Partitive Constructions and Partitive Elements Within and Across Language Borders in Europe

edited by Elvira Glaser, Petra Sleeman, Thomas Strobel, Anne Tamm



Partitive Constructions and Partitive Elements Within and Across Language Borders in Europe

LiVVaL

Linguaggio e Variazione. Variation in Language

Serie diretta da | A series directed by Giuliana Giusti

3



LiVVaL

Linguaggio e Variazione. Variation in Language

Direzione scientifica | Editor-in-Chief

Giuliana Giusti (Università Ca' Foscari Venezia, Italia)

Comitato editoriale | Editorial Board

Laura Brugè (Università Ca' Foscari Venezia, Italia) Anna Cardinaletti (Università Ca' Foscari Venezia, Italia) Gianluca Lebani (Università Ca' Foscari Venezia, Italia) Francesca Santulli (Università Ca' Foscari Venezia, Italia) Francesca Volpato (Università Ca' Foscari Venezia, Italia)

Comitato scientifico | Scientific Board

Larisa Avram (University of Bucharest, Romania) Michela Cennamo (Università degli Studi di Napoli «Federico II», Italia) Massimo Cerruti (Università degli Studi di Torino, Italia) Silvio Cruschina (University of Helsinki, Finland) M. Teresa Espinal (Universitat Autònoma de Barcelona, Espanya) Mirko Grimaldi (Università del Salento, Italia) Kleanthes Grohman (University of Cyprus, Cyprus) Adam Ledgeway (University of Cambridge, UK) Paolo Lorusso (Università degli Studi di Udine, Italia) Salvatore Menza (Università degli Studi di Catania, Italia) Sílvia Perpiñán (Universitat Pompeu Fabra, Barcelona, Espanya) Diego Pescarini (Université Côte d'Azur, France) Eva-Maria Remberger (Universität Wien, Österreich) Lori Repetti (Stony Brook University, USA) Antonella Sorace (The University of Edinburgh, UK) Anna M. Thornton (Università degli Studi dell'Aquila, Italia) Mila Vulchanova (Norwegian University of Science and Technology, NTNU, Trondheim, Norway) Marit Westergaard (UiT, The Arctic University of Norway, Tromsø, Norway)



e-ISSN 2974-6574 ISSN 2974-6981

Partitive Constructions and Partitive Elements Within and Across Language Borders in Europe

edited by Elvira Glaser, Petra Sleeman, Thomas Strobel, Anne Tamm

Venezia **Edizioni Ca' Foscari** - Venice University Press
2024

Partitive Constructions and Partitive Elements Within and Across Language Borders in Europe

edited by / a cura di Elvira Glaser, Petra Sleeman, Thomas Strobel, Anne Tamm

© 2024 Elvira Glaser, Petra Sleeman, Thomas Strobel, Anne Tamm for the text | per il testo © 2024 Edizioni Ca' Foscari or the present edition | per la presente edizione



Quest'opera è distribuita con Licenza Creative Commons Attribuzione 4.0 Internazionale This work is licensed under a Creative Commons Attribution 4.0 International License



Qualunque parte di questa pubblicazione può essere riprodotta, memorizzata in un sistema di recupero dati o trasmessa in qualsiasi forma o con qualsiasi mezzo, elettronico o meccanico, senza autorizzazione, a condizione che se ne citi la fonte.

Any part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means without permission provided that the source is fully credited.



Certificazione scientifica delle Opere pubblicate da Edizioni Ca' Foscari: il saggio pubblicato ha ottenuto il parere favorevole da parte di valutatori esperti della materia, attraverso un processo di revisione doppia anonima, sotto la responsabilità del Comitato scientifico della collana. La valutazione è stata condotta in aderenza ai criteri scientifici ed editoriali di Edizioni Ca' Foscari, ricorrendo all'utilizzo di apposita piattaforma.

Scientific certification of the works published by Edizioni Ca' Foscari: the essay published has received a favourable evalutation by subject-matter experts, through a double blind peer review process under the responsibility of the Scientific Committee of the series. The evaluations were conducted in adherence to the scientific and editorial criteria established by Edizioni Ca' Foscari, using a dedicated platform.

Edizioni Ca' Foscari Fondazione Università Ca' Foscari | Dorsoduro 3246 | 30123 Venezia https://edizionicafoscari.unive.it/|ecf@unive.it

1a edizione ISBN 978-88-6969-795-1 [ebook] ISBN 978-88-6969-818-7 [print]

Cover design | Progetto grafico di copertina Lorenzo Toso

This book has been published with the support of NWO (the Netherlands Organisation for Scientific Research, Grant 236-70-007).

Partitive Constructions and Partitive Elements Within and Across Language Borders in Europe / edited by Elvira Glaser, Petra Sleeman, Thomas Strobel, Anne Tamm — 1. ed. — Venezia: Edizioni Ca' Foscari, 2024. — xii + 232 pp.; 23 cm. — (LiVVaL; 3). — ISBN 978-88-6969-

URL https://edizionicafoscari.unive.it/it/edizioni/libri/978-88-6969-795-1/ DOI http://doi.org/10.30687/978-88-6969-795-1

Partitive Constructions and Partitive Elements Within and Across Language Borders in Europe

edited by Elvira Glaser, Petra Sleeman, Thomas Strobel, Anne Tamm

Abstract

The goal of this volume is to investigate the universal and varying properties of partitive constructions and partitive elements in some of the languages of Europe.

Partitives are by definition relational, as they encode part-whole relationships. They encode the part-whole relation between two sets of entities, and the entities belong to the same kind. For instance, in *some of these students*, *some students* form a part – in other words, a subset – of *these students*, which represents the whole, a larger set, and in other words, a superset: SUBSET/PART ⊆ SUPERSET/WHOLE. Both sets consist of members that can be identified as "students", which sets partitives apart from other relations between sets.

The volume explores various concepts and linguistic expressions related to parts and wholes. It brings together researchers who work in diverging linguistic frameworks and academic traditions and use different methods. The volume sheds light upon the variation within partitives in closely related dialect continua as well as in their wider surroundings of contacts and mutual impact. It also looks at less studied subtypes of partitives, examines where the relation is marked within the constructions, how partitives interact with verbs, and which parts of the constructions are obligatorily or optionally overt or covert.

Since the expression of partitivity in Romance languages has been extensively discussed in recent literature, in this volume special attention is paid to other European languages, such as Germanic, Gaelic, Finno-Ugric and Slavic languages. The expression of partitivity that is discussed concerns partitive constructions, partitive articles, partitive pronouns, possessive partitive markers, and partitive case. It is shown that within and across language borders the expression of partitivity presents considerable variation.

With data from microvariation and variation that spans over vast geographical distances and involves various contact situations, this volume brings new insights into what is universal and what is particular in partitive constructions and elements in Europe. The volume presents papers that were presented at the PARTE workshop in Budapest in September 2022 or at the Partitive Online Talks.

Keywords Partitive. Subset. Superset. Partitive article. Partitive pronoun. Partitive case. Possessive partitive marking. Germanic. Uralic. Slavic. Irish.

Partitive Constructions and Partitive Elements Within and Across Language Borders in Europe

edited by Elvira Glaser, Petra Sleeman, Thomas Strobel, Anne Tamm

Table of Contents

Preface Elvira Glaser, Petra Sleeman, Thomas Strobel, Anne Tamm	i
Introduction Partitive Constructions and Partitive Elements Petra Sleeman	3
The Indefinite Article as an Exponent for Partition Ellen Brandner	19
Pseudo-Partitives and Individuation A Study on Adnominal Genitives in German Alexander Pfaff	55
Corpus Perspectives on Some Irish Gaelic (Pseudo-)Partitives Dóra Pődör	77
Possessive Partitive Strategies in Uralic Evidence from Mari and Hungarian Quantifiers and Inflected Adpositions Gabriella Tóth, Kata Kubínyi, Anne Tamm	101
The Partitive Pronoun ER in Two National Varieties of Standard Dutch Petra Sleeman	127
'I Am Also Found on Facebook' Locuphoric 'Find'-Based Strategies in Finnish Internet Corpora Rodolfo Basile	153
Ukrainian Aspect and Object Case in ukTenTen The Partitive Genitive of Perfective Verbs and Mass Nouns Lesia Chaika, Natalia Lehka, Anne Tamm, Natalia Vaiss	173
Index of Terms	225
Index of Languages	231

Partitive Constructions and Partitive Elements Within and Across Language Borders in Europe

edited by Elvira Glaser, Petra Sleeman, Thomas Strobel, Anne Tamm

Preface

Elvira Glaser

University of Zurich, Switzerland

Petra Sleeman

University of Amsterdam, Netherlands

Thomas Strobel

Ca' Foscari University of Venice, Italy

Anne Tamm

Károli Gáspár University of the Reformed Church, Hungary

The contributions that are part of this volume were presented at the 3rd PARTE Workshop entitled *Methods for Approaching Variation: Partitives and Beyond*, which was organised by Anne Tamm and her colleagues and took place at the Károli Gáspár University of The Reformed Church in Hungary, Budapest, from 15 to 17 September 2022 (the support of the KRE-BTK grant #20736B800 is acknowledged).

PARTE (PARTitivity in European languages) is a network of 11 research teams of theoretical linguists, dialectologists, sociolinguists, typologists, historical linguists and applied linguists at the University of Amsterdam, Meertens Institute KNAW, University of Zurich, Ca' Foscari University of Venice, University of Pavia, Károli Gáspár University (Budapest), University of Postsdam, Johannes Gutenberg-Universität Mainz, Goethe University Frankfurt, CNRS in Bayonne, and University of Turku.

The PARTE network originates in two workshops that were organised by Elisabeth Stark and her colleagues at the University of Zurich in 2014 and 2016. The collaboration between a number of researchers who participated in these workshops resulted in the PARTE project, which was funded by NWO (the Netherlands Organisation for Scientific Research, Grant 236-70-007) and co-funded by the Universities

of Zurich, Venice, Budapest and Pavia and was aimed at bringing together ongoing research on partitivity by the 11 partners together.

During the years, the PARTE network has informally been extended thanks to the workshops that were organised by PARTE members (workshops in Venice in November 2017, organised by Giuliana Giusti; in Pavia in September 2019, organised by Silvia Luraghi; in Frankfurt am Main in November 2019, organised by Cecilia Poletto and Francesco Pinzin; in Amsterdam (online) in December 2021, organised by Tabea Ihsane and Petra Sleeman: in Leipzig in September 2023, organised by David Paul Gerards and Désirée Kleineberg). Some of the chapters of this volume were presented at the online PARTE lectures, moderated by Anne Tamm.

PARTE members have also been involved in the publication of several volumes and special issues on partitivity or including contributions on partitivity, many papers and presentations at conferences, and in a database for partitivity data hosted by the Universitv of Zurich.

The guest-editors of this volume are PARTE members Elvira Glaser, Petra Sleeman (Principal Investigator of the PARTE project), Thomas Strobel and Anne Tamm.

For the publication of this volume the guest-editors thank Giuliana Giusti, the editor-in-chief of LiVVaL. Linguaggio e Variazione | Variation in Language, for kindly accepting the proposal for this volume, which was submitted by Anne Tamm. We are also very grateful to Giuliana Giusti for approving the final manuscript and to the reviewers for their valuable comments and suggestions in the double-blind reviewing process.

Partitive Constructions and Partitive Elements Within and Across Language Borders in Europe

Partitive Constructions and Partitive Elements Within and Across Language Borders in Europe

edited by Elvira Glaser, Petra Sleeman, Thomas Strobel, Anne Tamm

Introduction

Partitive Constructions and Partitive Elements

Petra Sleeman

University of Amsterdam, Netherlands

Abstract Whereas most languages have proper partitive constructions and pseudopartitive constructions, not all languages have partitive elements like partitive determiners, partitive pronouns and partitive case. This Introduction serves to introduce these partitive constructions and elements, to briefly discuss their diachronic evolution, their morphological and syntactic expression and their occurrence in various languages and dialects. After the presentation of this background information, the essays that are part of the volume are introduced.

Keywords Proper partitive construction. Pseudo-partitive construction. Partitive determiner. Partitive pronoun. Partitive case.

For most persons who have learned Italian or French at school, the notion 'partitivity' will be associated with the term 'partitive article'. These determiners, called *articolo partitivo* in Italian and *article partitif* in French, are illustrated in (1) and (2):

- (1) Ho visto dei ragazzi.
 I.have seen ART.PART.M.PL. boys
 'I have seen boys.'
- (2) L'enfant boit du lait.
 the child drinks ART.PART.M.SG. milk
 'The child is drinking milk.'



For the partitive article in Italian in (1) it has been proposed in the literature (Chierchia 1998; Zamparelli 2008) that it is syntactically related to an overt partitive structure as in (3), containing a subset (alcuni 'some') and a superset ([i] ragazzi '(the) boys'):

(3) Ho visto alcuni dei ragazzi.

I.have seen some of the boys.'

Cardinaletti and Giusti (2016), however, argue against the establishment of a relation between *dei* in (3) and *dei* in (1). Partly based on Storto (2003), who shows that (3) implies a larger set, whereas (1) does not, Cardinaletti and Giusti analyse *dei* in (1) as the plural counterpart of the indefinite article *un* 'a', with the interpretation of a plural undetermined quantity. A similar analysis for the French partitive article, as in (2), although in a more sophisticated syntactic framework, has been put forth by Ihsane (2013), arguing against the analysis proposed by Kayne (1977), which is comparable to Chierchia's (1998) analysis for Italian, with a zero quantifier instead of an overt quantifier and with the superset analysed as a PP.

Cardinaletti and Giusti's and Ihsane's analyses are synchronic analyses that concern the partitive article in contemporary Italian and French. In a diachronic perspective, however, it has been argued that there is indeed a relation between the partitive article and a partitive structure as in (3). Luraghi (2013) shows that the construction that gave rise to partitive articles in Italian is an overt partitive structure without an overt quantifier already attested in Late Latin, which could be used as a direct object, as shown by the example (4) from the Old Testament:

(4) et ipse in nobis quoniam de Spiritu suo and 3SG.NOM in 1PL.ABL because from spirit.ABL POSS.3SG.ABL dedit nobis give.PRF.3SG 1PL.DAT

'[We know that we live in him] and he in us, because he has given us of his Spirit.' (1 John 4.13)

Luraghi and Albonico (2021) argue that the construction formed by di plus the definite article in Old Italian had already started undergoing grammaticalisation in the direction of the Modern Italian partitive article. The newly created partitive article started out in direct object position, but soon spread to indefinite post-verbal subjects. The Late Latin construction exemplified in (4) also gave rise to partitive determiners in French, and in the same way as in Italian (Carlier 2007; Carlier, Lamiroy 2014). The notion of partition set faded

away, with the notion of a non-specified quantity remaining. As a consequence, the partitive article acquired the new property of marking indefiniteness. As in Italian, the newly created partitive article in French started out in direct object position but soon spread to indefinite post-verbal subjects, as argued in Carlier and Lamiroy (2014). In modern Italian, contrary to French, however, the partitive article is not obligatory. Seržant (2021) calls this type of partitives, those with no explicit realisation of the subset referent, "generalised partitives", referring to their diachronic development.

The partitive structures from which partitive articles developed are called "proper partitive structures" by Giusti and Sleeman (2021), "true partitives" by Seržant (2021) and "canonical partitives" by Falco and Zamparelli (2019). In this Introduction we will use the term "proper partitives". As Koptjevskaja-Tamm (2001, 523) puts it, in this construction a part of something is taken. These constructions involve a presupposed set of items referred to by the superset noun phrase (Koptjevskaja-Tamm 2001), which, as such, is most often definite, as formulated in Jackendoff's (1977, 113) Partitive Constraint. In Giusti and Sleeman's (2021) definition of this construction, the subset may be expressed by a quantifier, as in (3), or a measure noun, as in (5).

(5) una tazza del tè che hai preparato a cup of.the tea that you.have prepared 'a cup of the tea that you have made'

In this type of partitive constructions, the superset may have a locative origin. According to Seržant (2021), the most frequent source of partitive markers are spatial adpositions (or case markers in languages that have case), such as adpositions that indicate an ablative relation 'from, out of', expressing the separative strategy (Koptjkevskaja-Tamm 2001). Another strategy is the locative strategy, making use of the adposition 'among'. A third strategy is the possessive strategy, making use of the adposition 'of'.

This type of construction differs from the so-called pseudo-partitive construction (Selkirk 1977). According to Koptjevskaja-Tamm (2001), the pseudo-partitive construction is used to specify the amount of something. In Giusti and Sleeman's (2021) definition, pseudo-partitive constructions are instantiated by measure nouns which quantify over an indefinite mass or plurality, as in the Italian example (6) and the French example (7). With this definition, pseudo-partitive constructions can be distinguished from quantifier constructions such as 'some books' (Giusti 2021):

(6) una tazza di tè 'a cup of tea' (7) une bouteille de vin 'a bottle of wine'

Not only partitive articles have been shown to have evolved from proper partitive structures: Koptjevskaja-Tamm (2001), Luraghi and Kittilä (2014) and Seržant (2021) argue that pseudo-partitives emerge from proper partitive structures as well. Separation strategies have given rise to proper partitive structures. Proper partitive structures have given rise to pseudo-partitive structures and also to partitive articles, as shown at the beginning of this Introduction.

For persons who have learned Italian or French at school, the notion 'partitivity' may also be associated with the term 'partitive pronoun'. The Italian partitive pronoun is ne and the French partitive pronoun is en. These partitive pronouns, which are rather clitics, can be used to replace each of the 'of'-phrases in (1)-(3) and (5)-(7). This is illustrated by the following examples from Italian. Sentence (8) illustrates that ne can replace the superset part of a proper partitive construction, as in (5), or a pseudo-partitive construction, as in (6), and (9) shows that ne can replace a noun phrase introduced by a partitive article, as in (1):

- (8) Ne bevuto una tazza (del tè che hai I.have drunk of.the tea that you.have PART.CL. cup preparato; di tè). made; of tea 'I have drunk a cup (of the tea that you have made; of tea)'
- (9) Ne ho visti.

 PART.CL. I.have seen.M.PL.

 'I have seen a(n undetermined) quantity of them.'

Ihsane (2013) shows that French en can assume the same functions as in Italian. According to Ihsane, the linguist Milner (1978) was the first to make the distinction between the two functions of the partitive pronoun for French that were illustrated in (8) for Italian. Milner calls en that replaces the superset of the proper partitive construction "partitive en" and en that replaces the superset of the pseudopartitive construction, as in (7), "quantitative en".

In Germanic languages, partitivity is not completely expressed in the same way as in Italian and French. Whereas the proper partitive construction is expressed in the same way (although in German there may be case on the superset instead of a preposition), the expression of the pseudo-partitive construction depends on the type of Germanic language. English has an 'of'-construction (*a cup of tea*), but languages like German and Dutch do not use 'of', but juxtaposition (German: *eine*

Tasse Tee; Dutch: een kopje thee). Standard German and Dutch do not have a partitive determiner. They make use of bare nouns in sentences equivalent to (1) and (2). Standard Dutch has a pronoun with a partitive function. As in the case of Italian and French, a distinction has been made for Dutch between a quantitative pronoun, er, and a partitive pronoun, ervan 'of it/of them'. Whereas in Italian and French the distinction is only a semantic one, the clitics ne and en subsuming both functions, in Dutch there may also be a formal distinction, the distinction between er and ervan. Koptievskaja-Tamm (2001) observes that the semantic borderline between the pseudo-partitive construction and the proper partitive construction is not watertight. The two questions "May I have a glass of wine?" and "May I have a glass of that wine?", expressed by someone who points at a bottle of wine, are quasi-synonymous in this situation. The same holds for the Dutch pronoun er. Besides a quantitative function, cf. (10), the Dutch pronoun er may also have a partitive function, similar to the pronoun *ervan*, cf. (11):

- (10) Gisteren heb ik twee boeken verkocht. Vandaag heb ik yesterday have I two books sold today have I drie verkocht. three sold PART.WK. 'Yesterday I have sold two books. Today I have sold three.'
- (11) Gisteren boeken gekocht. hebik drie Vandaag hebik yesterday have I three books bought today have I twee gelezen / heb ik twee ervan gelezen. two read have I two of.which read 'Yesterday I have bought three books. Today I have read two of them.'

Standard German does not have a partitive/quantitative pronoun comparable to Dutch *er*. However, it is argued by Glaser (1992; 1993) that standard German may use the pronoun *welch*- to express an undefined quantity. Strobel and Glaser (2020) state that the partitive-indefinite pronoun *welch*- presumably stems from its interrogative counterpart 'which (one)'. Both types of *welch*- are illustrated in (12):

(12) Nimm dir welche. Welche willst du? take you WELCH- Which want you 'Take some. Which ones do you want?'

Strobel and Glaser (2020) show that in modern German dialects there is quite a wide range of different syntactic means to express pronominal partitivity. One of these means is the use of null anaphora, occurring essentially in the Southwestern, primarily Alemannic, region (Glaser 1995, 69):

(13) I heet geern kherfə, hedər Ø? Ja, doo sen Ø; nem der Ø.
I would like cherries have.you Ø yes here are Ø take you Ø
'I'd like some cherries, do you have any? – Yes, here are some; take some
(of them).'

Another strategy mentioned by Strobel and Glaser (2020) is the use of the indefinite pronoun *ein-* 'one' in the Southeastern, originally Bavarian system. In other varieties of German, *ein-* is used to refer to a singular count noun, but in Bavarian it additionally may be used to refer to mass nouns and to plural entities (Glaser 1993, 107):

(14) Happts Jõ õi khafft? [Kartoffeln] have.you already EIN.PL bought [potatoes] 'Did you already buy some?'

Furthermore, Strobel (2017) as well as Strobel and Glaser (2020) show that in German dialects such as Central Hessian there exists a partitive pronoun *ere*, referring to plural entities, (15), and feminine singular mass nouns, (16), but that there is also a masculine and neuter singular counterpart *sen*, referring to mass nouns, (17). According to Strobel and Glaser (2020), these pronouns are mostly limited to a strip between West Central German and East Franconian.

- (15) Hei sein ere! [Pilze] here are ERE [mushrooms] 'Here are some (of them)!'
- (16) Mer hu ach Melch. Willst du ere? we have also milk want you ERE 'We have milk, too. Would you like some?'
- (17) Soll eich sen holle? [Fleisch] shall I SEN get [meat] 'Shall I get some?'

Strobel and Glaser (2020) state that the German partitive/quantitative pronoun (a)r(a) and the Dutch partitive/quantitative pronoun er are derived from third person genitive pronouns.

In non-standard Germanic varieties, not only partitive/quantitative pronouns (see also Glaser, Bart 2021a; 2021b; 2021c), but also forms similar to partitive determiners are found. Like the partitive/quantitative pronoun they are related to genitive case with a partitive function (Strobel, Glaser 2020). Strobel and Glaser (2020) give an example that occurs in Walliser and Walser German dialects, in which *derul deschi* are genitive forms of 'the'.

(18) Welleder nu deru/deschi Steina/Boone/Epfla? stones/beans/apples want.you still the.GEN.PL 'Would you like (some) more of these/such stones/beans/apples?'

Not only in German dialects partitivity may be expressed by case marking. Whereas in Romance and Germanic the partitive relation between the subset and the superset in the proper partitive structure is expressed by means of a preposition, 'of', in Armenian it is expressed by means of ablative case marking (Koptjevskaja-Tamm 2001, 528):

(19) mi gavat' ayd hamow surč-ic' one cup.Nom that good coffee-ABI 'one cup of that good coffee'

As Koptjevskaja-Tamm (2001) shows, in the proper partitive construction elative case is normally used in Finnish, although under special circumstances partitive case may also be used. According to Koptjevskaja-Tamm, the partitive is rather used to indicate the quantity of a substance, the noun receiving a "kind"-interpretation, whereas the elative is rather used to indicate a part of a predefined entity:1

- (20) Anna minulle pala tätä hvvää kakkua. give 1SG.ALL bit.nom dem.part good.part cake.part 'Give me a bit of this good cake.'
- (21) Anna minulle pala tästä hyvästä kakusta. 1SG.ALL bit.nom dem.ela good.ela cake.ela give 'Give me a bit of this good cake.'

In the pseudo-partitive construction, in Romance languages and in English the preposition 'of' is used. There are also languages in which case marking is used. One such language is Finnish, in which partitive case is used in this construction, as shown by Koptjevskaja-Tamm (2001, 531):

(22) Osta säkki perunoita! buv.IMP.2SG sack.NOM potato.PART.PL 'Buy a sack of potatoes!'

Koptjevskaja-Tamm (2001) shows that Russian makes use of genitive case, both in the proper partitive construction, as in (23), and in the

¹ Koptjevskaja-Tamm 2001 does not make a distinction between the English translations of the two sentences.

pseudo-partitive construction, as in (24). Daniel (2014) as well as Ter-Avanesova and Daniel (2023) show that in the pseudo-partitive construction, some nouns can show a special form of the genitive, the socalled "second genitive", illustrated in (25). Koptjevskaja-Tamm (2001) labels this second genitive as "partitive".

- (23) čaška vkusnogo čaja etogo сир. NOM DEM.GEN good.gen tea.gen 'a cup of this good tea'
- (24) čaška čaja cup.NOM tea.GEN 'a cup of tea'
- (25) čaška čaju cup.NOM tea.GEN2/PART 'a cup of tea'

Whereas Italian and French make use or can make use of partitive articles to express indefiniteness with mass nouns and plural nouns. while in Germanic normally bare nouns are used, there are also languages in which partitive case is used to express an undetermined amount. Luraghi and Kittilä (2014, 19) show that, in Finnish, partitive case can be used to indicate partial objects (26), while total objects are expressed by means of the accusative (27). This illustrates the role of quantitative unboundedness in the expression by partitive case in (26) and quantitative boundedness in the expression by accusative case in (27):

- (26) Aino sö-i leipä-ä. Aino eat-PST.3SG bread-PART 'Aino ate (some of the) bread.'
- (27) Aino sö-i leivä-n. Aino eat-pst.3sg bread-Acc 'Aino ate the (whole) bread.'

Quantitative (un)boundedness may also play a role in the expression of the subject in an existential sentence, as shown by Huumo (2021), although the subject indicating a bounded quantity in (28) is in the nominative case and not in the accusative case, as in (27), whereas the subject indicating an unbounded quantity is again in the partitive case (29):

- (28) Pöydä-llä kiria. be.pres.3sg book.nom table-ADE 'There is a book on the table.'
- (29) Pöydä-llä kirjo-j-a. on table-ADE be.PRES.3SG book-pl-part 'There are books on the table.'

Huumo (2021) shows that the use of partitive case in Finnish may also be in relation to the non-culmination of the event. In (30), partitive case on the object signals a non-culminating, atelic, interpretation of the event, equivalent to progressive aspect. In (31), the accusative object signals that the event is telic and reaches its culmination. Since the verb in (31) is in the present tense, this results in a future reading with regard to the culmination, according to Huumo.

- (30) Lue-n kirja-a. read-pres.1SG book-part 'I am reading a/the book.'
- (31) Lue-n kirja-n. read-PRES.3SG book-ACC 'I will read a/the book (completely).'

Furthermore, Huumo (2021) shows that negation triggers the partitive:

(32) E-n lue kirja-a. NEG-1SG read.CNG book-PART 'I am not reading a/the book.'; 'I will not read a/the book.'

In Italian and French, partitive articles started to be used in object position, but later also spread to other functions. However, in subject position the use of the partitive article is much more restricted than in object position, both in Modern Italian and in Modern French (Bosveldde Smet 1998; Luraghi, Albonico 2021). In Finnish, the use of partitive case is also extending to subjects. Huumo (2003; 2018) states that in Finnish partitive subjects in most cases have an existential interpretation and occur with unaccusative verbs, as in (33), but that they are also extending to other types of verbs, such as unergative and transitive verbs. In (33), partitive case expresses indefiniteness. Definiteness in the same context is expressed by nominative case, as in (34). The examples are taken from Luraghi and Kittilä (2014):

- (33) Nais-i-a tul-i koti-in. woman-PL-PART come-pst.3sg home-ILL 'Some women came home.'
- (34) Naise-t tul-i-vat koti-in. home-ILL woman.NOM-PL come-PST-3PL 'The women came home.'

The alternation in (26)-(27) and (30)-(31) has been called Differential Object Marking (DOM), being associated with optional object marking in languages like Spanish, where certain types of objects are preceded by a (Iemmolo, Klumpp 2014). Chappell and Verstraete (2019) call the case alternation type DOM and the Spanish type Optional Case Marking. De Hoop and Malchukov (2008) call the first type symmetrical DOM, whereby all objects are marked, but take different cases, and the second type asymmetrical DOM, whereby certain objects are unmarked while others are marked. Luraghi and Kittilä (2014) show, however, that the partitive does not only alternate with the accusative, but also with the nominative and that the term Differential Object Marking is therefore not completely correct. The alternation in (28)-(29) and (33)-(34) would rather have to be called Differential Subject Marking (DSM). Object or subject case alternation to express definiteness versus indefiniteness does not only occur in Finnish. Luraghi (2023) studies the alternation between the accusative and the genitive to encode the second argument with experiential verbs in Ancient Greek. Conti and Luraghi (2014) state that in Ancient Greek, as in other Indo-European languages that allow them, partitive genitive subjects essentially occur in existential clauses with the verb 'be' or with unaccusative verbs. Metslang and Habicht (2023) show that in Estonian the object may appear in the partitive, the genitive or the nominative, depending on a Differential Object Marking system in which important factors influencing object case usage are aspect, quantitative boundedness of the object referent, and the polarity of the sentence.

The essays that are presented in this volume all reveal new research on aspects of partitivity that had not been researched yet, or they add new insights. While much research on partitivity in recent edited volumes has (partially) focused on Romance languages (Falco, Zamparelli 2019; Ihsane 2020; Ihsane, Stark 2020; Sleeman, Giusti 2021; Pinzin, Poletto 2022; Luraghi, Sleeman 2023; Sleeman, Tamm forthcoming), this volume contains research on languages in which the expression of partitivity has not been researched to such an extent: Uralic languages, Ukrainian, Irish Gaelic, Standard and substandard German, dialectal varieties of German and Belgian Dutch. The methods that are used are corpus research (digital dictionaries and databases) as well as Grammaticality Judgment Tasks and

Translation Tasks submitted to native speakers. The essays have been thematically grouped together, starting with some essays on pseudopartitive and proper partitive constructions, followed by an essay on partitive pronouns and ending with two essays on case alternation/Differential Object Marking.

In her essay "The Indefinite Article as an Exponent for Partition", Ellen Brandner investigates the use of the indefinite article with mass nouns in some Southern German dialects. With the help of questionnaires containing a Translation Task and a Grammaticality Judgment Task, data from Alemannic speakers were elicited. Based on the results, Ellen Brandner argues that *ein*-mass nouns are interpreted as subkinds. A fine-grained syntactic analysis is proposed.

Alexander Pfaff, in his essay "Pseudo-Partitives and Individuation: A Study on Adnominal Genitives in German", investigates the acceptance of the use of genitive case for the juxtaposed superset in pseudo-partitive constructions in standard German. This research, executed with the help of a Grammaticality Judgment Task submitted to native speakers of German, confirms earlier research that claims that the acceptability of the use of the genitive is essentially limited to pseudo-partitives containing a plural noun preceded by an adjective, as in eine Gruppe ausländisch-er Studenten 'a group (of) foreigngen students'. The results, however, also suggest that individuation plays an important role in the acceptance. The use of the genitive is rated much higher if the superset contains a noun referring to an individual than when it refers to food.

In her contribution "Corpus Perspectives on Some Irish Gaelic (Pseudo-)Partitives", Dóra Pődör studies some quantificational and partitive structures in Irish Gaelic. Literature on partitivity in Irish is scarce. The data were collected on the basis of an online corpus and online dictionaries. Three constructions are investigated: quantificational constructions such as 'a little of French', a pseudo-partitive construction with *cuid* 'part, portion' and a body part, and a partitive construction with nouns functioning as personal numerals that are used for counting people, as in 'three people/persons of children' (= 'three children'). The results of the research are presented in a quantitative and qualitative way.

In their essay "Possessive Partitive Strategies in Uralic: Evidence from Mari and Hungarian Quantifiers and Inflected Adpositions", Gabriella Tóth, Kata Kubínyi and Anne Tamm analyse proper partitives in Hungarian and Mari, where possessive agreement with the superset appears on the quantifier that represents the subset or the postposition that links the subset to the superset. Hungarian and Mari differ in where the possessive suffix that indicates the number and person of the superset can or must occur in proper partitive structures.

In her essay "The Partitive Pronoun ER in Two National Varieties of Standard Dutch", Petra Sleeman investigates the acceptance, by

native speakers of Netherlandic Dutch and Belgian Dutch, of the use of the partitive/quantitative pronoun er with a broad range of elliptical NP types. These include NP types for which national variation is signalled in the Dutch Reference Grammar, but also NP types not described in the sections on *er* of that grammar. The results show that the acceptance of er by the two groups of participants differ in various contexts, but that, in the case of variation, the variant that is preferred by the Netherlandic Dutch participants is also accepted to some extent by the Belgian Dutch participants.

Rodolfo Basile, in his contribution "'I Am Also Found on Facebook'. Locuphoric 'Find'-Based Strategies in Finnish Internet Corpora", investigates the (frequency of) use of locuphoric forms (1st and 2nd person) of the existential verb *löytyä* 'to be found'. In his digital corpus study he found that in the existential reading, locuphoric forms with this verb form are (marginally) used to signal the speaker's or addressee's presence on the Internet. While in this case the locuphoric forms may only be used in the nominative case, Rodolfo Basile also investigated competing constructions with the verb löytää 'to find', namely the Impersonal and the Impersonal Passive constructions, where the agent is not expressed and the patient is susceptible of nominative-partitive alternation. The corpus data revealed that accusative case on locuphoric forms was preferred in these constructions, although partitive case was not excluded.

Natalia Lehka, Lesia Chaika, Anne Tamm and Natalia Vaiss study genitive-accusative case alternation in Ukrainian, a lesser studied Slavic language, in their contribution "Ukrainian Aspect and Object Case in ukTenTen: The Partitive Genitive of Perfective Verbs and Mass Nouns". The goal of their study is to establish the patterns of usage of the Ukrainian (partitive) genitive and accusative object. The corpus that they use is a Ukrainian corpus extracted from Sketch Engine, and it contains texts from 2020 that were collected on the Internet. The authors study the relation between case and perfective/ imperfective verbs, the influence of Aktionsart-prefixes on case alternation and the relation between concrete and abstract nouns and case alternation. As expected, verbal prefixes and nominal properties matter for the emergence of partitive genitives. However, also imperfective verbs have partitive genitive objects, whereby abstract mass nouns are more frequent than concrete mass nouns, and aspect does not influence the case of abstract mass nouns.

Abbreviations and Notations

ablative

ABL

ADL	ablative
ACC	accusative
ADE	adessive
ALL	allative
ART	article
CL	clitic
CNG	connegative form
DAT	dative
DEM	demonstrative
ELA	elative
GEN	genitive
ILL	illative
IMP	imperative
M	masculine
NEG	negation
NOM	nominative
PART	partitive
PL	plural
POSS	possessive
PRES	present tense
PRF	perfect
PST	past tense
SG	singular
WK	weak

Bibliography

- Bosveld-de Smet, L. (1998). On Mass and Plural Quantification. The Case of French des/du-NP's [PhD Dissertation]. Groningen: University of Groningen.
- Cardinaletti, A.; Giusti G. (2016). "The Syntax of the Italian Indefinite Determiner dei". Lingua, 181, 58-80. https://doi.org/10.1016/j. lingua.2016.05.001.
- Carlier, A. (2007). "From Preposition to Article: The Grammaticalization of the French Partitive". Studies in Language, 31, 1-49. https://doi. org/10.1075/sl.31.1.02car.
- Carlier, A.; Lamiroy, B. (2014). "The Grammaticalization of the Prepositional Partitive in Romance". Luraghi, S.; Huumo, T. (eds), Partitive Cases and Related Categories. Berlin: Mouton De Gruyter, 477-523. https://doi. org/10.1515/9783110346060.477.
- Chappell, H.; Verstraete, J.-C. (2019). "Optional and Alternating Case Marking: Typology and Diachrony." Language and Linguistics Compass, 13(3), e12311. https://doi.org/10.1111/lnc3.12311.
- Chierchia, G. (1998). "Partitives, Reference to Kinds and Semantic Variation". Lawson, A. (ed.), Proceedings of Semantics and Linguistic Theory (SALT), 7. Ithaca NY: CLC Publications, 73-98. https://doi.org/10.3765/salt. v0i0.2792.
- Conti, L.; Luraghi, S. (2014). "The Ancient Greek Partitive Genitive in Typological Perspective". Luraghi, S.; Huumo, T. (eds), Partitive Cases and

- Related Categories. Berlin: Mouton de Gruyter, 443-76. https://doi. org/10.1515/9783110346060.443.
- Daniel, M. (2014). "The Second Genitive in Russian". Luraghi, S.: Huumo, T. (eds). Partitive Cases and Related Categories. Berlin: Mouton De Gruyter, 17-62. https://doi.org/10.1515/9783110346060.347.
- De Hoop, H.: Malchukov, A. (2008). "Case-Marking Strategies". Linguistic Inquiry. 39,565-87. https://doi.org/10.1162/ling.2008.39.4.565.
- Falco, M.; Zamparelli, R. (2019). "Partitives and Partitivity". Glossa: A Journal of General Linguistics, 4(1), 111. https://doi.org/10.5334/gjgl.642.
- Giusti, G. (2021). "Partitivity in Italian: A Protocol Approach to a Multifaceted Phenomenon". Sleeman, P.; Giusti, G. (eds), Partitive Determiners, Partitive Pronouns and Partitive Case. Berlin: De Gruyter, 33-76. Linguistische Arbeiten 580. https://doi.org/10.1515/9783110732221-002.
- Giusti, G.; Sleeman, P. (2021). "Partitive Elements in the Languages of Europe. An Advancement in the Understanding of a Multifaceted Phenomenon". Sleeman, P.; Giusti, G. (eds), Partitive Determiners, Partitive Pronouns and Partitive Case. Berlin: De Gruyter, 1-30. Linguistische Arbeiten 580. https://doi.org/10.1515/9783110732221-001.
- Glaser, E. (1992). "Umbau partitiver Strukturen in der Geschichte des Deutschen". Sprachwissenschaft, 17(2), 113-32.
- Glaser, E. (1993), "Syntaktische Strategien zum Ausdruck von Indefinitheit und Partitivität im Deutschen (Standardsprache und Dialekt)". Abraham, W.; Bayer, J. (Hrsgg.), Dialektsyntax. Opladen: Westdeutscher Verlag, 99-116. https://doi.org/10.1007/978-3-322-97032-9_5.
- Glaser, E. (1995). "Die syntaktische Nullstelle-eine Kennform des Alemannischen?". Löffler, H. (ed.), Alemannische Dialektforschung. Bilanz und Perspektiven. Tübingen; Basel: Francke. 65-79. https://doi. org/10.1007/978-3-322-97032-9 5.
- Glaser, E.; Bart, G. (2021a). "Partitivpronomen (Sg.F.) I". Glaser, E. (Hrsg.), Syntaktischer Atlas der deutschen Schweiz, vol. 1. Tübingen: Narr, 158-62.
- Glaser, E.; Bart, G. (2021b). "Partitivpronomen (Sg.F.) II". Glaser, E. (Hrsg.), Syntaktischer Atlas der deutschen Schweiz, vol. 1. Tübingen: Narr, 162-7.
- Glaser, E.; Bart, G. (2021c). "Partitivpronomen (Sg.F.) (maps)". Glaser, E. (Hrsg.), Syntaktischer Atlas der deutschen Schweiz, vol. 2. Tübingen: Narr, 93-6.
- Huumo, T. (2003). "Incremental Existence: The World According to the Finnish Existential Sentence". Linguistics, 41(3), 461-93. https://doi.org/10.1515/ ling.2003.016.
- Huumo, T. (2018). "The Partitive A: On Uses of the Finnish Partitive Subject in Transitive Clauses". Seržant, I.; Witzlack-Makarevich, A. (eds), The Diachronic Typology of Differential Argument Marking. Berlin: Language Science Press, 419-49.
- Huumo, T. (2021). "Longitudinal or Transverse? How the Unbounded Quantity Expressed by the Finnish Partitive Case Relates to Time". Sleeman, P.; Giusti, G. (eds), Partitive Determiners, Partitive Pronouns and Partitive Case. Berlin: De Gruyter, 295-317. Linguistische Arbeiten 580. https://doi. org/10.1515/9783110732221-009.
- Iemmolo, G.; Klumpp, G. (2014). "Introduction to the Special Issue Differential Object Marking: Theoretical and Empirical Issues". Linguistics, 52, 271-9. https://doi.org/10.1515/ling-2013-0062.

- Ihsane, T. (2013). "En Pronominalization in French and the Structure of Nominal Expressions". Syntax, 16(3), 217-49. https://doi.org/10.1111/ svnt.12003.
- Ihsane, T. (ed.). (2020). Distentangling Bare Nouns and Nominals Introduced by a Partitive Article. Amsterdam: Brill. Syntax & Semantics 43. https://doi. org/10.1163/9789004437500.
- Ihsane, T.; Stark, E. (2020). "Introduction. Shades of Partitivity: Formal and Areal Properties". Linguistics, 58(3), 605-19. https://doi.org/10.1515/ ling-2020-0078.
- Jackendoff, R. (1977). X'-Syntax: A Study of Phrase Structure. Cambridge, MA: MIT Press.
- Kayne, R. (1977). Syntaxe du français: Le cycle transformationnel. Paris: Editions du Seuil.
- Koptjevskaja-Tamm, M. (2001). "'A Piece of the Cake' and 'a Cup of Tea': Partitive and Pseudo-Partitive Nominal Constructions in the Circum-Baltic Languages". Dahl, Ö.; Koptjevskaja-Tamm, M. (eds), The Circum-Baltic Languages, vol. 2, Grammar and Typology. Amsterdam: John Benjamins, 523-68. https:// doi.org/10.1075/slcs.55.11kop.
- Luraghi, S. (2013). "Partitivi nel latino biblico". Studi Italiani di Linquistica Teorica e Applicata, 42(1), 41-60.
- Luraghi, S. (2023). "Beyond Affectedness Partitive Objects and Degrees of Agenthood in Ancient Greek". Luraghi, S.; Sleeman, P. (eds), Partitives Cross-Linguistically. Dimensions of Variation. Special issue of Linguistic Variation, 23(1), 95-123. https://doi.org/10.1075/lv.21002.lur.
- Luraghi, S.; Albonico, G. (2021). "The Partitive Article in Old Italian. Early Stages in the Grammaticalization of the Italian Partitive Article". Sleeman, P.; Giusti, G. (eds), Partitive Determiners, Partitive Pronouns and Partitive Case. Berlin: De Gruyter, 169-201. Linguistische Arbeiten 580. https://doi. org/10.1515/9783110732221-005.
- Luraghi, S.; Kittilä, S. (2014). "Typology and Diachrony of Partitive Case Markers". Luraghi, S. & Huumo, T. (eds), Partitive Cases and Related Categories. Berlin: Mouton De Gruyter, 17-62. https://doi. org/10.1515/9783110346060.17.
- Luraghi, S.; Sleeman, P. (eds) (2023). Partitives Cross-Linquistically. Dimensions of Variation. Special Issue of Linguistic Variation, 23(1). https://doi. org/10.1075/lv.23.1.
- Metslang, H.; Habicht, K. (2023). "Partitive, Genitive or Nominative? Estonian DOM in Written Use through Centuries". Luraghi, S.; Sleeman, P. (eds), Partitives Cross-Linguistically. Dimensions of Variation. Special issue of Linguistic Variation, 23(1), 157-89. https://doi.org/10.1075/lv.20016.met.
- Milner, J.-C. (1978). De la syntaxe à l'interprétation: Quantités, insultes, exclamations. Paris: Seuil.
- Pinzin, F.; Poletto, C. (eds) (2022). "Partitive Articles and Indefiniteness, Micro and Macrovariation". Special Issue and Introduction of Studia Linguistica, 76(1). https://doi.org/10.1111/stul.12182.
- Selkirk, E. (1977). "Some Remarks on Noun Phrase Structure". Culicover, P.; Wasow, T.; Akmajian, A. (eds), Formal Syntax. New York: Academic Press, 285-316.
- Seržant, I. (2021). "Diachronic Typology of Partitives". Sleeman, P.; Giusti, G. (eds), Partitive Determiners, Partitive Pronouns and Partitive Case.

- Berlin: De Gruyter, 111-67. Linguistische Arbeiten 580. https://doi. org/10.1515/9783110732221-004.
- Sleeman, P.: Giusti, G. (eds) (2021). Partitive Determiners. Partitive Pronouns and Partitive Case. Berlin: De Gruyter, Linguistische Arbeiten 580. https://doi.org/10.1515/9783110732221.
- Sleeman, P.: Tamm, A. (eds) (forthcoming), "Methods for Approaching Variation: Partitive Constructions and Partitive Elements". Special Issue of Linauistic Variation.
- Storto, G. (2003). "On the Status of the Partitive Determiner in Italian". Quer, J. et al. (eds), Romance Languages and Linguistic Theory 2001. Selected Papers from Going Romance 2001. Amsterdam: John Benjamins, 315-30. https://doi.org/10.1075/cilt.245.19sto.
- Strobel, T. (2017). Pronominale Partitivität: Arealität und Mikrovariation einer morphosyntaktischen Variable in den Varietäten des Deutschen [PhD Dissertation]. Frankfurt: Goethe University Frankfurt. urn:nbn:de:hebis:30:3-444245.
- Strobel, T.; Glaser. E. (2020). "The Rise and Fall of Partitive Markers in Some Germanic Varieties". Ihsane, T. (ed.), Disentangling Bare Nouns and Nominals Introduced by a Partitive Article. Leiden: Brill, 17-53. https://doi. org/10.1163/9789004437500 003.
- Ter-Avanesova, A.; Daniel, M. (2023). "The Second Genitive in the History of Russian and across its Dialects". Luraghi, S.: Sleeman, P. (eds), Partitives Cross-Linguistically. Dimensions of Variation. Special issue of Linguistic Variation, 23(1), 28-74. https://doi.org/10.1075/lv.21004.ter.
- Zamparelli, R. (2008). "Dei ex machina: A Note on Plural/Mass Indefinite Determiners". Studia Linguistica, 63(3), 301-27. https://doi. org/10.1111/j.1467-9582.2008.00149.x.

Partitive Constructions and Partitive Elements Within and Across Language Borders in Europe

edited by Elvira Glaser, Petra Sleeman, Thomas Strobel, Anne Tamm

The Indefinite Article as an Exponent for Partition

Ellen Brandner

University of Stuttgart, Germany

Abstract The essay deals with the phenomenon of the indefinite article occurring with mass nouns of the type *I brauch a geld* (literal translation: 'I need a money'), inducing a partition reading for a vague amount. After a survey of its distribution in the Southern German dialects Bavarian and Alemannic, based on a large-scale empirical investigation, the essay focuses on the fine-grained distinction between subsets and subkinds whereby the latter occur with the indefinite article in all variants. A fine-grained functional structure is suggested where the respective functional heads are immediately adjacent, giving rise to the possibility of extending the indefinite article to subsets.

Keywords Indefinite article. Mass noun. Partition. Subkinds. Kinds. Alemannic. Bavarian.

Summary 1 Introduction. – 2 The SynAlm Project. – 2.1 Background. – 2.2 The Questionnaires. – 2.3 The Informants. – 2.4 The Results. – 3 The Phenomenon and Its Occurrence in Alemannic. – 3.1 The Distribution of the IA+Mass in Alemannic – a First Look. – 3.2 The IA+Mass as Replacement of Genitive Marking?. – 3.3 Doubling of the Indefinite Article. – 4 More Data. – 4.1 The Relevance of the Verbal Predicate – Kinds and Subkinds Again. – 4.2 Mass Nouns in Generic Statements. – 4.3 Varying the Verbal Predicate. – 5 Theoretical Discussion. – 6 Conclusion.



1 Introduction

Partitivity, i.e., division in its broadest sense, ranging from simple subset/superset relations of substances ('a bit of wine') to part-whole relations ('the roof of the house') is not only a multi-faceted conceptual phenomenon, but also shows a huge variety in its morphosyntactic manifestations: both across languages and within one language. Whereas some languages stick to a rather uniform marking of these relations, e.g., 'of'-insertion in English, others show a variety of means, using different cases (genitive, partitive, elative), different prepositions or agreement phenomena; see for a recent overview the contributions in Sleeman and Giusti (2021).

Against this background, I will discuss a morpho-syntactic manifestation of partitivity by inserting the indefinite article ein- (IA) before a mass noun, yielding a kind of partitive meaning in the sense that a contextually salient (vague) amount of money is intended:1

(1) dahei? Host aeld have-you IΑ money with(you) 'Do you have (any) money with you?'

This phenomenon, IA+mass in the following, is attested in various Southern German dialects (Bayarian, Alemannic) and its distribution as well as its closer examination concerning the different environments in which it occurs as well as a possible syntactic analysis, is the main topic of this essay. One important issue will be to distinguish it from other constructions that involve either a mass noun or an indefinite article. For example, how do mass nouns behave when they are used in generic statements? What is the role of the verbal predicate and what happens if it is varied in aspect (episodic vs. habitual)? Are there neighbouring constructions that might look very similar but have a different interpretation and thus also syntax? For example, a closely related construction, namely what is often discussed in the context of 'indefinite determiner doubling', as in a so a (queter) Wein (= a such a (good) wine 'such a good wine') has to be treated in different terms, see already Strobel and Weiß (2017). Thus, I will illustrate in the following

¹ I would like to thank Alexandra Rehn, Mahena Stegmann (from the former SynAlm project), Ljudmila Geist, Alexander Pfaff, and my colleagues from Stuttgart (Daniel Hole, Judith Tonhauser) for helpful comments and discussion. Also thanks to the audience at the PARTE-workshop, held in Budapest, September 2022, as well as two anonymous reviewers. Special thanks go to Thomas Strobel. Parts of this work are funded by the DFG under project number 465419462. I will discuss here only that kind of partitivity which is realised within one functional projection of a nominal, i.e., what comes close to pseudo-partitive, and what is called in the literature 'proper partitive', including two distinct nominal projections, will not be discussed.

how the differing readings and interpretations of the indefinite article in the context of mass nouns can be evoked when gathering data in a large-scale dialect project, working with written questionnaires. The main problem with written questionnaires is to control for the context, i.e., how to avoid that speakers can nevertheless have in mind another, non-intended meaning. Some cases where this obviously had happened, will be discussed in Section 4, together with some suggestions as to how this can be avoided in future work. The rest of the essay is structured as follows: Section 2 gives some background on the SynAlm project, concentrating on the methods used in this project. Section 3 describes the phenomenon in more detail, whereby some first results are used to illustrate the range of variation found. Section 4 then is devoted to the neighbouring constructions, and as already mentioned, some of the puzzling results give rise to suggestions how to better control for the context. In Section 5, I will suggest an analysis of the data within an exo-skeletal approach, Borer (2005), with a fine-grained sequence of functional projections which is able to capture the different interpretations as well as the different lexicalisations in the respective dialects by locating the variation in the lexicon.

2 The SynAlm Project

2.1 Background

The project **Syn**tax des **Alem**annischen ran from 2011-2016 at the University of Konstanz and was funded by the DFG.² It was informally connected to other Germanic dialect syntax projects that ran during nearly the same time, namely SyHD³ (Syntax of Hessian dialects) and SADS⁴ (Syntaktischer Atlas der deutschen Schweiz). It was also part of the EdiSyn⁵ network. All these projects were interested in a detailed description of various syntactic phenomena, among them the morpho-syntax of infinitivals, possession, relative clauses, prepositional adverbs, adjectival inflection, and the use of determiners, including the partitive construction mentioned above. For some constructions, including the use and form of partitive pro-forms, the very same testsentences were tested in SyHD, SADS and SynAlm projects alike. Other phenomena that are more Alemannic-specific, e.g., certain particles in infinitival constructions, see, e.g., Brandner and Salzmann (2012),

https://gepris.dfg.de/gepris/projekt/198350616.

³ https://www.syhd.info/startseite/index.html.

⁴ https://dialektsyntax.linguistik.uzh.ch/.

⁵ http://www.dialectsyntax.org/wiki/Projects_on_dialect_syntax.

got of course more room in SynAlm. SynAlm was preceded by a smaller dialect syntax project which was part of the SFB 471 at the University of Konstanz. This in turn was preceded by several pilot studies.

One of the most important insights from these smaller studies was that it is very well possible to get robust results by directly aiming at the native speaker's competence by offering whole 'batteries' of carefully controlled variations on one construction. Versions of a construction for which it is highly likely that they are ungrammatical were included in these batteries nevertheless, in order to obtain explicit negative evidence. Especially in the area of dialectal research. it is very important to follow the guideline that the absence of positive evidence does not necessarily imply negative evidence.

Based on our own as well as on the experiences from other dialect syntax projects, we used from the start the so-called "layered method" (Cornips, Poletto 2005). The data on a specific topic were gained in several rounds such that later questionnaires could react on the results of a former one. This means that the relevant construction was usually first presented in the form of a translation task, i.e., the sentence was given in the standard language and the task for the informants was to translate it into his/her dialect. In a later round then, the various versions given to us were presented to all informants in the form of a judgment task.

2.2 The Questionnaires

Seven questionnaires (Fragebogen 'questionnaires', FB in the following) were designed and each one had one main morpho-syntactic topic. This topic was investigated in great detail with mostly judgment tasks. In order to make the questionnaire not 'too boring' for the informants, these tasks were interrupted by translation tasks for the topic of one of the next questionnaires. The results and the careful analysis of these translation data gave us a first overview of the deviations from the standard. These versions were then offered, systematically varied as mentioned above, to all speakers in a later round as a judgment task. The first FB contained thus many translation tasks

⁶ A short description can be found under https://ling.sprachwiss.uni-konstanz. de/pages/proj/sfb471/proj-kurz/A-17.html.

The translated sentences were directly transferred into Excel while keeping all the orthographic devices the informants used to come as close as possible to the 'real' dialect version. From these we created a normalised form to build the basis for categorisation. Categorisation means that every example got 'annotations', e.g., in the case of the IA+mass, it was annotated in different columns whether the informant had inserted an IA or not (no; yes), which form it took (e.g., the vowel), and further properties. These then are the basis for the maps, see below.

for different constructions. Concerning determiners, FB3 contained some translation tasks and FB5 had as a main topic the form and distribution of determiners with the focus on generic readings. Most of the data in this essay stem from these two FBs.

In SynAlm, we used in most cases a 5-point Likert scale with 1 =best (dark green) and 5 = worst (dark red) on the maps below. As dialect speakers sometimes hesitate to rate a 'strong dialectal' version as perfectly fine - due to the still negative attitude towards the dialect -, we additionally used a 3-point scale with the values 1 = I use it myself: 2 = I hear it from others/it is known to me: 3 = I never heard it. Thus, with the 2-judgment, speakers were not committed to their own usage - but a high amount of 2-judgments indicates that the construction in question is vivid. There were also simple binary Yes/No judgment tasks, but in later rounds, we refrained from these, as the 5-point scales deliver much more useful results that can be interpreted from different angles, e.g., by taking into account strong vs. weak rejection. Besides these judgment and translation tasks, there were also choice tasks. E.g., in a sentence with a mass noun, the speakers simply had to mark whether they would insert a definite article, an indefinite one or no article at all. In all the judgment tasks, the speakers had the possibility to give an 'own version', in case none of the offered versions suited them. In case yet another version occurred in these 'own versions', it was offered again to all speakers in a judgment task in a later round. Ideally, all constructions should have gone through these production/rating procedures - however this could not be achieved for all of them, due to limitations of time and resources. Nevertheless, for a considerable amount of constructions, we gained data according to this procedure. The rather drastic differences between the results of different tasks can be seen below in Section 3.

2.3 The Informants

As said above, SynAlm had limited resources, especially if one considers the area covered, see the maps below. Thus, compromises had to be made concerning recruiting and selecting the informants. SynAlm could not reach the density of locations as SADS or SyHD. Specifically, it could not be ensured that there are always several speakers per location. Furthermore, as is to be expected for such a long-term project, the number of informants decreased during time. Expecting this situation when sending out a new questionnaire, several exemplars were sent to one already recruited informant such that s/he could pass them over to new informants in their location (snowball system). Due to this, the decrease was not so dramatic (from 1000 speakers from the first round to 516 in the seventh) and the area covered could be kept constant until the last round. But this

procedure comes of course with the cost that there are partially different speakers for different questionnaires. But a substantial number of informants filled out all the questionnaires. Still, when interpreting the maps and also the numerical results, it should be kept in mind that small deviances could also be an effect of this situation.

2.4 The Results

The results of SynAlm can be found in a database together with the questionnaires (only in German). In the database itself, the examples are translated into English and the numerical results as well as (dynamically created) maps for each question can be found. This is executed via an XML database with a Graphical User Interface (GUI), developed by ourselves. The maps there are rather preliminary and serve more to get a first impression. The SynAlm maps will all be published in the near future at the "Forschungszentrum Deutscher Sprachatlas" and the first volume (Nominal Syntax) is already published. The maps are taken from there [maps 1-4].

After this short description of SynAlm and how the data were gained, let us turn now to the phenomenon under discussion, namely the IA+mass in Alemannic.

3 The Phenomenon and Its Occurrence in Alemannic

3.1 The Distribution of the IA+Mass in Alemannic – a First Look

It is well documented in the literature that in Bavarian dialects, the indefinite article *ein*- can occur together with a mass noun, as illustrated in (1) above. Usually taken as a genuine Bavarian property, it could be shown already in the project "Atlas zur deutschen Alltagssprache" that the construction occurs in the neighbouring Alemannic dialects as well.¹⁰ In the project Syntax of Alemannic (SynAlm), this construction was tested with a translation task and with a judgment task. In order to get a first impression about the distribution, consider the first two maps [maps 1-2].

