include a more complicated spectrum of details. We will start with simple instances; more complex cases will be discussed below.

Following the Finnish object rules, with telic events the perfectivity will be expressed by the ACC and imperfectivity – by the PAR. Imperfectivity is expressed in examples (191) and (192) below:

(Finnish)

(191)	Hyvä	рии	teke-e	hyv-i-ä	hedelm-i-ä,
	good	tree	bear-PRS.3SC	G good-PL-PAR	fruit-PL-PAR
	huono	рии	kelvottom-i-	a hedelm-i-ä	
	bad	tree	bad-PL-PAR	fruit-PL-PAR	
	'Every	good ti	ree bears good	d fruit, but a bad	tree bears bad fruit.'
(192)	Hän –	käske-e		saastais-i-a	henk-i-ä
	3sg	comma	nd-PRS.3SG	unclean-PL-PAR	spirit-PL-PAR
	valla-lla ja voima-lla []				
	authority-ADE and power-ADE				
	'For with authority and power he commands the unclean spirits.'				

Telicity is also directly linked with the quantitative unboundedness of the object because of the lack of the culminational point. Two examples are given to illustrate the quantitative unboundedness of the event (193) and (194). Both examples also include ACC objects: in (193) leading people out is interpreted as a culminational event, while performing wonders and signs is interpreted as a non-culminational event. Example (194) illustrates that the same rule of culmination and non-culmination applies also for mass nouns: the bread is quantified as bounded, and the fish is quantified as unbounded:

(Finnish)

- (193) *Juuri* hän joht-i heidä-t pois ia tek-i exactly s/he lead-PST.3SG they-ACC away and do-PST.3SG ihme-i-tä ia tunnustek-o-ja Egypti-ssä. wonder-PL-PAR and sign-PL-PAR Egypt-INESS 'This man led them out, performing wonders and signs in the land of Egypt.'
- (194) Jeesus tul-i, ott-i leivä-n ja
 Jesus come-PST.3SG take-PST.3SG bread-ACC and anto-i hei-lle, samoin hän anto-i kala-a. give-PST.3SG they-ALL same he give-PST.3SG fish-PAR 'Jesus came, took the bread and gave it to them, and did the same with the fish.'

However, Figure 4 shows that before all these cases of imperfectivity and quantificational unboundedness the algorithm would first check the semantic group of the verb. The semantic groups of verbs that are most likely to prompt PAR were discussed in chapter 4. Such semantic groups as *surface-contact verbs, scalar verbs* and *conative verbs* for Finnish were established. These verbs are very likely to get PAR objects because of their own semantic characteristics. Some examples of these samples are given below. *Surface-contact verbs* were discussed in chapter 4.2.2. and are illustrated by examples (195) for verb *iskeä* 'to hit, to strike' and (196) for the verb *lyödä* 'to hit, to slap' from the corpora:

(Finnish)
(195) [...] iske-n hei-tä suu-ni mieka-lla.
hit-PRS.1SG they-PAR mouth-GEN.1SGPX sword-ADE
'[...] and will fight against them with the sword of my mouth.'

(196) Jos joku lyö sinu-a poske-lle,
If someone.NOM slap.PRS.3SG you-PAR cheek-ALL tarjoa toinen-kin poski.
propose.IMP2 other.ACC-FOC cheek.ACC
'If someone slaps you on one cheek, turn to them the other also.'

Scalar verbs were discussed in chapter 4.2.3 in more detail. Instances of such verbs, which prompt to PAR because of their own semantics, were also found in corpora: examples (197), (198) and (199):

(Finnish)

- (197) Vahvista-koon siis Kristukse-n Jeesukse-n armo strengthen-IMP3 therefore Christ-GEN Jesus-GEN grace sinu-a, poika-ni. you-PAR son.NOM.1SGPX 'Thou therefore, my son, be strong in the grace that is in Christ Jesus.'
- (198) [...] jotta voi-si-n anta-a tei-lle jonkin that can-COND-1SG give-INF you.PL-ALL some hengellise-n lahja-n ja näin vahvista-a tei-tä. spiritual-ACC gift-ACC and so strengthen-INF you-PL.PAR '[...] so that I may impart to you some spiritual gift to make you strong.'
- (199) [...] aivan kuin lamppu valais-is-i sinu-a as as lamp.NOM enlighten-COND-3SG you-PAR loistee-lla-an. shine-ALL-3PX '[...] as when a lamp shines its light on you.'