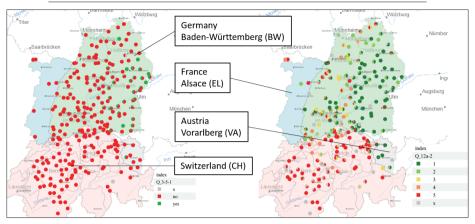
A quite similar distribution was found when the mass noun was construed with a weak quantifier of the type $ein\ wenig\ ein\ Wasser$ ('a bit of water') [map 3]. ¹¹

⁸ On https://ilg-server.ling.uni-stuttgart.de/synalm/html/

⁹ Under https://regionalsprache.de/synalm.aspx

¹⁰ See the map under http://www.atlas-alltagssprache.de/runde-3/f08d/.

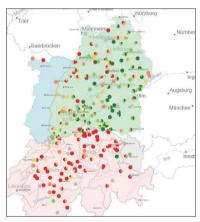
¹¹ There was no translation task for the corresponding sentence [map 3].



Maps 1-2 IA+mass in translation task; IA+mass in judgment task

Sentence for Map 1 and Map 2:

Habt ihr noch (ein) Mehl im Haus? Have you.**PL** still (a) flour in.the house 'Have you still some flour at home?' Map 1 Results from FB3, Q 3-5-1, n = 757 Map 2 Results from FB5, Q 12a-2, n = 517



Map 3 IA with mass noun, preceded by a weak quantifier (ein wenig) in judgment task

Sentence for Map 3:

Hätten Sie mir ein wenig ein Wasser für den Hund? you me a bit a water for the dog? 'Could I have some water for the dog?' Map 3 Results from FB4, Q 4-1, n = 591

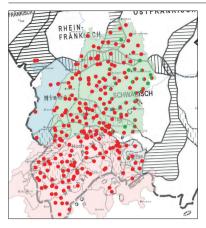
Considering first the difference between Map 1 and Map 2, it shows how important it is to use different types of tasks when dealing with dialectal data. If only one task had been used, one would either conclude that the IA+mass construction is generally accepted in the Alemannic variants spoken in Germany (green background, BW-Alemannic henceforth) but essentially completely rejected in Switzerland (red background, CH-Alemannic) [map 2]. But Map 1 with the translation task would suggest that there is only one small area, immediately adjacent to Bayaria, where this construction occurs. In the latter case, the natural conclusion would be that it is an effect of 'language contact', that means speakers living near to the border of Bavaria - where this construction is prevalent - simply 'took it over', as these speakers are plausibly more often confronted with Bayarian speakers. Note that the few green dots in CH on Map 2, are all very close to the German border, indicating again that the construction in question is highly susceptible of 'taking over'. I will take up this issue in Section 5, see also fn. 7.

This kind of seemingly contradictory results can be taken nearly as a textbook example of the "Decathlon model" in action, see Featherston (2005). According to this model, a native speaker of a given language has various options in his/her internalised grammar – with the effect that acceptance rates are always much higher, reflecting the different grammars. ¹³ In a production task in contrast, there can be only 'one winner'. I.e., the speaker must actively discriminate between the two or even more various possibilities. This choice is often influenced by outer-linguistic factors like prestige, closer to the written standard, or even 'in-group-effects'. For the usefulness of this approach to variation and how the differing results from different tasks can be exploited also for theoretical questions concerning the modelling of syntactic variation, see Rehn and Brandner (2022). ¹⁴

¹² The blue background covers Alsace, a region in France where Alemannic is (still) spoken. Since the number of informants is very small, this region will be left out in the following discussion. The same holds for the region Vorarlberg in Austria. However, note that these speakers did not actively produce IA+mass, but the acceptance rate is very high.

¹³ Whether this situation is due to some inherent underspecification in the grammar of natural languages per se or to multilingualism in a broad sense, i.e., knowledge about or confrontation with the various dialectal variants, must be left open here. Note that speakers can in principle rate two or more distinct versions as equally good, which would involve then true optionality. And indeed, there were some speakers who rated all three versions of a generic statement with a mass noun (i.e., indefinite/definite/zero article) with 1, i.e., the best rating. But to draw serious conclusions from this observation, a much more detailed statistical analysis is required.

¹⁴ See also Brandner 2020 and the references cited therein for a discussion of the impact of the political borders on dialectal phenomena. There, the attempt is made to correlate different types of variation with different types of areal patterns. Clear cases of the relevance of the political border mostly affect lexical phenomena (e.g., different



Results of the translation task with sub-division of Alemannic as background

Zooming further in, one might suspect at first sight that the distribution follows the traditional sub-division of Alemannic into Swabian (Schwäbisch on the map), High Alemannic (Switzerland and the most South Western part of BW) and Low Alemannic in the more northern part of BW. But if we put the results of the translation task [map 1] on a map with this historical division, one can see that only the eastern part of Swabian is affected. On the other hand, the rejection rate of the construction should be much higher in the High Alemannic region in BW - if the distribution would follow the traditional subdivision. Thus, in the following, I will draw the line between CH-Alemannic and BW-Alemannic instead of the traditional sub-division.

Now if we look at Map 3, the construction with the weak quantifier a weng (= 'a bit'), the lighter green dots (meaning 2 on the Likert scale) and the yellow ones (3 on the Likert scale) show up more frequently in BW-Alemannic than in Map 2 with the unquantified mass noun. Nevertheless, rejection (dark red) is sparse in contrast to CH-Alemannic. But a closer look at CH reveals less rejection of this particular construction. 15 Thus, this slight change in construal (additional quantifier) seems to have an effect. 16

verbs or nouns for the same concept); syntactic phenomena like the order in a 3-verb cluster on the other hand correlate much more with the traditional sub-division(s). The lexicon, as that part of the grammar that is highly accessible to 'conscious decisions', cf. the discussion around the Decathlon model, is thus the place where on the one hand contact phenomena are to be expected - but on the other where they may cross-cut the traditional divisions.

In fact, 3-judgments (yellow dots) is 9% with this construction, but only 4% with the IA+mass without the quantifier.

¹⁶ One could object now that these small differences result from the bias with the different numbers of informants discussed above. However, note that FB5 [Map 2] is later

In sum, the following picture emerges:

- active production of IA+mass is confined to a small area near the Bayarian border
- acceptance is high essentially throughout BW-Alemannic but not in CH-Alemannic
- acceptance decreases with a quantifier in BW-Alemannic but increases slightly in CH

Given these findings, the following questions emerge:

- is there a parametric syntactic difference between these variants? Has the DP a more complex structure in Bavarian and BW-Alemannic in contrast to CH-Alemannic?
- is there a lexical difference in the sense that the IA has a different semantic specification in the two variants respectively?
- what is the effect of the weak quantifier? Assuming that the semantic effect of adding it (i.e., severing a small portion out of a mass) is the same in both variants, what could it tell us about the syntax?

These maps and their brief discussion were meant to give a first impression on how important it is to use different tasks for elicitation in order to get a realistic picture. It will turn out below that there are some unexpected occurrences of the IA in CH, given the results above – however, they occur in slightly different contexts. I take these data to show how important it is to analyse very carefully the relevant morpho-syntactic and semanto-pragmatic variables, see Section 4. But before that, the phenomenon of IA+mass will be discussed in more general terms.

3.2 The IA+Mass as Replacement of Genitive Marking?

Standard German (and as can be seen from the maps above also Swiss German) prefers zero-marking of the mass noun, i.e., the mass nouns occur neither with genitive marking, which used to be the case in Middle High German (2b) (see Strobel, Glaser 2021) for a detailed description, nor with a preposition (with sometimes an amalgamated article, i.e., the partitive article), as it is familiar from the Romance languages, (2c):

and has fewer informants than FB4 [map 3] and nevertheless a higher acceptance. As the general tendency is that the number of informants decreased – as it is the case between FB4 and FB5 – it seems highly implausible in this case that – even if there was a certain exchange – suddenly much more 'Bavarian-like' speakers were involved. Later, we will see that this result does not come as a surprise when considering more data.

(2)a. Hast du Geld dahei? Standard German money there.with have you 'Do you have money with you?' b. ...ich noch ein-**er** hân... salbe-n MHG still a-**GEN** ointment-GEN have "... I still have some ointment" (cited after Paul 1919, 348) c. Tu as de l' argent? French 'Do you have money with you?'

The same pattern can be found when a mass noun combines with a weak quantifier where again Bavarian and some parts of Alemannic insert an IA before the mass noun, see [map 3]:

(3) ÖΙ Standard German a. ein weniq bit oil а b. (ich han) öl-s ein wenina MHG (I have) oil-GEN bit 'I have a bit of oil' (from DWB:BD 29,1)17 d'huile French реи c. un bit of oil 'a bit of oil'

Finally, a similar pattern arises with so-called container nouns resp. measure phrases:

Standard German a. ein Glas/Liter Milch (4) glass/liter milk phunt vleisch-es/ein fuoder guoten wine-s b. ein MHG pound meat-GEN/a loadtrack good wine-GEN а (cited after Paul 1919, 294) kilo de pommes French c. un kilo of apples а

17 DWB = Deutsches Wörterbuch Jacob und Wilhelm Grimm. http://dwb.uni-trier.de/de/

In the cases illustrated in (2) and (3), we have seen above that Bavarian and parts of Alemannic use the IA instead of the genitive marking whereas Standard German has no marking at all. As such, these dialects pattern more with French in the sense that there is a lexicalised syntactic position for partitivity. However, in the cases in (4) with container nouns/measure phrases, the Southern German dialects seem to pattern again with Standard German, i.e., with zeromarking instead of an IA before the mass noun. 18 Thus, a pure replacement analysis of genitive marking with the IA will obviously not capture the whole range of data, since the genitive was used reqularly with container nouns/measure phrases in older stages of German. Nevertheless, putting container/measure nouns aside for the moment, we can roughly distinguish between two varieties of Modern German: one that has replaced the former genitive by zero-marking and one that uses the IA in its stead. And this raises the following guestion: how come that a lexical item, standardly assumed to have derived from a numeral, is able to stand for partitivity, where usually only a vague quantity is at issue? While some have claimed that the insertion of the IA in Bayarian is more or less a formal reguirement, meaning that there are no article-less nouns in this dialect, e.g., Eroms (1989), others, e.g., Glaser (1993; 1996; 2008) and subsequent work. Donhauser (1995) and Kolmer (1999), discuss the semantic contribution of the IA. The characterisation of its contribution ranges from 'individuation' via 'countability' to mere 'partitive/ partition'. I will follow the latter approaches and assume that the IA indeed makes a semantic contribution in these contexts. The question is whether one can find a common semantic core which allows this lexical item to lexicalise such differing concepts and thereby capturing of course also its more common use, i.e., as the existential quantifier with count nouns. I will argue in Section 5, based on the distribution of the IA in Alemannic, that this common semantic core is a rather abstract notion of 'contrast', meaning that if there is an IA, it presupposes that there exists something of a similar kind from which the denoted entity is divided, either as a subset or as a subkind. This is much in the spirit of the non-uniqueness analysis suggested for the IA in Le Bruyn (2010) and also Zamparelli (2008). However, I will suggest a syntactic structure that is able to capture the fine-grained distinctions between the different environments where the IA occurs.

¹⁸ See Grestenberger 2015 for a detailed discussion of the syntax and semantics of container noun constructions in Austrian Bavarian. In her data, no example with an IA occurs; the same is true in Kolmer 1999. Unfortunately, there are no data with container nouns/measure phrases from SynAlm because the focus was more on generic/nongeneric readings. However, as a native speaker of Alemannic, I can confirm that the IA is not possible in the context of container nouns/measure phrases. I also did not come across any examples of such a construction in dialect grammars, consulted until now.

The next steps are therefore to investigate the distribution and semantic contribution of the IA in further environments. Specifically, are there other unusual or uncommon (in contrast to Standard German) occurrences of the IA, e.g., does it also occur with predicatively used nouns in these dialects and also importantly: Where is it not allowed? Although there was no special topic 'partitivity' in the questionnaires built in SynAlm, the distribution of the indefinite and definite article - contrasted with zero-marking - was an important issue. One aim was to examine more closely the phenomenon known as 'determiner doubling, as this is an often discussed phenomenon for southern German dialects, see Section 3.3. The other issue was to find out which morpho-syntactic means are used to mark generic readings of nominal expressions. As mentioned in Section 2.1, the idea in SynAlm was also to gain explicit negative evidence, thus versions which were highly unlikely to exist, were nevertheless offered to the informants. As will be shown below, this strategy leads to some interesting and also puzzling effects.

3.3 Doubling of the Indefinite Article

A very close construction to the one illustrated above, attested both in Bavarian and Alemannic, is the one in (5a), which is often discussed in the literature under the term '(indefinite) determiner doubling', see e.g., Kallulli and Rothmayr (2008) and Richner-Steiner (2011) for Swiss German, and Strobel and Weiß (2017) for a more recent account of Bavarian. Compare (5a), where we find an IA with a count as well as with a mass noun, with (5b) which is the construction already presented [map 3]:

```
    (5) a. a so a netter bua / a so a guater wein Bavarian/(Alemannic)
        a so a nice boy / a such a good wine
        'such a nice boy' / 'such a good wine'
        b. a weng a wasser
        a bit a water
        'a bit of water'
```

Due to the surface similarity between them, these two constructions are often treated in a parallel fashion, e.g., in Kallulli and Rothmayr (2008). However, Strobel and Weiß (2017) have argued in great detail that (5a) must be strictly set apart from the pure quantification/partitive structure in (5b), since it has different morpho-syntactic properties e.g., in terms of obligatoriness and of inflection of the articles, which I will not present here for reasons of space, but see fn. 14 for

some remarks. Note in addition that the combination with so seems to be the only case where an IA occurs obligatorily with a mass noun even in Standard German, typically in exclamatives:

With such an exclamation, one refers to a situationally given entity (wine, luck) together with a linguistically not expressed evaluative attitude. In Brandner (2010), where certain types of exclamatives are discussed, it is argued that the IA in these cases implicates the presence of something with which it can be contrasted, and that this is the basis for its prototypical usage in exclamatives. 19 The interpretation is thus not that of a portion/amount, i.e., partitive, as it is the case in (5b), but rather that of different sorts/types/degrees. If the adjective is present, the contrasting effect is based on the lexical contribution of the adjective itself - if there is 'good wine', it implies that there is also, e.g., 'bad wine'. Even in its bare form, cf. (6), the construction with so still implies that there are different kinds of wine - and the one at hand is remarkable or special, depending on the situation. In the case of 'luck', we can think about 'degrees of luck' or again 'bad luck', 'good luck' etc. This contrasting effect can be captured with the notion of the so-called 'subkind reading', see Carlson (1977) and also Cohen (2001). Subkinds stand in a taxonomic relation to their 'superior' kind. E.g., 'wine' denotes a kind, the established subkinds are, e.g., 'red wine', 'white wine', 'table wine'. But a further possibility is something like 'an extraordinary wine (in my view)' - 'in contrast to others', as in (6a). Thus, we do not need necessarily the notion of degree in the sense of a scale. Subkind merely means that there is at least one property that distinguishes one type of wine from another one. The proposal here is now that either the addition of an adjective and/or the construal with so, creates ad hoc subkinds. The important point is that subkinds in contrast to 'proper kinds' are conceived of as individuals - and this has consequences for the (im)possibility of the indefinite determiner, specifically, subkinds always come with

¹⁹ Usually, this is captured with the notion of degrees, cf. for example Rett 2011. This of course is also due to the fact that so is the typical degree particle. But note that Anderson and Morzycki (2015) have argued that degrees can be conceived of as a special kind of kinds, namely kinds of states. What is important in the context here is that degrees by their very nature always include a notion of 'contrastiveness', be it on a scale or on a more abstract level - a given value can only be defined in contrast to other neighbouring values.

an indefinite determiner - even in Standard German, cf. (6), I will come back to this issue in more detail in Section 4.1. What is important for now is that despite the surface similarity of (5a) and (5b), we are dealing here with two different interpretations of the IA+mass.

Concerning the doubling in (5a), I follow the argumentation in Richner-Steiner (2011, 129 ff.) that what looks like an indefinite article as the a in (5a) is indeed part of the particle so which shows up as əso in these dialects, see also Strobel and Weiß (2017). This form is the result of a phonetic reduction of the (originally) emphatic version *al-so*. What looks like doubling is thus more a re- or better misanalysis of this complex form as including the indefinite article. This is possible because the IA in Alemannic consists of a schwa in the feminine/neuter nominative and accusative case.²⁰ The masculine form is an, nevertheless, the element before so shows up again as a schwa - at least in BW-Alemannic. 21 In CH-Alemannic, where doubling is attested as well, the paradigm of the IA is (in some parts) more complex than the one described above. In these dialects, the neuter form is $\theta s.^{22}$ There are no explicit negative data, since we did not offer a sentence of the [... es so es adj + neuter noun] in a judgment task. But some speakers of this variant gave us their version of such a construction in a related task and the forms given were of the type [e so es adj + neuter noun] throughout. Thus, there is also no inflection of the higher 'article'.

- Although schwa is represented with the grapheme <a> in the text.
- 21 This is also true for feminine nouns in the dative where we find a more distinquished morpheme:
- vun a so era sach such а-гем.рат thing

This example was tested (5-point scale with 1-2 ratings as acceptance) with basically all possible combinations of (non-)inflection up to no higher IA at all, i.e., merely so. In fact, the latter version got the best rates (75%), the one given in (i) was the second best (26%). The version with both of them inflected got 8%. The version with only the higher one inflected and the lower IA uninflected (vun ara so a sach) however got surprisingly a rather good rating (17%). This last version was found in an old dialect grammar (Staedele 1927) on which we built the test sentences. I cannot offer a real explanation for this pattern. However, note that the particle/IA(?) is immediately adjacent to a case assigner, i.e., the preposition von, and given the adjacency requirement of case assigner and case assignee (assuming that the so-particle is in a degree phrase within the NP. see, e.g., already Corver 1990), it could be this surface adjacency that makes this ordering sound correct. And recall that the form of the IA in non-dative environments is simply schwa, which means that the particle and the IA are phonetically identical, the particle-schwa is then taken as the base for adding the inflectional suffix for the dative exponent. If such a reasoning is on the right track, it would argue in favor of an affixmigration-like analysis, see, e.g., Diertani 2011, i.e., a process operating on the surface string. This process would then be operative in Bavarian to a much higher extent - in addition with copying. I will leave this open for future research.

22 Thanks to a reviewer for pointing out the possible relevance of this difference in the paradigms.

For Bavarian on the other hand, inflecting forms of the higher IA are attested, see, e.g., Strobel and Weiß (2017). However, as indicated in their examples throughout, the inflection on the higher IA seems to be optional, i.e., a bare one is always a possibility. This indicates that the inflected doubling forms seem to be rather an effect of 'parallelism in morphology' on the surface. A final argument for this rather surfacish analysis of this 'doubling' is again areal distribution. As presented in Brandner (2021), the regions where doubling is attested coincide nearly exactly with those that use the əso-form also in a syntactic environment where it is a simple degree particle so hoch (= 'so high').

The 'doubling' in (5b) is arguably due to the fact that the higher IA is indeed part of the quantifier, namely as a frozen uninflected indefinite article, like in English 'a lot of', see Strobel and Weiß (2017). The lower article in this case is thus indeed the IA+mass as in (1). This leads one to expect that 'doubling' of this kind is only possible in those varieties that use the IA just the way it is used in (1). As shown earlier [Map 3], this is by and large indeed true, if one considers the areal distribution - although a deviance could be detected in terms of acceptance. I will offer a possible solution for this fact in Section 5, after having introduced the syntactic structure that I will assume. But before that, further data will be presented in order to get a broader picture of the usages of the IA in Alemannic.

4 **More Data**

In (7), all the sentences are listed that we gave for translation in FB3. We chose examples where a deviation from Standard German could be expected when it comes to the use of the IA. Thus, we included bare nouns in predicational function and mass nouns in varving contexts (episodic, generic, accompanied by a weak quantifier). Some more data from different tasks and constructions will be integrated as the discussion of these examples proceeds.

The examples are given in (7), FB3 3:

- a. Ich brauch noch Kaffee für morgen früh (7) bare mass noun coffee for tomorrow early need still 'I still need some coffee for tomorrow morning.'
 - Mechaniker b. Mein Sohn ist predicational NP mechanic my son 'My son is a mechanic.'

c.	<i>Wasser</i> water 'Water	 at	10	00 <i>Grad.</i> 00 degre	es	generic (subject)
d.	Hättes have 'Would	<i>mir</i> for.m /e some	e a	bit	g Zucker? sugar	with weak quantifie
e.	Habt have 'Do you	 still		in.the	Haus? house	bare mass noun

The numerical results for the sentences in (7) are summarised in Table 1 for the translation tasks (FB3) and the acceptance tasks (FB5):

Table 1 Production and acceptance rates of the construction in (7)

construction type	translation with IA (production rate) n = 757	acceptance of IA (1 & 2 ratings) n = 517
(7a) bare mass noun (need)	BW: 23% CH: 5%	
(7b) predicational noun	BW: 5% CH: <1%	BW: 17% CH: 10%
(7c) generic (subject)	BW: <1% CH: <1%	BW: 20% CH: <1%
(7d) with weak quantifier	BW: 8% CH: <1%	BW: 44% CH: 4%
(7e) bare mass noun (have)	BW: 11% CH: <1%	BW: 68% CH: 6%

As can be seen - and as already could have been read off from the results for (7d,e) presented in Section 3.3 - the production and the acceptance rates differ guite drastically. The overall picture nevertheless strengthens the observations, already found in Glaser (2008), that the IA in CH-Alemannic and in BW-Alemannic obviously differ in their grammatical status, such that the IA in CH essentially does not show up in the respective constructions. However, there are also some 'outliers': first the comparatively high production rate in CH for (7a) and second the high acceptance of the IA+mass in the generic statement (7c) in BW, again in a sharp contrast to the production rates. Another astonishing result is the difference in acceptance between (7d) and (7e), which we also already saw above when considering the maps. In the following, I will discuss each of these data points and will in some cases also offer some possible explanations that may lead to further investigations.

4.1 The Relevance of the Verbal Predicate: Kinds and Subkinds Again

Turning first to (7a), with the difference in production compared to (7e), unfortunately it is one of those sentences that was not presented for a judgment task in further questionnaires. The reason we did not include this sentence was the assumption that we are dealing in both cases with mass nouns in the partitive reading and thus we expected no relevant difference to the sentence in (7e). A possible account for this difference can be sought in the type of the predicate. Note that 'need' is an intensional verb and following Moltmann (2013), based on Carlson (1977), if the argument of an intensional verb is a mass noun. then the kind reading is prevalent. That would mean that the IA in (7a) does not necessarily lexicalise a partitive reading, but that a kind reading is possible as well. In order to strengthen such a conjecture. it must be shown whether there is a certain percentage of Alemannic speakers that use the IA+mass in kind-denoting environments. And this seems to be indeed the case. In a further 5-point judgment task, we contrasted mass nouns and count nouns in so called "characterizing statements", see, e.g., Cohen (2001) and Krifka (2003), where - informally speaking - the IA serves to pick out one specimen, standing for the whole kind, and the property assigned to it is then generalised. As such it is very close to the proper kind-reading. which is expressed in German usually with a bare plural or the definite determiner (data from FB5-3b, resp. 3c):23

- (8) a. Man weiss doch, dass ... ('it is common knowledge that...')

 eine/die/0 Kartoffel(n) viel Stärke enthält/ enthalten.

 a/the/0 potato(es) much starch contain(s)

 'a potato/potatoes contain(s) a lot of starch'
 - b. ein/der/0 Wein aus Trauben gemacht wird. a/the/0 wine from grapes made is 'a wine/the wine is made out of grapes'

The version in (8a) with the count noun ('potato') and an IA is the standard case for these characterizing statements, and thus, as expected, receives a rather high rating (1-2 ratings in BW 48% and in

²³ There is not a complete overlap. For example, *A dodo is extinct* is not possible. Krifka (2003, 180) cites the English example *the gentleman opens the door for ladies* as ungrammatical. In German, I think this sentence is acceptable. However, this shows merely how flexible the interpretation of definite and indefinite articles is – across languages and dialects.

CH even 55%).²⁴ But interestingly, for the example in (8b), which is a characterizing statement with a mass noun ('wine'), the 1-2 ratings reached 18% in CH and 23% in BW, i.e., much higher in CH but lower in BW than with an IA+mass in a partition reading, cf. (7a,e). Note that in such a characterizing context, a partitive reading is highly implausible, given that all types of wine are made out of grapes. Thus, the acceptance of the IA in this environment (for those speakers at least) must find another explanation. We can approach this problem if we consider subkinds again, discussed already briefly in Section 3, cf. the examples in (5) and (6). Recall that subkinds are defined in contrast to another subkind, i.e., the two entities must share a certain amount of properties - but crucially differ in at least one. Additionally, there must be a taxonomically higher kind, by which these two are dominated. Now contrast 'wine' with, e.g., 'beer' with respect to what they are made of. The constructed follow-up to (8b) in (9) is perfectly acceptable if there is a heavy stress on the nouns:

It is common knowledge that... [WINE is made out of grapes] but BEER is made out of grains.

One can indeed construe two subkinds, such that both belong to the taxonomically higher kind 'alcoholic beverages'. 25 'Pure' kinds on the other hand do not contrast distinguishable subkinds/sorts but can stand for themselves. Under this perspective, there is a genuine variability as to whether a mass noun is conceived as a 'pure' kind or as a subkind. The suggestion is thus that those speakers who accept the IA+mass in these environments construe the mass noun not as a kind - but as a subkind. And as was discussed above in Section 3.3. the IA - either with mass or with count nouns, cf. (8), can lexicalise this semantic concept. Thus, the astonishing high amount of the IA+mass in (8b) even in CH but the lower acceptance in BW - if contrasted with the partition reading, cf. (7e) - could be accounted for if we assume that a certain amount of speakers from both variants have built ad hoc subkinds and the occurrence of the IA in these examples must be set apart from the partition reading. But then, coming

²⁴ That the ratings are not higher has probably to do with the fact that this version was presented directly contrasted with one with the definite article, resp. a bare plural, which both seem to be preferred. Note that only 6% rejected the version with the IA completely (5 on the scale).

²⁵ Note that even 'alcoholic beverages' could be turned into a subkind of 'beverages' in general with one being with alcohol and the other not, i.e., we have again a distinguishing/contrasting property. A reviewer asks whether the sentence itself could also be interpreted such that there are other types of wine, e.g., made from fruit. This is indeed true, cf. Apfelwein ('apple wine'), where the subkind reading is realised via the compounding, cf. also 'red wine', 'white wine'. Thus, the formation of subkinds is not restricted to the syntax but takes also place directly in the lexicon.

back to the discussion around (7a), i.e., the mass noun 'coffee' under the intensional verb, we are faced with another problem. Recall that I suggested that we are dealing here with a kind reading. But if the IA is indeed the lexicalisation of subkinds, we must assume that the speakers here have different kinds of coffee in mind - which seems rather implausible in this context. However, note that we added 'for tomorrow morning' as context. This means that the coffee is probably needed for breakfast. Now 'breakfast' can be taken in one reading as an object mass noun like, e.g., 'furniture', 'clothing', 'equipment' etc., i.e., consisting of different items but belonging to one concept. Typically, these nouns behave syntactically like mass nouns, which would be in line with the analysis given in Moltmann (2013) that we get a kind reading here. The items belonging to 'breakfast' would be among others 'bread', 'honey', 'butter', and of course 'coffee'. A plausible scenario thus would be that 'coffee' is interpreted in the context given in (7a) not directly as a kind, but as one constitutive part of this object mass noun. As such, it again would fall under the notion of subkind, since there is a taxonomically higher notion ('breakfast') and there are contrasting entities at the same level.²⁶ The IA would thus then be again the lexicalisation of a subkind reading. Those speakers who did not use the IA would then have had the pure kind interpretation in mind, which is expected under an intensional verb, see above. Based on these admittedly speculative considerations, it would be interesting to design a questionnaire where these factors are controlled for more systematically, i.e., contexts where the subkind reading is forced by contrasting the two nominals, as in (9) - and on the other hand contexts where such a reading is highly implausible. In sum, the unexpected ratings for (7a), especially in contrast to (7e), give rise to further considerations concerning the notion of subkinds that open new fields for investigation.

4.2 Mass Nouns in Generic Statements

Let us investigate now the results from (7c), the sentence with a mass noun in a generic statement. The puzzling fact is that the IA was produced in the translation below 1% in both areas - however, the acceptance rate in BW is exceptionally high (20%). First of all, note that this is a sentence which hardly invites to construe a subkind reading - as in a non-technical understanding, all fluids that can boil are essentially

²⁶ See, e.g., Sutton, Filip 2018 for a detailed semantic discussion of the building of subkinds with object mass nouns. The relevant difference is that these subkinds overlap extensionally (e.g., coffee is not only part of breakfast, but can also be drunk after lunch) - in contrast to the more familiar subkinds of the 'red wine/white wine' type of mass nouns.

water. As such, the CH-rating is what is expected. As it seems highly implausible that only the BW-speakers construe the subkind reading in this case.²⁷ and if we compare it with the results for (8b), the characterizing statement ('wine is made out of grapes'), the reason for this high acceptance must be found in another factor. As mentioned above, we offered many more examples in generic contexts with the respective noun with either definite/indefinite/zero article - which I will not all present here. Many of these were built on the examples discussed in the literature on generics. For example, with a verbal predicate like 'extinct', the rates for IAs (whether with mass nouns or count nouns) are below 1% - as expected. In a choice task with a sentence where the mass noun is the object comparable in its content to the one in (7c), the acceptance in BW is only 3.6%.²⁸ Thus, one could hypothesise at first sight that the difference can be traced back to a subject/object distinction. But in another example with the mass noun again in subject position (Geld allein macht nicht glücklich 'Money alone doesn't make (one) happy'), only 2% opted for the IA. In general then, the IA+mass in generic contexts receives very low acceptance and it never reached the acceptance rates found with the sentence in (7e). Thus, I conclude that in explicit generic statements with a kind reading of the mass noun, the IA shows up only marginally. The reason for the relatively high acceptance for (7c) in BW thus must be left open here. However, note that the generic statement in (7c) is built with a verb that is in its basic meaning an activity verb ('cook') and the generic reading comes via the construction and not via the lexical meaning of the verb, cf. a verb like 'extinct'. That this difference may have an impact will be discussed in the next section where exactly this factor was controlled for and where the results are equally not as clear-cut as expected on the basis of (7e). This shows that the lexical content of the predicate as well as the context must not be underestimated, cf. also the discussion around the intensional verb 'need' with its deviating results. Thus, for future research in this area, it is indispensable to offer examples containing much more variation, specifically concerning the verbal predicate. However, it is not enough to simply vary the lexical predicate, since one lexical predicate can get different interpretations depending on the further syntactic surrounding, specifically the actual aspectual/temporal specification. This is the topic of the next section.

²⁷ Which is of course a possibility, recall that, e.g., oil boils at a different degree. However, that this does not happen in CH - in contrast to the 'breakfast' example, makes this highly implausible.

²⁸ The sentence given was the one in (i) and is translated into English best as 'Gold belongs to the precious metals':

⁽i) Zu den Edelmetallen zählt man das/ein/0 Gold to the precious metals counts one the/a/0

4.3 Varying the Verbal Predicate

As mentioned in Section 2, the SynAlm-project aimed at an exhaustive overview of the forms/constructions to express generic readings. We thus constructed examples where we varied systematically the predicate-type (stage-level vs. individual-level) with the morphosyntactic make-up of the respective DP together with the aspectual specification. This led to a large amount of examples with the IA in various semanto-pragmatic environments, which can now be exploited to get a better picture of how the IA behaves in partitives as well. We cross-classified the predicates with the readings of the predicate such that with each reading of the predicate, the DP was offered with an IA, a definite article, or a null version, cf. the Standard German examples in (3) and (4). As we were interested mainly in generic readings, not only mass nouns were tested but also (plurals of) count nouns and abstract nouns ('hope', 'fear' etc.). In addition, we varied also the grammatical function of the respective DP, i.e., whether it acts as the subject or object. A further aspect which is important to consider is that typical activity verbs like 'eat' and 'drink' can get an individual-level/non-episodic reading by adding an adverb like 'usually' for a habitual aspect.

We constructed thus the following examples, for ease of exposition, simply given here in English:

(10)Situation: in a beer garden ...

> a. Usually, I drink beer or wine (stage-level; habitual) b. But today, I will drink water (stage-level; episodic) c. Otherwise. I like beer or wine better (individual-level; generic)

We offered these three sentences with definite/indefinite/zero determiner and the speakers were asked to rate them on a 5-point scale. The outcome is as follows: (% of 1 & 2 ratings):

Table 2 Varying interpretations of the verbal predicate 'drink'

	definite article	indefinite article	zero
stage-level; habitual	BW: 3 CH: 4	BW: 72 CH: 38	BW: 78 CH: 93
stage-level; episodic	BW: 5 CH: 4	BW: 89 CH: 42	BW: 80 CH: 92
individual-level; generic	BW: 42 CH: 33	BW: 66 CH: 24	BW: 79 CH: 84

Compared to the cases discussed until now, the picture in this case is a bit more complicated. On the one hand, zero-marking is nearly in all cases the preferred version, beside the 89% in BW for the episodic reading. Having a closer look at the results for the IA, it is again obvious that in BW, the usage of the IA is in general higher but the numbers for CH are astonishing, given what we have seen so far. This might be due to the context given, since in a restaurantsetting, the portion-reading, i.e., the ordering of a drink means always portion ('glass of...'), is the most natural one and this is a usage where we find the indefinite article even in Standard German. Note furthermore that it is also a counting environment, i.e., if two people order the same drink, it is no problem to order zwei Bier (literal translation: 'two beer'), i.e., use a numeral with a mass noun. Thus, the contextual setting was in the end rather unfortunate - although it gave a good opportunity to contrast the habitual reading of an activity verb with an inherent individual level predicate. But nevertheless, note again the contrast between CH and BW for the indefinite article. Thus, even with this bias, a clear distinction between CH and BW can be detected when it comes to the acceptance of the IA+mass construction.

In order to vary the tasks, we took the noun 'fish', which can be interpreted either as an ordinary count noun, but in a food context, it can get a mass reading (cf. 'there is fish in the soup'). So, we asked our speakers for the sentence in (11) which interpretation they prefer if the IA is present:

(11)I would like to have a fish for lunch

The interpretations (a-c) for both versions are given below, together with the results for the version with the IA:29

a)	It must be a whole/complete fish	BW: 35%	BW: 35%
b)	it contains fish, e.g., fish soup	BW: 7%	CH: 3%
c)	both interpretations are possible	BW: 54%	CH: 22%

As expected, CH speakers prefer the individual reading in case an IA shows up whereas this interpretation is mandatory only for 35% in BW, cf. the interpretation in a). Concerning b), note that the 7% in BW corresponds approximately to the 8% that produced the IA+mass in the translation task, cf. (1). Interestingly, there seems to be a certain variability for c) in CH, but the value for this option in BW is much higher. The problem of this task, resp. the way we executed it, is the possibility in c). Given this optionality, we could not control

²⁹ As expected, for the version without the IA, i.e., the bare nominal, about 80% voted for both interpretations, i.e., in this food context the nominal itself is seemingly underspecified.

which interpretation is indeed preferred, as the other two interpretations were presented as the 'only possible' one. Thus, a better design of such interpretational questions is necessary. Still, there is again a sharp difference between BW and CH for a), indicating that the IA has a different usage in the two variants. In sum, the general picture from the maps in Section 3 is confirmed, namely that in CH, the IA+mass is used much more reluctantly. How this difference between the two variants can be captured, is the topic of the next section.

5 **Theoretical Discussion**

Table 3 gives a rough overview of the constructions discussed. Instead of giving the percentages, I use a three-way distinction with + = high acceptance; - = virtually no acceptance; ~ = substantially above rejection.

Table 3	Summary	of the	findings
---------	---------	--------	----------

Construction	BW	СН
IA+mass (have some flour)	+	-
IA+mass (intensional)	+	~
IA+mass weak quant (doubling)	+	-/~
predicational noun	~	~
generic statement (water boils)	-/~	-
habitual (activity verb), restaurant setting	+	~
episodic (activity verb), restaurant setting	+	~
generic (indlevel predicate), restaurant setting	+	~
stuff reading (fish)	+	-/~

Ignoring the restaurant setting case, due to its inherent bias with the portion, resp. ordering reading, it is obvious that there is a sharp difference between CH and BW. The cases where we find a certain amount of IA+mass in CH are all cases where further factors come into play: the intensional verb with the object mass noun ('coffee/ breakfast' example), where I suggested that a subkind reading is a possibility, which then even would require an IA also in CH. But as discussed there, the suggestion that the IA in these cases is the exponent of a subkind reading should not be taken as a proposed analysis but rather as a hint to which possible interpretations might arise and that they should be controlled for in future work. What I did not address until now is the predicational construction, which is interesting in itself and surely deserves more investigation but can be set apart in the context of partitivity. 30 Another reason to put it aside are the results for these examples: the IA is virtually not present in the translation tasks but the acceptance rates (17% in BW and 10% in CH) cannot be neglected. Interestingly, the difference between BW and CH is less pronounced than in the other tasks. Additionally, although I will not display the maps for reasons of space, the distribution of this acceptance is highly scattered across the whole area, such that it must be assumed that there is a high amount of individual variation. But since the focus here is on partitivity with mass nouns. I will put it aside and leave it for future work. Another area where IA+mass is accepted in CH to a certain amount is the doubling construction. Richner-Steiner (2011) discusses in great detail doubling of the indefinite article in Swiss German, although in the context of intensifiers, i.e., particles like 'very' together with an adjective. 31 She shows that especially younger speakers accept doubling to a remarkable extent. Furthermore, there does not seem to be a relevant areal distribution of doubling. Interestingly, it occurs in CH even with the particle sehr (= 'very'), which is reported to be strictly excluded in Bavarian, cf. Kallulli and Rothmayr (2008). Finally, there is a high amount of variation between speakers. Thus, it seems that doubling in CH is not a deep-rooted dialectal feature. According to our data, doubling in CH-Alemannic was better accepted - or at least less rejected than the comparable partitive construction without a quantifier [map 3]. Thus, a possible explanation would be that this lesser rejection is due to the fact that doubling of the indefinite article (although in a slightly different context, i.e., intensifiers) seems to be a rather frequent pattern in modern CH-Alemannic. Given what was said about doubling as a rather 'surfacish' phenomenon, see Section 3.3, it might very well be the case that the effect arises through a 'pattern transfer', due to the surface resemblance between the two. Taking these considerations together, it is in my view justified to assume a micro-parametric difference between the two variants with respect to the IA+mass construction in its partitive reading.

The next step is then to model this difference within a suitable framework. I will do this in an exo-skeletal framework as first worked out in detail in Borer (2005) and much subsequent work. Specifically, I assume that lexical items enter the syntax as a-categorial roots, see, e.g., Embick and Nover (2007). In case of a nominal, this root merges with the categoriser 'little n'. Furthermore, I assume that these roots do not

³⁰ But see Le Bruyn 2010 (Part III), who argues that IA+predicational noun can also be captured with the notion of non-uniqueness, resp. the REL operator (or R-operator, as in Carlson 1977), see also Schulpen 2016 for a detailed discussion.

There is also a brief discussion of the construction with the weak quantifier - however, doubling in this context is not discussed.

come with more lexical specification than the mere discrimination between non-linguistic concepts (encyclopedia). This means that there is no mass/count distinction at this step of the derivation. I will come back to this issue below. Above little n, functional heads are added that give instructions for the actual interpretation, e.g., in English and German, if the plural suffix is added to the mass noun 'wine', the sort/type reading is forced. On the other hand, if a 'count noun' like 'fish' comes without further functional material, it gets a stuff reading (grinding effect). In recent years, more fine-grained structures than Borer's Div(ision) phrase have been suggested for this low area of the DP, based on empirical work on other languages and on theoretical considerations. I cannot do justice to this work here, but see for example the contributions in Mathieu, Dali and Zareikar (2018), I will broadly follow the nanosyntactic approach in which for every semantic feature, an extra head is projected in the syntax, see Baunaz et al. (2018), and importantly, neighbouring heads can be spelled out with the same lexical item (syncretism), whereby the notion 'lexical item' also involves affixes. In the case at hand, the relevant lexical item is the indefinite article and the different interpretations that it may contribute, as we have seen above. Another issue is to capture the variation between CH and BW that was detected in the previous sections. I will argue that the functional sequence, relevant for the issues here, looks as follows, given here as a table and ignoring for the moment the proper kind-reading in generic statements as well as the characterizing statements.

Table 4 The functional sequence and its lexicalisations in the various dialects

functional head	number	individual		partition	little n	√lexeme
meaning	counting	existential	subkind	subset vague	categoriser	encyclopedic
contribution				amount		
example	one N	a potato	such a N	aflour	no marking!	encyclopedic
			cf. (5), (8b), (7a)?	cf. (7e)	mass per default	
lexicalisation in	oa(n)-/	a(n)-		a(n)-	zero	encyclopedic
Bavarian and BW	oi(n)-					
lexicalisation in CH	ei(n,s)-	a(n,s)-		zero	zero	encyclopedic

The values in the row 'functional head' should be taken as X^0 categories, projecting to XP with a specifier if needed, see below. The hierarchical order of these projections starts with 'number' as the highest and ' $\sqrt{\text{lexeme}}$ ' as the lowest one. In the following, I will justify this sequence in some more detail. After that, the lexicalisation patterns will be discussed.³²

³² The numerals show a great variety of forms in the dialects under discussion. I have chosen only few as representatives. The relevant point is that they differ substantially

First, it seems undisputed that the IA can be an exponent of partition in the Germanic languages. There are various examples from MHG where we can detect it in environments like those in (7d) and (7e):

- (12) a. dô snê gevallen GL 1196,4 was ein MHG there was snow fallen 'There was fallen (some) snow.' (cited after Paul, Wiehl, Grosse 1998, 24 387)
 - daz brôt b. er âz und tranc zuo eines wazzers he ate the bread and drank there with IA-GEN water-gen 'He ate the bread and drank with it (some) water.' (Iw, V. 3310 - 3311)

(12b) shows that there was obviously a time when the IA and the genitive could even occur together and (12a) is a textbook example of a partitive, referring to a given subset and this subset is (i) a vague quantity and (ii) the partition is the result of an actual event. I thus take 'partition', the position directly above little n, as representing a spatio-temporally definable subset of the substance denoted by the mass noun, see also Acquaviva (2019) and the literature cited there. We can call it 'situational partitivity' and I will suggest informally that it is licensed only if the relevant DP is in the scope of an event variable which refers to an actual situation. It is this type of event variable that is lacking in generic and characterizing statements. Thus, the order and the meaning contribution of the functional heads within the nominal projection are the same in both cases, the relevant point is the temporal/aspectual marking in the VP/TP area. This draws a first rough line between having bare mass nouns in generic statements (in general without an IA) in contrast to the occurrence of the IA in episodic contexts.

Concerning partitivity in general, I will follow the idea, see originally Barker (1998), that partitivity necessarily involves true subtraction, specifically that there is a residue left, see Zamparelli (2008).33 This means that the entity named by the nominal expression is set in contrast to the remaining or residual part of the entity. In the case of situational partitivity, the subset in the actual event is contrasted with what is left over in the actual world. With the notion of contrast, we can capture the distinction between subkinds and pure

from the indefinite article in having a diphthong. Given this clear distinction between numerals and the IA, I will neglect the numeral in the following and leave its integration into the picture, specifically with respect to grammaticalisation, for future research.

³³ He implements this idea syntactically by assuming a R(esidue)P, headed by the partitive preposition, e.g., in Romance.

kinds guite easily: proper kinds merely differentiate between different kinds on the lexical/encyclopedic level, subkinds on the other hand imply that there is at least one contrasting subkind, having at least one distinguishing property. Recall that both are dominated by a 'higher kind', cf. the example with 'wine' and its subkinds 'red wine', 'white wine' etc. Thus, it is not only 'difference' but in fact 'contrast', since they also must share some properties. Concerning the more common use of the indefinite article for introducing a new discourse referent (existential reading, usually with a typical count noun, cf. 'a potato' [tab. 4]), it comes with a "non-uniqueness" implicature, see Le Bruyn (2010, chapter 5 for extensive discussion). This simply means that it is implied that there exist further instances of 'potatoes' in the world. Taking this again as contrasting one single instance to all the others left in the world, the parallelism to the situational partitivity is obvious. The suggestion thus is that the indefinite article lexicalises the abstract notion of contrast - and depending on the surrounding context - this may have different instantiations:

(13) The indefinite article lexicalises contrast, whereby contrast can apply to different concepts:

```
amount → situational partitivity (partition)
```

property/ies → subkinds

singling out one instance → existential reading

Note that I suggested one functional head 'individual' – but which can have two different interpretations, namely either as existential or as subkind – and recall that the actual interpretation is dependent on further factors in the aspectual/temporal domain. The reason for assuming the basic distinction between partition and individual is that subkinds and subsets (in the sense of situational partitivity) build a minimal pair when it comes to anaphoric reference. Consider (14):

- (14) Q: Hond ihr no **a** Mehl im Huus? have you still a flour in.the house 'Do you still have (some) flour in the house?'
 - *Na, Α. ich han PS an it *Ja ich han PS it no, I have as.well not / yes, have it intended: 'No, I don't have either.'/ 'Yes, I have some.'
 - A': Na, ich ha au **koas** / Ja ich ha **welles/0** no, I have as.well neg.indef / yes, I have some 'No,I don't have either.'/'Yes I have some.'

Although the mass noun is accompanied by the IA, it cannot be referred to anaphorically with a pronoun in the answer. Instead, the negative indefinite *kein*- has to be used or a partitive pronoun (*welles*) resp. a zero-form - which is the most common version in Alemannic, see Glaser (1993; 2008). If we compare this with either the 'construed' subkinds, discussed above, or with the regular ones accompanied by the particle so, a pronoun becomes possible:34

```
kaffee
(15) a. En
                            sott
                                            z'dünn
              coffee
                            should
                                       not too thin
         а
              suscht
                            schmeckt er
                                            it
              otherwise
                           tastes
                                       he
                                            not
         'Coffee shouldn't be too thin - otherwise it doesn't taste (well).'
```

b. So den gekauft? (guter) Wein! - Wo hast du ein wine where have you bought 'Such a good wine - where did you buy it?'

The difference is that the respective subkinds are individuals in the sense that they are properly distinguishable as different entities, due to the necessary contrasting properties. Hence the possibility to refer to them via pronouns. In the partition reading, only a vague amount from the same substance is distinguished, which is then not conceived of as an individual with clear-cut boundaries. 35 The shared property of all three of them is nevertheless the rather abstract notion of 'contrast'. In order to capture now the variation between CH/Standard German on the one hand and BW/Bavarian on the other, I will suggest that there is a small difference in the lexical entry of the IA. Whereas in BW/Bavarian, it lexicalises indeed only 'contrast', including thus partition, in CH/Standard German, 'contrast' is restricted to individuals:

(16) a. IA in BW/Bavarian: [contrast] b. IA in CH/Standard German: [contrast, individual]

The question then is how CH/Standard German lexicalise situational partitivity. Surely, this concept exists in these languages as well, and therefore must have a lexicalisation. I will suggest here for the sake

³⁴ I assume that it is the particle so which induces the subkind reading, lexicalised then by the IA. For the sake of concreteness, I suggest that it is located in the specifier position of the individuation head and thus scopes over this part of the functional sequence. The exact syntactic analysis awaits further research, but see Hohaus, Zimmermann 2021 for a proposal in semantic terms with a preliminary syntax.

³⁵ Note that as soon as a measure phrase is involved, the expression is interpreted as an individual, as it can be counted, cf. 'three liters of wine'.

of concreteness, following Adger (2013), that a lexical item can move higher up in the functional sequence and lexicalise the relevant semantic feature by itself. Thus, the root, after having combined with little n, and being now categorised as a noun, moves one position higher up and is interpreted now as a (situational) partitive. The cells with 'zero' [tab. 4] thus do not contain a 'zero-exponent' - but the lexical noun itself occupies this position. In BW/Bavarian, this movement does not take place, instead the IA is inserted and lexicalises the partition head directly - due on the one hand to its specification as only 'contrast' and on the other, due to its neighbourhood to the individuation head, i.e., this 'spreading' can be taken as an instance of syncretism. In CH/Standard German, the IA can be inserted only from the individual layer on upwards. Thus, the syntax, the functional sequence above little n, is in all the variants the same; the difference in the output, i.e., whether IA+mass is accepted or not, is simply due to the more liberal conception of 'contrast' in BW/Bavarian. Note that this model is well-suited to capture the different outputs concerning translation and acceptance tasks. The only assumption that must be made is that the speakers who accept IA+mass, but do not produce it actively, have both lexical entries in their lexicon and thus judge it as a further possible version - if they are allowed to - as in a judgment task. If a given speaker is more often confronted with it, as it is presumably the case close to the Bavarian border, this version then becomes prevalent such that it is also actively produced. Under this perspective, what is called in traditional dialectology 'transition zones', where speakers seem to have a 'mixed grammar', could then be modelled quite easily: The syntax, i.e., the presence and order of the functional heads, is constant but the lexicalisation may vary. As the neighbouring head (individuation) is realised in all dialects under discussion by the IA, a 'shift' one step further down is licit, according to the assumptions of lexicalisation within the nano-syntactic framework.

Concerning the lower acceptance of a pseudo-partitive with a weak quantifier in contrast to the 'bare' one in BW, I suggest that these weak quantifiers are situated in the specifier of the partition phrase and those speakers who do not use the IA+mass in this context obey something akin to the Doubly filled Comp filter (DFC) in that both positions cannot be lexicalised simultaneously. Concerning the lesser rejection in CH, see the remarks about doubling above. A DFC kind of explanation would then also hold for measure phrases/container nouns and other weak quantifiers that do not co-occur with an IA. Recall that in earlier stages, container nouns were followed by a noun in the genitive but that in this case, the genitive was not 'replaced' by the IA. We can either assume that again something like the DFC is at stake or - as is widely assumed in the grammaticalisation literature, cf. Van Gelderen (2004) - that the phrase that was originally situated in the specifier has been reanalysed as a head and lexicalises

the partition head now directly - leaving no more room for an IA. But since the head is lexicalised nevertheless, the output is grammatical. However, this does not explain the strict impossibility of the IA+mass with measure phrases/container nouns. But since I do not have independent confirmation of this fact. I will leave it for future work.

To make the picture complete, here are only a few remarks concerning 'proper kinds'. I will follow the analysis proposed in Borik and Espinal (2015), who suggest that the kind reading is captured best if one assumes an impoverished functional structure above a traditional NP-projection. In their syntactic structure, there is only one functional head, namely number, which they assume to be lacking in kind readings. Instead, the NP, denoting a property, as is commonly assumed, is dominated directly by D, lexicalised by the definite article in the Romance languages - on which their proposal is built. 36 In the proposal here, the highest projection would then be little n. As indicated [tab. 4], if the derivation stops here, i.e., no more functional structure is added, the nominal gets a mass interpretation by default. And such a structure would then be relevant for mass nouns in generic statements, for which we saw above that they occur predominantly without an IA. But what about the generics with count nouns? In the Germanic languages, the usual way to lexicalise a kind reading is to use a bare plural, i.e., something like 'cats catch mice'. Now plural is one instance of number and thus one would have to assume that the whole structure is projected until number is reached, since plural operates on individuals. 'Cutting out' the functional structure in between would not be an option since then there is no layer for the individual interpretation and thus, the plural operation would 'run empty'. However, Geist and Błaszczak (forthcoming) and Geist (2023) argue, based on Mathieu (2012), that there is a functional head dubbed by them as "mass plural" and which is located below DIV in Borer's framework (individuation here). This head is lexicalised by the usual plural morphology but it brings in a different semantics. The observation is, again especially in food contexts, that a plural like 'carrots' can combine in German with the uninflected form of the quantifier viel ('much, many') and then gets a substance/ kind reading, i.e., something like there is 'too much carrot in the soup', i.e., something akin to the grinding effect. If the quantifier is inflected, the usual count/individual reading shows up again. 37 Thus,

³⁶ I have nothing to say here about the definite article that occurs obligatorily in the Romance languages in this reading - a possibility that is also found in Germanic. But note that the definite article belongs to a region that is responsible for 'linking', if one follows Wiltschko's (2014) approach of universal (functional) categories, i.e., it regulates how the nominal expression is integrated into the discourse. As such, it is not directly involved in the construal of the kind reading.

See Ruys 2017 for a similar effect in Dutch with the same type of quantifier.

with an expression like viel-e Karrotten 'many carrots', reference is made to whole individual carrots. Whatever the role of (non-)inflection is and whatever head in the functional above it realises, such observations show again that only a much finer grained functional structure above the nominal is able to capture the whole range of the possible different readings of lexical nouns. Coming back to the kind reading, the suggestion thus is that the bare plurals in kind readings in German(ic) make use of this "mass plural". The kind reading itself arises through such an impoverished structure of the DP together with the relevant operator in the verbal/clausal projection. The characterizing statements with an indefinite article, cf. (8), which are - recall - very close to kind readings but not identical, have a nominal syntax with a lexicalisation of the head 'individual', but the aspectual/temporal specification of the clause in which they occur is at least non-episodic, i.e., without a specific time reference and thus lead to a generic interpretation.

6 Conclusion

Starting with the well-documented phenomenon that in Bavarian, mass nouns may occur with the indefinite article, this essay reported how this construction was examined in more detail in Alemannic within the project SynAlm. As a first result, the observation that the construction occurs in the neighbouring Alemannic dialects as well, could be confirmed - with a high acceptance in BW but a very reluctant one in CH. A closer examination of neighbouring constructions revealed that the phenomenon has indeed much more facets than a mere two-fold distinction between 'having the IA+mass construction or not' would suggest. It turned out that many more factors have to be considered: concerning the nominal expression itself and the possibility to insert an indefinite article, the notion of the subkind reading - in contrast to the subset (situational partitivity), the proper kind, the characterizing statement, and the existential reading - plays a crucial role, as with this reading, the IA+mass can be subsumed under 'individual' and thus the IA is licensed (or even required) also in those dialects that do not lexicalise situational partitivity with the IA. This situation was modelled with a fine-grained functional sequence above the noun with different lexicalisation options, whereby the common semantic building block 'contrast' was suggested to encompass all usages in all dialects. Some have a richer lexical entry (restricted to individuals) and thus a more restricted distribution. With this kind of modelling, the huge difference found in translation and acceptance tasks can be captured quite easily, as there is only one component within the lexical entry at variance. And given that the very same functional sequence is present in all languages, only a

small step is needed for 'dropping' this component and in turn accept the IA+mass also in the situational partitivity reading.

Concerning the verbal predicate and the aspectual/temporal specification of the clause, it was observed that here as well many more factors may play a role when informants construe the situation on the basis of a given sentence. For the relatively high acceptance of the IA+mass under the intensional verb brauchen ('need'), it was speculated that some speakers construed rather subkinds (intended) partition. And since subkinds are lexicalised with the IA, the deviant results could then be captured. Whether these speakers indeed had such a reading in mind, cannot be proven on the basis of the data we have. But such a possibility should be kept in mind and the context be controlled for accordingly in future work on partitives and their exponents.

Still, the data obtained gave rise to the following theoretical considerations. Following recent exo-skeletal approaches to syntax, I suggested a universal fine-grained, semantically motivated, functional structure above the lexical root. Differences between languages are not due to different syntactic structures (e.g., Bavarian has an 'additional' D⁰-head for the IA), rather, the variation is to be sought in the differing possibilities to lexicalise these heads. The place of variation is thus entirely restricted to the lexicon. However, languages do not randomly select any lexical items, rather the lexical item in question must stand for a concept that is plausibly connected to the respective functional head. In the case of the IA, I suggested that the relevant basic notion that it stands for is that of 'contrast', being a component in all attested usages discussed here. The difference is that some variants apply this concept very broadly, which means that the partitioning of substance (situational partitivity) is covered by it, i.e., IA+mass is possible, whereas others apply 'contrast' to distinguishing properties, i.e., IA+mass is only possible in subkind readings. Finally, it was discussed how this structure (and its various lexicalisation possibilities) might be able to capture neighbouring constructions like pure kind readings, the combination with weak quantifiers and/or measure phrases. Needless to say that much more work is needed to justify or probably further refine this structure.

Abbreviations and Notations

BW	Baden-Württemberg
CH	Switzerland
DAT	dative
FEM	feminine
GEN	genitive
IA	Indefinite article
MHG	Middle High German

plural PL

Bibliography

- Acquaviva, P. (2019), "Categorization as Noun Construction, Gender, Number, and Entity Types". Mathieu, E.; Dali, M.; Zareikar, G. (eds), Gender and Noun Classification. Oxford: Oxford University Press, 41-63. https://doi. org/10.1093/oso/9780198828105.003.0003.
- Adger, D. (2013). A Syntax of Substance. Cambridge, Mass.: MIT Press. https:// doi.org/10.7551/mitpress/9780262018616.001.0001.
- Anderson, C.; Morzycki, M. (2015). "Degrees as Kinds". Natural Language & Linguistic Theory, 33(3), 791-828. https://doi.org/10.1007/s11049-015-9290-z.
- Barker, C. (1998). "Partitives, double genitives and anti-uniqueness". Natural Language & Linguistic Theory, 16(4), 679-717. https://www.jstor.org/ stable/4047919.
- Baunaz, L. et al. (2018). Exploring Nanosyntax. Oxford: Oxford University Press. https://doi.org/10.1093/oso/9780190876746.001.0001.
- Borer, H. (2005). Structuring Sense, vol. 1. Oxford: Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199263905.001.0001.
- Borik, O.: Espinal, M.T. (2015), "Reference to Kinds and to Other Generic Expressions in Spanish: Definiteness and Number". The Linguistic Review, 32(2), 167-225. https://doi.org/10.1515/tlr-2014-0023.
- Brandner, E. (2010). "On the Syntax of Verb-Initial Exclamatives". Studia Linguistica, 64(1), 81-115. https://doi.org/10.1111/j.1467-9582,2010,01167,x.
- Brandner, E. (2020). "A 'Borderline Case' of Syntactic Variation". Glossa, 5(1), 25. https://doi.org/10.5334/gjgl.606.
- Brandner, E. (2021). "Areal Patterns and Their Relevance for the Linguistic Analysis - The Case of (indefinite) Determiner Doubling in Southern German dialects". Talk given at the MVC21 (Morphosyntactic Variation and Change), March 2021, Cambridge (online).
- Brandner, E.; Salzmann, M. (2012). "Crossing the Lake: Motion Verb Constructions in Bodensee-Alemannic and Swiss German". Ackema, P. et al. (eds), Comparative Germanic Syntax: The State of the Art. Amsterdam: John Benjamins, 67-98. https://doi.org/10.1075/la.191.03bra.
- Carlson, G.N. (1977). Reference to Kinds in English [PhD Dissertation]. University of Massachusetts: Amherst. http://semanticsarchive.net/ Archive/ik3NzRlY/.
- Cohen, A. (2001). "On the Generic Use of Indefinite Singulars". Journal of Semantics, 18(3), 183-209. https://doi.org/10.1093/jos/18.3.183.
- Cornips, L.; Poletto, C. (2005). "On Standardising Syntactic Elicitation Techniques (part 1)". Lingua, 115(7), 939-57. https://doi.org/10.1016/j. lingua.2003.11.004.
- Corver, N. (1990). The Syntax of Left Branch Constructions [PhD Dissertation]. Tilburg: Tilburg University.
- Diertani, C. (2011). Morpheme Boundaries and Structural Change: Affixes Running Amok [PhD Dissertation]. Philadelphia: University of Pennsylvania. https://repository.upenn.edu/handle/20.500.14332/30064.
- Donhauser, K. (1995). "Gibt es einen Indefinitartikel Plural im Althochdeutschen? - Überlegungen zur Syn-und Diachronie des deutschen Artikelsystems". Arndt, E; Brandt, G. (Hrsgg.), Wie redet der Deudsche man inn solchem fall?. Stuttgart: Heinz, 61-72.
- Embick, D.; Noyer, R. (2007). "Distributed Morphology and the Syntax-Morphology Interface". Ramchand, G.; Reis, C. (eds), The Oxford Handbook of

- Linguistic Interfaces. Oxford: Oxford University Press, 289-324. https:// doi.org/10.1093/oxfordhb/9780199247455.013.0010.
- Eroms, H.-W. (1989). "Artikelparadigmen und Artikelfunktionen im Dialekt und in der Stadardsprach". Koller, E.; Wegstein, W.; Wolf, N.R. (Hrsgg), Bayerisch-österreichische Dialektforschung. Würzburger Arbeitstagung 1986. Würzburg: Königshausen, 305-28.
- Featherston, S. (2005). "The Decathlon Model of Empirical Syntax". Reis, M.; Kepser, E. (eds), Linguistic Evidence: Empirical, Theoretical and Computational Perspectives. Berlin: Mouton De Gruyter, 187-208. https://doi. org/10.1515/9783110197549.187.
- Geist, L. (2023). "Plurals as Collectives: A Constructivist Approach". Talk given at Linguistics Colloquium, University of Stuttgart, 20 July 2023.
- Geist, L.; Błaszczak, J. (forthcoming). "Distributed Plural Hypothesis in Russian and Polish". Jędrzejowski, Ł. et al. (eds), Syntax, Semantics, and Lexicon. Papers by and in Honor of Ilse Zimmermann. Berlin: Language Science Press. Open Slavic Linguistics.
- Glaser, E. (1993). "Syntaktische Strategien zum Ausdruck von Indefinitheit und Partitivität im Deutschen (Standardsprache und Dialekt)". Abraham, W.; Bayer, J., (Hrsgg.), Dialektsyntax. Opladen: Westdeutscher Verlag, 99-116. https://doi.org/10.1007/978-3-322-97032-9_5.
- Glaser, E. (1995). "Die syntaktische Nullstelle eine Kennform des Alemannischen?". Löffler, H. (Hrsg.), Alemannische Dialektforschung. Tübingen; Basel: Francke, 65-79.
- Glaser, E. (1996). "Morphologie und Funktion des unbestimmten Artikels im Bairischen". Eroms, H.-W.; Scheuringer, H. (Hrsgg.), Sprache an Donau, Inn und Enns. Vorträge des Symposions zu Sprache und Kultur des altbairischen Raumes, zugleich Zweite Arbeitstagung zu Sprache und Dialekt in Oberösterreich, vom 12. bis 14. Mai 1994 auf Burg Neuburg am Inn. Linz: Adalbert-Stifter-Institut des Landes Oberösterreich, 149-69.
- Glaser, E. (2008). "Syntaktische Raumbilder". Peter, E.; Patocka, F. (Hrsgg.), Dialektgeographie der Zukunft. Akten des 2. Kongresses der Internationalen Gesellschaft für Dialektologie des Deutschen (IGDD) am Institut für Germanistik der Universität Wien, 20. bis 23. September 2006. Stuttgart: Steiner, 85-111. Zeitschrift für Dialektologie und Linguistik. Beihefte 135.
- Grestenberger, L. (2015). "Number Marking in German Measure Phrases and the Structure of Pseudo-Partitives". The Journal of Comparative Germanic Linquistics, 18(2), 93-138. https://doi.org/10.1007/s10828-015-9074-1.
- Hohaus, V.; Zimmermann, M. (2021). "Comparisons of Equality with German 'so... wie', and the Relationship between Degrees and Properties". Journal of Semantics, 38(1), 95-143. https://doi.org/10.1093/jos/ffaa011.
- Kallulli, D.; Rothmayr, A. (2008). "The Syntax and Semantics of Indefinite Determiner Doubling Constructions in Varieties of German". The Journal of Comparative Germanic Linguistics, 11, 95-136. https://doi.org/10.1007/ s10828-008-9019-z.
- Kolmer, A. (1999). "Zur MASS/COUNT-Distinktion im Bairischen: Artikel und Quantifizierung". Arbeitspapier/Institut für Sprachwissenschaft, Universität
- Krifka, M. (2003). "Bare NPs: Kind-Referring, Indefinites, Both, or Neither?". Semantics and Linguistic Theory, 13, 180-203. https://doi.org/10.3765/ salt.v13i0.2880.
- Le Bruyn, B. 2010. Indefinite Articles and Beyond. Utrecht: LOT, Landelijke Onderzoekschool Taalwetenschap.

- Mathieu, É. (2012). "Flavors of division". Linguistic Inquiry, 43(4), 650-79.
- Mathieu, É.; Dali, M.; Zareikar, G. (eds) (2018). Gender and Noun Classification, vol. 71. Oxford: Oxford University Press. https://doi.org/10.1093/ oso/9780198828105.001.0001.
- Moltmann, F. (2013). "The Semantics of Existence". Linguistics and Philosophy, 36.31-63.https://doi.org/10.1007/s10988-013-9127-3.
- Paul, H. (1919). Deutsche Grammatik III. Tübingen: Niemeyer.
- Paul, H.; Wiehl, P.; Grosse, S. (eds) (1998). Mittelhochdeutsche Grammatik. 24. Auflage überarbeitet von Peter Wiehl und Siegfried Grosse. Tübingen: Niemeyer.
- Rehn, A.; Brandner, E. (2022). "Bad Data can be Good Data the Significance of Different Methods for Syntactic Theorizing". Hörnig, R. et al. (eds), Proceedings of Linguistic Evidence 2020: Linguistic Theory Enriched by Experimental Data, Tübingen: University of Tübingen, 257-79.
- Rett, J. (2011). "Exclamatives, Degrees and Speech Acts". Linguistics and Philosophy, 34, 411-42. https://doi.org/10.1007/s10988-011-9103-8.
- Richner-Steiner, J. (2011). E ganz e liebi Frau. Zu den Stellungsvarianten in der adverbiell erweiterten Nominalphrase im Schweizerdeutschen. Eine dialektologische Untersuchung mit quantitativ-geographischem Fokus [PhD Dissertation]. Zürich: Universität Zürich.
- Ruys, E.G. (2017). "Two Dutch 'Many's' and the Structure of Pseudo-Partitives". Glossa, 2(1), 7, https://doi.org/10.5334/gigl.276.
- Schulpen, M.E. (2016). Conceptual Restrictions on Weakly Referential Constructions: Evidence From Modification. [PhD Dissertation]. Utrecht: Utrecht University.
- Sleeman, P.; Giusti, G. (eds) (2021). Partitive Determiners, Partitive Pronouns and Partitive Case. Berlin; Boston: De Gruyter. https://doi. org/10.1515/9783110732221.
- Staedele, A. (1927). Syntax der Mundart von Stahringen [PhD Dissertation]. Tilburg im Breisgau: Universität Freiburg.
- Strobel, T.; Glaser, E. (2021). "The Rise and Fall of Partitive Markers in Some Germanic Varieties". Ihsane, T. (ed.), Disentangling Bare Nouns and Nominals Introduced by a Partitive Article. Leiden; Boston: Brill, 17-53. Syntax & Semantics 43. https://doi.org/10.1163/9789004437500_003.
- Strobel, T.; Weiß, H. (2017). "Möglichkeiten der Reduplikation des Indefinitartikels im Bairischen". Lenz, A. et al. (Hrsgg), Bayerisch-österreichische Varietäten zu Beginn des 21. Jahrhunderts – Dynamik, Struktur, Funktion, Stuttgart: Franz Steiner, 71-88. Zeitschrift für Dialektologie und Linguistik - Beiheft 167.
- Sutton, P.; Filip, H. (2018). "Restrictions on Subkind Coercion in Object Mass Nouns". Proceedings of sinn und bedeutung, 21(2), 1195-214.
- Van Gelderen, E. (2004). "Economy, Innovation, and Prescriptivism: From Spec to Head and Head to Head". The Journal of Comparative Germanic Linguistics, 7,59-98. https://doi.org/10.1023/b:jcom.0000003601.53603.b2.
- Wiltschko, M. (2014). The Universal Structure of Categories: Towards a Formal Typology. Cambridge: Cambridge University Press. https://doi. org/10.1017/cbo9781139833899.
- Zamparelli, R. (2008). "Dei Ex Machina: A Note on Plural/Mass Indefinite Determiners". Studia Linguistica, 62(3), 301-27. https://doi. org/10.1111/j.1467-9582.2008.00149.x.

Partitive Constructions and Partitive Elements Within and Across Language Borders in Europe

edited by Elvira Glaser, Petra Sleeman, Thomas Strobel, Anne Tammm

Pseudo-Partitives and Individuation

A Study on Adnominal Genitives in German

Alexander Pfaff

University of Stuttgart, Germany

Abstract Pseudo-partitives in German do not normally allow genitive marking of the inner nominal, but in the presence of an adjective this is possible. But even then, it is usually a marked option. It has been suggested that genitive marking is the preferred option if the inner nominal is plural. This is partly true, but we adduce additional observations suggesting that there are also semantic conditions making reference to the degree of individuation of the referent of the inner nominal: genitive marking is preferred if the inner nominal denotes a plurality of referents that are high on the individuation scale.

Keywords Pseudo-partitive. Individuation. Genitive. German. Adjectival inflection.

Summary 1 Introduction. – 2 Genitives and Pseudo-Partitives. – 2.1 The Genitive Problem. – 2.2 Genitive or Not? – 3 Data Assessment and Reflections. – 3.1 Practical Considerations. – 3.2 The Survey. – 3.3 Some Further Comments. – 4 Theoretical Ramifications. – 5 Concluding Remarks.



1 Introduction

Simple pseudo-partitives in German involve juxtaposition of two nominals, the classifier measure noun and the inner nominal. Genitive marking on the inner nominal is not normally an option:

(1) ein Liter / Glas Wein a. a liter / glass wine 'a liter / glass of wine' ein Kilo / Sack Karotten a kilo / sack carrots 'a kilo / sack of carrots' *ein Liter / Glas Wein-es c. a liter / glass wine-GEN

In the presence of an adjective, however, genitive marking is possible, but even here it is not mandatory. Instead we observe a competition of various constellations. For simplicity, we will only focus on the aspect most relevant here - the presence/absence of genitive marking:

(2)ein Liter französisch-en Wein-es a liter French-wk.GEN wine- GEN ein Liter französisch-er Wein b. a liter French-NOM.SG wine 'a liter of French wine'

For the most part, it would seem as though this is a matter of style/ register; to a great extent, use of the genitive is a feature of formal/ written language. This would explain why the genitive is not normally used in pseudo-partitives (even when possible), and dispreferred when compared to alternative constructions. A recent study by Zimmer (2015) argues that, at least with plural inner nominals, the genitive is actually the preferred option. We will argue here that this

We would like to thank two anonymous reviewers for valuable comments and constructive feedback on a previous draft, which helped improve the quality of this article considerably. All remaining shortcomings are ours.

One point deserves mentioning; we have not been able to incorporate all suggestions by the reviewers, notably those concerning aspects of the methodology. The reason is that the study underlying the discussion was a mere preliminary survey intended to get a first impression of a range of phenomena. It does not fully comply with the standards for experiment design, but cannot be modified after the fact, either. We will incorporate the suggestions unaddressed here in a follow-up study (in preparation).

1 We adopt the term "inner nominal" from Falco, Zamparelli 2019, and analogously use "outer noun/nominal" for the classifier/measure noun.

observation is a step in the right direction, but also that it is not the context plural per se that favours the genitive. We will suggest that the genitive appears to make a semantic contribution in that it has an individuation effect, or, conversely, that the genitive is the preferred option *iff* the referent of the inner nominal is high on the scale of individuation, or construed as a plurality of individuals.

This claim, if true, could have far-reaching consequences for the analysis of pseudo-partitives or even genitive noun phrases more broadly in Modern German. However, the data situation is not as clear as suggested above, and it is far from obvious to what extent other native speakers share this intuition. The problem lies in the status of the genitive; semantic and stylistic considerations overlap, and with individual examples it is not clear at all how to evaluate/judge the genitive.

The article is structured as follows. In Section 2, we will discuss the (morphosyntactic) licensing conditions and use of (adnominal) genitives in Modern German. We will then look specifically at genitives in pseudo-partitives and suggest that the genitive has an individuation effect on the referent of the inner nominal. In Section 3, we will discuss a preliminary survey that, to some extent, corroborates this underlying intuition, but also offer some critical reflection and comments. Section 4 briefly addresses some theoretical concerns, and Section 5 concludes.

2 Genitives and Pseudo-Partitives

Even though, technically, Modern German possesses morphological genitive marking for certain items, its precise status as an element of German grammar is rather elusive. To a great extent, the genitive is on the retreat in (spoken) German, its function being taken over by the preposition *von*:

(3)	a.	das Auto	von	mein-em	Lehrer
		the car	from	my-dat	teacher
		'my teacher's c	ar'		
	b.	die Schwester	von	mein-em	Lehrer
		the sister	from	my-dat	teacher
		'my teacher's s	ister'		
	c.	manche	von	d-en	Äpfel-n
		some	from	the-dat	apples-рат
		'some of the ap	ples'		

Several German dialects have completely lost a morphological genitive, but also in Standard German, which does still possess the genitive, use of the genitive is often associated with a higher register or

written language. Colloquially, the prepositional paraphrase is typically preferred. Setting aside this particular issue, there are some peculiar morphological and morpho-syntactic aspects to consider.

In general, the exponence of nominal inflection is rather deficient, but in contexts such as possession, kinship, and (proper) partitivity, morphological genitive marking on the dependent noun phrase (~ inner nominal) is a possibility; compare (3) and (4):

(4)	a.	das Auto	d-es	Lehrer-s
		the car	the-GEN	teacher-GEN
		'the teacher's	car'	
	b.	die Schwester	d-es	Lehrer-s
		the sister	the-GEN	teacher-GEN
		'the teacher's	sister'	
	c.	manche	d-er	Äpfel
		some	the-GEN.PL	apples
		'some of the ap	ples'	

Run-of-the-mill pseudo-partitive constructions, on the other hand, usually comprise a juxtaposition of two nouns without any dependency marking, notably without genitive marking on the inner nominal:²

This is not, however, the whole story because, in the presence of an adjective, it is possible to mark the inner nominal with a genitive. In Section 2.1, we fill first address the licensing of adnominal genitives in Modern German, and in Section 2.2, we will look at some semantic consequences.

2 In older stages of German, the genitive was regularly used in such contexts:

(i)	a.	zua flasgun uuin-es	(Old High German)
		two bottles wine-gen	
		DDD-AD-Kleinere_Alth	ochdeutsche_Denkmäler_1.2 > BR1_BaslerRezept1
	b.	zehenzug mezzo	ol-es
		a hundred measure	oil-gen
		DDD-AD-Tatian_1.2 > T_	_Tat108

These examples are retrieved from the Referenzkorpus Altdeutsch (Reference Corpus of Old German) via the ANNIS search interface at https://korpling.german.hu-berlin.de/annis3/ddd). Zimmer (2015, § 2) gives a brief overview of the decline of the partitive genitive from Middle High German onwards.

The Genitive Problem 2.1

While masculine and neuter (= [-FEM]) nouns have a genitive singular exponent, feminine nouns do not display any case marking at all. The [-FEM.SG] exponent -(e)s is associated with strong nouns, where the qualifier 'strong' makes reference to an inflectional class (diachronically, a family of inflectional classes). Besides, there is a class of 'weak' masculine nouns that display a general oblique-case marker -(e)n. Plural nouns do not have a genitive exponent at all.³

Adjectives, on the other hand, have two kinds of inflection; they can inflect both strongly and weakly. This is a property of the category A, rather than a lexical property of individual items. It is the morphosyntactic environment that determines which inflection is chosen: if an (adnominal) adjective is preceded by an inflected determiner, it inflects weakly, if it is preceded by a zero element, it inflects strongly. However, the adjectival inflection has lost the strong genitive ending -(e)s for the [-FEM.SG] forms and uses the weak form instead. Determiners only display the strong inflection. Both adjectives and determiners have a (strong) plural exponent for the genitive.

With these basic facts in place, let us have a closer look at genitival noun phrases. First observe that a genitive noun phrase cannot comprise merely a bare noun (examples are based on Sternefeld 2004. 21):

```
(6)
     der Geschmack...
     'the taste (of)...'
          *Wein-es
                       (masc, strong; genitive realised = strong genitive)
                       (intended: 'the taste of wine')
          wine-GEN
         *Limonade
                       (fem; no genitive exponent)
          lemonade
                       (intended: 'the taste of lemonade')
          *Bär-en
                       (masc, weak; case realised = weak oblique)
          bear-wĸ
                       (intended: 'the taste of (a) bear/bear-meat')
```

3 As an anonymous reviewer points out, nominalised adjectives could be viewed as '(apparent) counterexamples'; nominalised adjectives and participles retain the adjectival inflection, and as such, they do have a genitive plural ending (see next paragraph):

```
(i) die Angewohnheit Jugendlich-er
    the habit
                        youthful-GEN.PL
    'the habit of teenagers (lit.: young-ones)'
```

For the purpose of this article, we will disregard deadjectival nouns.

4 Thus, while gut-es Wein-es 'good-str.gen wine-str.gen' was an option until ca. the nineteenth century, Modern German uses gut-en Wein-es 'good-wk wine-str.gen' instead (Wein 'wine' is masculine).

*Wiirst-e (plural; no genitive exponent) sausage-PL (intended: 'the taste of sausages')

This is a formal property of the genitive per se in that the restriction applies to adnominal genitives at large, regardless of the semantics the relation is to express:5

(7) *ein Glas / ein Liter Wein-es a. a glass / a liter wine-gen *ein Freund b. Wein-es a friend wine-gen *der Verzehr Wein-es c. the consumption wine-GEN

There are two conditions for genitive noun phrases to be light; (i) the noun has to be accompanied by an inflecting element (adjective, determiner), and (ii) at least one of the inflecting elements involved has to have a strong genitive ending. The latter condition entails that the genitive may be realised only on the noun, cf. (8a)/(11a), only on an adjective/determiner, cf. (9)/(11b), or on two elements simultaneously, cf. (8b). Since, by definition, weak (masculine) nouns have no strong genitive marker and adjectives are defective in the genitive for [-FEM.SG], neither can satisfy condition (ii) and an additional element is required, cf. (10a) vs. (10b):

der Geschmack... 'the taste (of)...' gut-en Wein-es (8) (masc, strong) good-wĸ wine-STR.GEN.SG.-FEM 'the taste of good wine' (masc, strong) this-str.gen.sg.-fem wine-str.gen.sg.-fem 'the taste of this wine'

5 For comparison: in Icelandic, the genitive cannot be used with pseudo-partitives as in German, see example (i-a) below, cf. (7a), but it is fine with other kinds of semantic relations, as in (i-b-d), cf. (6a) and (7b-c):

(i) a. *alas / *lítri vín-s c. neysla vín-s glass / liter wine-GEN consumption wine-GEN b. vinur vín-s d. bragð vín-s friend wine-GEN taste wine-gen

(9) frisch-er Limonade (fem) a. fresh-STR.GEN.SG.FEM lemonade 'the taste of fresh lemonade' dies-er Würst-e b. (pl) these-STR.GEN.PL sausage-PL 'the taste of these sausages' (10) a. *gebraten-en Bär-en (masc, weak) steaked-wĸ bear-wĸ h. ein-es aebraten-en Bär-en a-STR.GEN.SG.-FEM steaked-wĸ bear-wĸ 'the taste of a steaked bear'

If conditions (i) and (ii) are satisfied, genitive marking is possible in all kinds of nominal relations, (apparently) regardless of the semantics – including on pseudo-partitives:

(11)	a.	ein Freund a friend	<i>gut-en</i> good-wк	Wein-es wine-str.gen.sgfem
	b.	der Verzehr the consumption	<i>lecker-er</i> delicious-s	Würst-e TR.GEN.PL sausage-PL
	c.	ein Glas / ein Liter a glass / a liter	<i>gut-en</i> good-wк	Wein-es wine-str.gen.sgfem

This phenomenon is well known (see e.g. Schachtl 1989; Gallmann 1990; 1996; 1998; Müller 2002; Sternefeld 2004; 2006; Zimmer 2015; see Gallmann 2018 for a recent discussion and some complications), but it is an open question how to best account for it. We will not be concerned with its actual analysis, but rather use it as a backdrop against which we describe another observation. In the following, we will use the gloss GEN for strong genitives (on determiners, adjectives and nouns), and AGR for everything else (weak or non-genitive forms).

2.2 Genitive or Not?

It has transpired that pseudo-partitives can involve genitive marking after all, provided the inner nominal is modified by an adjective. Nonetheless, the fact that genitive marking is possible here does not entail that it is mandatory in these contexts. In fact, zero-marking on the noun seems to be the default, even in the presence of an (inflecting) adjective, while the genitive version is stilted and sounds archaic or artificial. The adjective in the non-genitive version tends

to agree in case with the outer nominal (but in gender with the inner nominal), i.e. it displays the case that is assigned to the macro noun phrase by the external context.6

```
(12) a.
           ein Glas kühl-es
                                    Rier
           a glass
                    cool-AGR
                                    heer
           (AGR = NEUT.NOM/ACC; Bier is neuter)
     b.
           ein Glas gut-er/gut-en Wein
           a glass good-AGR wine
           (AGR = MASC.NOM / MASC.ACC; Wein is masculine)
           ein Glas frisch-e
                                    Milch
           a glass fresh-AGR
                                    milk
           (AGR = FEM.NOM/ACC; Milch is feminine)
```

We will refer to the two types as AGR and GEN, respectively. In individual cases, the contrast between the AGR and the GEN versions may be perceived as stronger than in others, but largely it seems as though there really is only a stylistic difference - at least, in the singular.

2.2.1 Zimmer (2015): Genitives and Plurals?

Zimmer (2015) reports on a study (judgement tasks) on the morphosyntactic expression of pseudo-partitivity. In particular, he examines the roles of adjectival inflection and (non-) genitive marking. One finding is that the genitive is a marked and dispreferred option in most contexts even though the inner nominal involves an adjective. He suggests, however, that grammatical number makes a difference reporting that genitive marking is clearly the preferred option if the inner nominal is a plural, irrespective of the external case environment. Some examples including the judgement mean are given below (the scale ranges from 6 = perfect to 1 = totallyunacceptable):

⁶ Put differently: the outer nominal is opaque to case assignment from outside. While this is largely true for noun phrases in nominative/accusative contexts, there are complications, uncertainties and speaker variation in other case environments; see Zimmer 2015 for discussion and further references.

⁷ He looks at a number of alternatives to genitive marking on the inner nominal, e.g. dative or accusative or weak inflection on the adjective (all these are summarised here as AGR), and contrasts those with genitive marking on the adjective (and, where applicable, noun).

[&]quot;Partitive Genitive werden bei Artangaben im Plural deutlich besser bewertet als bei Artangaben im Singular. Der partitive Genitiv wird unabhängig davon, welcher Kasus vorausgeht, im Plural als sehr gut bewertet" (Zimmer 2015, 15).

(13)	a.	[] wie ein Rudel hungrig-er	Wölfe	4,9
		like a pack hungry-gen	wolves	
	b.	[] mit einer Gruppe jung-er	Menschen []	5,5
		with a group young-gen	people	
	c.	[] mit einer Gruppe jung-e/jung-en	Menschen[]	1,5
		with a group young-AGR	people	
		(Zimmer 2015, 15-16)		

This is a rather interesting observation, which implies that the behaviour of plural inner nominals deviates from that of singular ones. But the issue is more complex than that. Zimmer puts emphasis on the formal property PLURAL, but notice that all of his (plural) examples involve living beings (humans and wolves). As we will show in the following, number may be a precondition for a higher acceptability of the genitive in pseudo-partitives, but there appear to be other semantic factors as well.

2.2.2 Kinds and Individuation

With the results of Zimmer's study in mind, consider the following examples:

```
(14) Ich hätte gerne...
     'I'd like to have...'
     ein Kilo
                  aelb-e
                                Rüben
     a kilo
                  yellow-AGR turnips
     'a kilo of carrots'
     ???ein Kilo gelb-er
                                Rüben
      a kilo
                  yellow-GEN turnips
     'a kilo of yellow turnips'
     ein Kilo
                  saur-e
                                Gurken
b.
     a kilo
                  sour-AGR
                                cucumbers
     'a kilo of pickled cucumbers' or: a type of candy ('Sour Pickles')
     ???ein Kilo saur-er
                                Gurken
      a kilo
                                cucumbers
                  sour-gen
      'a kilo of sour cucumbers'
```

Here the genitive is strongly dispreferred in spite of the plural context. This suggests that Zimmer's observation reported above does not generalise across all kinds of inner nominals. In addition, we observe two semantic contrasts. For one thing, notice that adjective and noun potentially constitute an idiomatic phrase denoting a

type of food: 'yellow turnips' means carrots in several German dialects, and 'sour cucumbers' denote either pickled cucumbers or a type of candy. This idiomatic reading is only preserved in the AGR type, whereas the GEN type produces a compositional, i.e. literal interpretation. Thus, (14a') is literally about turnips that are vellow. and (14b') about cucumbers that are sour.9 There is another semantic contrast: while the AGR version presents the denotation of the inner nominal as a type of food (= kind) or substance (= mass), the GEN version appears to produce an individuation effect of sorts: 'each (individual) turnip is vellow; each (individual) cucumber is sour'. Notice that food contexts with pseudo-partitives typically invite a mass/ type reading, which would then account for the fact that GEN is dispreferred in the above examples. The individuation effect in (14) is rather subtle, but it is possible to diagnose it indirectly: if the inner nominal denotes a referent that is high on the individuation scale. such as living/human beings, 10 and a plurality of individuals is the expected denotation, the preferences are reversed, i.e. GEN is the preferred option:

(15) Gestern habe ich... gesehen

	'yesterday I saw'		
a.	eine Gruppe	ausländisch-er	Studenten
	a group	foreign-GEN	students
	'a group of foreign students'		
a'	???eine Gruppe	ausländisch-e	Studenten
	a group	foreign-AGR	students
b.	eine Horde	wütend-er	Fussballfans
	a horde	furious-GEN	football.fans
	'a horde of furious football fans'		
b'	???eine Horde	wütend-e	Fussballfans
	a horde	furious-AGR	football.fans
c.	eine Delegation	katholisch-er	Nonnen
	a delegation	catholic-GEN	nuns
	'a delegation of catholic nuns'		

⁹ While (14b'), by virtue of its lexical meaning, can potentially allude to pickled cucumbers, it cannot denote the type of candy called "Saure Gurken" ('Sour Pickles').

¹⁰ See the detailed discussion by Grimm (2012, 54 ff.; 68-71); for the purpose of this essay, we will assume the following simplified version of that hierarchy:

⁽i) substance < small objects < insects/small animals < large(r) objects < animals < humans For any given referent, the further to the right on the scale it can be located, the greater the probability that a language will conceptualise it as an individual, and the greater the likelihood that it associates with grammatical means indicating individuation such as, e.g. plural marking - and as we are suggesting here: genitive marking in pseudo-partitives.

c'	???eine Delegation	katholisch-e	Nonnen
	a delegation	catholic-AGR	nuns
d.	eine Herde	anmutig-er	Gazellen
	a herd	graceful-GEN	gazelles
	'a herd of graceful gazelles'		
ď	???eine Herde	anmutig-e	Gazellen
	a herd	graceful-AGR	gazelles

This also holds true if the outer nominal is a quantity expression, regardless of whether it suggests plurality/individuation by itself ('number') or not ('quantity'); see the contrast in (16). 11

(16)	a.	eine Anzahl	deutsch-er	Bürger
		a number	German-GEN	citizens
		'a number of Gerr	nan citizens'	
	a'	???eine Anzahl	deutsch-e	Bürger
		a number	German-AGR	citizens
	b.	eine Menge	deutsch-er	Bürger
		an amount	German-GEN	citizens
		'a large quantity o	of German citizens'	
	b'	???eine Menge	deutsch-e	Bürger
		an amount	German-AGR	citizens

Together these observations suggest, on the one hand, that the AGR type is a simple extension of regular pseudo-partitives with the inner nominal denoting a kind/mass. This is also in line with the view "that in [...] expressions [like 'two kilos of books': 'two boxes of books']. books behaves like a mass noun" (Rothstein 2011, 2; emphasis added). i.e. that the plural marking of the inner nominal in pseudo-partitives is actually a 'pseudo' plural with a mass denotation - which is especially obvious in food contexts. On the other hand, the GEN type makes an additional semantic contribution, which can be described as individuation effect. Therefore, an inner nominal with plural reference has a genitive preference if the referent is high on the individuation scale (e.g. a living/human being), as illustrated in (15)-(16); the context Plural as such is not sufficient. The genitive in food contexts, where a mass reading is expected, however, sounds unnatural because of this individuation effect, but also because a potentially idiomatic reading is lost, see (14).

However, as mentioned, the individuation effect is rather subtle. and often not (immediately) perceptible by many native speakers. The

¹¹ The classifier noun Anzahl only combines with countable nouns, whereas Menge is compatible with both countable and mass nouns, cf. eine Menge deutsches Bier 'a lot of German beer'.

judgements reported in this subsection are the author's. It is therefore not clear how general this assessment is. While several native speakers consulted largely agree with the judgements given above for (14) and (15) as such, the overall picture is not entirely straightforward. On the one hand, there are dissenting views on the interpretation of the judgements, and on the other hand, we also encounter a wide range of judgements. In the next section, we will discuss some material that motivated the claims made above in the first place, and address some aspects that need to be examined more carefully.

3 **Data Assessment and Reflections**

In order to address a number of questions concerning form and interpretation of pseudo-partitives and genitive constructions, an online survey (google forms) was conducted in October-December 2022. 12 It was intended as a preliminary study, 13 providing a broad overview and feedback as input for a more focused follow-up study (in preparation). The participants were told about the goal of the study and asked to base their judgements on their own intuition rather than on normative guidelines. They could optionally indicate their age, place of residence, and which dialect/variety they use most in everyday life; in addition, they had the option to comment on each question individually, as well as about each questionnaire as a whole. These comments were intended for internal use, but some illuminating comments will be presented below. Due to the immense amount of material, the questions were (randomly) distributed across four questionnaires (ca. 20 questions per questionnaire). Those were, in turn, disseminated via social media and mailing lists, and eventually answered by 38, 49, 30, and 45 participants, respectively. Even though around half of the participants indicated some Southern German variety as their everyday language or dialect, the rest comprises Central and Northern German, as well as Belgian German, Swiss German and Austrian varieties. In the following, we will ignore the metadata, and mostly focus on the data as such.

12 Accessible at the following links:

^{1.} https://docs.google.com/forms/d/e/1FAIpQLScVRBm-R4PTXGzoX7IFxcnIMyMrygt-PjVMwkK_IGGVmbrQ1yQ/viewform?usp=sf_link;

^{2.} https://docs.google.com/forms/d/e/1FAIpQLSc_UoOImff7oB-GCPeQUH0t0NpO-ykIaHzh2MeB2Cgo7k3hA/viewform?usp=sf link;

^{3.} https://docs.google.com/forms/d/e/1FAIpQLSdfcORU_mMHDIno5RnjWbEvfL3EA4x_ DItge4VAJQMEMN18Kg/viewform?usp=sf_link;

^{4.} https://docs.google.com/forms/d/e/1FAIpQLSejf6LORCbc9LgWOFb9vKyrL34LMkZ 6kYvzbi3iu2eD_yCf-Q/viewform?usp=sf_link.

¹³ I.e. without full-fledged experiment design and not intended for in-depth statistical analysis.

3.1 Practical Considerations

Above it was stated that unmodified pseudo-partitives take an unmarked inner nominal, but in many cases, it is also possible to embed the inner nominal with a preposition (an 'on'; von 'from'). Hence, several tasks asked to evaluate the options zero vs. genitive vs. an vs. von - with and without an adjective. In this case, each option could be evaluated on a Likert scale from 1 ('perfect') to 7 ('totally bad'). To illustrate this, consider the following example:

(17)	Die Zuschauer erwartet im kommenden Herbst []					
	'Spectators can look forward to []'					
	a.	eine Reihe Veranstaltungen	(zero)		3.4	
	b.	-	(→ no plural g	genitive marking on N)		
	c.	eine Reihe an Veranstaltungen	(preposition	n an)	2.8	
	d.	eine Reihe von Veranstaltungen	(preposition	von)	1.8	
(18)	Die	Zuschauer erwartet im kommen	den Herbst [.]	n=30	
,	'Spectators can look forward to []'					
	a.	eine Reihe besonder- e Veranstal	tungen	(A-agr)	4.1	
	b.	eine Reihe besonder- er Veransta	ltungen	(A-gen)	1.6	
	c.	eine Reihe an besonderen Veranstaltungen (preposition an)			2.6	
	d.	eine Reihe von besonderen Verai	nstaltungen	(preposition von)	1.8	

The outer nominal Reihe 'series' requires a countable inner nominal in the plural, cf. (16a), or put differently: a plurality of individuals. In accordance with what was said in Section 2.2.2, we should expect genitive marking on the inner nominal as the preferred option. This, in turn, is only visible in the presence of an adjective, and indeed, the GEN version scores best, cf. (18b). Notice, however, that the von version has practically an equally good score, regardless of the presence of an adjective, cf. (17d)/(18d). Recall from Section 2 that this preposition has been taking over most functions of the genitive in colloquial German. In a way, it could be viewed as a stand-in for formal genitive marking and indirectly supporting the idea that 'genitive' marking is associated with individuation. This is a problematic view, however, because *von* is not only in opposition to zero marking/AGR here, but potentially also to genitive marking as such, compare (3) vs. (4). Moreover, the main purpose of this sort of task is actually to examine the prepositions an vs. von, rather than the contribution of adjectival inflection.

Therefore, a second kind of task was used that specifically addresses that issue; for the remainder, we will focus on this task. Originally, the respective questions were conceived of as a brute 'forced-choice'

task, where participants should choose between gen and AGR in a given context. However, since we expected uncertainties in many cases, there was a risk that participants might simply guess and randomly pick either one. In order to avoid that, we decided on a 'mitigated forced-choice' task giving the participants the following options:

(A): only GEN is possible here (B): only AGR is possible here (AB): GEN and AGR are both possible

If participants lacked a clear intuition as to which option is 'better' or whether there even is a 'better option', they could choose (AB). We expected this to be the case with many examples and many participants because, in many cases, it is simply not obvious which option is better. Option (AB) does not itself address any of our questions, but it ensures a greater reliability for the numbers for (A) and (B); the numbers for (AB) itself, in turn, can be understood as a 'measure of uncertainty'. The participants also had the opportunity to comment on potential differences between (A) and (B) if both were considered possible. We asked especially for semantic differences; the reason for this was to see how native speakers would describe that perceived difference. In at least 100 comments, however, the participants alluded to a difference in register instead, stating that AGR is used colloquially, but GEN belongs to a more formal register. Labels used for the latter include 'standard', 'prescriptive', 'correct' etc. It is rather curious that several comments imply a dichotomy 'correct' (GEN) vs. 'colloquial' (AGR); this is especially, noteworthy because in one case, GEN was described as 'grammatically correct', but in the very same example, it scored 0%. The situation is thus such that often speakers are aware that the genitive is somehow 'correct' and, at the same time, they do not use it. This is precisely why the option (AB) was added. At the same time, we expected at least some contrasts to be reflected in the numbers where the ratio (A): (B) is of primary interest.

3.2 The Survey

Unsurprisingly, we corroborated Zimmer's (2015) finding that, with a singular inner nominal, there is a strong preference for AGR. Below we give the mean scores of all examples of this type:

(19) Singular inner nominals (mass):

(A): 5.2% (B): 48.2% (AB): 46.7%

Moreover, we also find strong corroboration for the ideas expounded in Section 2.2.2. First of all, on average, more than 50% of the participants chose the option (A) = 'GEN only' if the referent was +animate (which in most cases also meant +human):

(20) Plural inner nominals (+animate/human):

(A): 53.8% (B): 4.8% (AB): 41.5%

Below some examples are given for illustration:

(21)	[a herd of graceful gazelles]		
	(A)	eine Herde anmutig- er Gazellen	37.8%
	(B)	eine Herde anmutig- e Gazellen	4.4%
	(AB)		57.8%
(22)	In fro	nt of the theatre [a group of former actors] gathered	n=38
	(A)	eine Gruppe ehemalig- er Schauspieler	55.3%
	(B)	eine Gruppe ehemalig- e Schauspieler	2.6%
	(AB)		42.1%
(23)	[a del	egation of catholic nuns]	n=38
	(A)	eine Delegation katholisch- er Nonnen	60.5%
	(B)	eine Delegation katholisch- e Nonnen	5.3%
	(AB)		34.2%

Now consider the numbers of plural inner nominals in food contexts where we find that, as expected GEN is strongly dispreferred:

(24) Plural inner nominals (food context):

(A): 6.2% (B): 33.2% (AB): 60.6%

The situation is not entirely symmetric, however; the ratio AGR VS. GEN here (33.2:6.2) is rather smaller than the ratio GEN vs. AGR in the previous case (53.8: 4.8). In other words, the preference for AGR is not as strong here as the preference for GEN in (20). Perhaps this simply is the case, but maybe there were other factors at play as well. Consider the following examples; (25) supports our expectations, i.e. a strong preference for AGR:

(25)	'I'd like to have [a kilo of carrots]'			
		(→ 'yellow turnips'; cf. (14a/a'))	n=45	
	(A)	ein Kilo gelb- er Rüben	0.0%	
	(B)	ein Kilo gelb- e Rüben	42.2%	
	(AB)		57.8%	

However, the following example should have yielded similar results, but there is a noticeable difference, viz. a significantly smaller preference for AGR:

(26) In a candy store:

```
'I'd like to have [a pack of 'Sour Pickels'] (PS: those from Haribo)'
      (→ 'sour cucumbers'; cf. (14b/b'))
                                                         n=45
(A)
      eine Packung saur-er Gurken
                                                         4.4%
(B)
      eine Packuna saur-e Gurken
                                                         26.7%
(AB)
                                                         68.9%
```

The question contained two explicit cues ('candy store'; Haribo) that should only allow the 'candy' interpretation and rule out the 'cucumber' interpretation, but it turns out that not everybody even knows that type of candy. Thus, these numbers may not be entirely reliable.

Minimally, the contrast between (20), (21)/(22)/(23) vs. (24), (25)/ (26), i.e. the different (dis)preferences, shows that plural number on the inner nominal is not a sufficient condition for GEN, contra Zimmer (2015). Semantic aspects also need to be taken into account: more precisely, there is a clear and strong preference for GEN only if the inner (plural) nominal denotes a +animate/human referent.

In this context, it is worthwhile pointing out the following contrast. Baby-chicks may not be at the top, but, as +animate referents, they are still rather high up on the scale of individuation. In the example below, the modifier 'newly/recently hatched' additionally emphasises the aspect 'living being'. Given our assumptions, we would expect a strong preference for GEN; this expectation is indeed borne out in (27), but not in (28):

(27)	ʻa wa	n=49	
	(A)	eine Wagenladung neulich geschlüpft- er Küken	71.4%
	(B)	eine Wagenladung neulich geschlüpft- e Küken	4.1%
	(AB)		24.4%
(28)	ʻa po	rtion of fried baby-chicks'	n=49
	(A)	eine Portion gebraten- er Küken	14.3%
	(B)	eine Portion gebraten- e Küken	30.6%
	(AB)		55.1%

Even though the (inner) noun is the same, the (dis)preferences are reversed, and, in (28), AGR scores twice as high as GEN, which is a stark contrast to (27) and appears to be unexpected. Notice, however, that - albeit unconventional -14 'baby chicks' in (28) is construed as a food type or a dish and as such, (28) is an instance of a food context. Given our assumptions, it is actually not too surprising then that we find a preference for AGR here. In other words, contextual/ lexical information can impact the way a referent is perceived (living being vs. food); in this particular example, it is the items 'portion' and 'fried' that strongly suggest a food context. This perceived denotation, in turn, obviously has an impact on the form of the inner nominal (GEN VS. AGR). 15

3.3 **Some Further Comments**

In Sect 2.2.2, we made a claim about a semantic difference between two types of pseudo-partitives in German, which can be split into two components:

- 1. AGR is simply an extended version of regular pseudo-partitives; the inner nominal is construed as denoting a substance (mass plural/kind) and potential idiomatic readings are preserved.
- 2.. GEN makes a semantic contribution that can be characterised as individuation such that the inner nominal denotes a plurality of individuals; conversely, the higher the referent of the inner nominal is on the individuation scale, the greater the likelihood that GEN is the preferred option. Potential idiomatic readings are lost.

To a large extent, this claim is corroborated by the results of our preliminary study. At the same time, there are several problems mostly having to do with the interpretation of the results. For even where judgements comply with our expectations, it is not always clear that they were made for the reasons that we assume.

As already mentioned, participants commenting on a potential difference usually make reference to style/register or prescriptive

¹⁴ We are not aware of any menu that has fried baby-chicks on it. nor have we reason to believe that any of our participants has ever tasted fried baby-chicks; no actual baby-chicks were harmed in the course of this study. We deliberately also included unconventional examples such as this one.

¹⁵ An anonymous reviewer correctly points out that, in (22)/(23), one does not know for sure whether it is the adjective, the outer nominal, or both, that actually cause(s) the difference here, and this certainly needs to be tested more carefully. Nonetheless, we believe that the overall mode of presenting the referent - as a living being or food - is a relevant factor itself.

rules (e.g. 'GEN is grammatically correct, but AGR is ok, too'). Very few alluded to the semantic contrasts under discussion (e.g. 'AGR makes reference to a type/kind': 'the AGR version is the name of the product 'Sour Pickles', while the GEN version indicates that the cucumbers are actually sour', cf. (14b/b')/(26)). In addition, several participants suggested semantic contrasts that were not anticipated. For instance, in the context of (22), one participant suggested that the GEN version refers to former actors at the theatre mentioned while the AGR version could refer to former actors in general. Also consider the following example:

(29)	'a sacl	k of rotten apples'	n=49
	(A)	ein Sack faul- er Äpfel	34.7%
	(B)	ein Sack faul- e Äpfel	2.1%
	(AB)		63.2%

Notice that the adjective faul is ambiguous, meaning either 'lazy' (about people) or 'rotten' (about food). In this context, one participant commented that (A) = GEN means that the apples are lazy, while (B)= AGR means that they are inedible. This may have been intended as a joke, but it is actually a very astute observation, not a random play with the ambiguity. As a matter of fact, we can even discern a certain compatibility with our expectations insofar as the 'lazy' interpretation presupposes living being as referent while the 'inedible' reading applies to food. Thus, very indirectly, this comment affirms the view that GEN is associated with individuals (= living beings).

More generally, several comments on a perceived difference between GEN and AGR may actually confirm (i) and (ii) in spite of talking about different things. At the same time, precisely the diversity of such comments may be an indication that it is not that easy to pinpoint the actual difference between GEN and AGR, and that, possibly, (i) and (ii) may have to be reformulated eventually.

Moreover, recall that the genitive is largely being replaced by the preposition von. In many dialects, the genitive has disappeared, and in general, active use of the genitive often indicates that the speaker either has some sort of higher education or, at least, that they are rather familiar with formal/written language. In other words, even if GEN is preferred over AGR given a binary choice as in our survey, it does not necessarily mean that GEN is the only or unmarked form, the version that many speakers would actually use, see also (17) and (18). One consequence of such considerations is that the semantic generalisation cannot be considered a general property of German grammar. We might view it as a feature of a version/variety of German (which is presumably something akin to a register, rather than a regional dialect).

Theoretical Ramifications 4

The focus of this essay is descriptive, rather than theoretical. Nonetheless, we would like to make a brief comment here. To the extent that our claims are on the right track, in (a variety of) German, genitive marking of the inner nominal in adjectivally modified pseudopartitives brings about an individuation effect in the sense that the referent of the inner nominal is construed as a plurality of individuals (rather than a collective/mass plural). Since Borer (2005), individuation has been associated with a functional head DIV that also hosts plural morphology and classifiers. The problem is that, in the context of pseudo-partitives, this position is associated with the outer nominal, i.e. the measure/classifier noun, see e.g. Mathieu and Zareikar (2015). Since Selkirk (1977) and Jackendoff (1977), pseudo-partitives have been analysed as monophrasal, i.e. as one extended nominal projection. Our claim here thus seems to entail that there are two loci of individuation within the same noun phrase. This is a rather unwelcome consequence that cannot easily be justified.

There is an alternative view, though. We could take genitive marking to indicate that the inner nominal is actually a DP rather than simply an NP. This might account for a number of effects observed with the genitive. Then again, one subclass of pseudo-partitives has actually been argued to be biphrasal, i.e. involving two extended nominal projections, viz. container constructions (like 'a glass/bottle of wine' vs. measure constructions like a 'liter of wine'; e.g. Rothstein 2011: Grestenberger 2015). We then would be saving that the individuation reading and the content reading of inner nominals have the same source: they both constitute a separate DP (potentially indicated by the genitive case). Here the problem is that we would then predict a much greater acceptability of genitive marking with singular inner nominals if they occur with a container noun in the outer nominal: this does not seem to be the case:

(30)	ʻa gla	ass of cool lemonade'	n=49
	(A)	ein Glas kühl-er Limonade	0.0%
	(B)	ein Glas kühle Limonade	44.9%
	(AB)		55.1%

In other words, such a construal is not unproblematic, either. It seems that, either way we approach the issue analytically, we run into problems. We leave the issue for further research.

Concluding Remarks 5

In this article, we have made a claim on the semantic effect and the corresponding acceptability of genitive-marked inner nominals in German pseudo-partitives: while AGR is the default option, if the inner nominal denotes a plurality of objects that are high on the hierarchy of individuation (typically, +animate/human referents), GEN is strongly preferred and AGR is dispreferred. This claim has to a large extent been corroborated by a preliminary survey. At the same time. it has been pointed out that the genitive as such has a rather problematic status in German. This is reflected in the fact that survey participants mostly contrast gen and AGR in terms of register or 'correctness', rather in terms of semantic differences, but also in the fact that, in many concrete examples, it is not always easy or obvious which option to choose. Moreover, in Section 4, we hinted at the possibility that GEN may not be a canonical pseudo-partitive from an analytic point of view. Thus, there are still many open questions for further research.

Abbreviations

AGR	agreement (morphology)
AGR	agreement (noun phrase type/construction)
DAT	dative
FEM	feminine
[-FEM]	masculine and neuter
GEN	genitive (morphology)
GEN	genitive (noun phrase type/construction)
NOM	nominative
PL	plural
SG	singular
STR	strong
WK	weak

Bibliography

- Borer, H. (2005). In Name Only. Oxford: Oxford University Press.
- Falco, M.; Zamparelli, R. (2019). "Partitives and Partitivity". Glossa: A Journal of General Linguistics, 4(1), 1-49. https://doi.org/10.5334/gjgl.642.
- Gallmann, P. (1990). Kategoriell komplexe Wortformen: das Zusammenwirken von Morphologie und Syntax bei der Flexion von Nomen und Adjektiv. Tübingen: Max Niemeyer.
- Gallmann, P. (1996). "Die Steuerung der Flexion in der DP". Linquistische Berichte, 164, 238-314.
- Gallmann, P. (1998). "Case Underspecification in Morphology, Syntax and the Lexicon". Alexiadou, A; Wilder, C. (eds), Possessors, Predicates and Movement in the Determiner Phrase. Amsterdam: John Benjamins, 141-75. https://doi.org/10.1075/la.22.07gal.
- Gallmann, P. (2018). "The Genitive Rule and Its Background". Ackermann, T; Simon, H.; Zimmer, C. (eds), Germanic Genitives. Amsterdam: John Benjamins, 149-88. https://doi.org/10.1075/slcs.193.07gal.
- Grestenberger, L. (2015). "Number Marking in German Measure Phrases and the Structure of Pseudo-Partitives". The Journal of Comparative Germanic Linguistics, 18, 93-138. https://doi.org/10.1007/s10828-015-9074-1.
- Grimm, S. (2012). Number and Individuation [PhD Dissertation]. Stanford: Stanford University.
- Jackendoff, R. (1977). X-Bar Syntax: A Study of Phrase Structure. Cambridge, MA: MIT Press.
- Mathieu, E.; Zareikar, G. (2015). "Measure Words, Plurality, and Cross-Linguistic Variation". Linguistic Variation, 15(2), 169-200. https://doi. org/10.1075/lv.15.2.02mat.
- Müller, G. (2002). "Syntaktisch determinierter Kasuswegfall in der deutschen NP". Linguistische Berichte, 189, 89-114.
- Rothstein, S. (2011). "Counting, Measuring and the Semantics of Classifiers". The Baltic International Yearbook of Cognition, Logic and Communication, 6, 1-42. https://doi.org/10.4148/biyclc.v6i0.1582.
- Schachtl, S. (1989). "Morphological Case and Abstract Case: Evidence from the German Genitive Construction". Bhatt, C.; Löbel, E.; Schmidt, C.M. (eds), Syntactic Phrase Structure Phenomena in Noun Phrases and Sentences. Amsterdam: John Benjamins, 99-112. https://doi.org/10.1075/ la.6.08sch.
- Selkirk, E. (1977). "Some Remarks on Noun Phrase Structure". Culicover, P.W.; Wasow, T.; Akmajian, A. (eds), Formal Syntax. New York: Academic Press, 285-316.
- Sternefeld, W. (2004). "Feature Checking, Case, and Agreement in German DPs". Müller, G.; Gunkel, L.; Zifonun, G. (eds), Explorations in Nominal Inflection. Berlin: Mouton De Gruyter, 269-99. https://doi. org/10.1515/9783110197501.269.
- Sternefeld, W. (2006). Syntax: Eine morphologisch motivierte generative Beschreibung des Deutschen. Tübingen: Stauffenburg.
- Zimmer, C. (2015). "Bei einem Glas guten Wein(es): Der Abbau des partitiven Genitivs und seine Reflexe im Gegenwartsdeutschen". Beiträge zur Geschichte der deutschen Sprache und Literatur, 137(1), 1-41. https://doi. org/10.1515/bgsl-2015-0001.

Partitive Constructions and Partitive Elements Within and Across Language Borders in Europe

edited by Elvira Glaser, Petra Sleeman, Thomas Strobel, Anne Tamm

Corpus Perspectives on Some Irish Gaelic (Pseudo-)Partitives

Dóra Pődör

Károli Gáspár University of the Reformed Church, Hungary

Abstract Irish Gaelic is rich in partitive and pseudo-partitive structures, and this essay intends to discuss certain variational aspects of some of these based on corpus and lexicographical data. The structures to be covered are the following: (Type A) Quantifier + glottonym in the genitive; (Type B) Nouns denoting body parts with cuid 'part, portion'; and (Type C) Personal numerals in a partitive structure. A) and B) can be considered pseudo-partitives, while C) is a true partitive. As literature on this topic is scarce, the new data provided here are collected from dictionaries (especially the New English-Irish Dictionary – NEID – at focloir.ie and Ó Dónaill's Foclóir Gaeilge-Béarla [Irish-English Dictionary] – FGB), and the Corpus of Contemporary Irish. The focus of this research is to study the variation that is present or is expected to be present in these structures in contemporary usage, and to give possible reasons for the variation if it was attested.

Keywords Irish. Partitives. Cuid. Body parts. Personal numerals.

Summary 1 Introduction. – 2 Corpus and Dictionaries Used. – 3 Discussion of the Structures, Presentation and Analysis of the Data. – 3.1 Quantifier + Glottonym in the Genitive (Describing the Degree of Knowledge of a Language) (Type A). – 3.2 Nouns Denoting Body Parts with *Cuid* 'Part, Portion' (Type B). – 3.3 Personal Numerals in a Partitive Structure (Type C). – 4 Conclusion.



1 Introduction

Irish Gaelic belongs to the Celtic branch of the Indo-European language family. It is the first official language of the Republic of Ireland (the second being English) and is one of the 24 official languages of the European Union. Despite its nominally high status, it has only a few tens of thousands of native speakers, who speak several different dialects and are scattered in several officially designated Gaeltacht (= 'Irish-speaking') areas. The 2022 census did not intend to establish the number of native speakers; instead, it asked questions about the usage of Irish. According to the census data, 71,968 people claimed to speak Irish on a daily basis outside the education system (it is compulsory to learn Irish in schools); but only 20,261 speakers used Irish on a daily basis in the Gaeltacht areas. However, about 195,000 people stated that they could speak Irish very well ("Education and Irish Language" 2023; "Laghdú eile..." 2023).2

The geographically and linguistically fragmented nature of native varieties of Irish and the fact that learner speakers by far outnumber native speakers have various consequences for the language. However, it is not the aim of this essay to discuss these. Suffice it here to note that if we compare research done on Irish Gaelic and on English, then it will be obvious that English is a much more extensively studied language than its neighbour. It should not come as a surprise then that Irish (pseudo-)partitives have not yet been explored and discussed in great detail.

Irish is rich in partitive and pseudo-partitive structures.³ and certain corpus aspects of some of these will be discussed here. The structures to be covered are the following:

- Quantifier + glottonym in the genitive (as exemplified by the structure describing the degree of knowledge of a language, e.g. beagán Fraincise (lit. 'a little of French', as in example (1));
- b. Nouns denoting body parts with cuid 'part, portion', as exemplified by a cuid gruaige, lit. 'her part of hair', as in example
- Personal numerals in a partitive structure (as exemplified in c. triúr againn in example (14) and triúr dínn in example (15), both meaning 'three of us').

Support of the KRE-BTK grant #20736B800 is acknowledged.

- 1 The terms 'Irish Gaelic' and 'Irish' will be used to denote the varieties of Gaelic spoken on the island of Ireland. 'Irish' would normally be used in Ireland, while 'Irish Gaelic' outside Ireland.
- 2 The census was conducted in the Republic of Ireland, so it does not include data for Northern Ireland.
- 3 Partitives denote a PART of something, whereas pseudo-partitives denote an AMOUNT of something (Bayda 2018, based on Koptjevskaja-Tamm 2001).

As literature on this topic is scarce (but see Bayda 2018; Kane 2015), the data which supplement existing studies have been collected from dictionaries (see below), and the Corpus of Contemporary Irish. It is not the aim of this essay to argue for the categorisation of the structures discussed as partitive or pseudo-partitive; for example, Bayda's argument that the *cuid* possessive construction is a pseudo-partitive one (2018, 52) is accepted (his views are presented in the section on *cuid*). Thus, based on the definition given in footnote 3, A) and B) can be considered pseudo-partitives, while C) a true partitive. Rather, the focus of this research is to study the variation that is present or is expected to be present in these structures in contemporary usage, and to give possible reasons for the variation if it was attested.

2 **Corpus and Dictionaries Used**

In the following paragraphs a description is given of the corpus and the dictionaries used for this study.

The Corpus of Contemporary Irish contains Irish-language texts published from the beginning of the twenty-first century onwards. It has been freely available to the public since 2016 and contains 36.1 million words. If we compare it with other corpora - e.g. the *British* National Corpus contains 100 million words; the Corpus of Contemporary American English and the Hungarian National Corpus both have more than 1 billion words - then we can say that the Irish corpus is relatively small (although note that the *Hungarian National Corpus* contains non-contemporary material as well). The Irish texts come from 19 sources, which include newspapers, news portals, magazines, journals and scholarly publications, works of fiction, and the news from the Irish-language radio station (Raidio na Gaeltachta) and the Irish National Radio and Television Broadcaster, RTÉ ('Corpus of Contemporary Irish'). Not all the texts were written by native speakers, although the site does not mention this. This means that unless the biography of the author of the source of each quotation is checked, there is no way of knowing whether the given example is from a native or a non-native speaker. The search tool is fairly simple and offers two types of search modes: 'The phrase as is' and 'Broad search'. In the latter mode, inflected and alternate forms of the term(s) searched can be accessed. Two filters can be used: the first one is 'Collections', where the results are filtered according to source(s), and 'Word forms', which can only be used in the 'Broad search' mode, and certain word forms (e.g. the nom. pl. of a noun) can be excluded from the search. However, if the grammatical forms are homonymous (e.g. in some nouns the gen. sg. form is identical with the nom. pl. or the nom. sg. is identical with the gen. pl.), then the search tool is not able to distinguish between them. Also, some

examples are duplicated in the corpus although they have different identification numbers. Note that it was not possible to filter out duplicated examples in the course of this research. The corpus was compiled by the Gaois research group, which develops various digital resources for the Irish language, and is part of Fiontar & Scoil na Gaeilge [Irish Department] in the Faculty of Humanities and Social Sciences, Dublin City University ('About Gaois').