Conative verbs like *käskeä* 'to order, to command' are also found in the corpora. Some of them (depending on the outcome of the result) take ACC as in (200), some would take PAR as in (201–202). However, the object case in (201–202) might be dependent on a combination of several factors as the examples includes also verb of surface-contact *lyödä* 'to hit', *iskeä* 'to hit, to strike':

(200) Hän käsk-i väkijouko-n asettu-a nurme-lle. s/he direct-PST.3SG people-ACC sit_down-INF grass-ALL 'And he directed the people to sit down on the grass.'

- (201) Silloin ylipappi Ananias Paavali-n käsk-i then priest Ananias order-PST.3SG Paul-GEN mieh-i-ä vieressä seisov-i-a beside stand PTCP PRS-PL-PAR man-PL-PAR iske-mä-än hän-tä suu-lle strike-INF-ILL s/he-PAR mouth-ALL 'At this the high priest Ananias ordered those standing near Paul to strike him on the mouth.'
- (202) [...] *mutta tee-t* vastoin laki-a ja käske-t but do-PRS.2SG against law-PAR and order-PRS.2SG *lyö-dä minu-a*. hit-INF I-PAR

'[...] you break the law yourself by ordering me struck like that.'

The Chi-squared test was performed on predicates that have 10 or more occurrences. The test confirms that the alternation of the object case (ACC vs. PAR) is highly dependent on the verb itself: $p < 10^{-50}$.

5.3. Lithuanian data

The algorithm presented in Figure 5 was applied to the Lithuanian corpus. The outcome clearly shows that the prefixation of the verbs plays the most important role for the alternation between object cases in Lithuanian. According to the Figure, prefixes usually govern the GP. The algorithm also shows that *unboundedness* is an important criterion to check while determining the object case in Lithuanian (in this case it would be GEN). *Incremental quantification* comes into play at later steps and is usually associated with the ACC. *Non-incremental quantification* is again checked for *boundedness*. If the situation is bounded and non-incremental, the object case would be ACC. The figure also shows some interesting instances of factual imperfective (= GEN), which will be discussed below. A fundamental difference between the Finnish and the Lithuanian rule hierarchy is that, in Finnish, bounded is provided as the default feature whereas in Lithuanian unbounded is the default category. The outcome of the Lithuanian results is presented in Figure 5.

Examples (203) and (204) are given to illustrate instances of non-incremental unbounded quantification, which is marked with the GEN. Examples are given both for a mass noun (203) and for a discrete object (204):



Figure 5. Hierarchical criteria governing the choice of the object in Lithuanian tested on a corpus

(Lithuanian)

(203) Ir niekas. gėr-ęs sen-o and nobody.NOM drink-PST.PA.NOM.SG.M old-GEN.SG vvn-o, ne-nor-i jaun-o [...] NEG-want-PRS.3 new-GEN.SG wine-GEN.SG 'And no one after drinking old wine wants the new [...]' (204) *Su-rad-e* mokini-ų pra-buvo-me PVB-find-PST.PA.NOM.PL.M disciple-GEN.PL PVB-tarry.PST-1PL su *i-ais* septvni-as dien-as. with 3-INS.PL.M seven-ACC.PL day-ACC.PL 'Finding disciples, we tarried there seven days.'

Incremental situations are illustrated by examples (205) with a mass noun and (206) with the discrete object. The usual object case is ACC:

(Lithuanian)

- (205) j-is [...] siunči-a liet-ų ant teisi-ų-jų
 3-NOM.SG.M send-PRS.3SG rain-ACC.SG on righteous-GEN.PL-DEF *ir neteisi-ų-jų*.
 and unrighteous-GEN.PL-DEF
 'He sends rain on the righteous and the unrighteous.'
 (206) Aš j-ums duod-u nauj-a jsakym-a [...].
- (200) AS J-ams autour maij-q psukym-q[...]. ISG.NOM 3-DAT.PL give-PRS.ISG new-ACC.SG command-ACC.SG 'A new command I give you [...].'