When searches were made in the corpus, all the relevant grammatical forms of the given words were checked; however, in the presentation of the data here, only the dictionary form of the Irish words is provided.

Foras na Gaeilge's online New English-Irish Dictionary (NEID) was launched in 2013. The site does not give information about the current amount of data contained in the dictionary; however, users can learn that in January 2017 it contained 48,000 entries and 140,000 senses ("About"). The latest update was given in July 2023, according to which "a couple of hundred additional entries and senses were added" ("Latest news"). For the researcher, one of the most helpful features of this dictionary is that it can also be used as a corpus, and various types of searches can be made in it. For example, despite it being an English-Irish dictionary, one can also search for all the examples of Irish words or phrases that appear in it. Many of the examples do not seem to be corpus-based, although there is no information about the source of the examples on the site.

Ó Dónaill's Irish-English Dictionary (Foclóir Gaeilge-Béarla, FGB) was first published in 1977 and is available online. No information is given about the amount of data and the number of entries it contains; the printed version is of the size of a concise dictionary.

The *Electronic Dictionary of the Irish Language* (eDIL) is a digital historical dictionary of the Irish language, which covers the period from c. 700 to c. 1700.

All of the above resources can be freely accessed by the public.

⁴ For example, the sentence Beidh banna ceoil seachtair páirteach ann chomh maith 'A music band of seven people will be a part of it as well' can be found under numbers #2064167 and #2064232 in the corpus, coming from the same article on an online news portal. (Note that apart from the translations cited from dictionaries, all other - both word for word and literal - translations are those of the author.)

3 Discussion of the Structures, Presentation and **Analysis of the Data**

3.1 Quantifier + Glottonym in the Genitive (Describing the Degree of Knowledge of a Language) (Type A)

Discussion of the Structure 3.1.1

Irish Gaelic has many words that express quantity: e.g. a lán, mórán, neart, go leor - all meaning 'a lot, much, many'; e.g. a lán airgid 'a lot of money', airgid being the gen. sg. of airgead. See also examples with beagán 'a little', as in (1), roinnt 'some', as in (2), and tuilleadh 'more' as in (3).

- (1) Τá beagán Fraincise agam. little French.gen.sg at.1sg 'I have (= I know) a little French.' Lit.: 'There is (substantive verb) a little of French at me.'
- (2) Τá roinnt leabhar aige. be.subst.prs some book.GEN.PL at.3SG.M 'He has some books.' Lit.: 'There are (substantive verb) some books at him.'
- (3) tuilleadh eolais more information.GEN.SG 'more/additional information'

In (1), Fraincise is the gen. sq. of Fraincis 'French'. In (2), leabhar is the gen. pl. of leabhar 'book'. In (3), eolais is the gen. sq. of eolas 'information'. The general rule is that uncountable nouns will select the gen. sg. form, while countable nouns the gen. pl. As scholars have been documenting for the past few decades that the genitive case-form of the noun is on the decline in all the dialects (e.g., see Ua Súilleabháin 1994, 492; Ó hUiginn 1994, 565; Hughes 1994, 630-1, or Péterváry, Ghiollagáin 2014, 36), it would be worth examining some dictionary and corpus data connected to some pseudo-partitive phrases where the genitive form of the noun would be required. The present investigation was restricted to structures containing nouns that denote languages, as a) the great majority of them form their

⁵ Partitive use of *roinnt*, noun, 'division' (FGB s.v. "roinnt").

genitives in a phonologically quite salient manner (by adding an extra syllable), 6 b) many learners of the language would meet the gen. sg. for the first time while learning to talk about the languages that they speak, and finally, c) this limited number of nouns yielded an amount of data that was possible to analyse within a limited period of time.

312 Presentation and Analysis of the Data

Irish Gaelic expresses someone's knowledge of a language with a possessive structure:

(4) Τá Fraincis agam. be.subst.prs French.nom.sg at.1sg 'I have (= I know) French.' Lit.: 'There is (substantive verb) French at me.'

In this case, the noun denoting the language is in the nom. sg. However, if one wanted to express the level of language knowledge, then literally, the AMOUNT of the given language possessed by the speaker has to be given. For example, in the following example from the NEID, Spáinnise is the gen. sq. of Spáinnis 'Spanish':⁷

(5) 'they have a poor grasp of Spanish' mórán Spáinnise níl аси be.subst.prs.neg a lot Spanish.gen.sg at.3PL Lit.: 'There is not a lot of Spanish at them.' (NEID s.v. "poor")

Almost all nouns denoting a language end in the suffix -(a)is, are feminine and belong to the second declension; the two most notable exceptions being Gaeilge, 'Irish, Gaelic' and Béarla 'English'. These latter two have the same form in the nom. sq. and the gen. sq.; however, the language-nouns ending in -(a)is have gen. sq. -(a)ise, see (5) above.

⁶ Adding an extra syllable to form the gen. sg. is present in other nouns as well; however, there are also many nouns where the gen. sq. is created by palatalising the last consonant of the noun: e.g. ábhar /'a:vər/ 'material', roinnt ábhair / 'a:vər'/ 'some material'. For many learners, it is very difficult to distinguish between the palatal and nonpalatal versions of some consonants.

⁷ When the example is cited from the NEID, then the order is English phrase/clause/ sentence followed by the Irish equivalent (these two being taken from the dictionary), and then comes my literal translation of the Irish equivalent. Also note that the NEID does not use capitalisation and punctuation in its examples, and that is how material from this dictionary is presented here.

Of the glottonyms ending in -(a)is, Breatnais 'Welsh' seems to be the earliest attested, already appearing in Early Irish⁸ (eDIL s.v. "Bretnas"). A search in eDIL for some of the languages of Europe did not yield too many results: the earlier forms of the nouns for French, Italian and Spanish were found, all dated to the seventeenth century (eDIL s.v. "fraingcis", "Etáil(l)is", "Spáinnis"), but no noun phrases indicating the level of knowledge.

In the *Corpus of Contemporary Irish*, only a few examples of such structures were found. Some of these are: one example of roinnt Breatnaise/Gearmáinise/Iodáilise/Spáinnise ('some Welsh/German/ Italian/Spanish') each, one of mórán Breatnaise/Spáinnise ('a lot of Welsh/Spanish') each, one of beagán Gearmáinise/Iodáilise ('a little German/Italian') each and three of beagán Breatnaise ('a little Welsh'; two of which are from the same interview published in different news portals). No examples of phrases where the glottonym is NOT in the gen. sg. could be found.

The following example from the corpus illustrates the use of the nom. sg. and the gen. sg. forms:9

(6) Bhí Fraincis líofa aige agus roinnt be.subst.pst French.Nom.sg fluent at.3sg.m and some Gearmáinise Breatnaise. (#1136424) agus German.gen.sg and Welsh.gen.sg

'He had fluent French and knew some German and Welsh.'

Lit.: 'There was French fluent at him and some of German and some of Welsh.'

This example shows that in this pseudo-partitive structure two genitives that are dependent on the same noun can be coordinated.

Thus, it can be stated that at least in publications in Irish Gaelic the use of the gen. sq. of the second noun in this type of construction is still the norm. It could be suggested that as Irish grammars and Irish dictionaries codify the use of the gen. sg. in this structure, educated authors of Irish texts would try to follow this norm. (Note that in types B) and C) variation itself is present in grammars and dictionaries.) However, further research would be needed with other quantifier + noun combinations to see if there is variation between the genitive and the nominative in other phrases, and whether the way the gen. sg. of the noun is formed has any bearing on this.

⁸ Early Irish denotes the Gaelic language from the sixth century to the end of the twelfth c. It is also called Early Gaelic (especially in Scotland).

The source of the corpus example is ainm.ie s.v. "Dáithí Ó hÓgáin (1949-2022)".

3.2 Nouns Denoting Body Parts with Cuid 'Part, Portion' (Type B)

Discussion of the Structure 3.2.1

This type is exemplified in (7).

(7)cuid gruaige hair.gen.sg her part 'her hair' Lit.: 'her part of hair'

In (7), gruaige is the gen. sg. of gruaig nom. sg. 'hair'.

Modern Irish cuid goes back to the Old Irish noun cuit /kud'/, the primary meaning of which is 'share, part, portion'. 10 It is attested already in the Old Irish glosses from the eighth century AD. When followed by the genitive, its meaning is 'some, a certain amount'. eDIL cites 10 examples with the structure possessive pronoun + cuit + genitive of noun, "replacing simple noun" (i.e., possessive pronoun + noun in the nominative) (eDIL s.v. "cuit"). For the modern lanquage, the standard reference work on grammar, Graiméar Gaeilae na mBráithre Críostaí, confirms that cuid often occurs between a possessive pronoun and a noun dependent on it (both with abstract/uncountable nouns and plural nouns) (Ó hAnluain 1999, 115).

Victor Bayda conducted corpus research into this structure (see Bayda 2018). He used Nua-Chorpas na hÉireann / The New Corpus for Ireland (NCÉ), a corpus of about 30 million words, about 20% of which make up a native-speaker corpus, where texts are categorised into one of the three major dialects (Bayda 2018, 43). He examined the use of some mass nouns with (i) the bare pronouns a 'his', a 'her', a 'their' and their use with the same pronouns + cuid; (ii) the nouns caint 'talk', gruaig 'hair' with/without cuid; and (iii) pair nouns with the bare pronoun mo 'my' and the pronoun mo with cuid (Bayda 2018, 44-5). He comes to the conclusion that "[t]he use of *cuid* with mass nouns is highly preferred, whereas with plurals less so", and "[t]he pseudo-partitive nature of the construction means that *cuid* expresses the idea of the AMOUNT of the possessum which is non-specific, quantifying over a type of objects, unlike partitive constructions which quantify over a set" (2018, 52).

¹⁰ Bayda (2018) glosses cuid as 'part', and this is the first meaning given in FGB as well; thus, this equivalent will be used in this article, though 'portion' or 'share' might be a more idiomatic rendering in some contexts.

Pair nouns: objects or people that come in pairs (e.g. feet, hands, parents, shoes).

Apart from such corpus data, there is also lexicographical data, as the NEID has examples of the structure possessive pronoun + cuid + noun with more than 100 different nouns, ranging from concrete to abstract ones and belonging to various lexical fields.

For the purpose of the present study, one semantic group will be discussed based on lexicographical and corpus data: structures with body parts. The reasons for this choice are the following: they seem to form a clearly delineable group from the semantic point of view in that they are connected to inalienable possession; they include mass (uncountable) nouns, countable nouns and pair nouns; Bayda's research also includes some body parts; and learners of Irish come across the use of *cuid* with body parts at a fairly early stage.

3.2.2 Presentation of the Data

The NEID features the following nine different nouns denoting body parts in this structure: fiacail 'tooth', fuil 'blood', gruaig 'hair', ionga 'nail', ladhar 'toe', lámh 'hand, arm', méar 'finger', scamhóg 'lungs', súil, 'eye'. Of these, only two, fuil and gruaig are uncountable, thus they are used in the gen. sg. when preceded by cuid:

- (8) 'they transfused his blood' rinne siad fuilaistriú ar a chuid fola did.PST they blood transfusion on his part blood.GEN.SG Lit.: 'Did they blood transfusion on his part of blood.' (NEID s.v. "transfuse")
- (9) 'she has chestnut hair' t\u00e1 a cuid gruaige donnrua be.SUBST.PRS her part hair.GEN.SG chestnut Lit.: 'There is her part of hair chestnut.' (NEID s.v. "chestnut")

The other seven are countable nouns, therefore *cuid* is followed by the noun in gen. pl., e.g.:

(10) 'she clipped her nails'

bhearr sí a cuid ingne

clip.PST she her part nail.GEN.PL

Lit. 'Clipped she her part of nails.'

(NEID s.v. "clip")

Examples with *gruaig* 'hair' in the NEID far outnumber the total number of examples with the other words, as there are 186 tokens

of such structures in the dictionary, while there are only 33 examples with fiacail 'tooth', 18 examples with ionga 'nail', 12 examples with súil 'eye', 8 examples with fuil 'blood', 4 examples with méar 'finger', 3 examples with scamhóg 'lung', 2 with lámh 'hand, arm', and 1 with ladhar 'toe'.

The above data was complemented by a search in the *Corpus of* Contemporary Irish for structures containing the above nouns plus six other nouns denoting body parts either with poss. pron. + cuid or just the bare possessive pronoun. The six additional nouns are: cluas 'ear', cnámh 'bone', cos 'leg, foot', croí 'heart', qualainn 'shoulder', and glúin 'knee'. As pair nouns were also considered, the data for possessive pronoun + the numeral 'two' + body part is also provided for these. For the other nouns, this category is of course not applicable.

The results are summarised in Table 1: the data are presented in decreasing order in terms of the percentage of examples with

Note that there are some limitations as to the extensiveness and the accuracy of the data for the following reasons:

- In Irish Gaelic, many prepositions combine with the possessive pronouns which begin with a vowel. As much extra time would have been needed to search for all of these options in the corpus, these data were not taken into consideration (e.g., phrases such as lena shúile or lena chuid súl 'with his eyes', where lena is a combination of the preposition le 'with' and the possessive pronoun a 'his').
- 2. As for plural forms, Irish nouns fall into two categories: nouns with the so-called weak plural have the same form in the nom. sg. and the gen. pl.; and those with the so-called strong plural have the same form in the nom. pl. and the gen. pl. In this research, the first type of homonymy, namely when the nom. sg. is identical with the gen. pl. may cause problems. For example, mo chluas can either mean 'my ear' or 'of my ears', and only by looking at the context could these phrases be disambiguated. However, as some test analyses have confirmed that the great majority of these forms is nom. sg., such examples were not included in the count.
- 3. Another type of homonymy that exists is when the gen. sq. is identical with the nom. pl. (this generally occurs in nouns with weak plurals and some irregular nouns). This is the case, for example, with súil 'eye'. Thus, mo shúile can either mean 'my eyes' or 'of my eye'. Again, a test analysis was applied here, and according to the results, the nom. pl. forms by far outnumber the gen. sg. forms. The other word where such ambiquity arose was *qlúin* 'knee'. Thus, such forms were all counted among the nom. pl. forms.

 Table 1
 Nouns denoting body parts with a possessive pronoun and with or
 without cuid

Body part	Poss. Pron. + cuid/chuid/gcuid + body part	Poss. Pron. + Body Part (Nom. pl. if countable)	Poss. Pron. + 'two' + body part	Example in NEID with <i>cuid</i>
<i>gruaig</i> 'hair'	508 (= 69%)	232 (= 31%)	not applicable	YES
fuil 'blood'	99 (= 61%)	64* (= 39%)	not applicable	YES
fiacail 'tooth'	130 (= 61%)	84 (= 39%)	not applicable	YES
ionga 'nail'	27 (= 37%)	46 (= 63%)	not applicable	YES
ladhar 'toe'	4 (= 22%)	14 (= 78%)	not applicable	YES
<i>cnámh</i> 'bone'	9 (= 9%)	92 (= 91%)	not applicable	NO
scamhóg 'lung'	7 (= 9%)	74 (= 91%)	not applicable	YES
<i>lámh</i> 'hand, arm'	89 (= 6%)	1104 (= 73%)	312 (= 21%)	YES
súil 'eye'	194 (= 6%)	2769** (= 86%)	275 (= 8%)	YES
cluas 'ear'	20 (= 5%)	324 (= 85%)	38 (= 10%)	NO
<i>méar</i> 'finger'	17 (= 5%)	301 (= 95%)	not applicable	YES
cos 'leg, foot'	31 (= 2%)	1191 (= 87%)	147 (= 11%)	NO
glúin 'knee'	9 (= 2%)	415*** (= 86%)	57 (= 12%)	NO
gualainn 'shoulder'	7 (= 2%)	385 (= 96%)	8 (= 2%)	NO
<i>croí</i> 'heart'	2 (= 2%)	98 (= 98%)	not applicable	NO

 $^{^{\}star}$ The forms with the pl. 3 poss. pron. were not taken into consideration at all, as α bhfuil 'their blood' is homonymous with a bhfuil, relative particle + dependent form of the present indicative of the substantive verb. A search for *a bhfuil* in the corpus gives more than 10,000 results, and each would have had to be checked to disambiguate this syntagm.

^{**} Of these, 2333 are ambiguous, as they could be either nom. pl. or gen. sg. - see, however, point (3).

^{***} Of these, 315 are ambiguous, as they could be either nom. pl. or gen. sg. – see, however, point (3).

4. There exists dialectal variation in the nom. pl. + gen. pl. of nouns. So, although the gen. pl. form, cluas 'of ears', would be expected after cuid, structures with cuid + the officially recognised nom. pl. form cluasa 'ears' were also searched for. As such forms were indeed found, they were included in the count, as this research was not focussed on variation in the gen. pl. form of individual nouns, but on variation between structures with and without cuid.

3.2.3 Analysis of the Data

The following conclusions can be drawn from the data presented above:

- a. The nine nouns denoting body parts that appear in the NEID in the *cuid*-type of construction are not the only ones which can take *cuid*, as in the corpus the other six nouns can also appear with it.
- b. The nouns in the dictionary appearing with *cuid* are not necessarily those that most frequently appear in the corpus in this type of structure. E.g. *cnámh* 'bone' appears with *cuid* in nine cases in the corpus, making up 9% of the examples, but the NEID has no examples of *cnámh* with *cuid*. The corpus provides comparable data for *scamhóg* 'lung', but here the NEID does give examples with *cuid*.
- The ratio between structures with possessive pronoun + *cuid* c. + body part and structures between pronoun + body part (i.e. without *cuid*) varies greatly from noun to noun. There are three nouns which appear with cuid more often than without it: gruaig, fuil and fiacail. The first two are uncountable nouns, as humans do not know how much hair and blood they actually have, and so here the quantity in question is uncertain. The third noun, fiacail 'tooth', is a countable one, but of all the countable body parts, teeth are the most numerous, moreover, their number is not stable during one's lifetime, and two human beings will not necessarily have the same number of teeth. Generally, a person knows how many teeth they have; but they will not normally know how many another person has. Thus, the reason for the frequent use of *cuid* with this noun seems to be again the uncertain quantity. Ionga 'nail' and ladhar 'toe' also have a relatively high percentage of occurrences with cuid (37% and 22% respectively). In an ideal case, a person has 20 nails and 10 toes, which are fairly high

numbers as far as body parts go, and normally, it is not easy to see at first sight whether a person possesses all of these, so the element of uncertainty is also present here. It may then come as a surprise that *méar* 'finger' has a very low percentage of the *cuid*-type construction (5%): however, if we think along the lines of visibility, fingers are more conspicuous than toes, which means more certainty. At this point, it is interesting to compare these findings with those of Bayda (2018, 44). In the native-speaker corpus that he investigated, he found no examples of fuil 'blood' without cuid: and he had almost the same number of examples of gruaig 'hair' with and without cuid. However, it should also be noted that his total number of tokens was lower than in the present research (52 for fuil and 215 for *gruaig*). An important finding is that he was able to show dialectal differences in the use of cuid with aruaia.

d. Pair nouns, that is nouns that denote things or persons of which there are only two, constitute a separate subcategory in many languages of the world. The same applies to Irish Gaelic, which, like all Indo-European languages, used to have a fully-fledged dual number. 13 As stated earlier, of the category of body parts that come in pairs, Bayda examined five (cluas 'ear', cos 'leg, foot', glúin 'knee', lámh 'hand, arm' and súil 'eye') using a different corpus from the one used here, and presented only those results which contain the poss. pron. mo 'my'. He only found 2 examples of súil 'eye' with cuid, and no cuid-type examples with the other nouns. (He had altogether 647 examples.) However, he also calls attention to the fact that "[l]ámha, for example, has different numbers if we consider not mo, but a 'his', a 'her', a 'their': 306 "- cuid" against 15 "+ cuid"". He notes that "plural nouns denoting objects coming in pairs (usually inalienable possessions like body parts) are hardly ever used with cuid" (2018, 45) and that "[t]he construction is not used with singular nouns or those denoting possessions coming in pairs as in these cases there is no AMOUNT in guestion, the number of persons or items is given by definition" (Bayda 2018, 52). It is all the more noteworthy then that the NEID does give example sentences with poss. pron. + cuid with two pair nouns: lámh 'hand, arm' and súil 'eye'. They are the pair nouns that have the highest percentage of occurrences with *cuid* in the *Corpus for Contemporary Irish*: 6% in both cases (for *lámh*, this is not that much higher than Bayda's data for the three poss. prons. in 3rd person

¹³ It is not within the scope of this essay to discuss the residue of the dual number in Modern Irish.

mentioned above), although this would probably be somewhat higher in the case of súil if the gen. sg. forms from the ambiguous examples with mo shuile, do shuile, etc. could be filtered out, see point 3 above. A search was also done for examples for a sixth pair noun denoting a body part, qualainn 'shoulder'. With the exception of *cluas* 'ear', where 5% of the examples contain *cuid*, in the examples of the other three pair nouns (cos 'leg, foot', glúin 'knee' and qualainn 'shoulder') cuid only appears in about 2% of the cases.

Nouns denoting two internal organs, scambóa 'lung' and croí 'heart' have not been discussed yet. It is notable that 9% of the corpus examples with poss. pron. + scamhóg contain cuid, as opposed to only 2% of the examples with croi. Moreover, one of the examples is from a text written by a non-native speaker (see the discussion in Section 2: the source of this particular example was fairly easy to find, but note that further meticulous research would be needed to separate examples coming from native speakers from those coming from non-native speakers). The Corpus of Contemporary Irish seems to show that scamhóg is a lot more often used in the plural than in the singular, even when referring to one person (compare the frequently used English plural form, lungs). This may partly explain the relatively high number of examples of poss. pron. + cuid + gen. pl. (7 examples making up 9% of all cases) compared to the case of croi 'heart'.

Finally, the following example from the corpus illustrates the various uses of nouns denoting body parts:1415

(11)Scrúdaíodh cuid súl, cuid fiacla, examine.pst.pass her part eye.GEN.PL her part tooth.GEN.PL cuid ingne, cluasa, dhá láimh. (#393709) ear.noм.pL her two her part nail.GEN.PL her hand.Nom.sg 'Her eyes, her teeth, her nails, her ears, her two hands were examined.' Lit.: 'Were examined her part of eyes, her part of teeth, her part of nails, her ears, her two hands,'

Here we have the following structures: i.e. (i) possessive pronoun + *cuid* + gen. pl. of the body part; (ii) possessive pronoun + body part in the nom. pl.; (iii) numeral + body part in the nom. sq. It is interesting

¹⁴ The source of the corpus example is Mac Donncha (2010, 37).

¹⁵ The official standard recommends the form lámh /la:v/; however, in the Gaeltacht areas, láimh /la:v'/ with palatal final consonant is frequently used after the numeral dhá (Ó Baoill, Ó Tuathail 1992, 113).

to note that there are three body parts mentioned of which humans have two: eyes, ears and hands, and each is used in a different type of phrase. As the data presented in Table 1 also show, all of these three constructions can be used with pair nouns, although their frequency varies: the possessive pronoun followed by the nom. pl. of the noun being the most frequent type.

3.3 Personal Numerals in a Partitive Structure (Type C)

Discussion of the Structure 3.3.1

The last structure to be discussed is a true partitive equivalent to English 'two of us', 'three of you', etc., containing personal numerals. Personal numerals behave like nouns and are used for counting people, as in (12) and (13), with *gasúr* in (13) being the gen. pl. of gasúr 'child'.

- (12) triúr three people/persons'
- (13)triúr gasúr three people child.GEN.PL 'three children' Lit.: 'three people/persons of children'

The term 'personal numeral' for such words is used in Thurneysen's A Grammar of Old Irish ([1946] 1980, 243). In Ó Dónaill (2010, 190) they are also referred to as 'personal numerals' (note that Acquaviva uses the term 'collective' numerals - 2008, 30; 165). They are different from cardinals; for example, when simply counting or when counting things or animals, the word trí 'three' would be used for 'three'. In both eDIL and the FGB these personal numerals are categorised as nouns. The Modern Irish forms are the following:

```
duine '(one) person'
beirt 'two people' (earlier and now rarely used form: dís)
triúr 'three people'
ceathrar 'four people'
cúigear 'five people'
seisear 'six people'
seachtar 'seven people' (earlier and now rarely used form: mórsheisear)
ochtar 'eight people'
naonúr 'nine people'
deichniúr 'ten people'
dháréag 'twelve people'
```

Since in Irish Gaelic each noun has grammatical gender, the above-mentioned nouns/personal numerals also have grammatical gender and are (and were) declined according to the noun class they belong (or belonged) to. This means that in Modern Irish, all of them have a nom. sg., a gen. sg., a nom. pl. and a gen. pl. form, with the exception of $dh\acute{a}r\acute{e}ag$, which only has nom. sg. and gen. sg. The FGB still has an entry for $d\acute{s}s$, (Of persons) Two; pair, couple' (FGB s.v. "dis"); and the NEID also gives this as one of the equivalents of "two", when referring to people (NEID s.v. "two").

In order to understand why the above words function as numerals from the semantic point of view but behave as nouns from the morphological and syntactic point of view, one would need to have a look at their etymology.¹⁷

The origin of the Old Irish (OIr.) personal numerals is discussed in Thurneysen ([1946] 1980, 243), where he suggests that with the exception of 'two' (which was días in OIr.), 18 these are made up of the cardinals + the noun fer (Mod. Ir. fear, 'man'), thus OIr. tríar (Mod. Ir. triúr) in itself means 'three men' (= OIr. trí 'three' + fer 'man'), cethrar (Mod. Ir. ceathrar) 'four men' (= OIr. cethair 'four' + fer 'man'), etc. This explains why these personal numerals behave as nouns both from the morphological and syntactic point of view:

- as already mentioned above, they are declined like any other noun;
- b. they can be used on their own, e.g. *triúr* on its own means 'three people', *ceathrar* on its own means 'four people', etc.;
- c. if they are followed by another noun, then that noun has to be in the gen. pl., see ex. (13) above. According to Breatnach, nouns start to appear after the personal numerals only during the Middle Irish period (c. 900-c. 1200) (i.e. before that, these numerals could only be used on their own), and the noun had to be in the gen. pl. (Breatnach 1994, 262).

Kane (2015, 124) analyses these personal numerals as noun phrases, and convincingly argues that the fact that they can stand alone and are followed by the gen. pl. of the noun means that their second element, i.e. the reduced form of *fear*, is still considered to be the syntactic head of the noun phrase. (So, *cúigear* 'five people' consists of

¹⁶ This is probably because <code>dháréag</code> /'ˈɣa:r'e:g/ stands out from the above lexical items as it is actually the contracted form of <code>dháfheardhéag</code> /'ˈɣa:arj'e:g/, 'twelve men'; lit. 'two man teen', where it is the cardinal, and not the personal numeral that is used for 'two' (eDIL s.v. "deec")

¹⁷ Acquaviva classifies their usage as pronouns or determiners (2008, 165).

¹⁸ There were four differences in the personal numerals between Old Irish and Modern Irish, but these are not discussed here as they are not relevant for the research.

cúig 'five' and the reduced form of fear 'man', fear being the syntactic head of the noun phrase *cúiaear*.)

It is also worth noting that these personal numerals are not exclusively used for referring to people; they can also denote things (see Thurneysen 1980, 244 and eDIL s.v. "tríar"): however, in this case they cannot be followed by a noun (FGB s.v. "triúr"). Furthermore, the cardinals can also be used for counting people (see the entries for the numerals between 2 and 10 in the NEID), although language coursebooks and grammars generally teach the personal numerals to learners for this context.

From the semantic point of view, there seems to be a whole - part relationship expressed in some phrases in which the personal numerals are used, thus they can be considered true partitives. An example for one of these types can be seen in (13); and I would like to discuss another type below. This is the equivalent of English phrases such as 'one of us', 'two of us', 'three of us', i.e. 'X persons of us'. The NEID provides two equivalents for such phrases: one with the 1st person plural prepositional pronoun form of the preposition ag 'at', and one with the same grammatical form of the preposition de 'from'. FGB does name this type of usage as a partitive one under sense no. (4) in the entry for aq (FGB s.v. "aq"), and under sense no. (2 f) in the entry for de (FGB s.v. "de").

(14)triúr againn three people at.1PL 'three of us'

or

dínn (15)triúr three people from.1PL 'three of us'

The same two structures can be used for 'X of you' and 'X of them' as well (the latter could also refer to things).

3.3.2 Presentation and Analysis of the Data

The NEID does not give information on the frequency of usage, so a search for these constructions was conducted in the Corpus of Contemporary Irish; the results are presented in [table 2].

Table 2 Corpus data for expressing 'X of us', 'X of you', 'X of them'

Personal numeral	againn 'at us'	dínn 'from us'	agaibh 'at you' (pl.)	díbh 'from you' (pl.)	acu 'at them'	díobh 'from them'
duine	478	29	71	5	2116	437
	478 (94%)*	(6%)	(93%)	5 (7%)	(83%)	(17%)
'one person'		. ,	. ,			
beirt, dís	447	1	109	0	2049	44
'two' people'	(99.8%)	(0.2%)	(100%)	(0%)	(98%)	(2%)
triúr	143	0	10	0	416	18
'three people'	(100%)	(0%)	(100%)	(0%)	(96%)	(4%)
ceathrar	53	0	6	1	120	10
'four people'	(100%)	(0%)	(86%)	(14%)	(92%)	(8%)
cúigear	36	1	0	0	92	18
'five people'	(97%)	(3%)			(84%)	(16%)
seisear	29	0	3	0	32	13
'six people'	(100%)	(0%)	(100%)	(0%)	(71%)	(29%)
mórsheisear	2**	0	0	0	0	0
'seven people'	(100%)					
seachtar	15	0	0	0	45	7
'seven people'	(100%)	(0%)			(86.5%)	(13.5%)
ochtar	10	0	0	0	44	6
'eight people'	(100%)				(88%)	(12%)
naonúr	1	0	0	0	20	5
'nine people'	(100%)				(80%)	(20%)
deichniúr	5	1	0	0	44	6
'ten people'	(83%)	(17%)			(88%)	(12%)
dháréag	2	1	0	0	12	1
'twelve people'	(67%)	(33%)			(92%)	(8%)
Total:	1221	33	199	6	4990	565
	(97%)	(3%)	(97%)	(3%)	(90%)	(10%)

^{*} The percentages were calculated by comparing the data for the following different pairs: againn – dínn, agaibh díbh, acu – díobh.

^{**} These two examples come from the same passage from two different sources.

- The personal numeral *mórsheisear* (the earlier form for 'seven a. people') appears altogether 26 times in the corpus (but there are only two examples in the examined construction), although note that it is not listed in the NEID in the entry for 'seven'. Also, only 16 examples were found in the corpus with the earlier form for 'two people', dís, as opposed to 2634 examples with beirt in the structure examined. The variation in these two numerals was not examined.
- b. There is an almost total domination of the construction with the preposition aq. Although there is some variation depending on the first and second elements, sometimes the number of examples is so low (e.g. in the case of 'ten of us', 'twelve of us' or 'four of you'), that no meaningful conclusion can be drawn in such cases. However, when the data are totalled for each prepositional pronoun, then the dominance of the forms with ag can clearly be seen. It is also noteworthy that this prevalence is greater in the case of the structures 'X of us' and 'X of you' than in the case of 'X of them'. More research would be needed to establish whether the variation depends on native speaker or non-native speaker usage, or dialect, or context, or a combination of these.

Conclusion

The aim of this study was to provide some insight into certain aspects of a much under-researched grammatical feature of Irish Gaelic: partitive and pseudo-partitive structures. The focus of this research was to study the variation that is present or is expected to be present in three such structures - A) and B) being pseudo-partitives, C) being a true partitive - in contemporary usage, and to give possible reasons for the variation if it was attested. Data from the *Corpus* of Contemporary Irish was retrieved and analysed and was checked against dictionary data.

The findings can be summarised as follows:

Type A): The gen. sg. of nouns denoting a language after a quantifier (indicating the degree of knowledge) does not show variation in the *Corpus of Contemporary Irish*, in spite of the general scholarly consensus that the use of the gen. sg. of nouns in general is in decline. It has been suggested that as Irish grammars and dictionaries codify the use of the genitive here, this is probably why variation was not found in (educated) written Irish. Another possible explanation may have to do with the salience of the gen. sg. form of these nouns.

- h. Type B): Detailed data for the variation between the structures possessive pronoun + cuid + body part AND possessive pronoun + body part were presented, and it was argued that the frequency of the use of *cuid* with body parts seems to depend on the certainty in the speakers' mind about the quantity/amount of the body part (which in turn depends on countability and visibility). It was also found that pair nouns can also appear with cuid.
- c. Type C): Detailed data for the variation between the structures with two different prepositions corresponding to English 'one of us', 'two of us', 'one of you', 'two of you', etc., were presented from the Corpus of Contemporary Irish, which showed the overwhelming use of the construction with the preposition ag 'at' rather than with the preposition de 'from'. More research would be needed to establish the reasons behind this variation.

There are several possibilities for further research connected to all the three types discussed here. Based on these findings, the most obvious possibilities would be:

- а. Expansion on type A: Exploration of further structures expressing quantity and using other corpora as well (e.g. the New Corpus for Ireland) in order to compare the data from the different corpora;
- b. Expansion on type B: Further exploration of the use of cuid with nouns other than the ones denoting body parts: further exploration of the use of *cuid* with body parts using other corpora as well (e.g. the New Corpus for Ireland); examining the data in different text types;
- c. Expansion on type C: Further exploration of the use of personal numerals with nouns and with the prepositional pronominal forms of ag and de, using other corpora as well (e.g. the New Corpus for Ireland); examining the data in different text types.

This essay has shown that the rich variety of (pseudo-)partitive structures and meanings in Irish, and the existence of variation clearly deserve to be explored in more detail in the future.

Abbreviations

GEN genitive gen. pl. genitive plural genitive singular gen. sg. masculine Mod. Ir. Modern Irish NEG negative МОИ nominative nominative plural nom. pl. nom. sg. nominative singular Old Irish Olr.

passive DASS PL plural

poss. pron. possessive pronoun

PRS present PST past SG singular

SUBST substantive verb

Bibliography

Dictionaries, Corpora, and Sources of Corpus Examples

```
"About". https://www.focloir.ie/en/page/about.html.
```

"About Gaois". https://www.gaois.ie/en/about/info/.

British National Corpus. http://www.natcorp.ox.ac.uk/.

Corpus of Contemporary American English. https://www.english-corpora.org/ coca/.

Corpus of Contemporary Irish. https://www.gaois.ie/en/corpora/monolingual/. eDIL (Electronic Dictionary of the Irish Language). https://dil.ie/.

FGB - see Ó Dónaill, N.

Hungarian National Corpus / Magyar Nemzeti Szövegtár, http://clara. nytud.hu/mnsz2-dev/.

Mac Donncha, J. (2010). Aileach. Indreabhán [Inverin]: Cló Iar-Chonnacht.

"Latest news". https://www.focloir.ie/en/.

NEID - see New English-Irish Dictionary.

New English-Irish Dictionary (2013-). Foras na Gaeilge. https://corpas. focloir.ie/.

Nua-Chorpas na hÉireann / The New Corpus for Ireland (NCÉ). https://www. corpas.focloir.ie.

Ó Dónaill, N. (ed.) (1977). Foclóir Gaeilge-Béarla [Irish-English Dictionary], Baile Átha Cliath [Dublin]: An Gúm. https://www.teanglann.ie/en/fgb.

Dictionary or Encyclopedia Entries

[&]quot;ag" https://www.teanglann.ie/en/fgb/ag.

[&]quot;Bretnas" https://dil.ie/6772.

[&]quot;chestnut" https://www.focloir.ie/ga/dictionary/ei/chestnut.

[&]quot;clip" https://www.focloir.ie/en/dictionary/ei/clip.

```
"cuit" https://dil.ie/13717.
```

Secondary Sources

- Acquaviva, P. (2008). Lexical Plurals. A Morphosemantic Approach. Oxford: Oxford University Press.
- Bayda, V. (2018). "The Possessive Construction with Cuid 'Part'". Jones, A.L.; Fomin, M. (eds), "Y geissaw chwedleu": Proceedings of the Seventh International Colloquium of Societas Celto-Slavica. Bangor: School of Welsh, Bangor University, 41-53. Studia Celto-Slavica 8. https://doi.org/10.54586/ oaex3600.
- Breatnach, L. (1994). "An Mheán-Ghaeilge" [Middle Irish]. McCone et al. 1994, 221-333.
- "Education and Irish Language", Census of Population 2022 Summary Results, CSO Statistical Publication, 30 May 2023, 11am. https://www.cso.ie/en/ releasesandpublications/ep/p-cpsr/censusofpopulation2022summaryresults/educationandirishlanguage/.
- Hughes, A. (1994). "Gaeilge Uladh" [Ulster Irish]. McCone et al. 1994, 611-60. Kane, F. (2015). The Fine Structure of the Irish NP [PhD Dissertation]. Ulster University.
- Koptjevskaja-Tamm, M. (2001). "'A Piece of the Cake' and 'a Cup of Tea': Partitive and Pseudo-Partitive Nominal Constructions in the Circum-Baltic Languages". Dahl, Ö., Koptjevskaja-Tamm, M. (eds), Circum-Baltic Languages. Volume 2: Grammar and Typology. Amsterdam; Philadelphia: John Benjamins Publishing Company, 523-68. Studies in Language Companion Series 55. https://doi.org/10.1075/slcs.55.11kop.
- "Laghdú eile ar líon na gcainteoirí laethúla Gaeilge sa stát agus sa Ghaeltacht - daonáireamh", tuairisc.ie (30 May 2023). https://tuairisc.ie/ laghdu-eile-ar-lion-na-gcainteoiri-laethula-gaeilge-sastat-agus-sa-ghaeltacht-daonaireamh/.
- McCone, K. et al. (eds) (1994). Stair na Gaeilge [The History of Gaelic]. Maigh Nuad [Maynooth]: Coláiste Phádraig, Maigh Nuad [St. Patrick's College, Mavnooth1.
- Ó Baoill, D.P.: Ó Tuathail, É. (1992). Úrchúrsa Gaeilge [A New Course in Irish]. Baile Átha Cliath [Dublin]: Institiúid Teangeolaíochta Éireann [The Linguistics Institute of Ireland].
- Ó Dónaill, É. (2010). Essential Irish Grammar. S.l.: McGraw-Hill. Teach Yourself Series.

[&]quot;Dáithí Ó hÓgáin (1949-2022)" https://www.ainm.ie/Bio.aspx?ID=3043.

[&]quot;de" https://www.teanglann.ie/en/fgb/de.

[&]quot;Etáil(I)is" https://dil.ie/20639.

[&]quot;deec" https://dil.ie/15020.

[&]quot;dís" https://www.teanglann.ie/en/fgb/dís.

[&]quot;fraingcis" https://dil.ie/24239.

[&]quot;poor" https://www.focloir.ie/en/dictionary/ei/poor.

[&]quot;roinnt" https://www.teanglann.ie/en/fgb/roinnt.

[&]quot;Spáinnis" https://dil.ie/38556.

[&]quot;transfuse" https://www.focloir.ie/en/dictionary/ei/transfuse.

[&]quot;triúr" https://www.teanglann.ie/en/fgb/triúr.

[&]quot;tríar" https://dil.ie/41892.

[&]quot;two" https://www.focloir.ie/en/dictionary/ei/two.

- Ó hAnluain, L.A. (1999). Graiméar Gaeilge na mBráithre Críostaí [Christian Brothers: Irish Grammar]. Baile Átha Cliath [Dublin]: An Gúm.
- Ó hUiginn, R. (1994). "Gaeilge Chonnacht." [Connacht Irish]. McCone et al. 1994, 539-609.
- Péterváry, T.; Ghiollagáin, Á.U. (2014). Iniúchadh ar an gCumas Dátheangach. An sealbhú teanga i measc ghlúin óg na Gaeltachta [Analysis of Bilingual Competence. Language Acquisition Among Young People in the Gaeltacht]. Baile Átha Cliath [Dublin]: NUI Galway and An Chomhairle um Oideachas Gaeltachta & Gaelscolaíochta.
- Thurneysen, R. [1946] (1980). A Grammar of Old Irish. Dublin: The Dublin Institute for Advanced Studies.
- Ua Súilleabháin, S. (1994). "Gaeilge na Mumhan" [Munster Irish]. McCone et al. 1994, 479-538.

Partitive Constructions and Partitive Elements Within and Across Language Borders in Europe

edited by Elvira Glaser, Petra Sleeman, Thomas Strobel, Anne Tamm

Possessive Partitive Strategies in Uralic

Evidence from Mari and Hungarian Quantifiers and Inflected Adpositions

Gabriella Tóth

Károli Gáspár University of the Reformed Church, Hungary

Kata Kubínyi

Eötvös Loránd University, Hungary

Anne Tamm

Károli Gáspár University of the Reformed Church, Hungary

Abstract In this essay, we analyse how proper partitivity is expressed in Hungarian and Mari. Three strategies are used, one of which – marking on the superset via case or adpositions – is basically identical to what we find in well-studied languages. The other two strategies are possessive agreement with the superset by 1) the quantifier that represents the subset or 2) by the postposition that links the subset to the superset. This means that (at least) one of these entities bears a possessive suffix that indicates the number and person of the superset. We discuss how these strategies work in both languages, and what the structural differences are.

Keywords Proper partitives. Possessive agreement. Quantifiers. Postpositions. Locus of possessive suffixes.

Summary 1 Introduction. – 2 Cases and Adpositions (Postpositions) in Partitive Constructions in Uralic Languages. – 3 Possessive Agreement in Uralic Partitive Constructions: Subset Marking in Hungarian. – 4 Comparing the Possessive Strategies in Mari and Hungarian. – 5 Discussion. – 6 Conclusion.



1 Introduction

The aim of this essay is to describe possessive partitive strategies of proper partitives used in two Uralic languages, Hungarian and Mari. Hereby we provide information of the elusive link between possession and separative in partitive constructions that has been attested in many languages of Europe, such as in the English 'of'. While in English, the preposition 'of', originally a marker of separative relation between two entities, has developed to primarily mark possessive constructions, in Uralic, we see the opposite direction in grammaticalisation. Possessive (agreement) markers have become or are becoming partitive markers in Uralic.

The Uralic languages are spoken in Eastern Europe and in northwestern Siberia. The diagram represents a traditional view of the structure of the family. Hungarian belongs to the Ugric and Mari to the Volgaic languages within the Finno-Ugric branch of the Uralic family.

Diagram 1 The traditional view of the structure of the Uralic family (based on Miestamo, Tamm and Wagner-Nagy 2015, 8)

URALIC

- SAMOYEDIC
- FINNO-UGRIC
- UGRIC
- FINNO-PERMIC
- PERMIC
- FINNO-VOLGAIC
- VOLGAIC
- FINNO-SAAMIC
- SAAMIC
- FINNIC

In the morphologically rich Uralic languages, it comes as no surprise that there are different strategies to express semantic proper partitivity morphologically. While the partitive structures of the Finnic languages have been studied earlier, as they involve a dedicated partitive

We are deeply grateful to Elena Vedernikova for the Mari data elicitation sessions. The text has gained in quality from the comments and suggestions of three anonymous reviewers and the editors Elvira Glaser, Petra Sleeman, and Thomas Strobel. Thanks go to Giuliana Giusti and Elisabetta Taboga for their careful work with our manuscript at Series LiVVaL. All mistakes are ours. Gabriella Tóth and Natalia Lehka (to whom we are grateful for the help with example materials) acknowledge the support of the research grant obtained from the Faculty of Humanities and Social Sciences, Károli Gáspár University of the Reformed Church in Hungary (Theoretical and Experimental Research in Linguistics, reg. no. 20736B800) to this essay. Roles: Kata Kubinyi: Conceptualization, data curation, review, original draft writing, editing. Anne Tamm: conceptualization, data curation, methodology writing, review, editing, original draft writing. Gabriella Tóth: conceptualization, data curation, methodology writing, review, original draft writing.

case, elsewhere in the family, partitive structures can be formed by means of both case marking and possessive agreement. The possessive strategy has been regarded as one of the common characteristics shared by Uralic and Turkic languages (Fokos 1939, 17-18; 1961, 63-8; for recent research on Turkic see von Heusinger, Kornfilt 2017; Lvutikova 2023).

To discuss the semantics of the partitive constructions, we use the conceptual tools provided in Koptjevskaja-Tamm's semantic-typological work, such as 'part/amount of N (the whole)' relationship (Koptjevskaja-Tamm 2001) or in terms of Seržant (2021), the subset (the part/ amount) and a superset (the whole) relation. Partitive constructions are divided into two major subclasses: proper partitives and pseudo-partitives. Pseudo-partitive constructions (e.g., a glass of water, a number of problems, a piece of cake), as compared to the proper partitives, do not have an antecedent in the discourse, their subset DP1 is limited to a restricted number of lexical nouns in the head of NP1. In pseudo-partitives, the superset is indefinite and interpreted as an existential nominal construction (Koptjevskaja-Tamm 2001; Falco, Zamparelli 2019: Seržant 2021).1

To clarify how semantics is expressed in morphosyntax, we use Falco and Zamparelli (2019) as well as other approaches that regard proper partitives as structures that capture the semantic relationship between a subset and a superset. We use the term proper partitive throughout the essay for the sake of better understanding, though most of our examples are canonical partitives in the sense of Falco and Zamparelli (2019), Following Jackendoff (1968) and Selkirk (1977), Falco and Zamparelli (2019) argue that proper partitives are represented in two DPs (or other formal means that involve determiner phrases, such as noun phrases and quantifier phrases, e.g., De Hoop 1998; Martí-Girbau 2002; 2010; Cardinaletti, Giusti 2006; Sauerland, Yatsushiro 2017; von Heusinger, Kornfilt 2017, a.o.). DP1 stands for the subset and DP2 represents the superset. The structure in (1c) is adopted from Falco and Zamparelli (2019) and represents the superset, which is embedded in DP1, the subset. The two DPs are related via a preposition or case. The phrases 'ten of the girls' and 'ten of them' are illustrated in (1d) and (1e), respectively.

¹ See more on Uralic pseudo-partitives in the various chapters in Bakró-Nagy, Laakso, Skribnik 2022 or in comparison with proper partitives in Kubínyi, Tamm 2022. In Hungarian, pseudo-partitives do not have a complex structure. The subset precedes the superset (i).

pohár egy bor INDF glass[NOM] wine[NOM] 'a glass of wine' (Tamm 2014, 124)

- (1) [Context: Twenty students came to the party.]
 - a. Ten of the girls / ten girls of the freshmen went home very late.
 - b. Ten of them went home very late.
 - c. [DP1 [NP1 [PP [DP2 [NP2]]]]]]
 - d. $[_{DP1}$ ten $[_{NP1}$ (e) $[_{PP}$ of $[_{DP2}$ the $[_{NP2}$ girls]]]]]
 - e. $[_{DP1}$ ten $[_{NP1}$ (e) $[_{PP}$ of $[_{DP2}$ them $[_{NP2}$ (them)]]]]]
 - f. $[_{DP1}$ ten $[_{NP1}$ girls $[_{PP}$ of $[_{DP2}$ the $[_{NP2}$ freshmen]]]]]

The supersets in ('ten of the girls/ten girls of the freshmen') in (1a) and ('ten of them') in (1b) are related to the antecedent ('twenty students'). The superset can be a proper part of the antecedent, or a personal pronoun. As shown in (1d) and (1e), the head of NP1 ('girls') is silent (Cardinaletti. Giusti 2006), but can be overt as well, see (1f). However, in DP1, there must be an overt quantifier. The head of PP assigns case to DP2: see (1c), (1d), (1e), and (1f),

Our aim is to show how the partitive relation is marked via possessive agreement in Hungarian and Mari, see (1c). In typical Uralic languages, possessive agreement is a means to mark the number and person features of a possessor on the possessee via non-verbal agreement affixes, more specifically, suffixes. In Uralic, in partitive constructions, the locus of the possessive agreement can be the 'part', but it can also be the entity that relates the 'part' to the 'whole'. Therefore, we can say that in most of these languages, altogether three strategies are available to mark partitivity, one for each entity involved: the part, the whole, and the relating entity. In this essay, 'possessive agreement' means the partitive use of the possessive agreement suffixes to mark the number and person of the 'whole' on either the 'part' or on the link between the two, on the adposition.

The essay is organised as follows: in Section 2, we illustrate Finnish, Estonian, Hungarian and Mari. In these languages, the cases and postpositions that combine with the DP that denotes the superset mark the relation between the subset and the superset. In Section 3, we focus on the possessive strategies. We discuss the nature of possessive agreement on different syntactic categories and the morphological and syntactic properties of a special kind of quantifiers that can be marked for possessive agreement in Hungarian. In Section 4, we show that there are similarities but also crucial differences between Hungarian and Mari with respect to the use of the three strategies for encoding proper partitivity. Section 5 is a brief discussion and Section 6 is the conclusion.

2 Cases and Adpositions (Postpositions) in Partitive Constructions in Uralic Languages

In Uralic languages, one way of encoding the relationship between the subset and a superset is structurally identical with what can be observed in languages like English (2). This strategy involves marking the superset with case, for instance, elative, ablative, inessive, or adpositions, as illustrated in (3) to (6). Either the case phrase (KP) or the adpositional phrase (PP) is projected in these structures.²

(2) English

[Some students came to the party.]
Two of them / two of the qirls / two qirls of the freshmen left very early.

(3) Hungarian

a.	Megevett	hármat	az	almá- ból
	PREF.eat.PST.3SG	three.acc	DEF	apple[sg]-ELA
	/?? hármat	az	alma	közül.
	three.acc	DEF	apple[NOM.SG]	from
	'He ate three of the apples.'			

diákok közül b. [...] Kettő а two[NOM] DEF student.pl[NOM] from / ??kettő а diákok-**ból** hazakísért. two[NOM] student.PL-ELA home_accompany.pst.3sg DEF '[Ten students took the exam.] Two of the students accompanied me home.'

(4) Finnish

intuition.

[...] Kaksi hei-stä hylättiin.
 two[NOM] they.PL-ELA reject.PASS.PST
 '[Ten students took the exam.] Two of them failed.'

b.	Kaksi	hei- tä ,	22-vuotias	nainen ja
	two[NOM]	they.PL-PAR	22-year.old	woman and
	31-vuotias	mies,	jouduttiin	viemään
	31-year.old	man	have_to.pass.pst	take.INF
	ensiapuun	Tampereen	yliopistolliseen	sairaalaan.
	first_aid.ıLL	Tampere.gen	universitary.ILL	hospital.ıLL
	'Two of them, a 22-y be taken to first aid		,	an, were forced to

Where not otherwise indicated, the Hungarian data are based on the authors'

In Hungarian, the distribution of the postposition *közül* 'out of' and the elative case in constructions with partitive semantics is primarily based on countability: *közül* 'out of' usually does not occur with mass nouns, while the elative marker does, as shown in (3a) and (3b) above.³

As to Finnish, both the partitive case and the elative case can be used to mark the partitive relation on DP2 (4). The choice between the two cases depends on multiple factors, especially the definite/indefinite reference of the superset; nonetheless, it can be also free (VISK § 592). The elative and, in some constructions, the partitive morphological case is used to mark proper partitivity on DP2 also in Estonian, another Finnic language (5a). Partitive or pseudo-partitive semantics do not match well with what are referred to as the morphological partitive or elative cases, and these terms are perhaps not well suited for describing the natural divide between the case phenomena. In one type of interrogative wh-clauses, the object argument may be either in the morphological partitive or elative case (without any semantic partitivity), as illustrated with the minimal pair (5b) and (5c). Also, semantic partitivity is often expressed by postpositional phrases, as in (5d) and (5e).

(5) Estonian

- a. [...] Kaks nei-st sai(d) hea hinde. two[NOM] they.PL-ELA get.PST.3PL good.ACC grade.ACC '[Ten students took the exam.] Two of them got a good grade.'
- b. Miks/mis sa te-da kiusa-d?
 why 2sG DEM-PAR bully-2sG
 'Why are you bullying him?' (Pajusalu 2006, 331)
- c. Mis sa ta-st kiusa-d? what 2SG DEM-ELA bully-2SG 'Don't bully him.' (Pajusalu 2006, 331)
- d. [...] Kaks nende (tudengite) seast
 two[NOM] DEM.PL.GEN student.PL.GEN from_among
 sai(d) hea hinde.
 get.PST.3PL good.ACC grade.ACC
 '[Ten students took the exam.] Two of them / two of these students got a good grade.'

³ Words denoting crops are mass nouns in Hungarian. In sentence (3), $h\acute{a}rmat~az~al-m\acute{a}b\acute{o}l$ /?? $h\acute{a}rmat~az~alma~k\ddot{o}z\ddot{u}l$ can be interpreted as 'three of the apples'. In Hungarian, neither the elative case nor the postposition is exclusively used in partitive constructions.

```
e. paati-de sea-st /hulga-st
boat-GEN.PL among-ELA amount-ELA
'from among the boats' (Tamm 2014. 117)
```

In Mari, the postposition $\gamma y \check{c}$ 'from' is used to mark partitivity on DP2 (6a). Also, inessive case on DP2 can be – or was, at least, earlier – used to indicate the partitive relation (6b).

- (6) Mari
- a. Kum erγy γyč koktyt-šy-m salδat-lan puem.
 three son[NOM.SG] from two-3SG-ACC soldier-DAT give.PRS.1SG
 '1'll send two sons out of the three to the army.' (Bereczki 1990, 43)
- b. Kum uškal-**yšte** ikty-žy-m užalem.
 three cow[sg]-INE one-3SG-ACC sell.PRS.1SG
 'I will sell one of (the) three cows.' (Bereczki 1990, 38)

To represent partitive constructions in Uralic, in (7a), we adopt a modified structure proposed by Falco and Zamparelli (2019, 11); see the example (1e), 'ten of them', which is repeated here for the sake of convenience as (7b).

```
(7) a. [_{DP1} two [_{QP1} (two) [_{NP1} (students) [_{KP/PP} -PAR, -ELA, -INE/ out of, from, from among [_{DP2} them [_{NP2} (them)]]]]]] b. [_{DP1} ten [_{NP1} (students) [_{PP} of [_{DP2} them [_{NP2} (them)]]]]]] (Falco, Zamparelli 2019, 11)
```

The two DPs are related via a case or an adposition. 'Them' represents the superset, which is embedded in DP1, the subset ('two (students)'). This is the reason for placing partitive/elative/inessive case marking (or any adposition) as the head of KP/PP embedded under NP1 (we put aside the issue of morphological marking of accusative on NP1 in the illustrated sentences (3a), (6a), and (6b)).

Possessive Agreement in Uralic Partitive Constructions:Subset Marking in Hungarian

Section 2 detailed what could be called 'superset proper partitive marking', since the marking of the partitive relationship involves the phrase that stands for the superset ('the whole'). Now we introduce the details of what could be called 'subset proper partitive marking', which has enjoyed less attention in previous literature on partitivity. In superset but not subset marking, the relationship between the

subset and a superset is structurally marked in an identical way with what can be observed in languages like English. In the Uralic subset marking, which is the focus of this article, the relationship between DP1 and DP2 (i.e., between the subset and the superset) is encoded by possessive agreement suffixes. The possessive suffix attaches to the quantifier in DP1 that stands for the subset. Additionally, it can also attach to the head of the postpositional phrase containing DP2 that stands for the superset. In this section, we detail the quantifiers and in Section 4, the postposition.

Subset marking means, then, that there is an explicit morphological marker of number and person on the subset, which agrees with the superset. The subset is represented by a quantifier, such as a cardinal numeral, a 'weak' quantifier such as 'much' and 'several', or an indefinite pronoun such as 'one'. The quantifier bears a possessive marker. Henceforth, we refer to these categories by the term 'quantifier'.

Hungarian and Mari use the same possessive marking strategies to encode partitivity, but the structures may differ in several respects, as shown in Section 4 below. In this section, we focus on Hungarian, briefly discussing the syntactic categories that are involved in possessive agreement. We show that the different syntactic categories behave differently with respect to the possessive suffix. Then we focus on a subtype of the possessively marked partitive quantifiers of Hungarian. Finally, we discuss the agreement features marked with the possessive suffix on quantifiers.

3.1 Possessive Suffixes across Categories in Hungarian

In Hungarian (as, indeed, in most Uralic languages), possessive agreement suffixes can attach among others to possessive constructions, adpositions, and quantifiers in partitive constructions (8).4

- Hungarian
- a. Péter könvv-e Peter[NOM] book-3SG 'Peter's book'

⁴ As most of the Uralic languages, Hungarian is a pro-drop language. Personal pronouns are not pronounced if they can be recovered via person and number agreement, as is evident from (8c) and (8g). In standard Hungarian, the 3rd plural pronominal possessor formally coincides with its singular counterpart, while in some substandard variants the difference is marked, as indicated in (8j).

b. *Péter könvv Péter[NOM] book Intended to mean: 'Peter's book'

(mi) könyv-**ünk** c. *a* book-1PL DEF we[NOM] 'our book'

d. *a mi könvv we[NOM] book[NOM] Intended to mean: 'our book'

e. Péter mögött Peter[NOM] behind 'behind Péter'

f. *Péter mögött-e Peter[NOM] behind-3SG Intended to mean: 'behind Péter'

g. (ő) mögött-e he[NOM] behind-3sg 'hehind him'

h. *ő mögött he[иом] behind Intended to mean: 'behind him'

i. kettő-**jük** two-3PL 'two of them'

*ő(k) kettő-**jük** j. they[NOM] two-3PL Intended to mean: 'two of them'

k. *a fiúk kettő-**jük** DEF boy.pl[NOM] two-3PL Intended to mean: 'two of the boys'

In possessive constructions, the possessor can be overt or covert. The possessor is either a lexical NP or a pronoun. The suffix that reflects the number and person features of the possessor appears obligatorily on the possessee ((8a-b), (8c-d)). In adpositional constructions, the postposition cannot agree with a lexical NP, but it must agree with the

personal pronoun ((8e-f), (8g-h)). The quantifiers marked with the possessive suffix agree with the superset. However, the superset cannot be overtly present in the structure. Neither the personal pronoun nor the lexical DP2 can be overt ((8i-k), (9)).

(9) Hungarian

```
Meglátogat-ta
                     kettő-nk-et
                                    /*mi
                                              kettő-nk-et.
PREF.visit-PST.3SG>3 two-1PL-ACC
                                    we[NOM] two-1PL-ACC
'She visited two of us.'
```

3.2 Partitive Quantifiers: The Morphological Structure of the Possessively Marked Quantifiers Ending in -ik in Hungarian

In the previous subsection, we have already seen that numerals can be marked with the agreement suffix. In this subsection, we take a closer look at a morphologically complex subtype of the possessively marked quantifiers of Hungarian, which can be called ik-quantifiers as they end in what is called a derivational suffix -ik (É. Kiss 2018).

Examples of ik-quantifiers include eqvik 'one (of)', másik 'the other one', melyik 'which', valamelyik 'either, one, some', mindegyik 'each', bármelyik 'any', semelyik 'none'. This subtype has the following structure: the root is an indefinite - or alternatively an interrogative-relative - pronoun that is marked with the suffix -ik. followed by a possessive marker that has number and person features of the superset in DP2. Apart from quantifiers like 'two', 'many' etc., it is these pronounbased ik-quantifiers that can always morphologically express the person and number of the superset under the conditions illustrated by examples (8i-k) and (9) above.

Furthermore, if a quantifier has both an ik-form and an ik-less form. only the ik-form can carry the possessive suffix associated with the superset. This could be illustrated by the difference between egy-ik-üket 'one-ik-3pl-acc' versus *eqy-ük-et 'one-3pl-acc' as in (10). Note that the segmentation of the form -ik is intentionally diachronic for the purposes of the present essay and, synchronically, it is not a productive inflectional category on quantifiers.

(10) Hungarian

```
[...] Meglátogat-om
                        egy-ik-ük-et
                                          / *egy-ük-et.
PREF.visit.PRS-1SG>3
                        one-IK-3PL-ACC
                                          one-3PL-ACC
'[Ten students came to the exam.] I will visit one of them.'
```

3.3 The Nature of the Suffix -ik in Hungarian (É. Kiss 2018)

É. Kiss (2018) argues that the -ik suffix is historically related to a possessive agreement marker, being an obsolete allomorph of the 3rd person plural possessive suffix $-uk/\ddot{u}k$, $-juk/-j\ddot{u}k$ (e.g. $h\acute{a}z$ -uk 'their house', $p\acute{e}nz$ - $\ddot{u}k$ 'their money', $macsk\acute{a}$ -juk 'their cat', $kecsk\acute{e}$ - $j\ddot{u}k$ 'their goat'). Following Janda (2015), who also claims that possessive markers have a significant role in the organisation of the discourse, we agree that the entities they refer to have to be introduced in the preceding discourse. É. Kiss (2018) argues that in Modern Hungarian, the suffix -ik must be analysed as a specific-partitive derivational suffix. This is why ik-quantifiers cannot be interpreted without an antecedent in the discourse, unlike ik-less indefinite pronouns or the ik-less quantifier; see the difference between (11a) and (11b).

(11) Hungarian

- a. Meglátogatott valakit /valamilyen hallgatót a klubból.

 PREF.visit.PST.3SG somebody.ACC some student.ACC DEF club.ELA

 'He visited somebody/ some student from the club.'
- b. *Meglátogatott valamely-ik hallgatót a klubból.

 PREF.visit.PST.3SG some-IK student.ACC DEF club.ELA

 Intended to mean: 'He visited a (certain) student from the club.'

The suffix (or the suffixed word) also triggers object agreement on the verb (É. Kiss 2018).⁶

(12) Hungarian

a. Meglátogat-ok /*Meglátogat-om valaki-t a klubból. PREF.visit.PRS-1SG PREF.visit.PRS-1SG>3 somebody-ACC DEF club.ELA 'I will visit somebody from the club.'

b.	Meglátogat- ok	/ *Meglátogat- om	valamilyen	hallgató-t.
	PREF.visit.PRS-1SG	PREF.visit.PRS-1SG>3	some	student-Acc
	'I will visit some student.'			

⁵ The process described by É. Kiss (2018) seems to be a general tendency in Uralic languages (cf. Nikolaeva 2003; Gerland 2014; É. Kiss, Tánczos 2018).

⁶ In Hungarian, there are two verbal paradigms. Intransitive verbs and transitive verbs with indefinite objects are marked for subject agreement. Transitive verbs with definite objects have object agreement.

- c. Meglátogat-**om** /*Meglátogat-**ok** valamely-ik-et a klubból.

 PREF.visit.PRS-1SG>3 PREF.visit.PRS-1SG someone-IK-ACC DEF club.ELA

 'I will visit someone (lit. a certain one) of them from the club.'
- d. Meglátogat-**om** /*Meglátogat-**ok** valamely-ik-et
 PREF.visit.PRS-1SG>3 PREF.visit.PRS-1SG someone-IK-ACC
 a hallgatók közül.
 DEF student.PL[NOM] from
 'I will visit someone (lit. a certain one) of the students.'
- e. Meglátogat-**om** /*Meglátogat-**ok** valamely-ik-ük-et.

 PREF.visit.PRS-1SG>3 PREF.visit.PRS-1SG someone-IK-3PL-ACC

 'I will visit someone (lit. a certain one) of them.'

In (12a) and (12b), the objects *valakit* 'somebody' and *valamilyen hall-gatót* 'some student' do not trigger object agreement, as they are indefinite. In (12c-d), the noun head in DP1 is elided, giving way to the accusative marker to attach to the *ik*-quantifier. In (12c)-(12e) the quantifiers are specific and trigger object agreement, though a specific reading of the DP does not automatically trigger object agreement. Object agreement is triggered by DPs with the overt definite article, possessive structures, and some pronouns.

Bartos (2000) argues that only full-fledged object DPs agree with the verb, while QPs and NPs do not trigger object agreement. As we have shown in (12c), (12d), and (12e), the *ik*-words agree with the verb. We assume that *ik*-words in QP1 move to the head DP1.

(13) Hungarian

- a. $\left[_{_{\mathbb{Q}^{p}}} \text{valaki-t} \right]_{_{\mathbb{N}^{p}}} \left(\text{valaki-t} \right) \right]$ (cf. 12a) somebody-acc
- b. $[_{_{\mathbb{Q}P}}$ valamilyen $[_{_{\mathbb{N}P}}$ hallgató-t]] (cf.12b) some student.sg-Acc
- c. $[_{_{\rm DP}}$ valamely-ik-et $[_{_{\rm QP}}$ (valamely-ik-et $[_{_{\rm NP}}$ (hallgató-t)]]] (cf.12c) someone-ik-acc student.sg-acc
- 7 Not all partitive constructions trigger object agreement:
- (i) Levizsgáztat-ok/*Levizsgáztat-om mindenki-t a diákok közül.

 PREF.examine-PRS.1SG/PREF.examine.PRS.1SG>3 everybody-ACC DEF student.PL[NOM] from
 'I will examine all of the students.'

Gabriella Tóth, Kata Kubínyi, Anne Tamm Possessive Partitive Strategies in Uralic

d. [pp1 valamely-ik-et [(valamely-ik-et) [(hallgatót) someone-IK-ACC someone-IK-ACC student.sg-Acc [.... hallgató-k]]]]] [__közül [_{DP2} a (cf. 12d) out.of student-PL[NOM] DEF [(valamely-ik-ük-et) [(hallgató-t) e. ["valamely-ik-ük-et (cf. 12e) someone-IK-3PI-ACC someone-IK-3PI-ACC student.sg-acc

The reason for the movement of the *ik*-quantifiers to DP1 is to check the specificity feature and trigger object agreement, see the contrast between (13a-b) and (13c-e). *Ik*-constructions always agree with the verb, as in (12c), (12d), and (12e), represented in (13c), (13d), and (13e). *Ik*-quantifiers can also occur in quantitative constructions (14b).

(14) Hungarian

[A barátaim meglátogattak Londonban.] 'My friends visited me in London.'

- a. *Valamilyen l\u00e1nyt elvisz-ek vacsor\u00e1zni.
 some girl.ACC PREF.take.PRS-1SG dine.INF
 'I will take some girl out for dinner.'
- b. Valamely-ik lányt elvisz-**em** vacsorázni.
 some-IK girl.ACC PREF.take.PRS-1SG > 3 dine.INF
 'I will take some (lit. a certain) girl out for dinner.'
- c. $[_{_{DP}}$ valamely-ik $[_{_{QP}}$ (valamely-ik) $[_{_{NP}}$ lányt]]] some-ik some-ik girl.acc
- d. $[_{DP}$ valamely-ik $[_{NP}$ lányt]] some-ik girl.Acc

⁸ Jackendoff (1977) argues that partitive constructions contain 2 NPs, while in quantitative constructions there is only one NP, see the contrast between (ia) and (ib), see also Martí-Girbau 2002.

⁽i) a. Each boy visited some friends; quantitative

b. Each of the boys visited some friend; partitive

In (ia), the subject is a quantised NP, or to use an up-to-date term, a QP, which is specific, but it is not partitive, but quantitative, see also the Hungarian examples (12a-c) versus (12d-e) represented in (13a-c) versus (13d-e).

Ik-quantifiers are interpreted as specific both in quantitative constructions and in partitive constructions as opposed to existential quantifiers, see the contrast between (14a) and (14b). They must have an antecedent in the discourse both in partitive and quantitative constructions. *Ik*-quantifiers trigger object agreement also in quantitative constructions, see (14b). There is one major difference that can be attested in the behaviour of *ik*-quantifiers in quantitative and partitive constructions. In partitive constructions, ik-quantifiers can be marked with the possessive suffix, as in (12e) and (13e), while this strategy is not available in quantitative constructions (15).

(15) Hungarian

```
*[...] Valamely-ik-ük lányt
                                 elviszem
                                                         vacsorázni.
                       girl.acc PREF.take.PRS.1SG>3
                                                         dine.INF
'[My friends visited me in London.]' Intended to mean: 'I will take some (lit. a
certain) girl out for dinner.'
```

In quantitative constructions, there is no recoverable superset for the ik-quantifier, so it cannot exhibit the person and number features of any superset. It cannot be marked for the person and number of the antecedent either, as in (15).

3.4 Number and Person Features of the Superset Marked on the Subset

In Section 3.1, we discussed the nature of the possessive suffix on different syntactic categories in Hungarian. Now we take a glance at the number and person features that Hungarian encodes in quantifiers.

In proper partitive phrases, the number of the possessive suffix is always plural, as the understood superset is, by definition, plural. The person encoded by the marker is first, second, or third. The whole possessive agreement paradigm in Hungarian subset marking is illustrated in (16). We disregard free allomorphic variation of the suffixes.

(16) which of DP2

- a. mely-ik-ünk which-IK-1PL
- 'which of us'
- b. mely-ik-etek which-IK-2PL 'which of you'
- c. mely-ik-ük which-IK-3PL 'which of them'

While, as a result, reference to the superset is always morphologically plural, the antecedent is not necessarily morphologically plural, see (17).

(17) Hungarian

```
eljött
[Minden
          hallgató
                                                          bulira.]
every
          student.sg[NOM]
                              PREF.come.PST.3SG
                                                          party.subl
'Every student came to the party.'
```

- a. Ő-k nagyon kedves-ek volt-ak. she-pl[NOM] very nice-PL be.PST-3PL 'They were very nice.'
- b. Egy-ik-**ük** korán elment. one-IK-3PL[NOM] early PREF.go.PST.3SG 'One of them left early.'

In (17), the antecedent minden hallgató is in the singular, but the personal pronoun δk 'they' in (17a) and the quantifier eqyik $\ddot{u}k$ 'one of them' in (17b) is marked for plural. We must assume that the person and number marker on the quantifier comes from the superset, a silent pronoun in the superset DP2, not from the antecedent (17).

4 **Comparing the Possessive Strategies in Mari** and Hungarian

In Mari and Hungarian, the subset and the superset can be linked via a spatial case or a postposition meaning 'from (among)'. Both languages use also possessive marking with the number and person features of the superset to encode the superset-subset relation via the possessive suffix. In both languages, the locus of the marking can also be the postposition linking the two sets to each other, not only the subset (the quantifier). Yet, there are crucial differences between Hungarian and Mari in the use of these strategies. In what follows, we present the data about the differences.

4.1 Mari

4.1.1 Superset Marking Via a Case or a Postposition

In Mari, the superset can be overt; see example (6) in Section 2 above and example (18) here below; (6b) is repeated here as (18b). The subset and the superset can be linked either by means of the postposition (18a) or the inessive case (18b). In (18a), student [student.[NOM.SG]] 'students' is the superset, which is linked to kokyt-šo [two-3sg] 'two', the subset, via the postposition avč 'from among'. In (18b), iktv-žv-m [one-3SG-ACC] 'one' is the subset. It is related to the superset via the inessive case suffix -yšte in kum uškal-yšte [three cow-INE] 'of three cows'.

(18) Mari

- a. [...] Student kokyt-**šo** qvč provalitl-en. two-3SG[NOM] student[NOM.SG] from fail-PST2.3SG 'Two from among the students failed.' (Elena Vedernikova, pers. comm.)
- b. [...] Kum uškal-**yšte** ikty-**žy**-m užal-em. three COW-INE[SG] one-3SG-ACC sell-prs.1sg 'I will sell one from among (the) three cows.' (Bereczki 1990, 38)

4.1.2 Possessive Marking on the Quantifier

In Mari, the possessive suffix can attach to the quantifiers, but its form is invariantly in the 3rd person and singular, see (18) and (19). The superset is plural, so one might expect plural agreement on the quantifier in (19a), but the quantifier 'two' is ungrammatical with the 3rd person plural marking. At the same time, example (19b) demonstrates that the 1st person plural superset is grammatical with the 3rd person singular marking instead.

(19) Mari

- a. [...] *Kokyty-**št**-lan kuqu kol verešt-yn. two-3PL-DAT large fish[NOM] fall prev-pst2.3sg '[Ten men went fishing.] Two from among them caught large fish.' (Elena Vedernikova, pers. comm.)
- b. [...] Kokyt-**šo** provalitl-en-na. two-3sg[NOM] fail-PST2-1PL '[We took the exam.] Two from among us failed.' (Elena Vedernikova, pers. comm.)

As can be seen from the above data, the 3rd person singular possessive suffix does not reflect the number and person features of the superset. The plural agreement *kokyty-št-lan* [two-3PL-DAT] 'two of them' is not grammatical in (19a), despite the plurality of the superset. The 3rd person agreement is grammatical in (19b), despite the 1st person feature of the superset (the suffix -na in provalitl-en-na). The quantifier kokyt-šo [two-3sg] 'two' (or 'the two of them') can be related both to the third and the non-third person plural supersets. Given the agreement data in (18) and (19), we regard the 3rd person singular suffix as the default agreement marker that is bleached in its meaning.

413 Possessive Marking on the Postposition

Postpositions can agree with the DPs they subcategorise for also in Mari. In partitive constructions, the postposition can agree with DP2 (the superset), but the agreement is optional. There is a contrast between the postpositional phrases nunyn koklašty-št [they.gen among-3PL] 'of them', where the postposition bears the number-person features of DP2 it subcategorises for, and *nunyn koklašte* [they.gen among] 'of them', where there are no agreement features on the postposition; compare (20a) and (20b), respectively.

(20) Mari

- a. Nunyn koklašty-št kokyt-**šo** dene kutyrenam. they.GEN among-3PL two-3sg[NOM] with speak.pst2.1sg 'I spoke with two of them.' (Elena Vedernikova, pers. comm.)
- b. Nunyn koklašte kokyt-**šo** dene kutyrenam. two-3sg[NoM] with speak.pst2.1sg thev.gen among 'I spoke with two of them.' (Elena Vedernikova, pers. comm.)

In Mari, we show a relevant difference between the marking strategy on the quantifier and the postposition. While the form of the possessive marker on the quantifier is a default person-number suffix, as shown in Section 4.1.2, the form of the person-number marker on the postposition must reflect the person-number features of the superset. The genitive pronoun *nunyn* [they.gen] 'their' is in the 3rd person and the plural number in (20). The suffix on the postposition koklašty- $\check{s}t$ [among-3PL] 'of them' is also in the 3rd person but in the plural

⁹ Individual postpositions may behave differently in this respect. This phenomenon is not considered here. For more details see Riese, Bradley, Yefremova (2022, 154 ff).

number, unlike the suffix used on quantifiers; compare the grammatical form of the quantifier kokyt 'two' with the singular ending in examples (20a-b) and (18a) to its ungrammatical counterpart with the plural suffix in (19a).

In sum, quantifiers but not postpositions in Mari are always marked for the 3rd person singular, so Mari quantifiers have a bleached possessive partitive marker, similar to the Hungarian -ik. Mari postpositions have agreement. The 3rd person singular suffix on Mari quantifiers can be considered a default possessive agreement marker or a semantically bleached suffix that has gained the function of marking proper partitivity, which we conclude based on the sentences (18) to (20). Postpositions, on the other hand, can optionally have the number and the person suffix, whose values are identical with the person and number features of the superset. The superset can overtly cooccur with the agreement marked postposition and the quantifier.

4.2 Hungarian

Superset Marking Via a Case or a Postposition 4.2.1

In Hungarian, the superset and the subset can be related with either a case or a postposition, see example (3) in Section 2, repeated here as (21a), and (21b).

(21) Hungarian

a.	Megevett	hármat	az	almá- ból		
	PREF.eat.PST.3SG	three.acc	DEF	apple[sg]-ELA		
	/?? hármat	az	alma	közül.		
	three.acc	DEF	apple[иом.sg]	from		
	'He ate three of th	'He ate three of the apples.'				

b.	[…] Kettő	а	diákok	közül
	two[NOM]	DEF	student.pL[NOM]	from
	/ ??kettő	a	diákok- ból	hazakísért.
	two[NOM]	DEF	student.PL-ELA	home_accompany.psr.3sg
	'[Ten students	took th	e exam.] Two of the s	tudents accompanied me home.'

Either the elative case links the subset to the superset or the postposition közül 'from' is used (21).

4.2.2 Possessive Marking on the Postposition

If the superset is a personal pronoun, as in examples (8e-h) in Section 3.1, the Hungarian postpositions must be marked for the number and person suffix associated with the number and person features of the superset. Conversely, postpositions cannot be marked for the superset when it is a lexical NP. The contrast between pronominal and lexical NPs is illustrated by (22a) and the ill-formed (22b) as compared to the lexical NPs in (22c-d). In (22a), the superset is in the 1st person plural and the suffix on the postposition reflects the same features. The superset, the pronoun itself (mi 'we'), is optionally overt. Example (22b) illustrates the lack of agreement between the 1st person plural superset and the postposition; therefore, the structure is ill-formed. In (22cd), the superset is a lexical expression ('the freshmen'), so agreement by the postposition is not grammatical. Thus, (22c) is well-formed, while (22d) is not.

(22) Hungarian

- a. [...] Péter közül-ünk. beszélt egyikkel (mi) Peter[NOM] speak.pst.3sg we[NOM] from-1PL DEF one.INST 'Peter spoke with one from among us.'
- b. [...] *Péter beszélt (mi) közül. egyikkel Peter[NOM] speak.pst.3sg DEF one.INST we[NOM] from Intended to mean: 'Peter spoke with one from among us.'
- c. [...] Péter beszélt az eavikkel elsőévesek közül. Peter[NOM] speak.pst.3sg DEF one.INST DEF freshman.pl[NOM] from 'Peter spoke with one from among the freshmen.'
- d. [...] *Péter beszélt egyikkel az Peter[NOM] speak.pst.3sg one.INST DEF elsőévesek közül-ük. az freshman.pl[NOM] DEE from-3PL Intended to mean: 'Peter spoke with one from among the freshmen.'

4.2.3 Possessive Marking on the Quantifier

The quantifier must be marked for the number and person features of the superset in a structure without a superset DP2 or an adposition. In this structure, the identity (person) of the superset can be recovered via the agreement on the quantifier (23).

(23) Hungarian

- a. [...] (Az) egyik-**ük**-kel beszéltem.

 DEF one-3PL-INST speak.PST.1SG
 'I spoke with one from among them.'
- b. [...] (Az) egyik-ünk megbukott.
 DEF one-1PL[NOM] PREF.fail.PST.3SG
 'One from among us failed.'

The three strategies to mark the relationship are mutually excluded. See their distribution in the well-formed examples in (21), (22a), (22c), and (23), on the one hand, and the ill-formed variants in (24) below, on the other.

(24) Hungarian

- a. [...] *(Az) egy-ik-**ük** a fiúk közül eljött.

 DEF ONE-IK-3PL[NOM] DEF boy.PL[NOM] from PREF.come.PST.3SG

 'One from among the boys came.'
- b. [...] *(Az) egy-ik-**ük** közül-**ük** eljött.

 DEF One-IK-3PL[NOM] from-3PL PREF.COME.PST.3SG
 'One from among them came.'
- c. [...] *(Az) egy-ik a fiúk közül-**ük** eljött.

 DEF ONE-IK[NOM] DEF boy.PL[NOM] from-3PL PREF.come.PST.3SG

 'One from among the boys came.'

The sentences in (24) are ill-formed, because more than one of the three strategies are employed in them. In (24a), the superset is an overt lexical DP, embedded in a PP, and then the quantifier cannot be marked for the number-person features of the superset. In sentence (24b), the suffix is simultaneously attached to the quantifier and to the postposition: the result is ungrammatical. In sentence (24c), the superset is an overt lexical DP ('the boys'), and the postposition cannot carry the number-person reference to it in that case.

In Hungarian, the superset is always recoverable in the proper partitive constructions, but there is no redundancy in the structure: the superset can be referred to only once in the structure.

4.3 Differences between Mari and Hungarian Proper Partitive Constructions

There are four differences between the two languages. Firstly, in Mari, the quantifier has a default number-person marker, that is, the possessive suffix is always in 3rd person singular. In Hungarian, the quantifier always carries the number-person features of the superset, if these agreement features cannot be recovered on either the postposition or in the overt superset (DP2).

Secondly, in Mari, the agreement suffix optionally attaches to the postposition, and if so, it must exhibit the real values of the agreement features of the superset. In Hungarian, once there is no overt lexical nominal phrase in the superset DP2, the postposition is obligatorily marked for the agreement features of the superset.

Thirdly, in Mari, the three strategies can be applied simultaneously. On the other hand, in Hungarian, these strategies are mutually excluded, but one of the three strategies must be applied in proper partitive constructions. 10

Lastly, the major difference is that in Hungarian, the superset in proper partitive constructions is always recoverable, irrespective of whether the superset-DP is overt. In Mari, if the quantifier is the only overt element in the partitive constructions, then the interpretation is always discourse-based.

5 **Discussion**

Our article has shown new data on partitive (part-whole, subsetsuperset) relationships from Uralic, Based on Mari, we can conclude that a default possessive agreement marker has developed or is developing in a marker of partitivity, just as Hungarian has developed in its history. Possessive (agreement) markers have become or are becoming partitive markers in Uralic.

The discussion has contributed to the understanding of the relationship between possessive- and separative-based partitive structures. In the better described languages, such as in English, the preposition 'of', originally a marker of separative relation between two

[Négy vizsgázni.] Három megbukott. fiú jött boy[NOM.SG] come.PST.3SG take_exam.INF three[NOM] PREF.fail.PST.3SG 'Four boys came to take the exam.' 'Three failed.'

¹⁰ In covert partitive constructions, by contrast, only the subset is overtly present in the structure and the construction is interpreted on the basis of the antecedent (Falco, Zamparelli 2019), as in the Hungarian example (i). (i) Hungarian

entities, has developed to primarily mark possessivity (Heine 1997, 145-6). The Romance series of prepositions with de and the German von are also ablative or source structures that have grammaticalised as possessives (Heine 1997, 145-6).

In Uralic, we see the opposite direction in grammaticalisation: from possessives to partitives. One important difference between the partitive marking derived from possessive agreement is the locus of the morpheme in terms of the phrase it attaches to. While the English preposition combines in grammar with the superset ('ten of the girls'), the Uralic-type possessive partitive marker combines with the subset instead ('ten of the girls'). The Uralic possessive-based partitive marker typically links specific supersets and emerges in proper partitive constructions only. The English separative-based possessive 'of' is not restricted to proper partitives and specific supersets emerging in proper partitives (as in 'the youngest of my children'), but it can also be used in pseudo-partitives ('a cup of tea').

While we have established that the possessive-based partitive marker never appears in pseudo-partitive constructions in Uralic languages that we studied in more detail, the separative-based marker is not restricted to proper or pseudo-partitive constructions. Therefore, some proper partitive constructions have different partitive markers on supersets and subsets simultaneously; consider Hungarian: eqyik a gyerekeim közül 'one [proper partitive marker on the subset] from among my children [partitive postposition of the superset]'.

The Finnic languages that have a dedicated morphological marker, the partitive case, are like English. The separative-based marker is not restricted to either proper or pseudo-partitive constructions. The Estonian osa Euroopast [part Europe.ela] and osa Euroopat [part Europe.PAR] 'part of Europe' illustrate proper partitives with specific supersets. They have partitive or elative marking on the superset, while the pseudo-partitives have partitive marking on the superset: tass teed [cup tea.PAR] 'a cup of tea'.

Additionally, the possessive marker combines with the adposition, as in belől-e [from-3SG] 'out of it' (Hungarian); in other words, one could imagine a structure where the English preposition 'of' or the French preposition de has a suffix. This is exactly the strategy that also Arabic and Celtic languages have for partitivity; see Pődör, this volume, for Celtic, and Gensler (1993) for Celtic and Arabic. The Germanic languages such as German and Dutch display a possessive strategy like the Uralic one in their pronominal adverbs, such as the Dutch partitive ervan 'of it' or its emphatic counterpart daarvan 'of it' and the German equivalent davon 'of it'. The main difference between the Uralic and the Germanic combinations is in the explicit person and number features in Uralic: the Germanic partitive combinations are restricted to third person. Within this wider picture of possessive-agreement-based partitive markers, the proper partitive structures of Uralic languages are

syntactically far from uniform. In Mari, the three strategies can be applied simultaneously. In Hungarian, these strategies are mutually excluded, and only one of the three strategies must be applied in proper partitive constructions. The major difference is that in Hungarian, the superset in proper partitive constructions is always recoverable, irrespective of whether the superset-DP is an overt lexical DP, while in Mari, if only the quantifier is overt, the interpretation of the partitive constructions is always discourse-based.

6 Conclusion

The major contribution of this essay is clarifying the limits of variation in one of the special and frequently emerging characteristics of Uralic (also other Eurasian languages, such as Turkic), partitiverelated possessive marking on quantifiers and partitive marking on adpositions. We have discussed some parallels with other European languages. We have demonstrated two possessive-based partitive strategies and a non-possessive partitive strategy in Mari and Hungarian, and we have explained the structure of the variation between these two languages.

Abbreviations and Notations

1	nist person
2	second person
3	third person
ACC	accusative
DAT	dative
DEF	definite article
DEM	demonstrative pronoun

elative FIA GEN genitive

the formative -ik ΙK

illative 11.1

INF

indefinite article INDE

inessive infinitive INF INSTR instrumental МОИ nominative partitive PAR PASS passive PL plural PREF prefix PRS present PST past second past PST2 SG singular SUBI sublative

verbal agreement indicating the subject (1st person singular) 1SG>3

and the object (3rd person)

non-verbal agreement indicating the possessor (1st person 1SG>PL

singular) and the number of the possessee (plural)

Bibliography

Bakró-Nagy, M.; Laakso, J.; Skribnik, E. (eds) (2022). The Oxford Guide to the Uralic Languages. Oxford: Oxford University Press. Oxford Guides to the World's Languages. https://doi.org/10.1093/ oso/9780198767664.001.0001.

Bartos, H. (2000). "Az inflexiós jelenségek szintaktikai háttere" (The Syntactic Background of Inflection Phenomena)". Kiefer, F. (ed.), Strukturális magyar nyelvtan 3. Morfológia. Budapest: Akadémiai Kiadó, 653-762.

Bereczki, G. (1990). Chrestomathia Ceremissica. Budapest: Tankönyvkiadó. Cardinaletti, A.; Giusti, G. (2006). "The Syntax of Quantified Phrases and Quantitative Clitics". Everaert, M.; van Riemsdijk, H. (eds), The Blackwell Companion to Syntax, vol. 5. Oxford: John Wiley & Sons, Ltd. Blackwell, 23-93. https://doi.org/10.1002/9780470996591.ch71.

De Hoop, H. (1998). "Partitivity". GLOT International, 3, 3-10. https://doi. org/10.1515/9783110890952.179.

É. Kiss, K. (2018). "Possessive Agreement Turned into a Derivational Suffix". Bartos, H.; Den Dikken, M.; Váradi, T. (eds), Boundaries Crossed, at

- the Interfaces of Morphosyntax, Phonology, Pragmatics, and Semantics. Dordrecht: Springer, 87-105. Studies in Natural Language and Linguistic Theory 94. https://doi.org/10.1007/978-3-319-90710-9 6.
- É. Kiss, K.: Tánczos, O. (2018). "From Possessor Agreement to Object Marking in the Evolution of the Udmurt -jez Suffix: A Grammaticalization Approach to Morpheme Syncretism". Language, 94(4), 733-57. https:// doi.org/10.1353/lan.0.0233.
- Falco, M.; Zamparelli, Z. (2019). "Partitives and Partitivity". Glossa: A Journal of General Linguistics, 4(1), 1-49. https://doi.org/10.5334/ gjgl.642.
- Fokos, D. (1939). "Finnugor-török mondattani egyezések (Finno-Ugric-Turkic Syntactic Correspondences)". Magyar Nyelvőr, 68, 13-19, 40-5, 84-7.
- Fokos, D. (1961). "Uráli és altaji összehasonlító szintaktikai tanulmányok III (Uralo-Altaic Comparative Syntactic Studies III)". Nyelvtudományi Közlemények, 63, 63-81.
- Gensler, O. (1993). A Typological Evaluation of Celtic / Hamito-Semitic Syntactic Parallels [PhD dissertation]. Berkeley: University of California, Berkeley.
- Gerland, D. (2014). "Definitely not Possessed? Possessives with Non-Possessive Function". Gamerschlag, T. et al. (eds), Frames and Concept Types. Applications in Language and Philosophy. Dordrecht: Springer, 269-92. https://doi.org/10.1007/978-3-319-01541-5 12.
- Heine, B. (1997). Possession: Cognitive Sources, Forces, and Grammaticalization. Cambridge: Cambridge University Press. Cambridge Studies in Linguistics 83.
- von Heusinger, K.; Kornfilt, J. (2017). "Partitivity and Case Marking in Turkish and Related Languages". Glossa: A Journal of General Linguistics, 2(1), 20, 1-40. https://doi.org/10.5334/gjgl.112.
- Jackendoff, R. (1968). "Quantifiers in English". Foundations of Language, 4, 422-42.
- Jackendoff, R. (1977). X'-syntax: A Study of Phrase Structure. Cambridge: MIT Press.
- Janda, G.E. (2015). "Northern Mansi Possessive Suffixes in Non-Possessive Function". Journal of Estonian and Finno-Ugric Linguistics, 6(2), 243-58. https://doi.org/10.12697/jeful.2015.6.2.10.
- Koptjevskaja-Tamm, M. (2001). "'A Piece of Cake' and 'a Cup of Tea': Partitive and Pseudo-Partitive Nominal Constructions in the Circum-Baltic Languages". Dahl, Ö.; Koptjevskaja-Tamm, M. (eds), The Circum-Baltic Languages. Typology and Contact, vol. 2. Amsterdam/Philadelphia: John Benjamins, 523-68.
- Kubínyi, K.; Tamm, A. (2022). "Partitivity in Uralic Languages without a Designated Partitive Marker". Paper presented at the Congressus XIII Internationalis Fenno-Ugristarum (Vienna, 22 August 2022). https://cifu13.univie.ac.at/programme/symposia/ b9-syntactic-typology/.
- Lyutikova, E. (2023). "Person Agreement with Anaphors: Evidence from Tatar". Languages, 8, 46. https://doi.org/10.3390/languages8010046.
- Martí-Girbau, N. (2002). "Partitives: One or Two Nouns?" Rivista di Grammatica Generativa, 27, 45-58.
- Martí-Girbau, N. (2010). The Syntax of Partitives [PhD dissertation]. Barcelona: Universitat Autónoma de Barcelona.

- Miestamo, M.; Tamm, A.; Wagner-Nagy, B. (eds) (2015). Negation in Uralic Languages, Amsterdam: John Benjamins Publishing Company, Typological Studies in Language 108.
- Nikolaeva, I. (2003). "Possessive Affixes in the Pragmatic Structuring of the Utterance: Evidence from Uralic". Suihkonen, P.; Comrie, B. (eds), International Symposium on Deictic Systems and Quantification in Languages Spoken in Europe and North and Central Asia. Collection of Papers. Iževsk and Leipzig: Udmurt State University and Max Planck Institute for Evolutionary Anthropology, 130-45.
- Pajusalu, R. (2006). "Multiple Motivations for Meaning of an Elative Wh-Construction in Estonian". Trames Journal of the Humanities and Social Sciences, 10(4), 324-40. https://doi.org/10.3176/tr.2006.4.02.
- Riese, T.; Bradley, J., Yefremova, T. (2022). Mari. An Essential Grammar for International Learners. Vienna: Koneen Säätiö. https://mari-language.univie.ac.at/grammar/eg2022.pdf.
- Sauerland, U.; Yatsushiro, K. (2017). "Two Nouns in Partitives: Evidence from Japanese". Glossa: A Journal of General Linguistics, 2(1), 13, 1-29. https://doi.org/10.5334/gjgl.171.
- Selkirk, E. (1977). "Some Remarks on Noun Phrase Structure". Culicover, P.; Wasow, Th.; Akmajian, A. (eds), Formal Syntax. London: Academic Press,
- Seržant, I. (2021). "Diachronic Typology of Partitives". Sleeman, P.; Giusti, G. (eds), Partitive Determiners, Partitive Pronouns and Partitive Case. Berlin: de Gruyter, 111-67. Linguistische Arbeiten 580. https://doi. org/10.1515/9783110732221-004.
- Tamm, A. (2014). "The Partitive Concept versus Linguistic Partitives: From Abstract Concepts to Evidentiality in the Uralic Languages". Luraghi, S.; Huumo, T. (eds). Partitive Cases and Related Categories. Berlin: Mouton de Gruyter, 87-152. Empirical Approaches to Language Typology 54. https://doi.org/10.1515/9783110346060.89.
- VISK = Hakulinen, A.; Vilkuna, M.; Korhonen, R.; Koivisto, V.; Heinonen, T.R.; Alho, I. (2004). Iso suomen kielioppi (Comprehensive Finnish Grammar). Helsinki: Suomalaisen Kirjallisuuden Seura. http://scripta.kotus.fi/ visk/.

Partitive Constructions and Partitive Elements Within and Across Language Borders in Europe

edited by Elvira Glaser, Petra Sleeman, Thomas Strobel, Anne Tamm

The Partitive Pronoun ER in Two National Varieties of Standard Dutch

Petra Sleeman

University of Amsterdam, Netherlands

Abstract The Dutch partitive pronoun ER in general occurs in combination with an elliptical noun phrase in object position. According to the Dutch Reference Grammar, partitive ER in general occurs with a quantifier in this case. The Dutch Reference Grammar observes that there is natiolectal variation with respect to the use of partitive ER, focusing on the national varieties of Dutch used in the Netherlands and in Belgium. In this essay, the acceptance of the use or omission of ER in different types of NPs by native speakers of the Netherlandic and the Belgian variety of Dutch is compared. It is shown that differences between the varieties go beyond those described by the Dutch Reference Grammar.

Keywords Partitive pronoun. ER. Netherlandic Dutch. Belgian Dutch. Standard language.

Summary 1 Introduction. – 2 National Varieties of Standard Dutch. – 2.1 A Pluricentric Vision. – 2.2 The Partitive Pronoun ER in the Dutch Reference Grammar. – 3 Previous Research on the Use of Partitive ER in Various Contexts. – 3.1 Berends (2019). – 3.2 Sleeman and Ihsane (2017; 2020). – 3.3 Cornips and Sleeman (2024). – 4 Methodology. – 4.1 Test Materials. – 4.2 Participants and Procedure. – 4.3 Analysis. – 5 Results. – 6 Discussion. – 7 Conclusion.



1 Introduction

Partitive pronouns refer to an antecedent that has previously been mentioned in the discourse. Typically, they occur in combination with an elliptical complex noun phrase modified by a cardinal numeral or weak quantifier in an indefinite NP in object position (Berends 2019). This is illustrated by the Italian example (1):

```
(1) NE ho tre. (Italian)
PART.CL have.PRS.1SG three
'I have three (of them).'
```

Giusti and Sleeman (2021) observe that in (1) *ne* can also appear without the quantifier, resuming a determinerless indefinite expression, often called a 'bare noun'. This is illustrated in (2):¹

```
(2) Gatti? Sì, NE ho. (Italian)
cats yes PART.CL have.PRS.1SG
'Cats? Yes. I have cats.'
```

Other Romance languages that make use of a partitive pronoun are French and Catalan. A Germanic language that has a partitive pronoun is Dutch. Whereas in Romance the partitive pronoun is a clitic, in Dutch it is a weak pronoun, the pronoun ER. Although in the Dutch tradition, ER is often called a quantitative pronoun (Blom 1977; Bennis 1986), it will be called a partitive pronoun in this essay, as it is called for the Romance languages. Giusti and Sleeman (2021) observe that in Netherlandic standard Dutch, the weak pronoun ER requires the presence of the quantifier, as illustrated in (3):

```
(3) Katten? Ik heb ER *(drie). (Netherlandic Dutch) cats I have PART.WK three 'Cats? I have three.'
```

De Schutter (1992) and Sleeman (1998) state that in standard Belgian Dutch, however, the use of a quantifier is not required, as illustrated by (4):

I am grateful to Anne Tamm and her student Kathleen Dobbelaere for distributing the test. Many thanks go to the participants for filling in the test. I also thank the reviewers for their valuable remarks on an earlier version of this text.

¹ In the English translation the antecedent *cats* is repeated. English does not have a partitive pronoun. In (2), it is not possible to use an empty noun, as in the English translation in (1), in which the elliptical noun phrase contains a quantifier. To avoid the repetition of the noun, a definite pronoun could be used: "Yes, I have them".

Context: [flowers]

(4) Hij brengt ER dikwijls mee voor haar. (Belgian Dutch)
he brings PART.WK often with for her
'He often brings her flowers.'

Corver and van Koppen (2018) observe that (in Netherlandic standard Dutch) the partitive pronoun ER

typically occurs in clausal environments featuring a(n indefinite) direct object noun phrase whose nominal head is empty, possibly as the result of movement of the partitive pronoun, and which is introduced by a cardinal or indefinite quantifier

as in (3). However, Sleeman (2023) shows that in a Grammaticality Judgment Task, in more than 80% of the cases the 15 Netherlandic and 15 Belgian Dutch participants accepted the use of the partitive pronoun in coordinated Dutch sentences such as (5), in which the elliptical noun phrase has been analysed as a quantified adverbial noun phrase in the literature (Barbiers 2017 for Dutch; Belletti, Rizzi 1981 for Italian), modifying an intransitive verb like 'remain', 'sleep' or 'swim', as in (5):

(5) [Gisteren heb ik één kilometer qezwommen] en yesterday have I one kilometre and swum vandaag heb ik ER twee gezommen. today have I PART.WK two swum 'Yesterday I have swum one kilometre and today I have swum two.'

Sleeman (2023, fn. 6) also reports the judgments of the same Netherlandic and Belgian Dutch participants on the use of the partitive pronoun ER in Dutch sentences with the intransitive verbs 'weigh' and 'cost' and an elliptical measure noun phrase:

- (6) Katrien weegt 57 kilo en Anneke weegt ER 59. Katrien weighs 57 kilograms and Anneke weighs PART.WK 59 'Katrien weighs 57 kilograms and Anneke weighs 59 kilograms.'
- (7) De reis door Italië heeft 2,000 euro gekost en 2,000 euros the trip through Italy has cost and de reis door Griekenland heeft ER 1.000 gekost. the trip through Greece has PART.WK 1.000 cost 'The trip through Italy cost 2000 euros and the trip through Greece 1,000.'

With these two verbs the judgments of the Netherlandic and Belgian Dutch participants diverge importantly. Sentence (6) with the verb 'weigh' was accepted by 47% of the Netherlandic Dutch participants and by 93% of the Belgian Dutch participants. Sentence (7) with the verb 'cost' was accepted by 27% of the Netherlandic Dutch participants and by 80% of the Belgian Dutch participants.

Besides sentences with intransitive verbs such as (5), (6) and (7), the Grammaticality Judgment Task that was submitted to the 15 native speakers of Netherlandic Dutch and the 15 native speakers of Belgian Dutch contained several other contexts in which the partitive pronoun occurred or was left out. In this essay the complete set of contexts with and without ER that were submitted to the Netherlandic and Belgian Dutch participants will be presented. The goal of the essay is to investigate for which contexts the judgments of the Netherlandic Dutch and the Belgian Dutch participants correspond and for which contexts their judgments diverge and to what extent. In this way, this essay aims at contributing to the description of syntactic differences between national varieties of standard Dutch.

De Troij, Grondelaers and Speelman (2023) observe that empirical research on the relationship between Netherlandic Dutch and Belgian Dutch has primarily targeted variation in pronunciation and the lexicon, but that relatively little is known (but see Haeseryn 1996; 2013) about how the national varieties compare at the level of grammar and morphosyntax, natiolectal variation with respect to syntax being thought to be absent or not being recognised because of ideological reasons. With the help of large bilingual parallel corpora and machine translation software, De Troij, Grondelaers and Speelman (2023) discovered that natiolectal variation in the grammar of Dutch is far more present than has often been assumed, especially in less edited text types such as discussion lists. They found natiolectal variation in 18 out of 20 alternative morphosyntactic types, comprising variable adnominal inflection, analytic versus synthetic constructions and variation in auxiliation. The current essay aims at contributing to this line of research, focusing on the contexts in which the partitive pronoun ER can be used in the two national varieties and using grammaticality judgments instead of production data.

The essay is structured as follows. In Section 2, the concept 'national varieties of standard Dutch' is introduced and is illustrated by means of a short description of the use of the partitive pronoun ER in national varieties of standard Dutch. In Section 3, literature reporting the results of research on several contexts of use of the partitive pronoun ER in, essentially, standard Netherlandic Dutch, is presented. Section 4 contains the methodology for the present study. The results of this study are presented in Section 5 and discussed in Section 6. The essay ends with some conclusions in Section 7.

2 National Varieties of Standard Dutch

2.1 A Pluricentric Vision

Since several decades, one of the most important grammars in which modern standard Dutch is described is the Dutch Reference Grammar. The Dutch Reference Grammar is a descriptive grammar (Colleman et al. 2021a). The first edition of the Dutch Reference Grammar was published as a printed book (Geerts et al. 1984). The second, revised, edition was published in 1997 in a printed form (Haeseryn et al. 1997) and in 2002 this second edition appeared online (Haeseryn, Coppen, de Vriend 2002). The third, partly revised, online edition was published in 2021 (Colleman et al. 2021b).

In the course of the years, the vision of the authors of the Dutch Reference Grammar on what is the Dutch standard language has changed (Colleman et al. 2021a). In the second edition of the Dutch Reference Grammar (Haeseryn et al. 1997), the Dutch standard language only comprises language phenomena that are used in the entire Dutch language area. This means that in this vision phenomena that are only used in the Dutch language of a specific area, such as Belgian Dutch, do not belong to the Dutch standard language. In fact, the "norm" in the second edition of the Dutch Reference Grammar is Netherlandic Dutch, whereas phenomena that only occur in Belgian Dutch have received the label "regional" (Haeseryn 2016). In the last decades, this vision has been replaced by a more symmetrical vision on what is the Dutch standard language (Colleman et al. 2021a). In the third edition of the Dutch Reference Grammar (Colleman et al. 2021b), a vision is formulated that is based, among others, on the report Visie op taalvariatie en taalvariatiebeleid (Vision on language variation and language variation policy), a text of the Advisory Committee on Language Variation commissioned by the General Secretariat of the Language Union (Vandekerckhove et al. 2019). In the vision of this report, the Dutch standard language is largely identical in the whole Dutch-speaking language area, but each part of the Dutch language area has language phenomena that are typical for the language of the specific region. These regional phenomena may also belong to the Dutch standard language. With respect to national varieties, this revised vision of the Dutch standard language is a pluricentric vision on language

² The Dutch name of the grammar is Algemene Nederlandse Spraakkunst, abbreviated as ANS.

³ For questions about the Dutch language it is also possible to consult Taaladvies.net, which is a language advice website of the Dutch Language Union (Nederlandse Taalunie) and which has a prescriptive role (Dhondt et al. 2020).

(Dhondt et al. 2020), in which there are several regional norms for the standard language. This pluricentric vision on language is also adopted by Taaladvies.net, which has a language desk for both Netherlandic Dutch and Belgian Dutch, and has also been adopted for languages like English or German (Haeseryn 2016).

The national varieties that are essentially described in the third edition of the Dutch Reference Grammar are Netherlandic, Belgian and Surinamese Dutch. Regional varieties that are used within these three language areas are sporadically described in the Dutch Reference Grammar (Colleman et al. 2021a). The Dutch Language Union (Taalunie), founded in 1980 by the governments of the Netherlands and Belgium, is a regulatory institution that governs issues regarding the Dutch language. Suriname has been an associate member of the Taalunie since 2004 (Ghyselen 2022).4 Since much less is known about Surinamese standard Dutch than about Netherlandic Dutch and Belgian Dutch, in the Dutch Reference Grammar there is only a limited description of grammatical phenomena that typically occur in Surinamese standard Dutch. In the next subsection the Dutch Reference Grammar's description of the use of the partitive pronoun ER in national varieties of standard Dutch will be presented.

2.2 The Partitive Pronoun ER in the Dutch Reference Grammar

The third edition of the Dutch Reference Grammar was published online in 2021, although several sections or chapters had not been revised yet. This also holds for the sections on the partitive pronoun ER, whose revision will not start before 2024. The version of the section on the partitive pronoun ER present in the third edition of the Reference Grammar is still the same as in the second edition. This means that the pluricentric vision has not yet been incorporated into this part of the Reference Grammar.

The subsection on the partitive pronoun can be found under the section "Adverb". Three regional distinctions are made. First, cases are presented that are used in the whole Dutch-speaking area and thus the standard language, such as the use of ER with a quantifier, as in (3). A second case that is presented, is the use of non-referential ER versus the use of a definite pronoun such as ZE 'them':

⁴ Although there is also an official collaboration between the Dutch Language Union and the Caribbean part of the Dutch Kingdom, for many speakers there Dutch is not the mother tongue (Vandekerckhove et al. 2019). This could explain why Caribbean Dutch is not included in the Dutch Reference Grammar.

- (8) "Heb ie ballen bii ie?" "Ja. ik heb FR hii me." have you balls with you yes I have PART.WK with me "Did you take balls with you?" "Yes. I took balls with me."
- (9)"Heb ie ballen bii ie?" me." have vou balls with vou ves have them with me "Did you take balls with you?" "Yes, I took balls with me."

Both versions are considered to be belonging to the standard language, but there is a regional difference in use: ER is used in Belgium and to a lesser extent in the southern provinces of the Netherlands (called the x-speakers in the Dutch Reference Grammar), although in the rest of the Netherlands, where ZE is used (called the y-speakers), v-speakers may know that ER could be used as well and may consider its use to belong to the standard language in this context.⁵

In the non-referential use, the pronoun does not refer to the whole antecedent, but in fact only to the noun. It indicates a subset of a category. In the referential use of the pronoun, only ZE can be used in the whole Dutch-speaking area. ZE refers to the whole set of apples that was introduced in the first part of the sentence:

(10)	Ik heb	vanmorgen	appels	geplukt	en
	Ihave	this morning	apples	plucked	and
	ik heb	ZE	aan de buren	gegeven.	
	I have	them	to the neighbours	given	

'This morning I have plucked apples and I have given them to the neighbours.'

A third case that is presented, is one which in the second and not yet revised version of the text on the partitive pronoun in the third edition is considered to not belong to the standard language. In the Belgian area, it is possible to use ER in combination with an indefinite noun phrase containing an adjective, see also De Schutter (1992):

⁵ The Dutch Reference Grammar does not explicitly make a similar remark about the use or knowledge of the use of ZE in non-referential contexts by x-speakers. One of the reviewers observes, however, that the Dutch Reference Grammar does not claim the use of the definite pronoun in these contexts to be absent or ungrammatical in the Belgian area. According to De Schutter (1992, fn. 2), in the Belgian area ZE can only be used in combination with an elliptical NP containing a PP, as in (i). In this context ER can also be used:

⁽i) De rode truitjes zijn verkocht, maar wehebben ER/ZE nog wel in 'tblauw. the red sweaters are sold. but we have PART.WK/them still yes in the blue 'The red sweaters have been sold, but we still have them in blue.'

(11) "Wat voor rozen hebt u?" "Ik heb FR witte rode." en have PART.WK white what for roses have you I and red "What kind of roses do you have?" "I have white and red ones."

```
(12) "Ziin
                       nog
                              andere
                                          rozen?"
                              other
     are
               there
                       still
                                          roses
     "Nee,
                       zijn
                              ER
                                                    andere."
               ρr
                                          geen
               there are
                              PART.WK
                                                    other
     no
                                          no
      "Are there also other flowers?" "No, there are no other ones."
```

Furthermore, in the Belgian area it is possible to use ER replacing a mass noun, without a quantifier, see also De Schutter (1992):

(13) "Wilt koffie" noq "Nee. heb ER nog." want you still coffee have PART.WK still nο "Would you like to have more coffee?" "No, I still have coffee."

If, in the pluricentric vision of the third edition of the Dutch Reference Grammar, regional phenomena may also belong to the Dutch standard language, it could be the case that this third case, ER with an adjective and ER replacing a mass noun, would be considered to belong to the Belgian variety of the standard language. The definition that is given of "standard language" in the Dutch Reference Grammar is:

the language that is generally used in public communication, that is in all major sectors of public life: government and administration, jurisdiction, education, media, etc.

That this third case would belong to the standard language could be supported by the fact that Sleeman (1998) found sentences like (13) in an exercise book belonging to a Belgian grammar book, which is the sector "education" of public communication, and which belongs to the standard language.

In this essay, the statements in the Dutch Reference Grammar with respect to partitive ER are checked. Furthermore, it is investigated if there are more contexts in which the use of partitive ER in the Netherlandic and the Belgian varieties of standard Dutch differ. It is also checked to what extent contexts with ER are accepted by native speakers. Before presenting the research, some other investigations on the use of ER in contexts that are relevant for this essay are presented.

Previous Research on the Use of Partitive ER 3 in Various Contexts

In the Introduction, results from the study by Sleeman (2023) on the acceptance of the use of ER with intransitive verbs and an elliptical quantified adverbial NP or elliptical measure NPs by native speakers of Netherlandic and Belgian Dutch were presented. In this section other results of previous research on the use of ER in various contexts are presented. Most research concerns Netherlandic standard Dutch. One research concerns Heerlen standard Dutch, which is a regional variety used in a city in the south-east of the Netherlands.

3.1 Berends (2019)

Table 1 Two conditions of a Grammaticality Judgment Task on ER (adapted from Berends 2019)

Condition		Sente	nces							
Numeral	Introduction	Vorige	wee	k he	bben	jullie	drie	films	beke	eken.
		last	wee	ek ha	ve	you	three	films	seer	1
	Target gram.	Deze	wee	k he	bben	wij	ER	vier	bekek	æn.
	Target ungram.	*Deze	wee	k he	bben	wij		vier	bekek	æn.
		this	wee	ek ha	ve	we		four	seen	
'Last week you have seen three films. This week we have seen four.'										
Adjective	Introduction	Vorig	jaar	heb	ik	vijf	grote	e cad	leaus	gekregen.
		last	year	have	1	five	big	pre	sents	received
	Target gram.	Dit	jaar	heb	jij		vijf	klei	ne	gekregen.
	Target ungram.	*Dit	jaar	heb	jij	ER	vijf	klei	ne	gekregen.
		this	year	have	you	ER	five	sma	all	received

^{&#}x27;Last year I have received five big presents. This year you have received five small ones.'

In a syntactic study, Berends (2019) submitted a Grammaticality Judgment Task to a group of 25 adult native speakers of Netherlandic Dutch. The participants were recruited in and around Amsterdam, which is a city in the western part of the Netherlands. The test consisted of pre-recorded sentence pairs: an introductory sentence and the test sentence. Visual stimuli were not provided. Two of the conditions were ER + numeral and ER + numeral and adjective. For each sentence with ER, there was a corresponding sentence without ER. Based on the literature (Sleeman 1996: Kranendonk 2010), Berends predicted that sentences containing ER + numeral and sentences containing a numeral and an adjective without ER would be judged grammatical, and the corresponding sentences without and with ER, respectively, ungrammatical [tab. 1]. For each condition there were 10

sentences, 5 with ER and 5 without. The participants were asked to judge the sentences on their grammaticality according to Dutch prescriptive grammars. They were sitting in front of a computer screen and were asked to press a red button when they judged a sentence incorrect and a green button when they judged a sentence correct.

For each of the two conditions, Berends presents the results of the sentences with and without ER together. Table 2 gives an overview of the means per condition.

Table 2 Means per condition for L1 Netherlandic Dutch speakers (adapted from Berends 2019)

	L1 Netherlandic Dutch
ER [+/*-present] with numeral	9.04/10
ER [*+/-present] with numeral and adjective	5.56/10

For the condition with a numeral, the result is as predicted, but for the condition 'numeral + adjective' it is not. Since an accepted cutoff point for acceptance is a score above 80% (e.g., Muftah, Eng 2011; Muftah, Rafik-Galea 2013; Spinner, Jung 2017), Berends set the cutoff point for rejection at a score below 20%, and the chance level between 40% and 60%. Based on the literature, Berends expected the means for the condition 'numeral + adjective' to be below 2.0. Although the mean score for the condition 'numeral + adjective' (5.56/10) is much lower than the mean score for the condition 'numeral' (9.04/10), it is not below 2.0, but it is at chance level. Berends suggests that it might be the case that Netherlandic standard Dutch is becoming more tolerant in allowing ER in combination with a numeral + adjective, a combination that is also allowed in some Dutch dialects (Kranendonk 2010).

Berends also conducted a semantic research on the acceptance by the same 25 native speakers of Netherlandic Dutch of sentences containing ER in combination with a non-presuppositional or a presuppositional quantifier. There were two types of non-presuppositional quantifiers: [-definite], as the quantifier *een heleboel* 'a lot, many', introduced by an indefinite article, and [-strong], as the quantifier *enkele* 'some'. There were also two types of presuppositional quantifiers: [-definite], as the quantifier *de helft* 'half', introduced in Dutch by a definite article, and [-strong], illustrated by the quantifier *sommige* 'some of them, certain'.

According to De Jong (1983) and De Hoop (1992), partitive ER encodes the referential characteristic [-presupposition]. The authors claim that ER can only appear in sentences in which the quantifier is also non-presuppositional. Berends (2019) therefore predicts that native speakers of Dutch will judge sentences containing ER in combination with the non-presuppositional quantifiers *een heleboel*

and enkele grammatical and sentences containing ER in combination with the presuppositional quantifiers de helft and sommige ungrammatical:6

[-presuppositional]

```
(14) [-definite]
     Zii
             hakt
                                      heleboel.
                      FR
                                een
     She
             bakes
                                      lot
                      PART.WK
     'She bakes many.'
```

(15) [-strong] Zij bakt enkele. She hakes PART.WK some 'She bakes some.'

[+presuppositional]

(16) [+definite] *Zii bakt ER de helft. She bakes PART.WK the half 'She bakes half of them.'

(17) [+strong] *Zii bakt sommige. ER She bakes PART.WK certain 'She bakes some of them.'

In this test only sentences with ER were tested, and not versions without ER. The test was again a computer-based Grammaticality Judgment Task. The sentences were again pre-recorded audio-sentences containing a preamble sentence and a test sentence. For each type of the four quantifiers there were 5 sentences, presented in a random order. Participants were asked to indicate on a scale ranging from 1 to 5 whether they thought that native speakers of Dutch would never say such a sentence (indicated by '1') or whether they thought that native speakers of Dutch would produce such a sentence (indicated by '5'). For the analysis, the results of the two non-presuppositional quantifiers + ER were taken together and the results of the two presuppositional quantifiers + ER were taken together.

⁶ The Dutch Reference Grammar explicitly makes a remark about the impossibility of the combination of sommige with ER (5.9.3.2.vi, 6), attributing the predicate "excluded" to the combination.

The acceptance rate, on a 5-point scale, of the sentences with ER and a non-presuppositional quantifier was 91%, as predicted. The acceptance rate of the sentences with ER and a presuppositional guantifier was 60%, which was not predicted on the basis of the literature. However, a statistical analysis showed that there was a significant difference between the acceptance rates of the [-presuppositional] and [+presuppositional] quantifiers in combination with ER [tab. 3].

Table 3 Acceptance rates in the non-presuppositional and presuppositional conditions (adapted from Berends 2019)

Grammatical [-presupposition]	Ungrammatical [*+presupposition]	р
3.62 (SD 0.52)	2.39 (SD 1.20)	0.0002 ***

3.2 Sleeman and Ihsane (2017; 2020)

Sleeman and Ihsane (2017; 2020) present the results of 23 Dutch students, all native speakers of Dutch and all being students of French at the University of Amsterdam. They filled in two Grammaticality Judgment Tasks, one for French and one for Dutch, with the options "Correct" and "Incorrect". Only the results of the Dutch version are presented here. The test contained:

- i. 6 sentences with a non-presuppositional quantifier: 3 with ER and 3 without ER, as in (3):
- 6 sentences with non-referential plural noun phrases: 3 with ii. ER, as in (8), and 3 with ZE, as in (9);
- iii. 6 sentences with referential plural NPs: 3 with ZE, as in (10), and 3 with ER;
- 6 sentences with a mass noun: 3 with ER, as in (13), and 3 iv. with the singular definite pronoun HET 'it';
- 6 negated sentences with a mass noun: 3 with ER and 3 with the singular definite pronoun HET, as in (18-19):

```
[Situation: Anne: "Do you never drink wine?"]
(18) Lucie:
               "Nee.
                        ik drink
                                              nooit."
                                    ER
      Lucie
               nο
                        I drink
                                    PART.WK
                                              never
```

[Situation: Anne: "Do you never drink wine?"] (19) Lucie: "Nee, ik drink HET nooit." Lucie I drink it nο never

Lucie: "No, I never drink it."