Examples are also given for non-incremental bounded quantification. Example (207) includes the surface-contact verb *paliesti* 'to touch', which were discussed under chapter 4.2.2. It was shown that this semantic class of verbs ends up with marking of the object with the ACC, except when reflexive verbs like *pri-si-liesti* 'to touch' are used:

(Lithuanian)

(207) J-is pa-liet-ė j-os ranką, ir
3-NOM.SG.M PVB-touch-PST.3SG 3-GEN.SG.F hand-ACC.SG and karštis pa-liov-ė.
fever.NOM.SG PVB-leave-PST.3SG
'He touched her hand and the fever left her.'

(208) Tai t-as, kuri-am pa-daž-ęs
It DEM.NOM.SG.M which-DAT.SG.M PVB-dip-PST.PA.NOM.SG.M pa-duo-si-u kąsn-į.
PVB-give-FUT-1SG piece-ACC.SG
'It is the one to whom I will give this piece of bread when I have dipped it in the dish.'

The analysis of the Lithuanian corpora also showed some intriguing cases of the factual imperfective, already touched upon in chapter 3.2.1. Factual imperfective actually involves various factors which need to be taken into account, e.g., aspectual properties of the predicate, notably (a)telicity, the interaction between aspect and tense and also discourse structure (Grønn 2004: 11). The two main readings of factual imperfective are *existential imperfective* and *presuppositional imperfective* (Grønn 2003: 25). Presuppositional is always characterized as being simply 'presuppositional', the example of which is given in (209):

(Russian: from Grønn 2003: 25)

(209) Pri čem tut ja? Ja čto li, ubival?

'I've got nothing to do with it. Did I kill him?'

The pragmatic functions of the other type of the factual imperfective are more diversified. The example (106) of factual imperfective is repeated here for the convenience:

(Lithuanian)

(106) a. Jonas skaitė 'Hamletą'.

(i) Jonas was reading 'Hamlet'. (processual imperfective reading)

(ii) Jonas has read 'Hamlet'. (factual imperfective reading)

b. Jonas per-skaitė 'Hamletą'.

'Jonas (has) read 'Hamlet'. (perfective reading)

The term *existential* factual imperfective was coined by Grønn 2001 to refer to usages of factual imperfective which resemble the experiential perfect. It was proposed that the existential factual imperfective could be further divided into closely related subgroups (Grønn 2003: 26). The experiential reading imposes that the focus of the speaker is on the Agent's own experience and not on the actual instantiation of the event in some particular moment in the past (ibid). Therefore, the intended meaning of (106) could be paraphrased as 'who has the property of belonging to the set of people, who have experienced an event of reading "Hamlet"?' (for more details about the factual imperfective in Russian see Grønn 2003).

Instances of factual imperfective, namely the existential factual imperfective were found in the Lithuanian corpora, see (210) and (211):

(Lithuanian)

(210) Visi valg-ė dvasini-o *t-0* pat-ies all eat-PST.3 DEM-GEN.SG.M same-GEN.SG spiritual-GEN.SG maist-o ir visi gėr-ė pat-ies to food-GEN.SG and all drink-PST.3 DEM-GEN.SG.M same-GEN.SG dvasini-o gėrim-o. spiritual-GEN.SG drink-GEN.SG 'They all ate the same spiritual food and drank the same spiritual drink.'

(211) Kaip j-is į-ėj-o į Diev-o
How 3-NOM.SG.M PVB-enter-PST.3 into God-GEN.NOM
Nam-us, ėm-ė padėtin-ės duon-os [...]
house-ACC.PL take-PST.3 concecrate-GEN.SG bread-GEN.SG
'He entered the house of God, and taking the consecrated bread [...]'

Factual imperfective has never been described for Lithuanian, therefore these examples could be inspiring for further research.