Lucie: "No, I never drink it."

νi 6 negated sentences with a plural bare noun: 3 with ER and 3 with the plural definite pronoun ZE, as in (20-21):

```
[Situation: Claire: "When you were in Brittany, didn't you eat oysters?"]
                                                        gegeten."
(20)
       Paul:
               "Nee.
                       ik
                             heb
                                     ER
                                                 niet
       Paul
               no
                             have
                                     PART.WK
                                                 not
                                                        eaten
       Paul: "No, I did not eat oysters."
[Situation: Claire: "When you were in Brittany, didn't you eat oysters?"]
```

- (21) Paul: "Nee, ik heb gegeten." niet Paul I have them not eaten Paul: "No. I did not eat them."
- vii. 6 sentences with an indefinite noun phrase containing an adjective, 3 with ER and 3 without ER, as in (11-12).

The reason for testing sentences such as (18-21) was that in sentences with a negation an indefinite can only be non-referential. In sentences such as (8-9) and (10) the (non-)referentiality depends on the context, and thus on how the participant interprets the sentence.

The results are presented in Figure 1. Per condition there were two options and therefore there are two bars per condition.

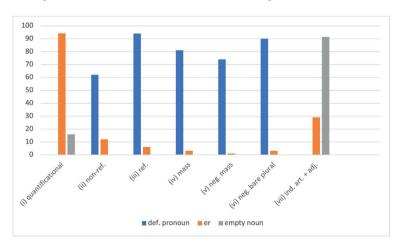


Figure 1 Acceptance of definite pronoun, "er" and empty noun by native speakers of Dutch (Sleeman and Ihsane 2017: 2020)

The results in Figure 1 show that the Dutch participants in Sleeman and Ihsane's research overwhelmingly accepted the use of the definite pronoun, not only in referential contexts (iii), but also in non-referential contexts such as (ii), (v) and (vi). Since the participants were students from the University of Amsterdam, most or all probably were from the western part of the Netherlands. According to the Dutch Reference Grammar, these speakers use the definite pronoun in non-referential contexts. Since, according to the Dutch Reference Grammar and De Schutter (1992), only speakers from Belgium use ER referring to mass nouns, the high percentage of acceptance of a definite pronoun in this context (iv) in Figure 1 is expected as well. The high acceptance of ER with a quantifier (i) is expected also. In more than 90% of the cases the omission of ER with an indefinite determiner and an adjective was accepted, as expected on the basis of the Dutch Reference Grammar, which states that it is possible to use ER in combination with an indefinite noun phrase containing an adjective in the Belgian area, see Section 2.2. This suggests that in the standard language of the Dutch area the combination of ER and an elliptical indefinite noun phrase containing an adjective is not possible. However, in almost 30% of the cases the use of ER with an indefinite determiner and an adjective was accepted. This percentage is lower than the 5.56/10 score in Berends' (2019) Grammaticality Judgment Task, see Section 3.1, but still higher than the cut-off point for rejection at a score below 20% set by Berends (2019). Although according to De Schutter (1992) the combination of ER with a numeral + adjective is completely unusual in Netherlandic Dutch, Kranendonk (2010) shows that it is allowed in some Dutch dialects. Kranendonk (2010) divides them into northern Dutch and southern Dutch for reasons of geographical distribution.

3.3 Cornips and Sleeman (2024)

Cornips and Sleeman (2024) investigated the use of the partitive pronoun in the quantificational construction and in the Age/Weight construction in Heerlen standard Dutch. The corpus was collected by Cornips (1994). The data consists of sociolinguistic interviews between 67 speakers of Heerlen Dutch, who interviewed each other. In the quantificational construction, ER was used 138 times (conform the use in Netherlandic standard Dutch) and omitted 28 times. The omission of ER is illustrated in (22). In the Age/Weight construction, ER was omitted 67 times (conform the use in Netherlandic standard Dutch) and used 14 times. This is illustrated in (23-25).

⁷ As stated at the beginning of Section 3.2, the participants were students of French of the University of Amsterdam. There are different departments of French spread over the country. Students of French generally choose a local university.

- (22) er is Ø nog eentje die in de boom gehangen heeft [Henk] there is another one.DIM who in the tree hung has 'there is another one who has hung in the tree'
- (23) ik was Ø vierenveertig toen ik begon [Mr. Balk]
 'I was forty-four when I started.'
- (24) *ik was ER 15* [Leo] I was PART.WK 15 'I was 15 [years].'
- (25) ik was ER 95 toen ik eruit kwam [Dik]
 I was PART.WK 95 when I out came
 'I was 95 [kilos] when I got out.'

Most of the previous research concerns the acceptance of ER in various contexts by native speakers of Netherlandic Dutch and shows some regional variation within the Netherlands. The goal of the research for this essay is to compare the judgments of native speakers of Netherlandic and Belgian Dutch. In the next section the methodology is presented.

4 Methodology

The goal of the essay is to investigate for which contexts with or without the partitive pronoun ER the judgments of the Netherlandic Dutch and the Belgian Dutch participants correspond and for which contexts their judgments diverge and to what extent.

4.1 Test Materials

A Grammaticality Judgment Task was created consisting of 75 sentences which had to be evaluated with respect to their acceptability. They were presented in a randomised order. Because of the length of the test, only the options "Correct" and "Incorrect" were available as possible answers. The test contained the following categories, presented in 66 sentences:

- 6 quantificational sentences (3 sentences with ER and 3 without ER)
- ii. 6 non-referential NPs (3 sentences with ER and 3 with a definite personal pronoun)
- iii. 6 referential NPs (3 sentences with ER and 3 with a definite personal pronoun)

- iv 6 mass nouns (3 sentences with ER and 3 with a definite personal pronoun)
- 6 negated mass nouns (3 sentences with ER and 3 with a defv. inite personal pronoun)
- 6 negated bare plural nouns (3 sentences with ER and 3 with a definite personal pronoun)
- vii. 6 sentences containing an indefinite article + adjective (3 sentences with ER and 3 without ER)
- viii. 6 sentences containing the presuppositional quantifier de helft '(the) half' (3 sentences with ER and 3 without ER)
- 6 sentences containing an indefinite quantity noun: een kilo 'a ix. kilogram', drie liter 'three litres' and twee glazen 'two glasses' (3 sentences with ER and 3 without ER)
- 6 sentences containing a measure noun referring to 'age', х. 'weight' or 'cost' (3 sentences with ER and 3 without ER)
- 6 sentences containing an intransitive verb (blijven 'to remain', slapen 'to sleep' and zwemmen 'to swim') and a guantified adverbial NP (3 sentences with ER and 3 without ER)

There were also 9 fillers.

The categories (i)-(vii) with the test sentences were taken from Sleeman and Ihsane (2017; 2020). On the basis of the Dutch Reference Grammar no difference in judgments was expected for category (i), but for the categories (ii) and (iv)-(vii) it was expected that native speakers of Belgian Dutch are more tolerant with respect to the use of ER than native speakers of Netherlandic Dutch. Category (viii) was added based on Berends (2019). Berends shows that in French the partitive pronoun is used with the presuppositional, definite quantifier la moitié '(the) half'. Berends shows that this also holds for indefinite determiner + adjective. Therefore, another category was added in which in French (and Italian) a partitive pronoun is used. This is category (ix). The categories (x) and (xi) were added because according to the literature the use of a partitive pronoun in combination with an intransitive verb is not allowed (Belletti, Rizzi 1981; Barbiers 2017), which raises the question whether there could be a difference between Netherlandic and Belgian standard Dutch, Belgian Dutch being generally more permissive with respect to the use of the partitive pronoun in various contexts than Netherlandic standard Dutch. The results for these two categories were already presented in Sleeman (2023), see the Introduction, but will also be presented in the Results section of this essay.

4.2 Participants and Procedure

The test was presented in SurveyMonkey (https://www.surveymonkey.com) and spread via social media, with a snowball effect. The participants could fill in the test in an anonymous way. They also answered some personal questions, such as their mother tongue, their age and their country of birth and residence. They had to give their informed consent for the use of their anonymous data for scientific purposes before they could proceed to the test.

4.3 Analysis

Only tests that were completely filled in and that were filled in by native speakers of Dutch who were not early bilinguals were retained for analysis. This resulted in the data of 15 monolingual speakers of Netherlandic standard Dutch (age range 21-50+) and 15 native speakers of Belgian Dutch (age range 18-50+).

The results of one sentence of category (vi), negated bare plural nouns with ER, were not taken into consideration, because the test sentence contained a negative quantifier, *geen* 'no', and not a bare noun.

⁸ The participants were asked if they had been living for some time in the Netherlands or in the Dutch-speaking part of Belgium. The goal of this question was to know if they had been living in another Dutch-speaking country than their own, but the answers showed that this may not have been clear. Only the data from participants who answered "Yes, I am from the Netherlands" or "Yes, I am from Belgium" were retained for analysis.

The participants were also asked if they were living or had been living in a region where a dialect or a regional language is spoken (and if this was the case, which one(s)), and which dialect(s) or regional language(s) they spoke or understood well, and to what degree. The results of the analysis of these data showed that there was regional variation, but since the number of participants per national variety left for analysis was rather low, no correlation with the results could be established.

⁹ Participants who were older than 50 years did not have to specify their age any further. One of the goals of the study was to investigate whether there was a difference in acceptance between a younger age group of participants (who had not reached the age of 35 years) and an older age group of participants (35+), but due to the relatively low number of participants left for analysis, such a comparison could not be made.

5 Results

The results of the judgments of the 66 experimental sentences are presented in Figure 2 for the Netherlandic Dutch participants and in Figure 3 for the Belgian Dutch participants [figs 2-3].

The results of the categories (x) and (xi) were already presented in the Introduction to this essay, but are presented here as well. There were two options and therefore theoretically two bars per condition. In conditions (v) and (vi) there is only one bar in Figure 2, because there was 0% of acceptance of the use of ER in these conditions.

For most of the categories there is more than 80% of acceptance and/or less than 20% of acceptance of one of the two variants that were presented to the native speakers of Netherlandic Dutch. ER replacing a mass noun accompanied by a negation and ER replacing a bare plural noun accompanied by a negation were accepted in 0% of the cases.

In the judgments of the native speakers of Belgian Dutch, there is only one category for which one of the two variants is judged correct in more than 80% of the cases and for which the other variant is judged correct in less than 20% of the cases. This is the category "quantificational NP" (i). For the categories "indefinite quantity noun" (ix) and "quantified adverbial NP" (xi), the general pattern is the same as in the data of the Netherlandic Dutch data, although the percentages for the variant with ER differ somewhat for the category "indefinite quantity noun" (9% of acceptance in Netherlandic Dutch and 27% of acceptance in Belgian Dutch). For the category "referential", the definite pronoun is accepted in more than 90% of the cases, as in the Netherlandic Dutch data, but ER is accepted in 31% of the cases, which is more than in the Netherlandic Dutch data (9%). Since ER was accepted in 71% of the cases in the category "non-referential" in the Belgian Dutch data, but only in 24% of the cases in the Netherlandic Dutch data, the interpretation of a referential NP as a non-referential NP (in both varieties) may thus account for the relatively high percentage of acceptance of ER with referential NPs in the Belgian Dutch data. The general pattern is also the same in the case of negated mass nouns (v) and negated bare plurals (vi), although the percentages of acceptance of the definite pronoun are lower than in the Netherlandic Dutch data. The general pattern is furthermore the same for the category "de helft" (viii), although ER was also accepted in 40% of the cases, but in the Netherlandic Dutch data only in 11% of the cases.

The general pattern of judgments with respect to the Netherlandic Dutch data differ in four cases: "non-referential NPs" (ii), "mass nouns" (iv), "indefinite article + adjective" (vii) and "measure nouns" (x). For non-referential NPs, mass nouns and indefinite article + adjective this is expected on the basis of what is observed in the Dutch

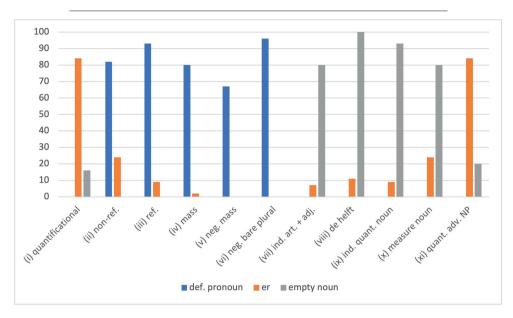


Figure 2 Acceptance of definite pronoun, "er" and empty noun by Netherlandic Dutch participants

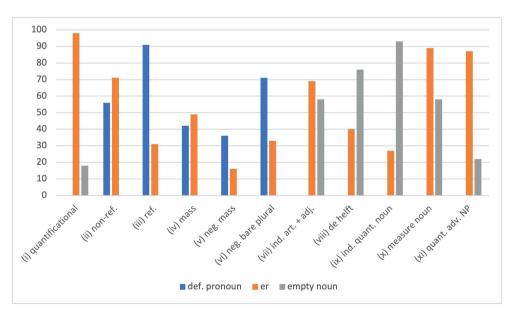


Figure 3 Acceptance of definite pronoun, "er" and empty noun by Belgian Dutch participants

Reference Grammar and De Schutter (1992). The category "measure nouns" is not presented in the Dutch Reference Grammar. For these four categories, the "other" variant is also accepted to a relatively high degree.

6 Discussion

In this essay it was investigated for which contexts with or without ER the judgments of the 15 Netherlandic Dutch and the 15 Belgian Dutch participants correspond and for which contexts their judgments diverge and to what extent.

The general patterns correspond for the five categories "quantificational NP", "referential NP", "de helft", "indefinite quantity noun" and "quantified adverbial NP". For the first two categories this corresponds to the observations in the Dutch Reference Grammar. For the category "de helft" the variant with ER was accepted more in the Belgian Dutch data (40%) than in the Netherlandic Dutch data (11%). The same holds for the category "indefinite quantity noun", such as 'a kilo' or 'three litres', where ER was also accepted more in the Belgian Dutch data (27%) than in the Netherlandic Dutch data (9%). These two categories were added to the test, because in a language like French (and Italian) the partitive pronoun is used with these categories. Both in the Netherlandic Dutch data and in the Belgian Dutch data the variant without ER is preferred, but the variant with ER is accepted to a certain extent as well in the Belgian Dutch data. 10 ER is preferred with quantified adverbial NPs in the Belgian Dutch data as it is in the Netherlandic Dutch data. These results for both national varieties seem to contradict claims that have been made in the literature on the acceptability of the combination of the partitive pronoun and quantified adverbial NPs, see the Introduction.

For the four categories "non-referential NPs", "mass nouns", "indefinite article + adjective" and "measure nouns" referring to "age", "weight" or "cost", the general patterns in the Netherlandic vs. the Belgian Dutch data diverge. For the categories "non-referential NPs", "mass nouns" and "indefinite article + adjective" this was predicted on the basis of what is observed in the Dutch Reference Grammar and in De Schutter (1992), although for the category "mass nouns" the variant with ER was accepted in only 49% by the Belgian Dutch speakers. The category "measure nouns" referring to age, weight and

¹⁰ One of the reviewers wonders if there could be influence from French. It could be the case that the relatively higher acceptance of the partitive pronoun in Belgian Dutch in these cases is influenced by the vicinity of French-speaking areas. However, De Schutter (1992) argues against the possibility of French influence to account for the more extensive use of ER in Belgian Dutch, attributing it to a language-internal overextension.

cost is not presented in the Dutch Reference Grammar. The results of the Grammaticality Judgment Task show a clear difference between the acceptance of the use of ER with this category in the Netherlandic Dutch data (24%) and the Belgian Dutch data (89%). It was shown for these four categories that the variant that was preferred in the Netherlandic Dutch data was also accepted to a relatively high degree by the native speakers of Belgian Dutch. 11

For the categories "negated mass nouns" and "negated bare plurals" it was predicted that ER would be accepted more by the Belgian Dutch participants than the definite pronoun. This was predicted on the basis of the fact that both types are non-referential. According to the Dutch Reference Grammar and De Schutter (1992). ER is used with non-referential elliptical NPs and with mass nouns in Belgian standard Dutch, but see fn. 5. However, the variant with the definite pronoun was preferred, as in the Netherlandic Dutch data. It is not clear if the difference between the two national varieties in the general patterns with respect to the categories "non-referential NPs" and "mass nouns" is due to the negation or if there could be another explanation. Both in the case of the category "mass nouns" and the category "negated mass nouns" the percentages of acceptance are relatively low, both for the variant with ER and for the variant with the definite pronoun.

The results differ from Berends (2019), discussed in Section 3.1. who tested native speakers of Netherlandic Dutch on their judgments on the combination of ER with an indefinite noun phrase containing an adjective and with presuppositional quantifiers such as de helft. For the first category the mean score in Berends (2019) was 5.56/10 (for adjectives with and without ER) and for presuppositional quantifiers (de helft and sommige 'some' + ER) the average acceptance rate was 2.39/5. In the Netherlandic Dutch data used for this essay, ER was accepted in 7% of the cases with an adjective and in 11% of the cases with de helft, which are much lower percentages than in Berends' results. It could be the case that the discrepancy is due to the different methodologies that were used: in Berends (2019) the test

¹¹ Whereas for the category "non-referential plural nouns", the plural definite pronoun ZE 'them' was accepted in 71% of the cases by the Belgian Dutch participants, with the category "mass nouns" the singular definite pronoun was accepted in only 42% of the cases. A possible explanation could be that there was a gender mismatch between the antecedent and the definite pronoun in two of the three test sentences: whereas the antecedent was a common noun, the pronoun was a neuter pronoun, which is a generally accepted use in, at least, spoken Netherlandic Dutch for reference to mass nouns (Audring 2009). However, one of the mismatch sentences was accepted in 60% of the cases, but the matching sentence was accepted only in 40% of the cases. Therefore, a gender mismatch does not seem to be a viable explanation. Another explanation could be that, according to De Schutter (1992) ZE is acceptable in combination with an elliptical NP containing a PP, see fn. 5. The results suggest then that the acceptance of ZE is extended to non-referential NPs without a PP as well. With mass nouns only ER would be possible, according to De Schutter.

sentences were presented in an aural form, whereas in this study the participants read the test sentences and in Berends (2019) a graded scale was used, whereas in this study a binary scale was used. In Sleeman and Ihsane's (2017; 2020) results, presented in Section 3.2, the acceptance by the Netherlandic Dutch participants of ER with elliptical indefinite nouns containing an adjective was higher, namely 29%. With respect to the results of the other categories reported in Sleeman and Ihsane (2017; 2020) [fig. 1], the tendencies observed in the results of the judgments are the same [fig. 2]. The category "measure nouns" was not tested by Sleeman and Ihsane. The use of ER in combination with the measure nouns "age" and "weight" in a corpus of Heerlen standard Dutch was studied by Cornips and Sleeman (2024). ER was used 14 times and omitted 67 times. In the Belgian Dutch data of this essay, the use of ER was accepted in 89% of the cases and its omission in 58% of the cases.

Because of the relatively small number of participants in this study, a statistical analysis has not been presented. Because of the relatively low number of participants, the results have to be taken with care, especially those of the Belgian Dutch participants. The Netherlandic Dutch data confirm to a large extent Sleeman and Ihsane's (2017; 2020) results. Since the statements of the Dutch Reference Grammar seem to be confirmed for Belgian standard Dutch, the results of the other contexts may also be valid. However, more research is needed, especially for the cases in which both variants were accepted to a low degree. Furthermore, this is a study on acceptance and not on production and regions where participants have been living could have influenced their acceptance of an option. More research is also needed in this respect.

In this essay, the acceptance of the use of the partitive pronoun ER by speakers of two national varieties of standard Dutch was investigated. Within the pluricentric vision of standard Dutch (see Section 2), there is, besides Netherlandic and Belgian standard Dutch, a third national variety of standard Dutch, namely Surinamese standard Dutch. Colleman et al. (2021a) observe that data about Surinamese Dutch are still largely absent in the third version of the Dutch Reference Grammar, because not much research has been done yet on this national variety. According to Vandekerckhove et al. (2019), one of the most widespread characteristics of Surinamese Dutch is the omission of the partitive pronoun ER in the quantificational construction, as in Hoeveel kinderen heb je? Ik heb Ø vier. 'How many children do you have? I have four.' If ER is absent in the quantificational construction in Surinamese standard Dutch, it could be expected that it is absent in other categories researched in this essay as well. However, it could be the case that in a Grammaticality Judgment Task ER would be accepted to a certain degree, under the influence of the asymmetric norm of Netherlandic standard Dutch. More research is also needed here.

7 Conclusion

The results of this essay confirm the statements made in the Dutch Reference Grammar with respect to differences between Netherlandic and Belgian standard Dutch. Whereas in Netherlandic Dutch the use of HET or ZE or the omission of ER is preferred with mass nouns, non-referential plural nouns and elliptical noun phrases containing an adjective, in Belgian Dutch the use of ER is preferred in these cases. It has been shown, however, in this essay, that the "other" variant is accepted as well in Belgian Dutch, but to a somewhat lower degree.

A new context that was tested, was the use of ER with elliptical measure nouns such as "age", "weight" and "cost". Whereas in the Netherlandic Dutch data the omission of ER was clearly preferred. in the Belgian Dutch data the use of ER was accepted in 89% of the cases, although the variant without ER was accepted as well, but to a lower degree.

Another new context that was added, was the use of ER with quantity nouns such as een kilo 'a kilo', drie liter 'three litres' or twee glazen 'two glasses'. The data for both national varieties of standard Dutch showed a clear preference (93% in both cases) for the variant without ER.

A third new context was the use of ER with the presuppositional quantifier de helft. The Belgian Dutch participants accepted sentences with ER in 40% of the cases, which is relatively high, although the sentences without ER were preferred (76%), as in the Netherlandic Dutch data.

A fourth new context was the use of ER with quantified adverbial NPs. In both national varieties there was a clear preference for the variant with ER, contradicting claims that have been made in the literature.

Colleman et al. (2021a) observe that to be able to make well motivated statements about the status of current national varieties of standard Dutch, a valid method should be developed that can be replicated. This could be a uniform research in big and comparable corpora of national varieties of standard Dutch or a uniform questionnaire submitted to native speakers of national varieties. Colleman et al. (2021a) add that the results of such a large-scale empirical investigation could without any doubt lead to adaptations in the description of the status of national varieties in the Dutch Reference Grammar. Although the study presented in this essay was only a small-scale study, it is hoped that the results may lead to small adaptations in the third version of the section on partitive pronouns in the Dutch Reference Grammar or that the method may be used for follow-up research on a larger scale.

Bibliography

- Audring, J. (2009). Reinventing Pronoun Gender. Utrecht: LOT.
- Barbiers, S. (2017). "Kwantitatief er en ze". Nederlandse Taalkunde, 22(2), 163-87. https://doi.org/10.5117/nedtaa2017.2.barb.
- Belletti, A.; Rizzi, L. (1981). "The Syntax of NE. Some Theoretical Implications". *The Linguistic Review*, 1(2), 117-54. https://doi.org/10.1515/ tlir.1981.1.2.117.
- Bennis, H. (1986). Gaps and Dummies. Dordrecht: Foris.
- Berends, S. (2019). Acquiring Dutch Quantitative ER. Amsterdam: LOT.
- Blom, A. (1977). "Het kwantitatieve er". Spektator, 6, 387-95.
- Colleman, T. et al. (2021a). "Over de Algemene Nederlandse Spraakkunst" (Introduction to Algemene Nederlandse Spraakkunst). 3rd Edition. Leiden: Instituut voor de Nederlandse taal. https://e-ans.ivdnt.org/.
- Colleman, T. et al. (2021b). Algemene Nederlandse Spraakkunst (Dutch Reference Grammar). 3rd Edition. Leiden: Instituut voor de Nederlandse taal. https://e-ans.ivdnt.org/.
- Cornips, L. (1994). Syntactische Variatie in het Algemeen Nederlands van Heerlen [Syntactic variation in Heerlen Dutch] [PhD dissertation]. Amsterdam: IFOTT, University of Amsterdam.
- Cornips, L.; Sleeman, P. (2024). "Variation in the Use of the Partitive Pronoun *ER* in Regional (Heerlen) Standard Dutch". To be published in *Linguistic Variation* 2024. https://benjamins.com/catalog/lv.23026.cor.
- Corver, N.; Van Koppen, M. (2018). "Dutch". Van Craenenbroeck, J.; Temmerman, T. (eds), *The Oxford Handbook of Ellipsis*. Oxford: Oxford University Press, 721-64. https://doi.org/10.1093/oxfordhb/9780198712398.013.37.
- De Hoop, H. (1992). Case Configuration and Noun Phrase Interpretation. New York: Routledge. https://doi.org/10.4324/9781315051628.
- De Jong, F. (1983). "Sommige niet, andere wel: De verklaring van een raadselachtig verschil" (Some Not, Others Yes: The Explanation of a Puzzling Difference). *GLOT*, 6, 229-46.
- De Schutter, G. (1992). "Partitief of kwantitatief ER, of over de verklaring van syntactische variatie" (Partitive or Quantitative ER, or about the Explanation of Syntactic Variation). *Taal en Tongval*, 44(1), 15-26.
- De Troij, R.; Grondelaers, S.; Speelman, D. (2023). "Natiolectal Variation in Dutch Morphosyntax: A Large-Scale, Data-Driven Perspective". *Journal of Germanic Linguistics*, 35(1), 1-68. https://doi.org/10.1017/s1470542722000071.
- Dhondt, A. et al. (2020). "Naar een pluricentrische Algemene Nederlandse Spraakkunst: Het gebruik van productiedata voor de beschrijving van nationale variatie" (Towards a Pluricentric Dutch Reference Grammar: The Use of Production Data for the Description of National Variation). Handelingen van de Koninklijke Zuidnederlandse Maatschappij voor Taal- en Letterkunde en Geschiedenis, 73, 85-134. https://doi.org/10.21825/kzm. v73i0.17279.
- Geerts, G.; Haeseryn, W.; de Rooij, J.; van den Toorn, M.C. (1984). *Algemene Nederlandse Spaakkunst* (Dutch Reference Grammar). Groningen: Wolters-Noordhoff.
- Ghyselen, A.-S. (2022). "Attitudinal and Perceptual Research as Part of the Methodological Toolbox to Define Standard Languages: Advances, Issues and Perspectives in Research on Belgian Dutch". Coupland, N.; Kristiansen,

- T. (eds), Standard Languages in Germanic-Speaking Europe: Attitudes and Perception. Oslo: Novus Press, 151-87.
- Giusti, G; Sleeman, P. (2021). "Partitive Elements in the Languages of Europe. An Advancement in the Understanding of a Multifaceted Phenomenon". Sleeman, P.; Giusti, G. (eds), *Partitive Determiners, Partitive Pronouns and Partitive Case.* Berlin: De Gruyter, 1-26. Linguistische Arbeiten 580. htt-ps://doi.org/10.1515/9783110732221-001.
- Haeseryn, W. (1996). "Grammaticale verschillen tussen het Nederlands in België en het Nederlands in Nederland: Een poging tot inventarisatie" (Grammatical Differences between Dutch in Belgium and Dutch in the Netherlands: An Attempt at Stock-Taking). Van Hout, R.; Kruijsen, J. (eds), Taalvariaties: Toonzettingen en modulaties op een thema. Dordrecht: Foris Publications, 109-26.
- Haeseryn, W. (2013). "Belgian Dutch". Hinskens, F.; Taeldeman, J. (eds). Language and Space: An International Handbook of Linguistic Variation. Vol. 3, Dutch. Berlin: De Gruyter Mouton, 700-20. https://doi.org/10.1515/9783110261332.700.
- Haeseryn, W. (2016). "Taalvariatie en normen in de vernieuwde Algemene Nederlandse spraakkunst (ANS)" (Language Variation and Norms in the Revised Dutch Reference Grammar). Mottart, A.; Vanhooren, S. (eds), *Proceedings of the 30th HSN-Conference*. Gent: Scribis, 327-30.
- Haeseryn, W. et al. (1997). *Algemene Nederlandse Spraakkunst*. 2nd ed. Deurne: Wolters Plantyn.
- Haeseryn, W.; Coppen, P.-A.; De Vriend, F. (2002). Algemene Nederlandse Spraakkunst (Dutch Reference Grammar) (E-ANS, electronic edition). Nijmegen: KUN. https://e-ans.ivdnt.org/data/archief/ans2/e-ans/ body.htm.
- Kranendonk, H. (2010). *Quantificational Constructions in the Nominal Domain:*Facets of Dutch Microvariation. Utrecht: LOT. https://www.lotpublications.nl/Documents/259_fulltext.pdf.
- Muftah, M; Eng, W. (2011). "The Acquisition of English Be Auxiliary and Thematic Verb Constructions by Adult Arab ESL Learners". International Journal of English Linguistics, 1(2), 91-105. https://doi.org/10.5539/ijel.v1n2p91.
- Muftah, M.; Rafik-Galea, S. (2013). "Language Learning Motivation among Malaysian Pre-University Students". *English Language Teaching*, 6(3), 92-103. https://doi.org/10.5539/elt.v6n3p92.
- Sleeman, P. (1996). *Licensing Empty Nouns in French*. The Hague: Holland Academic Graphics.
- Sleeman, P. (1998). "The Quantitative Pronoun ER in Dutch Dialects". Barbiers, S.; Rooryck, J.; Van de Weijer. J. (eds), Small Words in the Big Picture, Squibs for Hans Bennis. Leiden: Holland Institute of Generative Linguistics. 107-11.
- Sleeman, P. (2023). "Partitive Pronouns in Intransitive Contexts in Italian and Dutch". Luraghi, S.; Sleeman, P. (eds), Partitives Cross-Linguistically. Dimensions of Variation. Special Issue of Linguistic Variation, 23(1), 217-43. https://doi.org/10.1075/lv.21018.sle.
- Sleeman, P.; Ihsane, T. (2017). "The L2 Acquisition of the French Quantitative Pronoun en by L1 Learners of Dutch. Vulnerable Domains and Cross-Linguistic Influence". Blom, E.; Schaeffer, J.; Cornips, L. (eds), Cross-Linguistic Influence of Bilingualism. In Honor of Aafke Hulk. Amsterdam: John Benjamins, 303-30. https://doi.org/10.1075/sibil.52.14sle.

- Sleeman, P.; Ihsane, T. (2020). "Convergence and Divergence in the Expression of Partitivity in French, Dutch, and German". Linguistics, 58(3), 767-804. https://doi.org/10.1515/ling-2020-0090.
- Spinner, P.; Jung, S. (2017). "Production and Comprehension in Processability Theory: A Self-Paced Reading Study". Studies in Second Language Acquisition, 40(2), 1-24. https://doi.org/10.1017/s0272263117000110.
- Taaladvies.net. [online]. Language advice website of the Dutch Language Union. https://taaladvies.net/.
- Vandekerckhove, R. et al. (2019). Visie op taalvariatie en taalvariatiebeleid. Vision Text of the Advisory Committee on Language Variation Commissioned by the General Secretariat of the Language Union. https:// taalunie.org/publicaties/88/visie-op-taalvariatieen-taalvariatiebeleid.

Partitive Constructions and Partitive Elements Within and Across Language Borders in Europe

edited by Elvira Glaser, Petra Sleeman, Thomas Strobel, Anne Tamm

'I Am Also Found on Facebook'

Locuphoric 'Find'-Based Strategies in Finnish Internet Corpora

Rodolfo Basile

University of Tartu, Estonia; University of Turku, Finland

Abstract Allophoric forms of the Finnish verb *löytyä* 'to be found' are used in locational constructions similarly to copulas, while the verb's locuphoric forms have been claimed to be marginal. This essay confirms this claim by looking into Internet corpora and provides a qualitative overview of the types of utterances found in the sample, arguing that locuphoric forms may as well convey a locational function in certain contexts. The article also suggests a parallel between locuphoric 'find'-based strategies and competing impersonal constructions containing the verb *löytää* 'to find', discussing the role of partitive-marked object arguments.

Keywords Locational. Existential. Partitivity. Corpus linguistics. Invenitive strategies.

Summary 1 Introduction. – 2 Background. – 2.1 Locational Constructions. – 2.2 The Use of *löytyä* as a Locational Copula. – 3 Material and Method. – 4 Results. – 4.1 Self-Advertisement in Internet Contexts. – 4.2 Permanent Versus Temporary Location. – 4.3 Mirative Marking. – 4.4 Other Uses. – 4.5 Competing Constructions. – 5 Discussion. – 6 Conclusion.



1 Introduction

Basile and Ivaska (2021) have argued that the Finnish intransitive verb löytyä 'to be found' is used similarly to the locational copula olla 'to be'. Constructions containing this verb are highly specialised in that they often only convey a locational function, without involving the verb's original meaning find nor any kind of posture. For these reasons, they too can be considered copulas.1

- löytyvät jäsenkirjeestä. (1a) Puhelinnumerot newsletter.ELA phone.number.NOM.PL find.MM.3PL 'The phone numbers are (found) in the newsletter.' (Basile, Ivaska 2021, 25)
- (1b) Poikkeuksiakin ammattikunnasta löytyy profession.ELA find.mm.3sg exception.PL.PART.ENCL 'There are also exceptions in the profession.' (Basile, Ivaska 2021, 33)

Like *olla* 'to be', *löytyä* triggers the nominative-partitive alternation in its first argument, also called the *locatum*, which is the subject or located element (Haspelmath 2022). Partitive subject-like arguments are typical of the Finnish Existential construction, which usually also features the lack of agreement between verb and NP (cf. 1a. 1b). Because of this lack of agreement, lövtvä 'to be found' naturally appears almost always indexed for third persons. However, in their study. Basile and Ivaska also found one instance in which this verb is indexed for second person singular (2).

(2)	Mistä	löyd-y-t	prinssini,	44-50-v.	fiksu,
	where.ELA	find-мм-2SG	prince.1PX	44-50-y.o.	smart
	pitkähkö,	ulkonäkö	ok,	pilke	silmäkulmassa,
	tallish	appearance	ok	twinkle	eye.corner.INE
	lenkkeilet	ja	tanssit		
	jog.2SG	and	dance.2sg		
	'Where are w	numy nrince 44	to 50 years o	ld smart tallish	good-looking

Where are you my prince, 44 to 50 years old, smart, tallish, good-looking, with a twinkle in your eye, you who like to jog and dance.' (Basile, Ivaska 2021, 18)

¹ I would like to thank Petra Sleeman and the two anonymous reviewers for their valuable comments and suggestions that substantially improved the quality of this essay.

They then argued that the example above is marginal and used only in certain contexts. But how marginal is it? Within the scope of this essay. I will try to answer this question, as well as to determine the semantic and pragmatic constraints under which this verb appears indexed for locuphoric forms (i.e., speaker and addressee forms, see Haspelmath 2013). I will show that most uses of locuphoric forms of the verb *löytyä* pertain to an Internet environment. These strategies are used to advertise the Internet presence of users on various platforms. I will also discuss other uses that do not necessarily refer to the Internet environment but are nevertheless not common in everyday speech (Juha-Matti Aronen, p.c., among others). After an overview of the relevant literature, including Basile and Ivaska (2021), in Section 2, I define the material and methods of the research at hand in Section 3. Section 4 presents the results and provides an analysis of the material. In Section 5, I discuss the results and, finally, Section 6 concludes the article and mentions some future research possibilities.

2 Background

The verb *löytyä* 'to be found' is an intransitive derived from the verb löytää 'to find' through the deverbal morpheme -U- (realising as -u/y- following vowel harmony), which has been argued to have several functions, such as automative, passive, and reflexive (Kulonen-Korhonen 1985; VISK § 335). For this morpheme, I use the term "middle marker" (Kemmer 1993, 41; Zúñiga, Kittilä 2019, 168; Inglese 2022; 2023), which conveniently subsumes its different functions. It is also to be considered that locuphoric forms of the verb *löytyä* do indeed retain their meaning find more often than the verb's allophoric forms (third persons, see Dahl 2000; Haspelmath 2013; cf. "aliophoric" [Haspelmath 2020]), hence the middle markers they employ often express a passive function. This matter should however be further investigated by contrasting middle-marked forms of verbs with a root meaning FIND with unmarked ones (e.g., löytää 'to find'). The latter forms are arguably far more common in everyday speech but, for reasons of space and scope, I focus on the former and sketch a brief analysis of one of the possible competing constructions at the end of the article. Although the essay at hand does not analyse 'find'-based strategies from a cross-linguistic perspective, it is fundamental to bear in mind that these strategies are indeed used in other European languages for a variety of functions, especially to convey locational meaning (e.g., Italian trovarsi find.mm 'be located', Russian nachodit'sya find.mm 'be located'), and that they exhibit different usage patterns compared to Finnish when it comes to the

acceptability of allophoric versus locuphoric forms (Basile 2023).² The reasons why there exists this degree of variation are perhaps of a diachronic nature.

2.1 Locational Constructions

Locational constructions are forms of intransitive predication (Stassen 1997). They also fall within the concepts "non-verbal predication" (Hengeveld 1992: Roy 2013) and "copular clauses" (Declerck 1988; Mikkelsen 2011). An overview of these constructions is found in Haspelmath (2022), who distinguishes two main types: "predlocative constructions" and "existential constructions". These two construction types involve two arguments, a located element and a location, which are linked by a stative linking element called a copula (Haspelmath 2022). Predlocative constructions (e.g., 'The beer is in the fridge') predicate about a locatum (also called "figure" [Talmv 2000; Koch 2012; Creissels 2014] or "pivot" [Milsark 1977; Bentley, Ciconte, Cruschina 2013]) which is represented by a usually definite referent ('the beer') that is said to be in a location expressed by a locative phrase ('in the fridge') by means of a copula ('is'). In existential constructions (e.g., 'There are beers in the fridge'), the locatum is instead also called the existent, and represents an indefinite and discourse-new referent ('beers'). Existential constructions can be additionally marked for word order (see also Creissels 2019) or, in the case of English, expressed by an expletive followed by a copula ('there are'). Both predlocative and existential constructions express a locational function and feature an overt locative phrase.

In the Finnish tradition, the prototypical Existential construction features a clause-initial locative adverbial, as well as no verbal agreement (such as in French *Il y a des hommes* 'There are men', where the existential copula is marked for singular and the existent *des hommes* is a partitive construction), and a discourse-new subject-like referent whose existence is being predicated (Hakanen 1972; VISK § 893; Huumo 2003). The subject-like referent has also been called an *e-NP* (existential Noun Phrase) because it does not satisfy the typical criteria assigned to subjecthood: for example, it is often marked for partitive case (Huumo, Helasvuo 2015). One problem with the Finnish traditional definition of Existential construction is that it is often similar to structures that have been called "presentationals" (Gast, Haas 2011), which can also feature partitive-marked arguments that

² Outside of Europe, 'find'-based locational strategies have been found in, e.g., Tagalog and some Mande languages (Basile 2023). A cross-linguistic study is however needed to assess the productivity of such constructions.

do have the function of introducing new referents but typically do not express locational meaning. This happens because Finnish grammarians also allow for other (intransitive) 'existential verbs' to be used in the Finnish Existential construction, verbs that do not have a locational function. Such verbs are, e.g., tulla 'to come', juosta 'to run', ilmestyä 'to appear', and many others. Among these, however, the verb löytyä 'to be found' is a special case because not only its frequency in the Finnish Existential construction is much higher than the frequency of the rest of the existential verbs (Basile forthcoming), but also because it can express a purely locational function. It hence belongs to what Basile (2023) calls "invenitive verbs" ('invenitives'). Invenitives are a class of verbs that have a root with meaning FIND (from Latin invenire 'to find') which becomes semantically bleached and fulfils other grammatical functions. Typically, invenitives feature a valency-changing operation and are part of invenitive-locational constructions, where they express a locational function without marking a specific posture (like posture verbs such as German liegen 'to lie' instead do). Invenitives mostly occur in predlocative constructions in European languages, but in Finnish (and in Estonian) they frequently appear in existential constructions as well. For this reason, it is often the case that Finnish and Estonian invenitive-locational constructions feature partitive-marked existents (or e-NPs, see above). When *löytyä* is instead indexed for locuphoric forms, the pronoun it relates to cannot be marked for partitive case. Given that this verb is an intransitive, the locuphoric pronominal form for which it is indexed, if overt, will be marked for nominative case and constitute the syntactic subject of the clause.

2.2 The Use of löytyä as a Locational Copula

Basile and Ivaska (2021) investigate the nominative-partitive alternation of subjects in sentences containing the Finnish verb löytyä 'to be found' from a quantitative point of view.³ For subjects it is meant both canonical subjects (nominative-marked, clause-initial NPs that trigger verb agreement) and e-NPs, which can be either nominativemarked clause-final NPs or partitive-marked NPs. In both cases, e-NPs do not trigger verb agreement. When they are partitive-marked, they can occur both in clause-initial and clause-final position and usually suggest an existential reading. The method used in their article

³ The sample used in Basile, Ivaska 2021 is a random sample of 779 sentences taken from the corpus Kansalliskirjaston lehtikokoelma (KLK), made of newspapers and magazines written in contemporary Finnish. Given the synchronic nature of the research, the collection of examples was limited to papers written between the beginning of 1990 and the end of 2000.

is mixed-effect logistic regression (Gries 2015), which consists in a binary (NOM-PART) response variable (subject case marking) explained based on both fixed-effect and random-effect explanatory variables. They find that several variables have a statistically significant effect on nominative-partitive alternation, such as the NP's number in correlation with whether it is a count noun or not, and word order in correlation with verb agreement. Verbal tense also showed statistical significance - this is particularly interesting since past tenses, often encoding perfective aspects, increase the likelihood of the verb löytyä preserving its original meaning find. The examples analysed are almost all indexed for allophoric forms, and the only example indexed for a locuphoric form is justified as being marginal. The example in question is taken into consideration since it interestingly seemed to convey a locational function, although no nominative-partitive alternation occurred. Basile and Ivaska (2021, 35) generally conclude that allophoric forms of the verb *löytyä* indeed function as copulas, and that semantic bleaching plays a role in this. As we see from the analysis below, locuphoric forms of the verb löytyä can also be considered as copulas, in that they too undergo semantic bleaching to some extent. This feature comes into play especially when considering the uses of *löytyä* to mark permanent versus temporary location.

3 Material and Method

The material used in the research at hand is taken from the corpus Finnish Web 2014 (fiTenTen2014), a Finnish corpus consisting of various text types taken from the web. It is a large corpus that contains ca. 1.7 billion tokens and ca. 127 million sentences. I accessed the corpus through the platform Sketch Engine (Kilgarriff et al. 2014), where I performed a simple search of all the affirmative, negative, and interrogative forms of the verb *löytyä* 'to be found' when indexed for locuphoric forms (first and second persons, both singular and plural). While in Finnish interrogative forms are obtained by adding the morpheme -ko/-kö, negative forms are analytical constructions - e.g., en löydy 'I am not to be found' for the first person singular - made of a negation (en NEG.1SG) followed by a connegative form (löydy). Between the negation and the connegative form it is possible to find several other parts of speech, such as adverbs. However, I only searched for negative constructions that were written subsequently, with no additional language material in between the negative and the connegative form. Additionally, none of the negativeinterrogative forms (such as enkö löydy 'am I not found') nor past conditional forms (such as *olisin löytynyt* 'I would have been found') yielded any result, so I did not include them in Table 1, which lists all the locuphoric forms used.

 Table 1
 Locuphoric forms of the verb löytyä

	Affirmative	Negative	Interrogative
1SG.PRS	löydyn	en löydy	löydynkö
1SG.PST	löydyin	en löytynyt	löydyinkö
1SG.CND	löytyisin	en löytyisi	löytyisinkö
2SG.PRS	löydyt	et löydy	löydytkö
2SG.PST	löydyit	et löytynyt	löydyitkö
2SG.CND	löytyisit	et löytyisi	löytyisitkö
1PL.PRS	löydymme	emme löydy	löydymmekö
1PL.PST	löydyimme	emme löytyneet	löydyimmekö
1PL.CND	löytyisimme	emme löytyisi	löytyisimmekö
2PL.PRS	löydytte	ette löydy	löydyttekö
2PL.PST	löydyitte	ette löytyneet	löydyittekö
2PL.CND	löytyisitte	ette löytyisi	löytyisittekö

I provide a descriptive statistical outlook of the search results in Section 4. The sentences in the sample are then analysed from a qualitative perspective.

4 Results

The corpus search yielded a total of 540 occurrences containing the verb *löytyä* in locuphoric forms. After manually going through all the occurrences, 91 were discarded for various reasons, such as:

- substantival uses of löydyt (a misspelled version of löydöt 'findings, bargains', and a homograph of löytyä when indexed for 2sg);
- transitive uses of löytyä, likely due to misspelling löytää 'to find';
- misspelled forms of *löytyy*, i.e., find.mm.3sg.

When we are dealing with Internet texts, we must account for what has also been called "bad language" (Eisenstein 2013). Posts on social media and forums are not post-edited and users will often misspell words for several reasons (Drouin, Davis 2009). Additionally, users may be second language learners or unbalanced bilinguals (for research on L2 Finnish, see, e.g., Ivaska [2010; 2011], who found that learners of Finnish tend to mix sentence types when producing complex constructions such as the Existential construction in writing). The final sample amounts to 449 sentences [fig. 1].

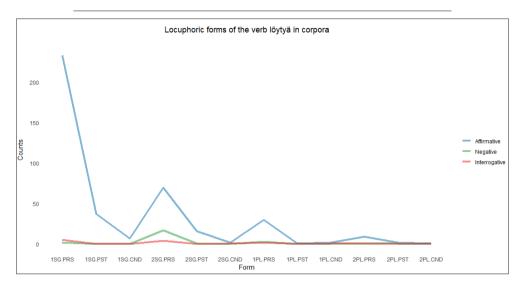


Figure 1 Results of the corpus search. Realised with RStudio by the author

Figure 1 confirms the claim by Basile and Ivaska (2021) according to which $l\ddot{o}yty\ddot{a}$ is rarely indexed for second person singular and, by extension, for all its locuphoric forms. In fact, locuphoric forms occur 449 times out of a total of ca. 1.2 million occurrences of the verb $l\ddot{o}yty\ddot{a}$ in the whole corpus. By comparison, performing a simple search of the allophoric form $l\ddot{o}ytyy$ within the same corpus yields a total of 613,650 occurrences. The results show that the most common locuphoric form is the first person singular in the present tense, indicative mood. In the following subsections, I analyse the main functional characteristics of the sentences found in my sample from a qualitative point of view.

4.1 Self-Advertisement in Internet Contexts

Most occurrences of the verb $l\ddot{o}yty\ddot{a}$ with locuphoric forms are indexed for first person singular (284 sentences, 63.25%). Some marginal instances with other locuphoric forms, such as second persons, are discussed below, but it is to be kept in mind that there is no big difference in use when it comes to grammatical number. In general, people tend to frequently talk about themselves and index most verbs for first person singular. However, the reasons why it is also the case with locuphoric forms of $l\ddot{o}yty\ddot{a}$ is that the first person singular is mainly used in forum environments and social media, where speakers advertise their presence on other websites or platforms (3).

(3) **Löydyn** myös Facebookista find.mm.1sg also Facebook.ELA

'I am also found on Facebook. / You can also find me on Facebook.'

The speakers also use this strategy to make their usernames available and clear to their interlocutors and, through the Internet forum format, to the rest of the community. In these cases, the first singular form is accompanied by an adessive-marked NP such as nimi 'name', nimimerkki 'pseudonym', tunnus 'username' that specifies the users' Internet identity. The main pragmatic intent of this construction is made explicit in examples such as (4), where a verbless relative construction (että...) has the clearly conative function of wanting the addressee to add the speaker to their contact list.

vanhalla (4) Löydyn skypestä edelleen samalla nimellä old.ade find.MM.1SG Skype.ela still same.ADE name.ADE perneri. sinne kaikki vanhat että vaan CONJ there.ILL old.pL USER **EMPH** all ia uudet and new.pL

'I am to be found on Skype still under the same old name perneri, (I would like) all old and new people (to add me) there.'

In some examples, the difference between the speakers' real and Internet identity is made more evident. In (5), the NP containing the username is used with the postposition taka- 'behind' instead of being marked for adessive case like in (4). The same postposition can be used in presentational constructions such as (6), where the speaker's username is, however, not mentioned.

(5) Eli instagrammista niinkin löydyn tutun that.is Instagram.ELA find.MM.1SG as.well familiar.gen nimimerkin kuin partfour takaa. behind.ELA pseudonym.gen user 'So, I am also found on Instagram behind the username partfour.'

(6) Tämän blogin takaa **löydyn** minä this.GEN blog.GEN behind.ELA find.MM.1SG 1SG 'The person behind this blog is me.'

These constructions seem to pragmatically imply the permanent presence of the speakers on the Internet. This can be a feature encouraged by the very Internet environment, in which all usernames can be considered to be available at all times, even when the person they refer to is not logged into the platform. This strategy is also employed with plural first persons, while second persons are mostly used to confirm to other users about their presence in a certain list or group, most likely on social media (7).

- (7a) Löydyt jo suosikeistani! find.mm.2sg already favourite.PL.ELA.1PX 'You are already among my favourites / in my favourites list!'
- (7b) **Löydyt** kuitenkin edelleen sieltä tykkääjien joukosta. find.mm.2sg anyway still there.abl liker.pl.gen group.ela 'Anyway, you are still in the list of likers.'

4.2 Permanent Versus Temporary Location

According to Haspelmath (2022, 6), German uses two different strategies in existential constructions to mark whether a referent is permanently located at a certain location or only temporarily (es gibt lit. 'it gives' marks permanent location, while stehen 'to stand' refers to temporary presence). In my sample, different strategies are similarly used to mark these two locational strategies. The difference is, however, that the verb is not lexically differentiated like in German. The first strategy is the one we see in § 4.1, and marks permanent location through lexical devices that pertain to the speakers' Internet presence. The second strategy is characterised by temporal adverbials (8).

(8) Löydyn Fastin pisteeltä kisojen jälkeen aina.
find.mm.1sG F.GEN point.ABL competition.PL.GEN after always
iltakuuteen asti
evening.six.ILL until

'After the competition, I am to be found at Fast's spot right until six in the
evening.'

In this type, the locative phrase marks a real-world location, in which the speaker can be found for a limited time indicated by temporal adverbials like *iltakuuteen asti* 'until 6 in the evening'. The adverb *aina* 'always' also marks the event as recurrent, as does *viikonloppuisin* 'on weekends' in (9).

(9) Viikonloppuisin **löydyn** hyvin poikkeuksetta pullon pohjalta.

weekend.ITER find.MM.1SG very exception.ABE bottle.GEN BOTTOM.ABL

'On the weekends I am always drinking.' (lit. 'found at the bottom of the bottle')

The difference is that while (8) indicates the availability of the speaker, in (9) the location is fictive and metaphorical. The speaker here infers about her drinking habit. In another example, time framing is used as a strategy to communicate the appearance of the speaker in a video, inferring permanent presence within the video, however confined to a certain time interval (10).

(10) miehän **löydyn** TÄSTÄ pätkästä 50 sekunnin kohdilta 1SG.EMPH find.MM.1SG this.ELA part.ELA 50 second.GEN place.PL.ABL 'I am to be found in THIS snippet at around 50 seconds.'

4.3 Mirative Marking

Mirativity is a linguistic category that expresses information that is surprising or unexpected to both the speaker and the addressee (DeLancey 1997; DeLancey 2001; Hengeveld, Olbertz 2012). Several European languages use 'find'-based strategies to mark mirative events (e.g., 'I found myself on the top of the hill'; 'I found myself thinking about you'), as the verb *löytyä* can also occasionally do (11).

(11)löydyn uudelleen ja uudelleen find.MM.1SG again and again pakonomaisesti tunkemassa ruokaa sisälleni compulsively shove.INF.INE food.PART inside.ALL.1PX 'I find myself over and over again compulsively shoving food in my mouth'

This way of marking one's involuntary involvement in a certain situation is similar to the more common analytical construction *löytää itsensä* 'find oneself', that also encodes mirative meaning (12).

(12) **Löysin** itseni sairaalasta. find.PST.1SG self.1PX hospital.ELA 'I found myself at the hospital.'

Like in English and in other European languages (Basile 2023), the mirative strategy can also be used with concrete locations instead of abstract situations and states of mind. It is still debatable whether (13a) can be interpreted as a mirative-marked strategy. The polyfunctionality of the middle marker may also simply suggest a passive-resultative reading, but then again the question arises: why didn't the speaker choose to use a passive construction (e.g., minut löydettiin 1sg.Acc find.PASS.PST lit. 'I was found'). On the other hand, it is clear that (13b) does not express a mirative function.

(13a)	Minulle	kerrottiin,	että	löydyin	kadulta		
	1SG.ALL	tell.pass.pst	CONJ	find.MM.PST.1SG	street.ABL		
	verissäni,	josta	minut	vietiin	sairaalaan		
	blood.pl.ine.1px	RELP.ELA	1SG.ACC	carry.PASS.PST	hospital.ıLL		
	ja	sen	jälkeen	mielisairaalaan.			
	and	it.gen	after	mental.hospital.	ILL		
	'I was told that I was found on the street covered in blood, then carried to						

^{&#}x27;I was told that I was found on the street covered in blood, then carried to the hospital and then to the mental hospital.'

(13b)	Viime	tiis	taina	meillä	oli	meidän	
	last	Tue	sday.Ess	1pl.ade	be.PST.3SG	1SG.GEN	
	lukion		musa-abi	en	konsertti,	jossa	
	high.school.gen		music-major.pl.gen		concert	REL	
	itse	se sitte löyd			toisinaan	mikin,	
	self	then	then find.мм.РST.1SG kitaran tai		occasionally	microphone.GEN	
	pianon,	kitar			basson	takaa.	
	piano.g	EN guita	r.GEN	or	bass.gen	behind.ELA	
	'Last Tuesday we had our high school's mu			school's mu	sic majors' concert, in occasion of		
		ould be fo	und behind	l the microph	none, the piano,	the guitar, or the	
	bass.'						

While usually used with an elative-marked spatial argument, *löytyä* can occasionally also be used with illative-marked NPs (14a) or verbs in the third infinitive illative form (14b), which expresses movement towards rather than from. Both examples encode a mirative event which is strictly connected to the Internet environment.

(14a)	Löydyin)	tekstiin	sattu	ımalta	ja	ilahduin	
	find.мм	.PST.1SG	text.ILL	accio	lentally	and	cheer.PST.1SG	
	että	aiheesta	a käyd	lään	vilkasta		keskustelua.	
	соил topic.eu		A run.PASS		active.PART		conversation.PART	
	'I accidentally stumbled upon the text and was glad that the topic is being							
	discusse	ed active	ly.'					

(14b)	hohoo,	vasta	nyt	löydyin		
	INTERJ	only	now	find.MM.PST.1SG		
	lukemaan	sun	mahtavia	ekoisi-huomioita!		
	read.INF.ILL	2SG.GE	amazing.pl.part	ecodaddy-remark.pl.part		
	'Oh, I am only now reading your amazing eco-daddy remarks!'					

Mirative readings are also triggered when, pragmatically, speakers presuppose the high unlikelihood of the situation. While for many other examples it is debatable whether the verb retains its original meaning FIND, (15) seems unambiguously resultative and passive in meaning.

(15)	Siksi	olikin	suoranainen	ihme,
	hence	be.pst.emph	absolute	miracle
	kun	sinä	löydyit.	
	when	2SG	find.MM.PST.2SG	

^{&#}x27;For this reason it was an absolute miracle when you were found.'

4.4 Other Uses

Among the other sentence types in my sample, I found occurrences of $l\ddot{o}yty\ddot{a}$ that mark desiderative functions. The literature usually refers to desideratives as morphosyntactic devices that encode volitive modality. Notable is the case of the Japanese bound verbal suffix -tai, which conveys the meaning want (Izutani 2003). When the suffix -tai co-occurs with the nominative marking -ga on the NP, we have a desiderative construction. The Finnish multifunctional particle -pA is the closest relative to a morphological desiderative marker (VISK § 833-5; for other desiderative constructions in Finnish see VISK § 1659). Together with the conditional mood, it indicates wanting an unlikely event to take place. Similarly, the conditional mood in (16), together with the fundamentally mirative meaning encoded by the verb, marks a desiderative function.

(16)	jos	vaikka	joku	aamu	yllättäisin	itseni	
	if	though	some	morning	surprise.conp.1sg	self.1PX	
	ja	oikeesti	löytyisin		tuolta	lenkkeilemästä	
	and	really	find.мм.co	OND.1SG	there.ABL	jog.INF.ELA	
	klo	7	aamulla.		:D		
	hour	7	morning.ADE		EMOJI		

^{&#}x27;If only one morning I could surprise myself and actually be found jogging at 7 am.'

The form *et löydy* 'you are not found' is almost always (15 out of 17 times) used referring to business contexts. This type of utterance communicates the importance of the Internet presence for enterprises (17a,b).

(17a)	Jos joku		etsii	vaikkapa	autonhuoltoa		
	if someone		search.3sg	for.example	car.maintenance.part		ART
	Jyväskylästä,		olet	aikalailla	ulkona	pelistä	jos
	Jyväskylä.ELA		be.2SG	pretty.much	out.ess	game.ELA	if
	et	löydy		Googlessa			
	NEG.2SG find.MM.		.CONNEG	Google.INE			

'If someone is looking for, say, car maintenance services in Jyväskylä, you are going to be pretty much out of the game if you are not to be found on the first page of Google's search results.'

(17b)	eri yhte		eisöihin	liittyvästä	kokonaisuudesta					
	various orga		anisation.PL.ILL	related.ELA	whole.ELA					
	yrityksen company.gen		hakukonenäkyvyydessä		on	kysymys.				
			search.engine.visibility.ıne		BE.3SG	question				
	Jos	et	löydy,	et	ole	olemassa.				
	if	NEG.2SG	find.MM.CONNEG	NEG.2SG	be.conne	G exist.INF.INE				
	"it is a matter of the company's search engine visibility for what									
			arious organisations. If you are not to be found, you don't							
	exist									

4.5 Competing Constructions

Since the locuphoric forms of the verb *löytyä* are expectedly marginal, speakers could prefer other constructions when talking about themselves and where they are located or to be found. Instead of using löytyä, which features only one argument (the subject of an intransitive clause, or S), competing constructions employ its transitive counterpart *löytää* 'to find', which features two arguments (the agent A and the patient P; for reference see, e.g., Haspelmath 2011). P, which corresponds to the object of a transitive verb, can be affected by case marking alternation (accusative-partitive in the case of personal pronouns, genitive-partitive in the case of other nouns), similarly to S (nominative-partitive) when *löytyä* is indexed for allophoric forms (Basile, Ivaska 2021). Competing constructions using löytää 'to find' may include Impersonal and Impersonal Passive constructions, where A is not expressed and P is susceptible to nominativepartitive alternation. Here, I will only consider locuphoric forms of P. In the Impersonal construction, the first/second person pronoun is followed by the verb indexed for 3sg (e.g., minut/minua löytää 1sg. ACC/1sg.PART find.3sg 'they find me, I am found'), while in the Impersonal Passive construction the only difference is the passive marking -tAAn/-ttiin on the verb, with basically no difference in meaning (e.g., minut/minua löydetään/löydettiin 1sg.acc/1sg.part find.pass.prs/find. PASS.PST 'I am found'). While I do not analyse all the possible variations of these constructions, I will briefly elaborate on two of them, namely the Impersonal constructions minut löytää and minua löytää, where the first person singular pronoun is indexed respectively for accusative and partitive case.

By performing a simple phrase search within the same corpus used above, I found that the accusative-marked construction *minut löytää* is far more common than its partitive-marked counterpart *minua löytää* (raw frequencies 910/10). It seems like the accusative-marked construction is often used similarly to locuphoric forms of the intransitive *löytyä*, with contexts ranging from Internet environments (18a) to expression of time-framed permanent presence (18b).

- (18a) Sieltä minut lövtää nimellä @evehei. find.3SG there.ABL 1SG.ACC name.ADE IISER 'You can find me / I am to be found by the name @evehei.'
- (18b) Vapaa-ajalla löytää usein minut koripallokentältä free-time.ADE 1SG.ACC find.3SG often basketball.court.ABL 'In my free time you can often find me / I am often to be found at the basketball court.'

Of the 10 occurrences of minua löytää, only 3 are relevant because used impersonally (19).

- (19a) kyseisillä nimillä minua lövtää pahraiten name.PL.ADE 1SG.PART find.3SG best in.question.PL.ADE 'Ideally, you can find me through the names in question.'
- (19b) Harvemmin löytää kuitenkaan valittamasta minua rarely.сомр find.3SG anyway.NEG complain.INF.ELA 1SG.PART musiikista mikä huoneessa soi. music.ELA RELP room.INE play.3sg 'It is even rarer that you can find me complaining about the music playing in the room.'
- (19c) Minua löytää DC:stä ia find.3SG 1SG.part DC:ELA and vllä olevasta osoitteesta. Myrskylinnusta. above.ADE be.PTCP.ELA address.ELA Myrskylintu.ELA 'I am to be found in DC and at the address above, Myrskylintu.'

It is interesting to notice that both accusative-marked and partitivemarked Impersonal constructions do not seem to encode mirative events. The Finnish Partitive case is often associated with changes in clause-level aspect, marking indefinite events or events with low control, as happens with certain verbs indicating feelings (e.g., minua itkettää 1sg.part cry.caus.3sg 'I feel like crying') where the experiencer is marked for partitive case. In this type of construction there can also be a causer (A) marked for nominative case, rendering the experiencer a sort of P. The fact that low control can be associated with mirative events and that the Partitive can be used to mark this type of events could point toward the suitability of the Finnish Partitive case to mark mirativity in minua löytää constructions; however, this is not the case. It is also true that the *minua löytää* construction is too marginal in the sample to draw general conclusions.

Discussion 5

In a similar way to what Basile and Ivaska (2021) do for the allophoric forms of *löytyä*, it can be argued that locuphoric forms of this verb may also function as copulas, since they too can undergo semantic bleaching, at least to some degree. In fact, we saw that many of the sentences found in the corpus have the main function of conveying the permanent presence of the speaker/hearer, often in an Internet environment. Alongside competing constructions that use the verb löytää 'to find', which would perhaps constitute a valid alternative. one could expect to find the copula olla 'to be' as the most frequent and unmarked way of expressing the same meaning. The additional meaning provided by *löytvä*, that of prompting the addressee to look for the located referent, certainly cannot be ignored, but it is often the case that the main function this verb has is a locational function. similarly to the copula *olla*.

The data indicates that, as Basile and Ivaska (2021) argued, locuphoric forms of *löytyä* are not as productive as allophoric forms, in that the latter are used overall more, more widely, and in a variety of contexts (Basile, Ivaska 2021). This means that the allophoric forms are already established as locational strategies, because they indicate a link between a located referent and a location, just as copulas do. It could be the case that by analogy with allophoric forms of löytyä, its locuphoric forms have started spreading to similar functional domains and have hence started conveying locational meanings. We could say, perhaps speculatively, that this is the first step towards an enhanced productivity of locuphoric forms of löytyä, thanks to the increased use of its allophoric forms.

We also should not forget that a language is not an isolated system. Finnish is surrounded by Indo-European languages with which it has been in contact for a long time. Of these, two of the arguably more influential languages. Swedish and Russian, similarly present 'find'-based (invenitive) strategies to convey locational meaning (Swedish att befinna sig 'to find oneself/be located'; Russian nachodit'sya 'to be located'). These strategies are productive, and they might have played a role in helping their Finnish counterpart rise as a locational copula, both in its locuphoric and allophoric forms.

6 Conclusion

This essay discusses locuphoric forms of the Finnish locational copula löytyä 'to be found'. The corpus search confirms the claim by Basile and Ivaska (2021) about the marginality of use of these forms. as only about 500 examples were found in a corpus of more than 1 billion tokens. Most occurrences are indexed for first person singular, as speakers tend to refer to themselves in Internet forums and social media, in order to advertise their Internet presence on other platforms. This finding points toward the specificity of use of these forms in certain contexts, while in everyday conversation they are arguably nearly absent and substituted by other 'find'-based strategies or the copula *olla* 'to be'. Locuphoric uses of *lövtvä* can also mark mirative events, similarly to analytical 'find'-based constructions such as *lövtää itsensä* 'to find oneself'. Moreover, they can mark permanent versus temporary presence of referents at a certain location, as well as desiderative functions. The sample is too small to make claims about the productivity of such verbal forms, especially because they are not common in everyday speech. It is, however, big enough to raise the question about the possible reasons why these forms developed only so marginally, and what the future of this line of research holds. One possible development is a study that contrasts locuphoric forms of löytyä, which features a middle marker, with unmarked intransitive constructions featuring the verb löytää 'to find'. The preliminary considerations about the spreading by analogy of locational functions from allophoric to locuphoric forms of *lövtvä* call for a more detailed diachronic study of the development of löytvä as a locational copula in the first place. This development might also be supported by language-contact hypotheses, since the use of 'find'-based strategies in locational constructions seems to be widespread in the languages of Europe, including Swedish and Russian. Furthermore, cross-linguistic evaluations about the productivity of 'find'-based (invenitive) strategies are needed. Using cognitive and usage-based frameworks to study such constructions could shed light on whether there exist general tendencies that could explain the development of inherently dynamic verbs with meaning find into stative copulas in different languages.

Abbreviations and Notations

first person 1 2 second person 3 third person abessive ABE ablative ABL accusative ΔCC ADE adessive allative AII comparative СОМР conditional COND conjunction CONJ CONNEG connegative elative ELA EMOJI emoii ЕМРН emphatic enclitic FNCI essive ESS GEN genitive ILL illative inessive INE infinitive INF interiection INTERJ iterative ITER middle marker мм negation nominative NOM PART partitive PASS passive plural PL PST past participle PTCP РΧ personal suffix RELP relative pronoun singular; USER - username. SG

Bibliography

Basile, R. (2023). "Invenitive-Locational Constructions in the Languages of Europe". https://doi.org/10.17605/OSF.IO/ES3FH.

Basile, R. (Forthcoming). "The Finnish Existential Partitive Construction Analyzed: Comparing Two Applications of Collostructional Analysis". Leuschner, T. et al. (eds), How to Do Things with Corpora - Methodological Issues and Case Studies. Berlin; Heidelberg: Springer. Linguistik in Empirie und Theorie/Empirical and Theoretical Linguistics. http://hdl.handle. net/1854/LU-01HVBZXA586A8VD4DVRD5HNDEV.

Basile, R.; Ivaska, I. (2021). "Löytyä-verbin konstruktioiden yhteydessä esiintyvä subjektin sijanvaihtelu". Eesti ja soome-ugri keeleteaduse ajakiri.

- Journal of Estonian and Finno-Ugric Linguistics, 12(1), 11-39. https://doi.org/10.12697/jeful.2021.12.1.01.
- Bentley, B.; Ciconte, F.M.; Cruschina, S. (2013). "Existential Constructions in Cross-Linguistics Perspective". *Italian Journal of Linguistics*, 25, 15-43.
- Creissels, D. (2014). "Existential Predication in Typological Perspective". Ms., University of Lyon.
- Creissels, D. (2019). "Inverse-Locational Predication in Typological Perspective". *Italian Journal of Linguistics*, 31(2), 37-106.
- Dahl, Ö. (2000). "Egophoricity in Discourse and Syntax". Functions of Language, 7(1), 37-77. https://doi.org/10.1075/fol.7.1.03dah.
- Declerck, R. (1988). Studies on Copular Sentences, Clefts and Pseudo-Clefts. Leuven: Leuven University Press & Foris. https://doi.org/10.1075/fol.7.1.03dah.
- DeLancey, S. (1997). "Mirativity: The Grammatical Marking of Unexpected Information". *Linguistic Typology*, 1, 33-52. https://doi.org/10.1515/lity.1997.1.1.33.
- DeLancey, S. (2001). "The Mirative and Evidentiality". *Journal of Pragmatics*, 33(3), 369-82. https://doi.org/10.1515/9783110572261-009.
- Drouin, M.; Davis, C. (2009). "R U Txting? Is the Use of Text Speak Hurting your Literacy?". *Journal of Literacy Research*, 41(1), 46-67. https://doi.org/10.1080/10862960802695131.
- Eisenstein, J. (2013). "What to Do about Bad Language on the Internet". *Proceedings of NAACL-HLT 2013. Atlanta, Georgia, 9-14 June 2013.* Association for Computational Linguistics, 359-69.
- Gast, V.; Haas, F. (2011). "On the Distribution of Subject Properties in Formulaic Presentationals of Germanic and Romance". Malchukov, A.; Siewierska, A. (eds), Impersonal Constructions: A Cross-Linguistic Perspective. Amsterdam: John Benjamins, 127-66. https://doi.org/10.1075/slcs.124.05gas.
- Gries, S.Th. (2015). "The Most Under-Used Statistical Method in Corpus Linguistics: Multi-Level (and Mixed-Effects) Models". *Corpora*, 10(1), 95-125. https://doi.org/10.3366/cor.2015.0068.
- Hakanen, A. (1972). "Normaalilause ja eksistentiaalilause". *Sananjalka*, 14(1), 36-76. https://doi.org/10.30673/sja.86366.
- Haspelmath, M. (2011). "On S, A, P, T, and R as Comparative Concepts for Alignment Typology". *Linguistic Typology*, 15, 535-67. https://doi. org/10.1515/lity.2011.035.
- Haspelmath, M. (2013). "Argument Indexing: A Conceptual Framework for the Syntactic Status of Bound Person Forms". Bakker, D.; Haspelmath, M. (eds), Languages across Boundaries: Studies in Memory of Anna Siewierska. Berlin: De Gruyter Mouton, 197-226. https://doi.org/10.1515/9783110331127.197.
- Haspelmath, M. (2020). "Locuphoric Person Forms and Speech Act Participants". https://dlc.hypotheses.org/2430.
- Haspelmath, M. (2022). "Nonverbal Clause Constructions". https://www.academia.edu/71539642/Nonverbal_clause_constructions.
- Hengeveld, K. (1992). Non-Verbal Predication: Theory, Typology, Diachrony. Berlin: Mouton de Gruyter. https://doi.org/10.1515/9783110883282.
- Hengeveld, K.; Olbertz, H. (2012). "Didn't you Know? Mirativity Does Exist!". Linguistic Typology, 16(3), 487-503. https://doi.org/10.1515/ lity-2012-0018.

- Huumo, T. (2003). "Incremental Existence: The World According to the Finnish Existential Sentence". Linguistics, 41(3), 461-93. https://doi. org/10.1515/ling.2003.016.
- Huumo, T.; Helasvuo, M.L. (2015). "On the Subject of Subject in Finnish". Huumo, T.; Helasvuo, M.L. (eds), Subjects in Construction: Canonical and Non-Canonical. Amsterdam: John Benjamins. 13-41. https://doi. org/10.1075/cal.16.02huu.
- Inglese, G. (2022). "Towards a Typology of Middle Voice Systems". Linguistic Typology, 26(3), 489-531. https://doi.org/10.1515/lingty-2020-0131.
- Inglese, G. (2023). "The Rise of Middle Voice Systems: A Study in Diachronic Typology". Diachronica, 40(2), 195-237. https://doi.org/10.1515/ lingty-2020-0131.
- Ivaska, I. (2010). "Eksistentiaalilauseen subjektijäsen edistyneiden suomenoppijoiden kirjoituksessa". Sananjalka, 52(1), 67-88. https://doi. org/10.30673/sja.86697.
- Ivaska, I. (2011). "Lausetyyppien sekoittuminen edistyneessä oppijansuomessa-näkökulmana eksistentiaalilause". Lähivõrdlusi. Lähivertailuja, 21, 65-85. https://doi.org/10.5128/lv21.03.
- Izutani, M. (2003). "Desiderative Construction in Japanese Revisited". Journal of The College of Liberal Arts and Sciences Tokyo Medical and Dental University, 33, 19-27.
- Kemmer, S. (1993). The Middle Voice. Amsterdam: John Benjamins. https:// doi.org/10.1075/tsl.23.
- Kilgarriff, A et al. (2014). "The Sketch Engine: Ten Years On". Lexicography, 1, 7-36. https://doi.org/10.1007/s40607-014-0009-9.
- Koch, P. (2012). "Location, Existence and Possession: A Constructional-Typological Exploration". Linguistics, 44, 569-612. https://doi. org/10.1515/ling-2012-0018.
- Kulonen-Korhonen, U. (1985). "Deverbaalisten U-verbijohdosten semantiikkaa". Virittäjä, 89, 290-309.
- Mikkelsen, L. (2011). "Copular Clauses". Maienborn, C.; Von Heusinger, K.; Portner, P. (eds), Semantics: An International Handbook of Natural Language Meaning, vol. 2, 1805-29. Berlin: De Gruyter Mouton. https://doi. org/10.1075/la.85.
- Milsark, G.L. (1977). "Toward an Explanation of Certain Peculiarities of the Existential Construction in English". Linguistic Analysis, 3(2), 1-29.
- Roy, I. (2013). Nonverbal Predication: Copular Sentences at the Syntax-Semantics Interface. Oxford: Oxford University Press. https://doi. org/10.1093/acprof:oso/9780199543540.001.0001.
- Stassen, L. (1997). Intransitive Predication. Oxford: Oxford University Press. Talmy, L. (2000). Toward a Cognitive Semantics. Vol. 1, Concept Structuring Systems. Cambridge (MA): The MIT Press. https://doi.org/10.7551/ mitpress/6847.001.0001.
- VISK = Hakulinen, A.; Vilkuna, M.; Korhonen, R.; Koivisto, V.; Heinonen, T.R.; Alho, I. (2004). Iso suomen kielioppi. Helsinki: Suomalaisen Kirjallisuuden Seura. Web version 1.11.2008. https://kaino.kotus.fi/visk/etusivu.php.
- Zúñiga, F.; Kittilä, S. (2019). Grammatical Voice. Cambridge: Cambridge University Press. https://doi.org/10.1017/9781316671399.

Partitive Constructions and Partitive Elements Within and Across Language Borders in Europe

edited by Elvira Glaser, Petra Sleeman, Thomas Strobel, Anne Tamm

Ukrainian Aspect and Object Case in ukTenTen

The Partitive Genitive of Perfective Verbs and Mass Nouns

Lesia Chaika

Károli Gáspár University of the Reformed Church, Hungary

Natalia Lehka

Károli Gáspár University of the Reformed Church, Hungary

Anne Tamm

Károli Gáspár University of the Reformed Church, Hungary

Natalia Vaiss

Tallinn University, Estonia

Abstract The goal of our study is to establish the usage patterns of the Ukrainian partitive genitive and accusative objects based on a corpus of modern Ukrainian (ukTenTen 2020). This article focuses on differences between concrete and abstract mass nouns as objects of perfective-imperfective verb pairs. Our corpus study targets relations between the grammatical aspect of verbs, Aktionsart prefixes and the partitive genitive, which has been traditionally associated with perfectivity. We found that Ukrainian imperfective verbs occur regularly with partitive genitive objects, and that aspect does not influence the object case of abstract mass nouns.

Keywords Verb classes. Abstract nouns. DOM. Grammatical aspect. Incremental theme. Aspectual composition.

Summary 1 Introduction. – 2 The Ukrainian Case System and Intensional Verbs (the "Genitive Verbs"). – 3 Aspect in Ukrainian. – 4 Methods. – 4.1.1 The Selection of the Verbs for the Analysis. – 4.1.2 The Selection of Nouns for the Analysis. – 5 Results. – 6 Discussion. – 7 Summary.



1 Introduction

Ukrainian grammars often contain references to 'partitive genitive' and 'partiality' in their discussions of object case and Aktionsart prefixes. We review these discussions in our essay, as we found Ukrainian aspect and object case an understudied topic in the current partitive related research. The goal of our study is to examine more precisely to what extent the Ukrainian genitive-accusative object case alternation of mass nouns interacts with the Ukrainian grammatical aspect. We will make forays in areas where variation has already been discovered about the partitive genitive, checking the findings against the data in the ukTenTen 2020 corpus. The main focus is on the differences between the occurrences of the genitive in the following three sentences, (1)-(3).²

Цього дня годиться зварити борщу півнем. C'oho dnja hodyťsja z-varyty boršč-u pivnem. this day good PREF-COOK.PERF borscht-gen with rooster.INST 'On this day, it is good to cook borscht with a rooster.'

In Ukrainian grammars, 'partitive genitive' is a term for genitive case inflection with a specialised meaning of referring to quantities of referents, such as mass nouns as complements of perfective verbs. This phenomenon is illustrated with the ukTenTen corpus example (1), where *boršč* 'borscht', a concrete mass noun, appears in a sentence with a perfective verb and genitive case. Ukrainian has 'grammatical aspect', which is expressed in terms of 'perfective' and 'imperfective'

We are deeply grateful for the comments and suggestions of two anonymous reviewers, two anonymous editors and Elvira Glaser. Thanks go to Anne Carlier, Olga Kagan, and Denys Teptiuk for their suggestions and comments on the manuscript, to the members of PARTE and EKNYEK for discussions, and to Giuliana Giusti and Elisabetta Taboga for their careful work with our manuscript at Series LiVVaL. All mistakes are ours. The order of the authors is alphabetically arranged. Lesia Chaika, Natalia Lehka, and Anne Tamm acknowledge the support of the research grant obtained from the Faculty of Humanities and Social Sciences, Károli Gáspár University of the Reformed Church in Hungary (Theoretical and Experimental Research in Linguistics, reg. no. 20736B800) to this essay. Natalia Vaiss is grateful for the support of Estonian Research Council grant (PRG 1978). The data file of this article can be accessed at osf.io/gcnx8.

¹ For recent similar corpus studies on verb classes, see Jurkiewicz-Rohrbacher 2019; Laugalienė 2022; Vaiss 2022.

² Because of space restrictions, we notify the reader only here that translations of the citations in Ukrainian, Ukrainian examples, and the glosses of examples from previous sources are provided by Lesia Chaika and Natalia Lehka. The translations of the lists of the functions of the genitive case in Ukrainian (Šypovyč, Ihnatolja, Dančenko 2020, 199), groups of verbs used with the genitive (as in Mežov 2008, 5-6) and with the accusative (Pljušč 2005, 104-6) are given without providing the original texts, translated by Lesia Chaika and Natalia Lehka.

verb forms. Aspect is often discussed in terms of aspectual pairings in Ukrainian literature on the topic (Vyxovanec', Horodens'ka 2004; Pljušč 2005), and Slavic in general (Jakobson 1971; Timberlake 1975; Comrie 1976; Dahl 1985). This distinction will become relevant in this essay as well.

(2)	Прохолодний	душ	зранку	додасть
	Proxolodnyj	duš	zranku	dodast'
	cool	shower	in.morning	PREF.add.PERF
	бадьорост-і	i	свіжості	тілу.
	bad'orost-i	i	svižosti	tilu.
	vigour-gen	and	freshness	to.bodv

^{&#}x27;A cool shower in the morning will add vigour and freshness to the body.'

In example (2), the abstract mass noun *bad'orist'* 'vigour' appears in a sentence with a perfective verb and genitive case, so it can well be considered as an example of partitive genitive. A central question of this essay concerns the opposition between sentences in (2) and (3). In (3), the genitive of an abstract noun appears in a sentence with an imperfective verb.

(3)	Такий	напій	додає	бадьорост-і,	а
	Takyj	napij	dodaje	bad'orost-i	а
	such	drink	PREF.add.IMPF	vigour-GEN	and
	приготувати	його	надзвичайно	просто.	
	pryhotuvaty	joho	nadzvyčajno	prosto.	
	prepare	it	extremely	easy	

^{&#}x27;Such a drink adds vigour, and it is extremely easy to prepare.'

We will discuss data that suggest that it is not completely unproblematic to assume a partitive genitive with abstract nouns, and that grammaticalisation may have affected groups of mass nouns differently depending on verb classes. The case alternation of boršč 'borscht' and other Ukrainian mass nouns in our sample that are concrete (voda 'water' and cukor 'sugar') follow the well-known Slavic pattern of partitive genitives, but the abstract nouns such as bad'orist' 'vigour' do not. Tentatively, we will discuss the variation and grammaticalisation patterns with genitive objects to two possible causes: verb classification and semantic differences between abstract versus concrete mass nouns.

The Ukrainian partitive genitive has parallels in many Baltic and Slavic languages (see Kiparsky 1998; Padučeva 1998; Chuikova 2012; 2021; Paykin 2014; Seržant 2014; Breu 2020). This linguistic phenomenon has increasingly been studied since Wierzbicka's work (1967).

Wierzbicka posed questions about the reasons for the different combinability of Polish perfective and imperfective verbs with measure and quantity object phrases, and she shows that imperfective Polish verbs do not occur with measure or quantity objects.3 Vyxovanec' (1992, 120) describes two types of partitive genitive in Ukrainian. The first type is called the 'quantitative partitive', and it indicates incomplete coverage of the object by the action, like some portion of milk that is bought, as in (4a). The second type is the 'temporal partitive', which indicates the complete coverage of the object by the action, but with a limitation on this action in time, as in (4b).

(4)

Дівчина купила молока. Divčyna kupyla moloka. bought.PERF girl milk.GEN 'The girl bought milk.' (understood as indefinite quantity: some milk)

b. Він позичив лопати. Vin pozvčvv lopaty. PREF.borrowed.PERF shovel.gen

'He borrowed a shovel.'

We will concentrate on the quantitative partitive genitive as in (1) and (4a) in this article. We will typically use the term 'genitive' in this essay for the case inflection, as we examine more precisely to what extent the Ukrainian genitive case is an object case used for mass objects of perfective verbs (the quantitative partitive genitive).

Some notes on the terminology as used in this essay are in order, before discussing the sources and the corpus data. We apply the term 'aspect' for a wider range of phenomena that pertain to the properties of events or the linguistic means to express them. The adjective 'aspectual' is also understood here in a wider sense. It includes also what has been referred to as Aktionsart that emerges in derivation,

³ The case alternation of accusative and genitive in Slavic and Baltic bears resemblance to the Finnic accusative-partitive object case alternation as described in sources such as e.g., Kiparsky 1998; Klaas 1999; Metslang 2001; Huumo 2010; Lees 2015; Seržant 2015; or Larjavaara 2019. In Larsson 2001 and Luraghi, De Smit, Igartua 2020 it is argued that the partitive case in Finnic languages has arisen because of Baltic and Slavic influence. This essay cannot do justice to the vast Russian based literature on the phenomenon. The writing has been much influenced by the literature on Finnic and aspectual composition and discussions of partitive in Germanic (see, e.g., Sleeman, Giusti 2021 for recent literature, and a Czech-Dutch comparison, Vymazalová 2014). More on Polish aspectual composition can be found in Młynarczyk 2004 and Rozwadowska, Willim 2004; on Czech and several other Slavic languages, see Filip 1997.

to lexically encoded properties of verbs with their arguments, quantificational and referential properties of the arguments that relate to the properties of events, and some event-delimiting or event-modifying adjuncts. In various discussions of aspect, often, the term 'incremental theme' is used (Dowty 1991: Krifka 1992) for a thematically related object that increases, decreases, or changes in some other way in a series of a fixed scale during the event that the verb denotes. 'Incremental theme verbs' are verbs that denote the processing of their objects (themes) piecewise, portion by portion, like in eating (an apple), or adding (add more borscht onto a plate). Intensional verbs' are a working term we use as shorthand for various groups of verbs that impose special semantic or referential properties on their objects, which we will clarify in the present essay. Suffice it to say here that intensional verbs are frequently classified as genitive verbs in Ukrainian grammars (like verbs denoting wishes, desires, demands, or wanting something). As opposed to incremental theme verbs that encode a change, intensional verbs do not encode a change.

Note, however, that we use the term 'aspect' as shorthand for 'grammatical aspect' as in the opposition of dodaty PERF and dodavaty IMPF 'add' and zvaryty PERF and varyty IMPF 'cook'. Verbs that appear in such perfective-imperfective pairs are called 'aspectual pairs' in this article. The two counterparts or members of aspectual pairs are called 'partners'. Thus, examples of the 'perfective partners' of these grammatical aspectual pairs are zvaryty PERF and dodaty PERF, and the 'imperfective partners' are varyty IMPF and dodayaty IMPF. We use 'Aktionsart' for derivational verbal prefixation, which typically modifies the lexical meaning of the basic lexical verb, as in do-davaty IMPF 'add'. 5 Note that the word-for-word translations of the prefixed verbs do not always allow to distinguish the meaning of the derived and underived verb versions as easily as in do-davaty IMPF 'add' and davaty IMPF 'give'. In these forms, the addition of do-resembles the English to, denoting a goal: 'give (more) to' is a kind of 'add'. The German zu- or the Dutch toe- are also similar in combinations with verbs, and in a similar way, these combinations

⁴ Incremental theme is a central concept in discussing the temporal relationship between verbs and objects in the events they denote, also in Slavic (cf. Zuchewicz 2020). Event types as well as verbs and their arguments that can express these events are often discussed using the terminology of 'aspectual classes' or 'Vendler classification' of states, activities, accomplishment, and achievements following Vendler 1957, sometimes referred to as 'actionality'.

The description here is simplified much and presented here for establishing basic terminology to operate with, not to take a stand in much debated issues. Perfectivity is distinguished from telicity, even though the phenomena they cover tend to overlap (cf. Borik 2006; Tamm 2007, see also these sources for testing for these phenomena). Also, the term 'boundedness' is frequently used to capture the semantic parallel between verbal aspect and object matter.

are seldom completely transparent. Such derivational pairs will not be referred to as 'aspectual pairs' but as 'verb forms', if they do not change the grammatical aspect of the verb. If it is relevant in the ensuing discussion to be precise, we use 'grammatical aspect' for perfectivity and imperfectivity. Since we regularly express thoughts about nouns and verbs in the same sentence, we frequently simplify the terminology in use. For the same reason of brevity, we frequently use 'concrete' and 'abstract objects' instead of "object complements that are in the singular number and denote concrete mass concepts and abstract mass concepts".

Our goal is to describe, based on previous literature on Ukrainian, how the genitive of the object relates to the properties of the verbs (specifically, grammatical aspect, Aktionsart, and lexical semantics or verb classification) and the properties of the noun. Our further aim is to clarify the extent of the variation in Modern Ukrainian based on a corpus study (ukTenTen 2020). We explore the patterns and their cause with special focus on mass nouns that vary on the scale of concreteness and abstractness.

In the empirical corpus study, we focus on a selection of the accusative-genitive alternation with typically prefixed verbs with perfective and imperfective aspect, such as do-daty and do-davaty 'add' and z-varyty and varyty 'cook' in order to examine if the object case depends on the grammatical aspect, on the Aktionsart, and the quantificational properties of the object noun. We examine the following 'testing factors' that pertain to grammatical aspect, Aktionsart prefixes, and nominal quantification.

- 1) Grammatical aspect: Is there a distinction between perfective and imperfective verbs in terms of genitive and accusative object marking?
- 2) Verbal (aspectual or Aktionsart) prefixes and lexical semantics: Are there differences between verb prefixes that are related to partiality in previous literature on Ukrainian, such as *z-/s-*, *do-* and *na-*?
- 3) Nominal properties: Do concrete mass nouns and abstract mass nouns display differences in object case marking?

The essay is structured as follows. In Section 2, we discuss the genitive case in the Ukrainian case system and its functions, including the object function. In Section 3, we discuss the Ukrainian aspect. Section 4 describes the corpus method. Section 5 presents the results, Section 6 is a discussion, and Section 7 is a summary.

2 The Ukrainian Case System and Intensional Verbs (the "Genitive Verbs")

Pljušč (2018, 120; 2005, 107) writes that the partitive genitive is (mostly) combined with perfective and not with imperfective verbs. Pliušč (2005, 107) also notes that, in this case, the noun is mass and has indefinite content, in the wording of Pljušč, "indefinite content and the measure of manifestation of materiality" (neoznačenisť vmistu, miry vviavu rečovvnnosti). She notes that the accusative is also possible in these environments, with the condition of the object being completely covered by the action (5). There is no mention of bare plurals.

(5) Спечем картоплю при зорі юшки наготуєм. Spečem kartoplju pry zori jušky nahotujem. PREF.bake.PERF potato.acc under star and guos prepare 'We bake the potatoes in twilight/under the stars and prepare soup.'

Let it be briefly noted, before a more thorough discussion, that next to the partitive genitive, the objects in negated sentences and objects of a variety of verb classes can be in the genitive. The examples are taken from Pugh and Press's work (1999, 98; 256), provided in (6).

(6)

- a. Він не продав стола. Vin prodav stola. ne PREF.SOld.PERF table.gen.sg he NFG 'He did not sell a table.'
- h. Ми чекали автобуса. My čekaly avtobusa. we waited.1PL.IMPF bus.gen.sg 'We were waiting for a bus.'
- Хочемо спокою/ миру. Xočemo spokoju/ myru. want.1PL.IMPF peace.GEN peace.GEN 'We want peace.'

⁶ Pljušč (2018, 120) also refers to Kuznecova with year 1963 and page number 18, but this source is not found among Pljušč's references. It has been noted (see Kiparsky 1998; Padučeva 1998; Chuikova 2012; 2021; Paykin 2014, among others) that the partitive genitive in Russian can combine also with imperfective verbs under some circumstances.

See Kryshevich 2010 for an account of the Ukrainian genitive of negation.

d.	Ми	чекали	п'ятий	автобус.			
	My	čekaly	p"jatyj	avtobus.			
	we	waited.1PL.IMPF	fifth[acc.sg]	bus[ACC.SG]			
	'We were waiting for bus no. 5.'						

In (6a), the direct object appears in the genitive case because of the negation in the sentence. In (6b) and (6c), the genitive case depends on the verbs such as *čekaty* 'wait' and *xotity* 'want'. However, if the object is specified, the accusative case is attested (6d). According to Pugh and Press (1999, 256) verbs of wanting, desiring, demanding and wishing are mostly used with genitive if the object is an abstract noun, a concept, unspecified, or unknown – we apply the terminology 'intensional verbs' to this group. In Ukrainian grammars, the genitive case is described as having various functions (Šypovyč, Ihnatolja, Dančenko 2020, 199). The genitive can appear on the following types of objects:

- 1. direct objects with verbs with the negation particle *ne* 'not', as in (6a);
- 2. direct objects that are quantitatively not specified or specified just partially (partitive genitive) (*kupyv medu* '(he) bought honey', *prynis soli* '(he) brought salt', *nabery vody* 'fill it with water');
- 3. with collective nouns (*zahin dobrovol'civ* 'a detachment of volunteers', *hurt divčat* 'a group of girls') and with nouns of measure (*centner borošna* 'centner of flour', *kilohram cukru* 'kilogram of sugar').

For more detailed information about the rest of the functions of the genitive, see Šypovyč, Ihnatolja, Dančenko (2020, 199).

Mežov (2008, 5-6) points out that there are seven groups of verbs where the nouns bearing the genitive case are direct objects without the partitive meaning:

- verbs of desire, will, achievement of the result, e.g., xotity 'want', bažaty 'wish', volity 'prefer', vymahaty 'demand', domahatysja 'aspire', dosjahaty 'achieve', žadaty 'desire', potrebuvaty 'need', prahnuty 'strive for';
- 2. verbs of avoiding an object, e.g., bojatysja 'fear, be afraid of', ljakatysja 'get scared', osterihatysja 'beware', storonytysja 'avoid', straxatysja 'fear', unykaty 'avoid', curatysja 'shun' etc);

⁸ As our goal is to review how traditional Ukrainian grammars describe the partitive genitive related phenomena and not to improve the descriptions, we occasionally indicate in a footnote if a Ukrainian source does not specify useful information for our later discussion or if a reviewer has suggested improvements of the descriptions.

- verbs of depriving of an object, e.g., pozbavljaty 'deprive', zrikatysja 'renounce';
- verbs of expecting an object, e.g., čekaty 'wait', očikuvaty 'expect, await', dočekatysja 'wait until (something)', ždaty 'wait';
- 5. verbs of relation to an object, e.g., *dotrymuvatysja* 'follow, observe (e.g., a rule)', *trymatysja* 'persist; hold on to, clutch', *torkatysja* 'touch';
- 6. verbs of learning, acquiring an object, e.g., *učytysja* 'learn', *navčatysja* 'study';
- verbs of sufficient coverage of an object (the word enough appears frequently if these verbs are translated), e.g., napytysja 'drink enough, get drunk', najistysja 'eat enough/be full', nasluxatysja 'listen enough', nadyvytysja 'watch enough (of something)'.

Pljušč (2005, 104-6) also describes groups of verbs that take accusative objects. She claims that the semantics of their objects varies because of the semantics of the respective verbs, and she distinguishes the following verb groups:

- 1. verbs with the semantics of physical action (e.g., buduvaty mist 'build a bridge'). They are used with inanimate objects and sometimes with animates in the accusative case. If an accusative object is used with an imperfective verb, it can express an external object fully covered by the action. If it is used with a perfective verb, then it expresses a "resultative object";
- 2. verbs with the semantics of movement in space. They are used with abstract nouns, animates, or nouns denoting objects (things) (e.g., pryvezty vuhillja (učniv) 'bring coal (students)');
- 3. verbs with the semantics of speech. With these verbs, the accusative case marks a specific conversation object or an abstract object that must be specified by the addressee (e.g., rozkazaty kazku 'tell a fairytale', opysaty portret 'describe the portrait', sxarakteryzuvaty heroja 'describe the character');
- 4. verbs with the semantics of an intellectual activity. In this case, the object in the accusative case can be an abstract noun, sometimes a specific noun, or a noun denoting a person or another animate (e.g., tvoryty čudo 'create a miracle', doslidyty problemu 'study the problem', učyty virš 'learn a poem');
- 5. verbs with the semantics of an internal condition of a person, expressing feelings. Such verbs are used with abstract nouns in the accusative case. This meaning type is primarily characteristic of the accusative objects that are expressed by an abstract noun (e.g., cinuvaty spokij 'appreciate peace', ljubyty krasu 'love beauty', šanuvaty starist' 'respect old age').

According to Vyxovanec' (1992, 119), the accusative is the main direct object case used in modern Ukrainian; however, the genitive case can also mark a direct object (Vyxovanec' 1992, 120), One of the features that distinguishes the accusative case from the genitive in Ukrainian is partitivity. While the genitive case indicates the partitive meaning of the object, the accusative is not compatible with that meaning. Vyxovanec' (1992, 120) describes two types of partitive genitive. Vyxovanec' (1992, 120) calls them quantitive and temporal uses of the genitive; see example (4). Nouns that can denote partiality or divisibility (častkovisť abo podiľnisť) in the genitive usuallv refer to substances (materials), for instance, moloko 'milk', voda 'water', xlib 'bread', m"jaso 'meat', ryba 'fish', sil' 'salt' (Vyxovanec' 1992, 120). Ševčuk (2010, 131) extends the number of nouns that are used in the partitive genitive case and divides them into classes. Ševčuk (2010, 131) as well as Vyxovanec' (1992) specify that the partitive genitive can mark nouns denoting various materials, substances, man-made items or products of natural origin, such as metals (bronza 'bronze', sriblo 'silver', zalizo 'iron'), chemical elements (kysen' 'oxygen', voden' 'hydrogen'), liquids (voda 'water', olija 'oil', moloko 'milk'), fabrics (šovk 'silk', polotno 'canvas', sytec' 'chintz'), food (boršč 'borscht', kava 'coffee', sil' 'salt', xlib 'bread'), medicines (aspiryn 'aspirin', cytramon 'citramon'), plants (morkva 'carrot', kavun 'watermelon', kalyna 'viburnum'), materials (visk 'wax', pisok 'sand', cement 'cement'). Pljušč (2005, 107) also mentions that the partitive genitive appears with nouns of materials and substances such as metal, loose, liquid, and gaseous items, drinks, or food etc.

Pljušč (2005, 82) gives an explanation about Ukrainian abstract nouns: "Nouns with an abstract meaning include generalisations of objectified concepts – qualities, properties, actions, processes; for example, diligence, kindness, blueness, learning, acceleration, dimension, flight". She points out that a sizable number of abstract nouns have only a singular form and some of them have only a plural form (e.g., košty 'money', zaručyny 'engagement', vybory 'elections'). Abstract nouns are usually formed based on adjectives or verbs and by means of suffixes such as -ist', -ot(a), -ann(ja), -enn(ja), etc. (Pljušč 2005, 82). Pljušč (2005, 82) also mentions that abstract nouns can be used with an indirect meaning. In that case, they lose or gain in their abstractness (e.g., polum"ja v peči 'flame in the cooker' and polum"ja sercja 'flame of the heart', raptovyj vyxor 'sudden whirlwind' and vyxor dumok 'whirlwind of thoughts'). Therefore, there is no strict division of nouns by concreteness and abstractness.

This essay focuses on singular nouns only. To render the examples easily readable for a non-Ukrainian speaking reader, a brief note on the Ukrainian nominal paradigms is in order. Ukrainian nouns have cases, numbers, and genders. There is a feminine, masculine, neutral and common gender. In the Ukrainian case paradigm, there are

seven cases: nominative, genitive, dative, accusative, instrumental, locative and vocative. There are also four declensions. Nouns of the same gender can still receive diverging endings if they belong to different declensions, which means that the ending of a form must be seen in its place in the case paradigm. The ending that sounds identical can fill a different function, for instance, -y, -i, -a or -u in different genders, numbers, and declension classes. For instance, the noun *vodu* with the ending -u is accusative as it is feminine, while the noun boršču with the ending -u is genitive as it is masculine. In our study, in combinations with perfective and imperfective verbs, we have used nouns such as voda 'water', bad'orist' 'vigour', boršč 'borscht', cukor 'sugar', optymizm 'optimism', vpevnenist' 'confidence' and dosvid 'experience'. All these nouns have genitive and accusative forms, and semantically they are mass nouns; see Section 4 for more details on the principles for selection. For our further discussion, it is relevant to note the semantic distinction between count and non-count nouns. Non-count nouns are typically mass nouns, and mass nouns can be concrete and abstract. Nouns have two numbers, singular and plural, and it is relevant that not all abstract nouns are also mass nouns: they can be counted and pluralised.

In the sources above, which served as our basis for corpus study, we found less material on abstract mass nouns than would have been necessary for a more thorough discussion of partitive genitive objects in Ukrainian. The question of why concrete mass nouns and abstract mass nouns display differences in object case marking was not explicitly addressed in the Ukrainian sources we consulted. We did not find discussions of groups of abstract mass nouns concerning their semantic groups or their status as instances of partitive genitive. However, abstract mass nouns were occasionally used in examples illustrating other points about the structure of Ukrainian, and we have included many of them in our literature review and considered them in the discussion of the results of our empirical corpus study.

3 Aspect in Ukrainian

Ukrainian verbal categories are tense, mood and aspect. This essay considers only aspect. The category of aspect is inherent to all Ukrainian verbs. The category of aspect allows the expression of actions and states as whole (*cilisnist'*) and not whole (*necilisnist'*). Ukrainian grammars distinguish two main types of verbs: perfective verbs

⁹ There are also categories of number, gender and person, but according to Vyxovanec' and Horodens'ka (2004, 223), these categories are not particular verbal categories, since they belong to other parts of speech as well.

(dokonani dijeslova), which express a completed action, and imperfective verbs (nedokonani dijeslova), which express action in progress (Vyxovanec', Horodens'ka 2004, 225). Ukrainian sources describe the formation of perfective and imperfective verbs by the morphological processes of prefixation or suffixation. Typically, perfective verbs are formed based on imperfective verbs, by prefixes. This process is called "perfectivisation". Imperfective verbs can be formed based on perfective verbs by suffixes. This process is called "imperfectivisation" (Vyxovanec', Horodens'ka 2004, 225). Such morphologically related perfective and imperfective verbs form an aspectual pair. In our essay, we illustrate the following pairs of aspectual verbs, among others: dodaty (PERF) - dodavaty (IMPF) 'add', zvaryty (PERF) - varyty (IMPF) 'cook', nabuty (PERF) - nabuvaty (IMPF) 'gain', dovaryty (PERF) – dovarjuvaty (IMPF), navaryty (PERF) – navarjuvaty (IMPF), and pobažaty (PERF) - bažaty (IMPF), However, Vyxovanec' and Horodens'ka (2004, 225) point out that not all verbs form aspectual pairs. To form an aspectual pair, verbs must have an identical lexical meaning. Often, however, perfective verbs that are formed based on an imperfective verb via prefixation do not only change the grammatical aspect but also the lexical meaning of the verb. 11 Imperfective verbs that denote actions, processes and states in progress that evolve towards a boundary readily form an aspectual pair with perfective verbs that denote the completeness of action, progress, or state, as in PERF: zvaryty and IMPF: varyty 'cook'. Imperfective verbs whose meaning does not evolve towards a boundary do not form an aspectual pair with perfective verbs, because the action, progress or state cannot be completed, as in bihaty 'run', xodyty 'walk', smijatysja 'laugh', plavaty 'swim' (Vyxovanec', Horodens'ka 2004, 225).

¹⁰ This corresponds to what is referred to in Verkuyl's (1993) terms as a distinction of durative and terminative or, in other sources, to unbounded and bounded, atelic and telic (e.g., Dahl 1985; Krifka 1992). However, the Ukrainian aspect is grammatical, which means that typically verbal aspect does not contribute to the clausal aspect compositionally as it does in the aspectual systems of typically discussed languages (which are Germanic). The Ukrainian aspect typically does not pertain to the internal structure of events composed of each other and in combination with the properties of internal arguments (e.g., van Hout 2000), but to the viewpoint on the situation or event. The viewpoint is taken either from the outside (on the event or a situation as a whole) or from the inside (from the internal course of the event or situation), as described, for instance, in Comrie 1976, Dahl 1984 and 1985, and Smith 1991. In sum, we do not expect the properties of the object to influence the aspectual semantics in a clause. There is one more type of verbs, those that can express both perfective and imperfective meaning. We do not discuss it here, because we did not examine this verb type in our corpus study, leaving it for further research.

¹¹ Vyxovanec' and Horodens'ka (2004) do not explicate aspectual pairs with the verb we use, 'cook'. Our rendering of their description applied to 'cook' is that the imperfective *varyty* 'cook' can be perfectivised as *z-varyty* with the prefix *z-* without a change in the lexical meaning. This is thus an aspectual pair. The verb can be prefixed by an Aktionsart prefix, as in *perevaryty* with the prefix *pere-*, rendering an extra lexical meaning of 'boil too much, overcook' to the verb. This is not considered as an aspectual pair.

In our essay, we focus mainly on verbs that form an aspectual pair. Vyxovanec' and Horodens'ka (2004, 227) claim that the number of aspectual pairs in Ukrainian is small. Imperfective verbs that are formed based on perfective verbs by means of suffixation preserve the identical lexical meaning and differ from the perfective verb only in aspect, while perfective verbs that are formed based on imperfective verbs by means of prefixation can change the verb's lexical meaning. The examples in Table 1 based on how Macjuk (2013, 169) distinguishes the ways of formation of aspectual verb pairs.

Table 1 The ways of forming Ukrainian aspectual verbs

Formation	Imperfective form	Perfective form
alternation of suffixes	<pre>kup-uva(ty) 'buy'; dopys-uva(ty) 'finish writing'</pre>	<pre>kup-y(ty) 'buy'; dopys-a(ty) 'finish writing'</pre>
change of the place of stress	sklykáty 'convene'; zasypáty 'fill up'	sklýkaty 'convene'; zasýpaty 'fill up'
adding prefixes, most often z- (s-), za-, na-, po-, pry-, pro-	pysaty 'write'; v"januty 'wither'	na-pysaty 'write'; zi-v″januty 'wither'
adding prefixes and changing suffixes at the same time	pad-a(ty) 'fall'; viš-a(ty) 'hang'	v-past(ty) 'fall'; po-vis-y(ty) 'hang'
adding prefixes to verbs with a different but semantically similar root	braty 'take'; govoryty 'talk'	v-zjaty 'take'; s-kazaty 'talk'
alternation of the sounds in the root	zbyraty 'collect'; nazyvaty 'name'; posylaty 'send'	zibraty 'collect'; nazvaty 'name'; poslaty 'send'
a simultaneous alternation of the sounds in the root and a change in the suffixes	zmitaty 'sweep away'	zmesty 'sweep away'

Vyxovanec' and Horodens'ka (2004, 227) specify that the main suffixes that are used for imperfectivisation are the suffixes -uva-, -ovuva-, -va- and -a-. They also emphasise that only imperfective verbs that evolve towards a boundary can form an aspectual pair with perfective verbs that are built up via prefixation. Such imperfective verbs tend to include verbs of concrete physical actions or types of intellectual activities (Vyxovanec', Horodens'ka 2004, 227-8). See also Vyxovanec' and Horodens'ka (2004, 228-32), who discuss the formation of imperfective and perfective verbs in more detail than Macjuk, whose aim with aspect verbs is L2 instruction.

Since in our corpus study we used mostly perfective verbs such as *dodaty* 'add', *navaryty* 'cook any amount' and *zvaryty* 'cook', we

focus on the prefixes do-, na- and z- as described by Vyxovanec', Horodens'ka (2004, 228). They claim that the prefixes *z-/s-* (and *po-*) are the main prefixes that form perfective verbs without creating new lexical meanings. 12 Even if they are, the meanings of imperfectivised verbs are identical to the meaning of the respective primary imperfective verbs without prefixes (Vyxovanec', Horodens'ka 2004, 228). So, we can state that the verb zvaryty PERF 'cook' in our examples expresses only completed action - 'cooked borscht' - in contrast to its aspectual partner in the pair, varyty IMPF 'cook', which denotes a process of cooking. The prefixes na- and za- may also be used to form the aspectual, perfective partner from an imperfective verb, but not as often as with z-/s- (and po-). Unfortunately, the source (Vyxovanec', Horodens'ka 2004) does not contain precise information about the prefix do-, which is the Aktionsart prefix of the verbs dodayaty 'add' and dodaty 'add' from our corpus data. However, Ševčuk (2010, 129) notes that "[t]he prefixes v-(u-), vy-, vid-, do-, z-(s-), na-, nad-, pere-, pid-, po-, pry-, pro- can give the verb an additional meaning of partiality, limitation of action in time". Vyxovanec' and Horodens'ka (2004, 229-30) also point out the partiality related to time in the semantics of these prefixes and elaborate on each of these prefixes. Ševčuk (2010, 129) specifies that "[p]refixed verbs (with prefixes v-(u-), vy-, vid-, do-, z-(s-), na-, nad-, pere-, pid-, po-, prv-, pro-) can be combined with a noun in the genitive and accusative cases. [...] Verbs of the perfective form with the prefix nafunction in combination with nouns in the genitive case". Vyxovanec' (1992, 120) also mentions that the quantitative partitive genitive can be used with verbs with the prefixes v-(u-), vy-, vid-, do-, z-(s-), na-, nad-, pere-, pid-, po-, pry-, and pro-.

These relevant pointers based on the literature lead us to our corpus testing factors 1 and 2, as identified in the Introduction. In sum, the reviewed Ukrainian grammars and studies suggest that genitive objects appear with the perfective and not with the imperfective verbs, and that the appearance of 'quantitative partitive genitive' may depend on the nature of the prefixes.¹³

¹² Usually, imperfective verbs are not formed on the basis of perfective verbs with the prefixes z-/s-. From an imperfective verb such as varyty IMPF 'cook', Ukrainian can rather productively create a perfective verb zvaryty PERF 'cook'. The verb zvaryty PERF 'cook' cannot be further productively imperfectivised by aspectual suffixation. There is a verb that is imperfectivised on the base of the perfective verb, zvarjuvaty; however, it has a lexicalised semantics: 'weld'. In rare cases, perfective verbs with the prefix z-/s- can form an imperfective verb by suffixation. In these cases, the imperfective verbs have the same lexical meaning as the imperfective verbs without the prefix; for example: nyščyty IMPF 1 - znyščyty PERF - znyščuvaty IMPF 2 'destroy'. According to the authors (Vyxovanec', Horodens'ka 2004, 228), the imperfective verbs nyščyty and znyščuvaty have an identical lexical meaning.

¹³ For a more formal approach to aspect and prefixation in Czech and several other Slavic languages, see Filip 2003.

4 Methods

We conducted a corpus search of accusative and partitive genitive mass noun objects to determine their occurrence with aspectual pairs in Ukrainian. The extended results are available online, in a data sheet (osf.io/gcnx8).

We used Sketch Engine for our sample, more specifically, the "uk-TenTen", the corpus of Ukrainian from 2020. The reason for choosing Sketch Engine (Kilgarriff et al. 2004; 2014) for the empirical study is that it is a large database system that contains 600 corpora in more than 90 languages. It is a tool for linguists that helps to understand how different languages work. Sketch Engine allows for conducting analyses of texts and shows what is typical, what is uncommon, and what is not attested in languages. It enables finding examples of usage of a word or a phrase, collocations, or patterns and in establishing variation.

The Ukrainian corpus ukTenTen20 contains texts that were collected on the Internet, and it is a part of the TenTen corpus family, which consists of web corpora that were created using identical principles and methods. It has a target size of 10+ billion words. The data for the Ukrainian Web Corpus 2020 were taken from texts from May 2014 to July-August 2020. The corpora contain 2.5+ billion words and more than 3.2 billion tokens. There are four subcorpora in the corpus: Ukrainian TLD.ua, Ukrainian Web 2014, Ukrainian Web 2020 and Ukrainian Wikipedia 2020.

4.1 The Selection of the Verb-Noun Combinations for the Analysis

In Section 3, we searched in earlier literature what is established about Ukrainian verb classes that have alternating object cases. Then we searched what earlier sources had specified about the semantic properties of the object types that can undergo case alternation. We relied on the sources described in Sections 1-3 that contained Ukrainian verb and noun lists with their description. In those sources, we identified the properties of verbs and objects that were classified according to their role in the choice of the object case (Timberlake 1975; Vyxovanec' 1992; Pugh, Press 1999; Vyxovanec', Horodens'ka 2004; Pljušč 2005; Mežov 2008; Ševčuk 2010; Pljušč 2018; Šypovyč, Ihnatolja, Dančenko 2020).

More specifically, concerning the 'aspectual' testing factor 1 for the corpus study, one relevant point raised in previous literature concerns the distinction between perfective and imperfective: the Ukrainian partitive genitive is known to appear with perfective and not with imperfective verbs (Pljušč 2005, 107; 2018, 120). For the

'Aktionsart' testing factor 2, we mainly followed the lead in Ševčuk (2010, 129), who mentions prefixes that add the additional meaning of partiality (*častkovist'*) and boundedness or delimitedness of the action in time (*obmežennja diji u časi*). Also, Vyxovanec' (1992, 120) discusses prefixes related to partitivity. These sources determined how we chose the prefixes that are related to partitivity in previous literature, *z-/s-*, *do-* and *na-*. The literature on the exact semantic constraints on the partitive genitive nouns was, however, scarce. We followed Ševčuk (2010) for finding concrete mass nouns. Although Pljušč (2005) does not write about partitive genitives with abstract nouns, we use the discussion in Pljušč (2005, 82) to explore the testing factor 3, 'partitive genitives factor' about the case alternation on mass nouns. The ensuing subsections detail the choice of testing materials.

4.1.1 The Selection of the Verbs for the Analysis

We deselected verbs that do not have object genitive-accusative case alternation: verbs that have only genitives as their object markers (intensional verbs). We also deselected verbs listed as verbs with only accusative objects in the verb lists. We excluded reflexive verbs. The verbs without an aspectual partner, those without a clear and transparent aspectual pair, were also excluded. Only verbs that formed clear aspectual pairs as represented in Table 1 – either with a suffix, prefix or other ways as specified in earlier Ukrainian sources – were chosen.

We searched for verbs with a general meaning that can also form a combination with a prefix. We were also searching if there were pairs formed with a more general perfectivising prefix, which is in some sources – but not in traditional grammars – referred to as 'empty' (such as z-/s-). In those pairs, we also searched for the perfective verb with another prefix (such as po-, pere-, do- or na-).

In terms of prefixation, we excluded semantically opaque combinations, thus resulting in a specialised lexicalised meaning; this restriction excluded many verbs from the selection. The selected combinations of the verbs and the prefixes were transparent in meaning, with no special lexical restrictions on the objects. We found the combinations with the prefixes na- and do- suitable, as they are mentioned as prefixes with the ability to function as quantifiers of mass objects. We aimed at verbs that allow 'portioning' their objects, in other words, mostly incremental theme verbs. These verbs allow combinations with mass nouns. Specifically for corpus testing, they were selected and categorised according to their ability to combine or not to combine with mass nouns. Additionally, the verbs were selected and classified as either allowing concrete themes as objects (such as varyty 'cook'), abstract ones (such as varyty 'gain, acquire'), or both (such as varyty 'add'). A pair of intensional verbs, the invariantly genitive-object verbs

pobažaty PERF, bažaty IMPF 'wish', were added in the corpus search and elaborated on briefly in the discussion section for comparison.¹⁴ Table 2 summarises the grammatical aspect and prefix type of the verbs in the study, as well as the type of mass object they allow.

Table 2 The selected verbs and the type of mass object they combine with

Verb	Aspect	Prefix	Suffix	Object
dodaty 'add'	PERF	do-		abstract or concrete
dodavaty 'add'	IMPF	do-	-va-	abstract or concrete
zvaryty 'cook'	PERF	Z-		concrete
varyty 'cook'	IMPF			concrete
nabuty 'gain'	PERF	na-		abstract
nabuvaty 'gain'	IMPF	na-	-va-	abstract
navaryty 'cook (any amount)'	PERF	na-		concrete
navarjuvaty 'cook (any amount)'	IMPF	na-	-juva-	concrete
dovaryty 'cook (till done)'	PERF	do-		concrete
dovarjuvaty 'cook (till done)'	IMPF	do-	-juva-	concrete
pobažaty 'wish'	PERF	ро-		abstract or concrete
<i>bažaty</i> 'wish'	IMPF			abstract or concrete

In this way, the corpus search was set up like an experiment to examine the effect of various aspectual properties of the verbs and the semantic properties of the mass nouns on the object case.

¹⁴ This pair was added for additional information on intensional verbs. Even if the pair is not recorded as an aspectual pair in the dictionary, we regard it as a pair based on the description of po- in Vyxovanec' and Horodens'ka (2004, 228). The discussion section will include a small-scale study on bojatysja 'be afraid of, fear' with the objects 'dog' and 'darkness'.

4.1.2 The Selection of Nouns for the Analysis

It has been established in literature that partitive genitive objects emerge with mass nouns. Within the semantic group of mass nouns, we searched for nouns that were lexical-semantically and pragmatically plausible object complements for the chosen verbs. The choice is based on Pljušč (2005) and Ševčuk (2010), who proposed classes of nouns prone to appear with genitive partitive, such as metals, chemicals, liquids, food, medicines, plants, and materials. The concrete mass nouns 'sugar', 'water', and 'borscht' were selected.

In the selection process, as with verbs, both semantic and morphological factors played a role. All count nouns were deselected, either a) concrete (or predominantly concrete, 'table', 'pillow'), b) ambiguously concrete or abstract, which would be dependent on their context or individual interpretation, e.g., 'school' as a building or institution, or c) abstract, such as 'number' or 'idea'. Nouns with frequent metaphorical extensions and mass/concrete metonymies (e.g., democracy: the western democracies) were excluded.