CONCLUSIONS

To conclude, the main findings of the work are as follows: it was shown that Lithuanian and Finnish have completely different prototypes for assigning object cases. In Finnish the prototype is *resultativity* (or the absence of a result); in Lithuanian the prototype is *quantification*. Therefore, Finnish PAR and Lithuanian GP play different roles for Finnish and Lithuanian. It was also shown that the endpoints of the culmination in Finnish might be of different types and could be categorized in very subjective terms, which gives lots of possibilities for Finnish to use PAR not only with mass nouns, but also with discrete objects very widely. Finnish PAR always triggers the interpretation of an unbounded event (imperfective aspect or the lack of a clear result -including also scalar analysis of some verbal classes). Quantification plays the most important role for the object marking in Lithuanian, whilst in Finnish quantification is only one of the elements of the object case marking, culmination being at the forefront. Therefore, the marking of discrete objects (*versus* mass nouns) with GP in Lithuanian is problematic.

The study also showed clear similarities and dissimilarities in differential object marking in Finnish and Lithuanian. It was shown that the PAR of negation has some shared characteristics in Finnish and Lithuanian. Both Lithuanian and Finnish lack a dedicated grammaticalized means to mark the (in)definiteness of an NP. In Lithuanian, GP operates on NPs that are by themselves unbounded; indefinite quantification may correlate with verbal prefixes. In Finnish, PAR is able to indicate indefinite quantity, but only in aspectually bounded situations (for more discussion see chapter 3.1). As regards incremental quantification, Lithuanian is different from Finnish. Finnish PAR with count nouns indicates incremental participation (refers to a progressive or a cessative meaning), ACC indicates the combination of bounded aspect and closed quantity. In Lithuanian, the difference in aspect is marked in imperfective/perfective verbs; incremental quantification is not coded in the object. Some exceptions apply to the instances of the factual imperfective, where GP refers to a bounded amount (discussed in chapter 3.2.1).

The dissertation also showed similarities and dissimilarities in the aspectual systems in Finnish and Lithuanian. The role of overt marking of aspect and Aktionsart on the Lithuanian verb is taken over by the PAR in Finnish. The comparison of marking of discrete objects serves as good grounds for this claim, as it was shown that the non-availability of irresultative meaning of the GP in Lithuanian (and other Slavic languages) is due to the possibilities of using aspectual prefixes, while Finnish uses PAR instead. Moreover, Lithuanian verbal prefixes may offer a full range of possibilities to describe the event in a very detailed manner regarding the outcome of the result. Apart from the description of the result of the event, prefixes may also reflect actional differences (i. e. differences in lexical aspect or Aktionsart), e.g., the prefix *pa- in pa-nešti* 'carry for some time' renders the verb perfective but atelic, and the boundedness associated with perfectivity is achieved through indication of an arbitrary boundary in time rather than through a change of state.

One chapter of the study was dedicated to the marking of discrete objects. It was shown that verbal semantics play an important role for the object case marking. Four semantic groups of verbs were established for Finnish and Lithuanian, also including areal data: temporally restricted usage, surface-contact verbs, scalar verbs and conative verbs. Finnish and Lithuanian both have a way of morphologically marking partially affected discrete objects but do so in different ways. Lithuanian encodes aspect on the verb and so marks partial affectedness that way, but Finnish uses PAR instead. The results of the research confirm that no consistent marking of irresultativity via case-marking would be expected in Lithuanian, because that would be redundant. The fact that there are only 7 examples in Table 8 (occurrences of verbs with GP for discrete objects in Lithuanian and Lithuanian dialects) demonstrates that the GP strategy for discrete objects never completely developed in Lithuanian.

The dissertation also performed a Corpus-based study of the factors that mandate the use of the PAR in Finnish and GP in Lithuanian. A separate study was performed on a wide dataset, which was treated with the ID3 algorithm and decision trees were produced. Decision trees were drawn up for 1637 Finnish instances and 714 Lithuanian instances. Examples from the corpora confirmed the clear hierarchical rules which are applied for Finnish and Lithuanian object marking. The outcome of the Finnish data shows that the most important governing criterion for the choice between the PAR and the ACC is the *boundedness* or *unboundedness* of the situation. The outcome clearly shows that the prefixation of the verbs plays the most important role in the alternation between object cases in Lithuanian.

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