We checked if abstract mass nouns deviate from concrete mass nouns in their case alternation behaviour. Thus, we hypothesised that there is variation among mass nouns on the concrete-abstract axis. While we selected *voda* 'water', *cukor* 'sugar' and *boršč* 'borscht' as Ukrainian examples of concrete mass noun objects, we complemented them with bad'orist' 'vigour', optymizm 'optimism', vpevnenist' 'confidence' and dosvid 'experience' for abstract mass nouns. In the MRC Psycholinguistic Database, 15 the selected concrete nouns belong to the most concrete segment (600-700) on the concreteness rating scale that ranges from 100 to 700. Borscht is not included in the database that contains only words in English; for boršč we checked the rating scale for the hypernym soup. The abstract mass nouns 'optimism', 'vigour', 'experience', and 'confidence' are in the suitable range of rating in the database. 16 The Ukrainian words or concepts of optimism, experience, and confidence had clear English translational counterparts, English words, in the database. The noun bad'orist' 'vigour' does not have a precise translation that would be frequent enough to appear in the rating. Therefore, we considered its synonyms, hypernyms, and words perceived as similar in abstractness as proof of its place among the most abstract group: these English

¹⁵ MRC Psycholinguistic Database: https://websites.psychology.uwa.edu.au/school/MRCDatabase/uwa_mrc.htm.

¹⁶ The least concrete and most abstract segment contains mainly function words (but not only, e.g., 'from', 'of', 'so', 'for', 'therefore', 'were', 'impossible'), so our choice of abstract nouns belongs to the second most abstract segment of the MRC abstractness/concreteness scale, that of 200-300.

vpevnenost-i

dosvid-u

vpevnenisť

dosvid

words were 'attitude', 'behaviour', 'distraction', 'enthusiasm', 'excitement', 'impulse', and 'temptation'.

Morphologically, nouns with clearly distinguishable genitive and accusative masculine and feminine forms were selected. Table 3 presents the accusative and genitive case forms of the mass nouns of the sample.

Noun, Translation	Semantic class	Gender m/f	Genitive	Accusative
cukor 'sugar'	concrete	М	cukr-u	cukor
voda 'water'	concrete	F	vod-y	vod-u
boršč 'borscht'	concrete	M	boršč-u	boršč
optymizm 'optimism'	abstract	M	optymizm-u	optymizm
bad'orist''vigour'	abstract	F	bad'orost-i	bad'orist'

Table 3 Accusative and genitive case forms of the mass nouns of the sample

abstract

abstract

In order to obtain a balanced set of features to analyse, we searched for additional verb-object combinations to complement the verb sets dodaty PERF 'add' and varyty IMPF 'cook', which were the most suitable for our study. The verbs are included in Table 2. Not all chosen suitable combinations, however, yielded abundant instances of the combinations for conducting comparisons of all possible features of verbs and objects. We have searched for nabu(va)tv optvmizm/ bad'orist' 'gain optimism/vigour', and doda(va)ty dosvid 'add experience', but we did not find any examples for the perfective and imperfective combinations with these objects. We note it here and exclude them from the tables, figures, and most of the later discussions.

4.2 **Corpus Search**

vpevnenist''confidence'

dosvid 'experience'

This Section is included for those readers who are interested in replicating the study to validate the results, or for those readers who wish to complement the dataset with comparable data collected with an identical methodology, for Ukrainian or other languages.

¹⁷ One may wonder why plurals, although semantically similar to mass nouns in cumulativity, were excluded. Partly, they were excluded on morphological grounds (singular and plural may have ambiguous forms in accusative or genitive), partly on semantic grounds. Plurals are more difficult to control for animacy, which is a well-known factor in the languages of the world as well as in Ukrainian with respect to mapping to case (cf. Neidle 1988).

We searched with the Word Sketch function for the verb-object collocations and entered them in an Excel table. We added all examples if the number of occurrences was less than 500 and coded them for their genitive or accusative objects manually. When there were more occurrences than 500, we used the function of 'Shuffle Sample' to create a representative sub-selection of 500 occurrences with Sketch Engine. 18 In all cases, we deselected examples that were instances of doublets (identical sentences with identical context but found on different websites), results of machine translation, negation and quantifiers as attested factors influencing or determining case in Ukrainian. Also, all measure genitives ('a pot of borscht') were removed, as they are similar to quantifiers. We also removed other instances where the target noun was actually a complement within another phrase (e.g., in a complex noun phrase) and not the object of the verb. We also removed passives. In some cases, nominal apposition with a superordinate term appeared, such as 'I cooked soup - borscht', and we removed such cases. We also removed sentences that turned out to be misclassifications of verb-object combinations, such instances with inversion where 'water' was a subject, not an object, and used in the nominative case. We composed a table where we counted the genitives and accusatives with perfective versus imperfective verbs. The result table [tab. 4] and the corresponding figures [figs 1-9, 11] are presented in Section 5. Additional combinations of features are found to support the discussion in Section 6 [figs 12-13].

The number of sentences with accusative and genitive objects that will be presented in the results section is typically based on the shuffle function sampling, which can be considered representative for testing the given combination. However, as a result of the manual exclusion of the unsuitable sentences (negation, quantifiers, etc), the number of manually analysed sentences is mostly less than 500.

The following passages detail the reasons for exclusion, with the corresponding lists of the number of items removed from the original Sketch Engine search results. Note that the examples with D refer to the examples on the online data sheet.

From the search on the verb dodaty/dodavaty 'add' and the object *voda* 'water', we excluded the following items: 4 sentences with

¹⁸ A similar method using shuffle function for a sampling 500 sentences was applied by Vaiss (2022), who used it to establish that the Russian and Ukrainian verbs for 'watch, look' have a significantly lower degree of transitivity compared to their equivalents in Estonian. It did not matter for the number of hits in the present study whether we started the Word Sketch from one or another direction: it was a matter of convenience. For the words bad'orist' 'vigour' with a perfective verb, we used the Word Sketch starting with the noun. For the noun voda 'water', we started the search via the verbs (PERF and IMPF). With the noun bad'orist' 'vigour', in combination with an imperfective verb, we used Word Sketch starting with the verb.

'water' as a subject, 2 sentences machine translated (Ukrainian text not produced by humans), 9 negative sentences (see examples 9 = (4D), 10 = (12D) and 11 = (13D) on the data sheet), 231 sentences with quantifiers (see examples 12 = (7D) and 13 = (17D) on the data sheet), 2 sentences with their objects in the plural, 21 sentences with 'water' misclassified as an object (being in fact a different type of complement).

For those readers who are interested in replicating the study, here we discuss some instances of excluded examples that represent types that were abundant in the results of our corpus search.

Example (7) = (3D) presents the perfective verb form dodadut' 'they add' and example (8) = (16D) presents the imperfective verb form dodaje 'it adds' with the dative case vodi. This mistake was regular in the type of search we conducted because of the threeplace predicate nature of the verb. The object in this case is present, aromat 'aroma', but we excluded all sentences that had a misclassified object.

(7) = (3D)

Вони	додаду	ТЬ	воді	аромат	i	зроблять
Vony	dodadut'		vodi	aromat	i	zrobljat'
they	PREF.add.3PL.PERF		water.DAT	aroma	and	make
шкіру	більш	м'якою.				
škiru	bil'š	m"jakoju.				
skin	more	soft				

^{&#}x27;They will add aroma to the water and make the skin softer.'

(8) = (16D)

Мідь	дода	ϵ	воді	неприємний	терпкий
Mid'	dodaje		vodi	nepryjemnyj	terpkyj
copper	PREF.gives.IMPF		water.pat	unpleasant	astringent
присмак	У	низьких	концентраціях.		
prysmak	и	nyz'kyx	koncentrac	ijax	
taste	in	low	concentrat	ions	

^{&#}x27;Copper gives water an unpleasant astringent taste in low concentrations.'

In examples (9) and (10), a verb form of perfective dodaty 'add' and imperfective dodavaty 'add' respectively are combined with the genitive object in negation.

(9) = (4D)

He перемішуйте. I. головне. додайте не Ne peremišujte. Ι, holovne, ne dodajte PREF.Stir.2PL.IMPF and most.importantly NEG PREF.add.PERF води! vody! water.gen 'Do not stir. And, most importantly, do not add water!'

(10) = (12D)

не	додавати	води,	якщо	бачите,
ne	dodavaty	vody,	jakščo	bačyte,
not	PREF.add.IMPF	water.gen	if	see.2PL
	застигає.			
	zastyhaje.			
ter	hardens			
	ne not	ne dodavaty not PREF.add.IMPF застигае. zastyhaje.	ne dodavaty vody, not PREF.add.IMPF water.GEN застигає. zastyhaje.	ne dodavaty vody, jakščo not PREF.add.IMPF water.GEN if застигає. zastyhaje.

^{&#}x27;Try not to add water if you see the plaster harden.'

In example (11), we present an imperfective verb form of dodavaty 'add' that is combined with the accusative object in negation. All together there were 130 examples with the accusative objects in negative sentences, which in itself is an interesting finding to report; here, it illustrates a highly frequent type of data that we have manually excluded.

(11) = (13D)

Наприклад,	не	додавайте	воду	У	туш
Napryklad	ne	dodavajte	vodu	и	tuš
for.example	neg	PREF.add.IMPF	water.acc	to	mascara
або	ацетон	У	лак	для	нігтів.
abo	aceton	и	lak	dlja	nihtiv.
or	acetone	to	polish	for	nails

^{&#}x27;For example, don't add water to mascara or acetone to nail polish.'

In examples (12) and (13), the perfective verb form of *dodaty* 'add' and its aspectual partner, the imperfective verb form of dodavaty 'add' respectively occur together with a quantifier after which follows the genitive object.

(12)) = ((7D)
------	-------	------

Α	що,	коли	до	вентилят	ора	приєдн	нати	холодильник,
Α	ščo,	koly	do	ventyljator	a	pryjedn	aty	xolodyl'nyk,
and	what	if	to	fan		connec	t	refrigerator
та	ще	й	дод	ати	тріш	ІКИ	води?	•
ta	šče	j	dod	aty	trišk	У	vody?	
and	also		PRE	F.add.PERF	a.litt	:le	water	.GEN

'And what if you connect a refrigerator to the fan, and also add a little water?'

(13) = (17D)

знизити	1 витрат	и,	недобро	совісні	виробники
znyzyty	vytraty,		nedobrosovisni		vyrobnyky
reduce	costs		unscrupulous		producers
(більше	во	ди	або	використовують
L	oil'še	voc	dy	abo	vykorystovujut'
IMPF r	nore	wa	ter.GEN	or	use
/ I	тоганої	яко	ості.		
ŀ	oohanoji	jak	osti.		
rial p	ooor	qua	ality		
r	educe MPF F	znyzyty vytraty, reduce costs більше bil'še MPF more поганої pohanoji	enyzyty vytraty, reduce costs більше во, bil'še voo мрг more wa поганої яко pohanoji jak	enyzyty vytraty, nedobros reduce costs unscrupul більше води bil'še vody мрг more water.GEN поганої якості. pohanoji jakosti.	educe costs unscrupulous більше води або bil'še vody abo мрг more water.GEN or поганої якості. pohanoji jakosti.

^{&#}x27;To reduce costs, unscrupulous producers add more water or use poor quality raw materials.'

From the search on the verb *dodaty/dodavaty* 'add' and the abstract object *bad'orist'* 'vigour', we excluded the following items: 1 sentence machine translated, clearly not worded by a human, 1 sentence that is doubled, 8 negative sentences.

From the search on the verb <code>zvaryty/varyty</code> 'cook' and the abstract object <code>boršč</code> 'borscht', we excluded the following items: 6 sentences with measure genitives, 1 sentence machine translated, 2 sentences with passive, 42 negative sentences, 2 sentences with doubled nouns, 68 sentences with objects in plural, 2 sentences that are doubled.

From the search on the verb *dodaty/dodavaty* with the noun *cukor* 'sugar', 2 sentences were excluded in the results of imperfective and 2 from the perfective sentences. In both cases, there was one malformed word and one quantifier in the phrases.

From the search on the verb *dodaty/dodavaty* with the noun *optymizm* 'optimism', negative sentences were excluded: 250 sentences were excluded in the results of imperfective and 91 from the perfective sentences.

From the search on the verb *dodaty/dodavaty* 'add' and the object *vpevnenist*' 'confidence', we excluded the following items: 4 sentences with 'confidence' as a subject, 68 negative sentences, 15 sentences with quantifiers, 1 sentence with another object than confidence and 1 sentence because it was identical to another sentence in the excel file.

From the search on the verb nabuty/nabuvaty 'gain' and the object dosvid 'experience', we excluded the following items: 11 sentences with 'experience' as a subject, 2 sentences with object in instrumental case, 4 sentences machine translated, 20 negative sentences, 9 sentences with quantifiers, 2 sentences with their objects in the plural, 11 sentences in passive construction.

From the search on the verb nabuty/nabuvaty 'gain' and the object vpevnenist' 'confidence', we excluded the following items: 3 negative sentences and 1 sentence that occurred twice.

From the search on the verb *navaryty/navarjuvaty* 'cook' and the object boršč 'borscht' we excluded the following items: 2 sentences with their objects in the plural.

From the search on the verb dovaryty/dovarjuvaty 'cook' and the object boršč 'borscht' we excluded the following item: 1 negative sentence.

From the search on the verb pobažaty/bažaty 'wish' and the object optymizm 'optimism' we excluded the following items: 3 sentences with quantifiers.

5 **Results**

The visualisations in Figures 1-4 present the data with the concrete mass nouns boršč 'borscht', voda 'water' and cukor 'sugar', and Figures 5-9 present the data with abstract mass nouns as bad'orist' 'vigour' or optymizm 'optimism' etc. Figures 10, 11 are additional, on the intensional verb pobažaty/bažaty 'wish' and the object optymizm 'optimism', and a summary figure, Figure 11, visualising Figures 1-9. The summary of the results can be found in Table 4. Note that there is an open access data sheet that contains proof of all combinations described in the ensuing Figures. The numbers with 'D', provided additionally next to the example numbers, refer to example numbering on the online data sheet at osf.io/gcnx8.

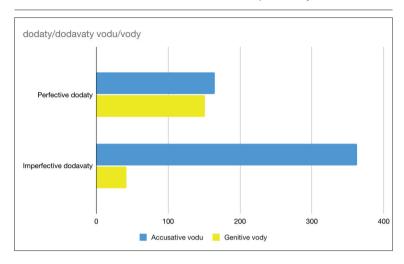


Figure 1 The verb dodaty/dodavaty 'add' and the object voda 'water'

5.1 Concrete Mass Nouns

The Figures 1-4 present the data with concrete mass nouns.

We see proportions of usage [fig. 1]. The object *voda* 'water' when combined with an imperfective verb *dodavaty* 'add' is used in 42 cases in the genitive case and in 363 cases in the accusative case. At the same time, with the perfective verb, the object *voda* 'water' is in 165 cases in the accusative case and in 151 cases in the genitive case. It is thus clear that the accusative case appears more with imperfective than perfective verbs and in the case of perfective verbs the number of accusative and genitive objects is almost equal. In examples (14) and (15), we present an example from the ukTenTen corpus of the perfective verb *dodaty vody* and *vodu* 'add water'. Example (14) illustrates the perfective *dodaty* 'add' and the accusative *vodu* 'water'.

(14) = (1D)	
Яйця	розби

Яйця	розбити	В	миску,	посолити,
Jajcja	rozbyty	V	mysku,	posolyty,
eggs	crack	in	bowl	add.salt
додати	воду	i	збити.	
dodaty	vodu	i	zbyty.	
PREF.add.PERF	water.acc	and	beat	

^{&#}x27;Crack the eggs into a bowl, add salt, add water and beat.'

¹⁹ The perfective variant with negation and an accusative object is absent with the combination 'add water', that is, not attested in our data.

Example (15) illustrates the perfective *dodaty* 'add' and the genitive vody 'water'.

(15) = (2D)

До	цієї	суміші	можна	додати
Do	cijeji	sumiši	možna	dodaty
to	this	mixture	is.possible	PREF.add.PERF
води	В	пропорції	1:1.	
vody	V	proporciji	1:1.	
water.gen	in	proportion	1:1	

^{&#}x27;Water can be added to this mixture in a proportion of 1:1.'

Example (16) illustrates the imperfective dodavaty 'add' and the genitive vody 'water'.

(16) = (10D)

```
Все це змішують
                                     додають
                                                          води.
Vse
           zmišujuť
                                     dodajut'
      ce
                                                          vody.
      this PREF.mix.3PL.IMPF
                                     PREF.add.3PL.IMPF
                               and
                                                          water.gen
'All this is mixed and water is added.'/'They mix all this and add water.'
```

Example (17) illustrates the imperfective dodavaty 'add' and the accusative vodu 'water'.

(17) = (11D)

3	гречаного		борошна,	В	яке	додаємо	
Ζ	hrečanoho		borošna,	V	jake	dodajemo	
from	buckwheat		at	flour	to	which	PREF.add.1PL.IMPF
воду		i	яйце,	робимо	густе	тісто.	
vodu		i	jajce,	robymo	huste	tisto.	
water.ac	CC	and	egg	make.1PL	thick	dough	

^{&#}x27;We make a thick dough from buckwheat flour, to which we add water and an egg.'

We see proportions of usage in Figure 2: the object *cukor* 'sugar', when combined with an imperfective verb dodavaty 'add', is used in 6 cases in the genitive case and in 449 cases in the accusative case. At the same time, with the perfective verb, the object *cukor* 'sugar' is in 50 cases in the genitive case and in 444 cases in the accusative case. It is thus clear that the genitive case appears more with the perfective than with the imperfective verb, and the number of accusative uses is almost equal for both the perfective and the imperfective verb [fig. 2].

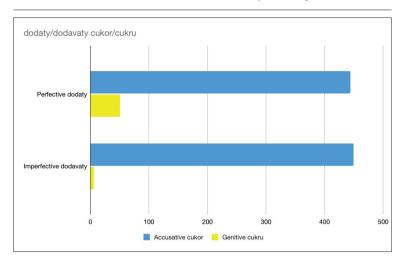


Figure 2 The verb dodaty/dodavaty 'add' and the object cukor 'sugar'

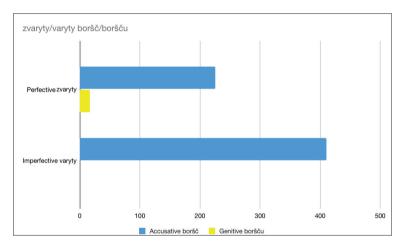


Figure 3 The verb zvaryty/varyty 'cook' and the object boršč 'borscht'

We see proportions of usage in Figure 3: the object boršč 'borscht', when combined with an imperfective verb varyty 'cook', has no cases (N=0) where the object is used in the genitive case, while it is used in 410 cases in the accusative case. For the perfective verb, the object boršč 'borscht' is used in 225 cases in accusative case and in 17 cases in genitive case. The accusative case is used more frequently for both imperfective and perfective verbs, while the genitive case does not appear at all with imperfective verbs (N=0) [fig. 3].

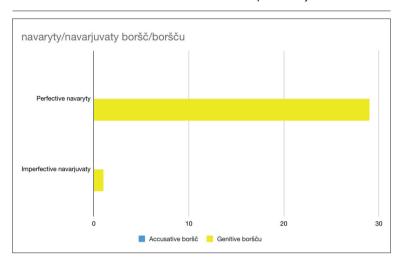


Figure 4 The verb navaryty/navarjuvaty 'cook' and the object boršč 'borscht'

Example (18) illustrates an instance of boršč 'borscht' in the accusative case and the imperfective verb varyty 'cook'.

$$(18) = (30D)$$

Як	варить	борщ	твоя	мама?		
Jak	varyt'	boršč	tvoja	mama?		
how	cook.IMPF	borscht.acc	your	mother		
'How does your mother cook borscht?'						

Example (19) illustrates an instance of boršč 'borscht' in the accusative case with the perfective verb zvaryty 'cook'.

$$(19) = (31D)$$

3	нею	зварити	борщ	можуть	навіть
Ζ	neju	zvaryty	boršč	možuť'	navit'
with	it	PREF.COOK.PERF	borscht.acc	can	even
мале	нькі	діти.			
maler	ı'ki	dity.			
little		children.			

'Even little children can cook borscht with it.'

Example (20) illustrates an instance of boršču 'borscht' in the genitive case with the perfective verb *zvaryty* 'cook'.

(20) = (32D)

Цього годиться зварити борщу з півнем. дня C'oho dnja hodyťsja boršču z pivnem. zvaryty on.this day it.is.good PREF.COOK.PERF with rooster borscht.gen 'On this day, it is good to cook borscht with a rooster.'

Example (21) illustrates grammatically incorrect sentences, which are marked with an asterisk. In (21a), there is a sentence with boršču 'borscht' in the genitive case with the imperfective verb *varyty* 'cook', which we have constructed. In (21b), we have modified the grammatically correct (18), which has an accusative, replacing the object case with the genitive. Native speaker's judgment about (21b) is also that it is incorrect.

(21) = (33D)

- борщу *Вона варила на кожне свято. boršču Vona varvla na kožne svjato. cooked.IMPF borscht.gen for every holiday she 'She cooked borscht for every holiday.'
- b. *Як варить борщу мама? твоя Jak varyt' horšču tvoja mama? how cook.IMPF borscht.gen your mother 'How does your mother cook borscht?'

We see in Figure 4 that the object *boršč* 'borscht', when combined with the imperfective verb *navarjuvaty* 'cook', is used just once (N=1) in the genitive case. The website of the Ukrainian dictionary²⁰ gives the following equivalent for the cooking-related sense of this version of the verb: 'prepare any amount of food by cooking' that suits the combination with the object *boršč* 'borscht'. Simultaneously, with the perfective verb, the concrete mass noun boršč is in 29 cases in the genitive case. The imperfective and the perfective verbs are not used with the accusative object at all (N=0) [fig. 4].

In (22), we see navarjuvaty boršču 'cook an amount of borscht': an imperfective verb with the genitive object.

(22) = (24D)

Я	наварювала	борщу,	i	цей	борщ
Ja	navarjuvala	boršču,	i	cej	boršč
1	PREF.cooked.IMPF	borscht.gen	and	this	borscht
за	один	день	з'їдали –	було	кому.
za	odyn	den'	z"jidaly –	bulo	komu.
in	one	day	eat.3PL	was	someone.

^{&#}x27;I cooked borscht, and this borscht was eaten in one day – there was someone (to do it).'

Example (23) illustrates the perfective *navaryty* 'cook' and the genitive boršču 'borscht'.

(23) = (29D)

Приведи	Алю,	Я	наварила	борщу –
Pryvedy	Alju,	ja	navaryla	boršču –
bring	Alya,	i	PREF.made.PERF	borscht.gen
сказала	Каті	В	наступний	раз.
skazala	Kati	V	nastupnyj	raz.
told.3.sg	Katya	in	next	time

^{&#}x27;Bring Alya, I have made (a certain amount of – LCh) borscht - she answered Katya.'

Perfective verbs with genitive objects are illustrated in (24) and (25), navaryty boršču 'cook a certain amount of borscht'. Note that there is a parallelism between the two actions that are juxtaposed in (24). In both examples, the verbs are prefixed with na-.

(24) = (27D)

Наварила борщу, тарілку. насипала Navarvla boršču. nasypala tarilku. PREF.cooked.PERF borscht.GEN PREF.poured.PERF plate into '(I/you/she) has cooked (a certain amount) borscht and has poured it into a plate.'

Note that, again, there is a parallelism in the prefix in the two actions that are juxtaposed in (25).

(25) = (28D)

Бабуся наварила борщу, наліпила вареників. Babusja navaryla boršču, nalipyla varenykiv. grandma PREF.COOK.PERF borscht.GEN PREF.made.PERF dumplings.GEN 'Grandma has cooked borscht (a certain amount), has made dumplings (a certain amount).'

In the series of 'cook' with the prefix do-, we found 6 imperfective verbs, which were the only sentences in the corpus, all of which appeared with an accusative object only. Examples (26) and (27) illustrate the imperfective dovarjuvaty 'cook so that it is ready' and the accusative boršč 'borscht'. Note that both occurrences of imperfective forms are combined with a motion verb: the motion verbs of running and going.

(26) = (25D)

У	ціі	й	метушні	жінка	забула	про	всі
U	cij		metušni	žinka	zabula	pro	vsi
in	thi	is	commotion	woman	forgot	about	all
образі	И	i	швидко	побігла	доварюв	вати	борщ.
obrazy		i	švydko	pobihla	dovarjuv	aty	boršč.
insults		and	quickly	ran	PREF.COO	k.IMPF	borscht.acc
'In this commotion, the woman forgot about all the insults and quickly ran							
to finish cooking borscht.'							

(27) = (26D)

Тільки	не	здумай	те	йти	доварювати	борщ
Til'ky	ne	zdumajt	te	jty	dovarjuvaty	boršč
just	neg	think		go	PREF.COOK.IMPF	borscht.acc
або	домивати		під	поги!		
abo	domyva	vaty		ohy!		
or	PREF.cle	an.IMPF	floc	rs		

'Don't even think of going to finish cooking borscht or to finish cleaning the floors!'

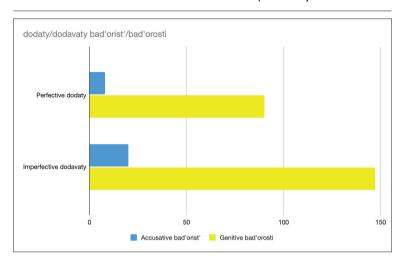


Figure 5 The verb dodaty/dodavaty 'add' and the object bad'orist' 'vigour'

5.2 Abstract Mass Nouns

Figures 5-9 present the data with abstract mass nouns.

We see the proportions in Figure 5: the object *bad'orist'* 'vigour', when combined with the imperfective verb *dodavaty* 'add', is used in 147 cases in the genitive case and in 20 cases in the accusative case. At the same time, with the perfective verb, the object *bad'orist'* 'vigour' is used in 8 cases in the accusative case and in 90 cases in the genitive case. It is thus clear that the genitive case appears more frequently with both the perfective and imperfective verb *dodaty/dodavaty* 'add' [fig. 5].

We see the proportions in Figure 6: the perfective verb dodaty 'add' appears 209 times with the object optymizm 'optimism' in the genitive case and just once in the accusative case. The imperfective verb dodavaty 'add' appears 250 times with the object optymizm 'optimism' in the genitive case and once in the accusative case. Thus, the object optymizm 'optimism' is very rare in the accusative case with the verbs dodaty/dodavaty 'add'.

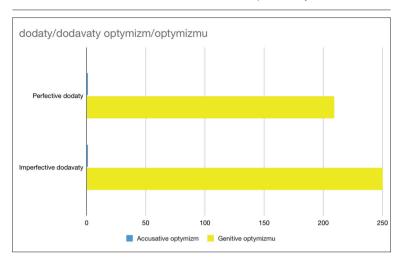


Figure 6 The verb dodaty/dodavaty 'add' and the object optymizm 'optimism'

Example (28) illustrates the perfective dodaty 'add' and the genitive optymizmu 'optimism' [fig. 6].

(28) = (20D)

Сумно?		Безнадійно?		Але	ж	сказав-бо
Sumno?		Beznadijno?		Ale	ž	skazav-bo
sadly		hopeless	hopelessly		PRT	said
апост	ОЛ	Павло	свої	парадоксал	<i>іьні</i>	слова,
aposto	l	Pavlo	svoji	paradoksal'ı	ni	slova,
apostle		Paul	his	paradoxical		words
що	не	одному	додал	пи	ОГ	тимізму:
ščo	ne	odnomu	dodal	У	ор	tymizmu:
which	not	one	PREF.a	dded.PERF	ор	timism.GEN
"A	де	збільшив	вся	гріх,	та	М
"A	de	zbil'šyvsjo	מ	hrix,	ta	m
and	where	increased	ł	sin	th	ere
зарясніла		благодать"				
zarjasnila		blahodat'"				
abounded		grace				

^{&#}x27;Sad? Hopeless? But the apostle Paul said his paradoxical words, which added optimism to more than one person: "But where sin increased, grace increased all the more".'

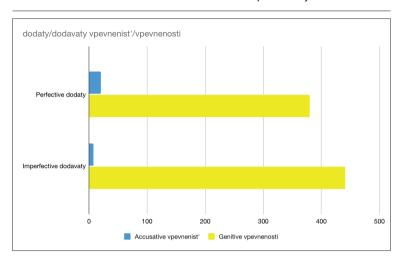


Figure 7 The verb dodaty/dodavaty 'add' and the object vpevnenist' 'confidence'

Example (29) illustrates the imperfective dodavaty 'add' and the accusative optymizm 'optimism'.

(29) = (21D)

поряд	із	зміцнен	ІНЯМ	нашої		держа	ви
porjad	iz	zmicnen	njam	našoji		deržav	'y
along	with	strength	ening	our		state	
ться	на	краще		наше	3	вами	
et'sja	na	krašče		naše	Z	vamy	
change		better		our	with	you	
	а	загарто	вані	сила		i	воля
	а	zaharto	⁄ani	syla		i	volja
	and	hardene	d	streng	th	and	will
ГЬ	оптиміз	ВМ	У	майбу	тньом	y!	
.,	optymizi	m	и	majbut	n'omu.	!	
d.IMPF	optimis	m.acc	in	future			
	porjad	porjad iz along with ться на et'sja na for a a and rь оптиміз	porjad iz zmicnen along with strength ться на краще et'sja na krašče for better a загарто a zahartov and hardene	porjad iz zmicnennjam along with strengthening ться на краще et'sja na krašče for better a загартовані a zahartovani and hardened ть оптимізм у optymizm u	porjad iz zmicnennjam našoji along with strengthening our ться на краще наше et'sja na krašče naše for better our a загартовані сила a zahartovani syla and hardened streng	porjad iz zmicnennjam našoji along with strengthening our ться на краще наше з et'sja na krašče naše z for better our with a загартовані сила a zahartovani syla and hardened strength ть оптимізм у майбутньом;	porjad iz zmicnennjam našoji deržav along with strengthening our state ться на краще наше з вами et'sja na krašče naše z vamy for better our with you a загартовані сила і a zahartovani syla і and hardened strength and гь оптимізм у майбутньому!

'Along with the strengthening of our state, may our life with you change for the better, and hardened strength and will add optimism in the future!'

We see in Figure 7 that in a positive sentence the perfective verb dodaty 'add' appears 380 times with the object vpevnenist' 'confidence' in the genitive case and 20 times in the accusative case. The imperfective verb *dodavaty* 'add' appears 441 times with the object *vpevnenist*' 'confidence' in the genitive case and 8 times in the accusative case. The abstract object in the genitive case is again more frequent here [fig. 7].

We see the proportions of usage in Figure 8. The abstract noun dosvid 'experience', when combined with the imperfective verb

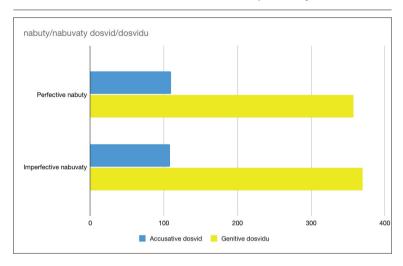


Figure 8 The verb nabuty/nabuvaty 'gain' and the object dosvid 'experience

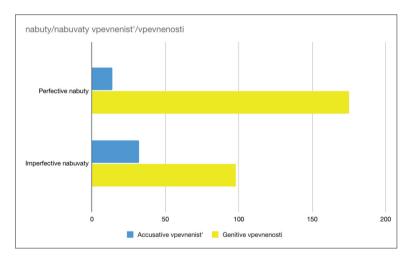


Figure 9 The verb nabuty/nabuvaty 'gain' and the object vpevnenist' 'confidence'

nabuvaty 'gain', is used in 370 cases in the genitive case and in 108 cases in the accusative case. At the same time, with the perfective verb, the abstract object dosvid 'experience' is used in 110 cases in the accusative case and in 357 cases in the genitive case [fig. 8].

We see the proportions in Figure 9: the object *vpevnenist'* 'confidence' when combined with the imperfective verb nabuvaty 'gain' is used in 98 cases in the genitive case and in 32 cases in the accusative case. With the perfective verb, the abstract noun *vpevnenist'* is in 14 cases in the accusative and in 175 cases in the genitive [fig. 9].

5.3 Intensional Verbs

This subsection presents the pattern of aspect and object case of an intensional verb pair, *pobažaty* PERF and *bažaty* IMPF *optymizm(u)* 'wish optimism' [fig. 10].

We see in Figure 10 that the object <code>optymizm</code> 'optimism', when combined with the verb form <code>bažaty</code> IMPF, 'wish' is used in 10 cases in the genitive case. At the same time, with the prefixed verb form, <code>pobažaty</code> PERF 'wish', the abstract noun <code>optymizm</code> is found in 12 cases in the genitive case. The verb forms do not occur with the accusative object. Figure 11 serves as a visual aid.

In Table 4, we present a summary of all analysed aspectual pairs. Please note that in some cases, we have not found examples of the verb and the object in our sample. These cases of low frequency with no examples (N = 0) were excluded in Figure 11 but included in Table 4 [fig. 11] [tab. 4].

Table 4 Summary of the results on the aspect of the verbs and the case and properties of the object nouns. An asterisk (*) marks items of low frequency

Verb	Aspect	Prefix	object noun	nominal proper-ties	N and % of accusative objects	N and % of objects with genitive
dodaty 'add'	perfective	do-	voda 'water'	concrete	165 (52.21%)	151 (47.78%)
dodavaty 'add'	imperfective	do-	voda 'water'	concrete	363 (89.62%)	42 (10,37%)
dovaryty'cook'*	perfective	do-	boršč 'borscht'	concrete	0	0
dovarjuvaty 'cook' *	imperfective	do-	boršč 'borscht'	concrete	6 (100%)	0(0%)
dodaty 'add'	perfective	do-	cukor'sugar'	concrete	444 (89.87%)	50 (10.12%)
dodavaty 'add'	imperfective	do-	cukor'sugar'	concrete	449 (98.68%)	6 (1.31%)
navaryty'cook' *	perfective	na-	boršč 'borscht'	concrete	0	29 (100%)
navarjuvaty* 'cook' *	imperfective	na-	boršč 'borscht'	concrete	0	1 (100%)
zvaryty 'cook'	perfective	Z-	boršč 'borscht'	concrete	225 (92.97%)	17 (7.02%)
varyty'cook'	imperfective	-	boršč 'borscht'	concrete	410 (100%)	0 (0%)
dodaty 'add'	perfective	do-	vpevnenist''confidence'	abstract	20 (5%)	380 (95%)
dodavaty 'add'	imperfective	do-	vpevnenist''confidence'	abstract	8 (1.78%)	441 (98.21%)
nabuty 'gain'	perfective	na-	dosvid 'experience'	abstract	110 (23.55%)	357 (76.44%)
nabuvaty 'gain'	imperfective	na-	dosvid 'experience'	abstract	108 (22.59%)	370 (77.4%)
dodaty 'add'	perfective	do-	optymizm 'optimism'	abstract	1 (0.47%)	209 (99.52%)
dodavaty 'add'	imperfective	do-	optymizm 'optimism'	abstract	1 (0.39%)	250 (99.6%)
dodaty 'add'	perfective	do-	bad'orist''vigour'	abstract	8 (8.16%)	90 (91.83%)
dodavaty 'add'	imperfective	do-	bad'orist''vigour'	abstract	20 (11.97%)	147 (83.02%)
nabuty 'gain'	perfective	na-	vpevnenist''confidence'	abstract	14 (7.4%)	175 (92.59%)
nabuvaty 'gain'	imperfective	na-	vpevnenist''confidence'	abstract	32 (24.61%)	98 (75.38%)

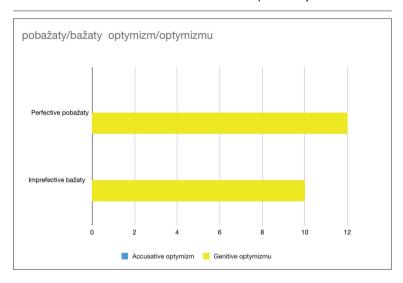


Figure 10 The verb pobažaty/bažaty 'wish' and the object optymizm 'optimism'

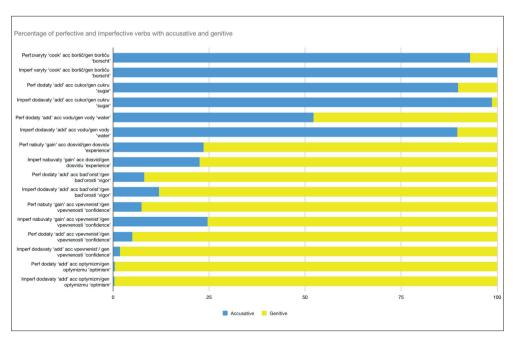


Figure 11 Summary of the usage of verbs with concrete and abstract mass nouns as objects in the accusative and the genitive case

6 Discussion

We have found that the verbs denoting 'add' allow us to compare the case alternation on the mass nouns, abstract and concrete. Additional combinations of verbs and nouns have been studied to supply more evidence. We have found differences between nouns that span across verb classes. For the discussion of the data, we performed an occasional smaller scale corpus search that we will discuss in the ensuing passages.

In the case of concrete mass nouns, imperfective verbs are less likely to appear with the genitive object than their usually prefixed counterpart, perfective verbs. The combination of the imperfective varyty 'cook' and boršč 'borscht' has only accusative objects in our sample, while the combination of the perfective zvaryty 'cook' and boršč 'borscht' has 7% of the genitive objects. However, navaryty/navarjuvaty 'cook (some certain amount)' has only genitive objects with boršč 'borscht', showing the significance of the partitivity feature of the prefix for the partitioning or portioning of the cumulative object of indeterminate quantity. In these verb forms, the prefixes do not perfectivise the partner in the grammatical aspectual verb pair.

The prefixes do- and na- with imperfective verbs and with the concrete object boršč (dovaryty/dovarjuvaty and navaryty/navarjuvaty 'cook') yield, however, few samples in the corpus and vary in their behaviour. The aspectual verb pair *navaryty/navarjuvaty* 'cook (any amount)' and boršč 'borscht', see examples (22) = (24D), (23) = (29D), (24) = (27D), (25) = (28D), have only 30 results, all examples are genitive and appear only with the imperfective verb partner.²¹ Verb semantics clearly plays a role here, as a determining factor for the possibility of any object case variation. In the case of *dovaryty/* dovarjuvaty 'cook (until done)' (see examples (26) = (25D), (27) = (26D)) a genitive object is impossible as only the whole predefined object can be cooked until done. The object is portioned and quantised in the previous discourse if this prefix is applied: one can only finish something that has been started already. The verb with this prefix does not 'portion' the object further, even if boršč 'borscht' in itself denotes a mass noun with indefinite quantity. The aspectual verb pair *navaryty/navarjuvaty*, vice versa, favours a genitive object as it shows here that the amount of object is of a certain quantity that was not defined ('portioned') in its preceding context. The prefix do-, as opposed to the prefix na-, implies an earlier start for the cooking of the same borscht - the cooking has been started earlier and, at the point of speech, it is communicated that it will be

or it was cooked so that this particular amount of borscht is ready. On the contrary, with the prefix *na*-, a new portion is produced. The quantity of borscht remains the same with do-: thus, while quantitatively indeterminate, boršč 'borscht' is not being 'portioned', and thus not compatible with the partitive genitive interpretation and the genitive case-marking on the object.²²

If the mass object is more frequent with the accusative than with the genitive, then the concreteness, aspect, and the presence of a prefix play a role. The verb *doda(va)ty* 'add' shows that the abstract mass nouns are predominantly in the genitive, and the concrete mass nouns are in the accusative. However, the individual mass abstract nouns displayed differences among each other and also in relation to their case behaviour in combination with the two partners of the aspectual pair. For instance, in *doda(va)ty vpevnenist' / optymizm(u)* 'add confidence/optimism' and nabu(va)ty dosvid(u) 'gain experience', the aspectual partners displayed only insignificant differences regarding object case marking. The imperfective partner *nabuvaty* dosvid(u) 'gain experience' even resulted in having a slightly larger share of genitive objects than the perfective one in the corpus. In this combination, the result is unexpected. We can conclude about abstract mass nouns that the grammatical aspect of the verb is largely insignificant for their object case. Figure 12 demonstrates the expected pattern, showing the share of partitive genitive defined as the combination of a genitive concrete mass noun object and a perfective verb.

Figures 12 and 13 contain the data of all examined verb pairs in our corpus [figs 12-13]. We can confirm based on our corpus study that concrete mass nouns give empirical evidence for the phenomenon referred to as the partitive genitive in Ukrainian. The pattern is as expected. Imperfective verbs have accusative objects, and perfective verbs are divided. The partitive genitive emerges with the perfective aspect and concrete mass objects. Figure 13 visualises the puzzle for abstract mass nouns.

The puzzle concerns Ukrainian abstract mass nouns, more specifically, the lack of straightforward evidence for the phenomenon referred to as the partitive genitive. Some instances of partitive genitive may well be among the examples, but the expected pattern we see for concrete mass nouns in Figure 12 is strikingly absent in Figure 13. Therefore, the accusative-genitive object case alternation

²² Verbs of movement (to go to do something, as in Vin pišov dovarjuvaty boršč [IMPF, ACC] 'He went to cook borscht') are combined with the imperfective suffixed infinitive; here the verb is prefixed with do-. Combining a motion verb with an imperfective instead of a perfective verb is well attested in our corpus examples and might provide evidence for parallels between nominal and verbal domains (cf. also Zuchewicz 2020).

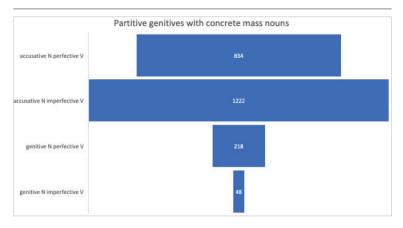


Figure 12 The share of partitive genitive and accusative with concrete mass nouns

cannot rely on a uniform nominal feature for determining the case of objects.23

The striking difference that underlies the variation between mass nouns, concrete versus abstract, calls for a cross-linguistic and diachronic investigation. As a result of our investigation, we found evidence for a split among mass nouns in the development of Romance and Germanic, and Uralic provides variation data for a synchronic split between concrete and abstract mass nouns.

Several earlier sources point out the abundance of specific partitive related phenomena in culinary literature (Carlier, Lamirov 2014. 479: 485: Glaser 2024), since culinary texts contain abundant examples for concrete mass nouns. Carlier and Lamiroy (2014) discuss five stages of the partitive article and note that in stage III French, characterised by the hybrid status of the Romance partitive preposition and article, abstract nouns lack the hybrid partitive. In stage IV,

²³ The other avenue is to approach the unexpected variation from the pragmatic or cognitive properties of the mass nouns. Further research could explore the psycholinguistic work on concreteness and abstractness, as represented in the MRC Psycholinguistic Database. Note that our sample of mass nouns belongs to the two outer extremes on the concrete-abstract ratings scale of the database. It is, therefore, plausible that nouns placed mid-scale are also more heterogeneous in terms of partitive genitives. Other cognitive factors may also contribute to the peculiar features of partitive genitive in mass nouns. For instance, abstract and concrete nouns may diverge in how they are processed in their contexts (Schwanenflugel 1991), or there may be a variety of factors, each relevant for a different group of abstract nouns (Wiemer-Hastings 1998). These factors may prevent some abstract mass nouns from being perceived as mass by native speakers of Ukrainian. Also, the frequency of the nouns could play a role in processing and production.

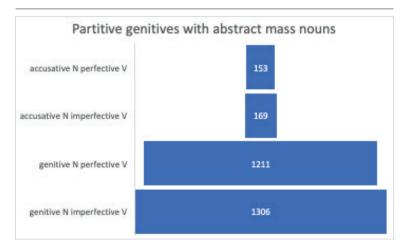


Figure 13 Share of partitive genitive and accusative with abstract mass nouns

the partitive with abstract nouns is still uncommon (Carlier, Lamiroy 2014, 497). In Modern French, which corresponds to stage V, abstract nouns tend to lack the partitive article only if embedded under a PP. Otherwise, Carlier and Lamiroy (2014, 498) generalise that "[t]he partitive article is no longer necessarily linked to the notion of unspecified quantity and becomes common in combination with abstract nouns". Glaser (2024, 5) points out in her discussion of the sixteenth century cookbook of East Swabian that "If lor abstract nouns." somewhat different conditions apply" with regard to their behaviour in terms of partitivity. She also points out that cookbooks in general are a special text type: they typically lack abstract nouns.

In diachronic studies of Romance and Germanic, the registers for researching variation within the domain of abstract nouns are restricted. In some Uralic languages, the cause of variation in the case marking within the group of mass nouns can be established across more registers. In Estonian, abstract and concrete mass nouns differ as far as partitive marking is concerned.²⁴ The examined Ukrainian

²⁴ Scalar and quantificational features that are common across categories affect the behaviour of nouns, verbs, and adjectives in a regular way (e.g., Kennedy, McNally 2005, among many others). Some abstract mass nouns are inherently bounded (or quantised) without being countable. Typically, such abstract mass nouns are unbounded, following the convincing line of thought in previous research on Estonian and Finnish (Ackerman, Moore 2001; Erelt et al. 1993; Kiparsky 1998, to mention some). As a suggestion for further perspectives on understanding the variation on mass objects in Ukrainian, a finer distinction in the behaviour of abstract mass nouns derived from adjectives could be studied. In Estonian, derived abstract nouns have their own scalar and boundedness properties. For instance, if the derived abstract mass noun is based on an adjective that is scalar but has no bound (e.g., 'popular', 'sad'), then the derived object is marked with

abstract nouns that differ from other mass nouns in case marking are also morphologically complex. Here, Finnic can offer new perspectives on further exploration. For instance, in Estonian, there is a significant difference between the case behaviour of abstract mass nouns based on their morphological structure, such as 'temperature' (underived), 'warm(th)' (derived), and 'cold' (derived). 25 As an interim summary, we have some supporting synchronic as well as diachronic evidence from the variation in Romance, Germanic, and Uralic languages that mass nouns vary regularly along the abstract-concrete axis. We may assume thus that Modern Ukrainian can be compared to general tendencies affecting the grammaticalisation of - and variation within - partitive structures.

Since in Modern Ukrainian, abstract mass nouns do not display a completely random pattern in case marking, we suggest examining the verb classes more precisely in their interaction with their objects. Case marking differences between concrete and abstract mass nouns are dependent on verb classification, as seen in Sections 2 and 3. Verbs that denote a change (typically, various incremental theme verbs) differ from those that do not (typically, intensional verbs). The vast literature on aspectual composition or on parallels between nouns and verbs in the tradition of Slavic studies (e.g., Mehlig 1996; Chuikova 2021) could be considered with Ukrainian mass nouns in view.

Without wishing to provide more than some suggestions for further study, we propose examining the interdependence between the lexical semantic features of the verb and the quantificational and other features of the object noun. Shifts in the lexical semantics of verbs are well attested in literature. Levin (1993, 172) discusses how verbs that are listed in one subclass of verbs are also found listed as members of other verb classes, but also highlighting that there are regularities (her discussion concerns creation verbs). Many traditional grammars list instances where the semantics of the verb undergoes a shift in figurative or metaphorical use, whereby a concrete object is understood abstractly. It has been noted in the literature that the figurative use of verbs is paired with genitive objects.²⁶

the partitive case ('add' V + 'popularity/sadness' OBJ > partitive marking); otherwise, the object is marked with the accusative case (Tamm 2014).

²⁵ While all these nouns are synonyms in temperature expressions, they can have different features of boundedness that matter for case assignment, because there is another layer of semantic features that influences case (Tamm 2011). This layer is available for adjective-based, derived abstract mass nouns such as soe 'warmth, temperature above zero' and külm 'cold, temperature below zero'. It is not available for the equally abstract mass noun temperatuur 'temperature'.

Chuikova (2012, 102) notes that there is a strong tendency in Russian to have genitive objects that cannot be replaced by the accusative ones, if an abstract noun is used in a figurative sense or largely desemantised (part of a set phrase), and if it is not used in its direct meaning.

It cannot be excluded that a shift in verb meaning and the object case are related. They are regularly related in many languages, including for instance Finnic languages. In many Finnic languages. verbs such as 'want a good grade' or 'love Mary' have a partitive object case because of unbounded (imperfective) verb semantics. The abstractness, concreteness, countability or definiteness of the object does not matter for the object case of these verbs. If a verb allows both object cases, such as 'find', then the accusative typically emerges with a bounded - perfective verb meaning. The partitive occurs with the unbounded (imperfective) verb meaning. In the sense of 'find a key', the object is accusative, and in the metaphorical sense of 'find it (that it is) correct', the object is partitive. In the latter case, nothing is being 'found' in any concrete sense. In the lexical semantics that matters for object case, a verb like 'find' may fall in two classes. In some of its lexical meanings it belongs to the same class as 'want' or 'love' and differs from other concrete meanings of 'find'.

Ukrainian object case assignment may in part occur following a similar principle of patterning with verb meaning, not any direct inherent properties of the noun. For instance, an incremental theme verb (e.g., 'add') whose semantics entails portioning of its theme object (or subject), is semantically shifted to another lexical semantic class. This shift may relate to metaphorical uses and abstract objects. While changes in a concrete object can be semantically mapped to the progress of an event and time transparently, this mapping becomes opaque in case of metaphors and abstract objects. Consider the difference in adding more borscht on the plate, where the changes in the events are transparently related to the object matter. On the contrary, the event of adding optimism is less transparently related to optimism.

The interpretation of an incremental theme verb crucially depends on the quantificational properties of the theme argument, but this is irrelevant with abstract nouns. With perfective verbs, the partitive genitive interpretation depends on the possibility of interpreting the object as a portion of a mass, but again, abstract nouns render this distinction irrelevant. Abstract nouns may be of indefinite quantity, but they are also difficult to interpret as 'portionable'. Consider how to imagine a portion of experience, vigour, optimism, or confidence as opposed to a portion of borscht, water, or sugar. Abstract mass nouns, at least not typically, do not participate in the progress of an event as concrete mass nouns do. Thus, even if abstract mass nouns denote indeterminate quantity like other mass nouns or indefinite plurals, the incremental theme reading cannot readily be applied to an argument that is an abstract noun. An abstract entity cannot be portioned in increments. It seems that these increments are relevant not only for incremental theme verbs but also grammatical aspect and object case marking in Ukrainian.

Kuznetsova and Nesset (2015) show that Russian has considerable object case variation with verbs that have appeared exclusively with genitive case only in the past, such as 'be afraid', and they suggest that the variation is not random. We conducted an additional small scale corpus search and established that the verb bojatysja 'fear, to be afraid of occurs in ukTenTen with the concrete singular noun sobaka 'dog' in 13 examples with the genitive case and in 3 examples with the accusative case. With the abstract noun temrjava 'darkness' and the verb *bojatysia* 'fear, to be afraid of', all the 110 examples that were found for this combination had a genitive object irrespective of tense, suggesting possible differences between the object case assignment of intensional verbs between modern variants of the two Slavic languages.²⁷ Additionally, we have some evidence from a small-scale experimental study, a Ukrainian discourse completion task that constrained the answers to the present tense: the objects of the intensional verb bažaty 'wish' were encoded invariantly in the genitive (Lehka, Chaika 2022). Ukrainian object case may be more dependent on verb class than the Russian one, based on our preliminary corpus and experiment-based forays into Ukrainian intensional verbs.

It is important to note that the literature on Ukrainian verb classes (Section 3) shows how entire verb classes determine the object case. either the genitive or the accusative. Both object cases pattern with abstract objects. Abstractness in itself does not change the object case pattern of a verb, as far as can be seen from the examples from the sources. Based on earlier traditional grammars, the group of accusative verbs always marks abstract objects that are only marked with the accusative, and intensional verbs have concrete noun objects that are only marked with the genitive (with exceptions under well-defined conditions). Abstract mass nouns clearly do not emerge with an inherently determined genitive. For further research, based on the possibility of parallels between nominal and verbal quantification that is reflected in object case marking, we suggest a similar avenue to explore.²⁸ Tentatively, the similarity concerns intensional verbs that frequently have abstract objects (e.g., 'optimism', 'experience', etc) and incremental theme verbs (e.g., 'add') used with abstract objects, which share an intensionality feature that may cause variation in object cases.

²⁷ These data reflect the total sum of singular objects in these combinations of verbs and objects. We excluded all sentences with the plural, negation and misclassifications.

²⁸ From a related study on Russian intensional verbs, we find Kagan (2012) and Partee et al. (2012) discussing Russian genitive objects of intensional verbs in connection with negation and subjunctivity. Kagan (2012) explains the genitive of Russian abstract objects via the lack of the relative version of existential commitment.

7 Summary

This article has aimed at filling what we perceive as a gap in understanding aspect and object case alternation in Ukrainian. Ukrainian grammars often contain references to 'partitive genitive' and 'partiality' in their discussions of object case and Aktionsart prefixes. As one of the most important contributions of this article, we have reviewed the traditional grammar literature that is accessible only in Ukrainian. We have verified the descriptions from the point of view of two authors who are native Ukrainian speakers in their early twenties and a modern corpus of Ukrainian, ukTenTen 2020. We used the Sketch Engine system to provide quantifiable results and modern language samples for the relationships between Ukrainian aspect and case.

The relevant literature contains descriptions of grammatical aspect, verbs, prefixes, object case, and nominal properties, which we have used to explore the nature of the partitive genitive in Ukrainian. In the domain of verbs, we have reviewed the Ukrainian literature on aspect that characterises the verb category in Ukrainian, verbal prefixes, and verb classes in terms of their restrictions on object cases. The factors that previous sources discuss and that pertain to verb and noun semantics have been based on examples from older literary language. These factors have now been tested on a corpus containing modern Ukrainian, ukTenTen 2020. The corpus data show that there is a distinction between perfective and imperfective verbs in object case assignment. With the versions of the verb *varyty* 'cook', the partitive genitive appears predominantly with the perfective and not with the imperfective verb. However, as expected, the derivational Aktionsart prefix matters. Verbs with the prefix na- have genitive objects and significantly differ in the object case alternation from z-/s-, based on our study on the verb varyty 'cook'. However, dodiverges from them in a different way, because its meaning entails an action that is completed with regard to a predefined quantity of an object. The partitive genitive is therefore simply not compatible with the semantics that the prefix do-imposes on the object in the discourse: quantity that cannot be 'portioned' further.

In our study of abstract and concrete mass nouns, we found differences in object case marking, but it was difficult to establish if the genitive was of the partitive genitive type. The question of why concrete mass nouns and abstract mass nouns display differences in object case marking has not been explicitly addressed in the Ukrainian or any other sources we consulted. We did not find references to abstract mass nouns concerning their status as instances of partitive genitive. We have established that only concrete mass nouns give straightforward empirical evidence of the phenomenon referred to as the partitive genitive in Ukrainian. Our results point towards a

variety of factors that might apply for the diverging groups of mass nouns and their emergence as partitive genitives. We have provided some evidence from diachronic and synchronic sources from other languages where a cleavage between abstract and concrete mass nouns emerges in partitives.

We have provided some pointers to further research, as we have established that the combinations vary also based on verb classes. Our finding is that the perfective aspect and nominal indefinite quantity, traditionally seen as the uniform defining features of partitive genitives, could be reconsidered. Increments are also relevant for defining the phenomenon as we see based on abstract nouns. Even if abstract mass nouns denote indeterminate quantity like other mass nouns or indefinite plurals, the incremental theme reading cannot readily be applied to an argument that is an abstract noun: it cannot be portioned in increments. Increments are thus relevant not only for incremental theme verbs but also for perfective verbs where the progress of the events is unrelated to the themes.

We offer this work as a step in the direction of explaining the relationship between aspect, verbs, and object case variation in Ukrainian.

Abbreviations and Notations

1	first person
2	second persor
3	third person
ACC	accusative
DAT	dative
GEN	genitive
F	feminine
IMPF	imperfective
PERF	perfective
M	masculine
NOM	nominative
PL	plural
PREF	prefix
PRT	particle
SG	singular
PTC	participle

Bibliography

- Ackerman, F.; Moore, J. (2001). Proto-Properties and Grammatical Encoding: A Correspondence Theory of Argument Selection, Stanford, CA: The Centerfor the Study of Language and Information Publications. https://doi. org/10.4000/linx.542.
- Borik, O. (2006). Aspect and Reference Time. Oxford: Oxford University Press. Oxford Studies in Theoretical Linguistics 13. https://doi.org/10.1093/ acprof:oso/9780199291298.003.0001.
- Breu, W. (2020). "Partitivity in Slavic-Romance Language Contact: The Case of Molise Slavic in Italy". Linguistics, 58(3), 837-68. https://doi. org/10.1515/ling-2020-0092.
- Carlier A.; Lamiroy, B. (2014). "The Grammaticalization of the Prepositional Partitive in Romance". Luraghi, S.; Huumo, T. (eds), Partitive Cases and Related Categories. Berlin: Mouton De Gruyter, 477-519. https://doi. org/10.1515/9783110346060.477.
- Chuikova, O. (2012). Variativnost' oformlenija prjamogo dopolnenija pri russkom glagole (Variation of the Form of the Direct Object of Russian Verbs). [Bachelor's Thesis]. St. Petersburg: St. Petersburg University.
- Chuikova, O. (2021). "K voprosu o (ne)sočetaemosti roditel'nogo partitivnogo i nesoveršennogo vida v russkom jazyke: korpusnoe issledovanie" (On (Non-) Compatibility of Genitive Partitive and Imperfective in Russian: A Corpus Study). Computational Linguistics and Intellectual Technologies Papers from the Annual International Conference "Dialogue", 20, Moscow, 162-78. https://www.dialog-21.ru/media/5502/chuikovaoiu105.pdf.
- Comrie, B. (1976). Aspect. An Introduction to the Study of Verbal Aspect and Related Problems. Cambridge: London: New York: Melbourne: Cambridge University Press. https://doi.org/10.2307/412958.
- Dahl, Ö. (1984). "Perfectivity in Slavonic and Other Languages". De Groot, C.; Tommola, H. (eds), Aspect Bound: A Voyage into the Realm of Germanic, Slavonic and Finno-Ugrian Aspectology. Dordrecht; Cinnaminson: Foris, 133-51. https://doi.org/10.1515/9783110846195.3.
- Dahl, Ö. (1985). Tense and Aspect Systems. Oxford: Blackwell.
- Dowty, D. (1991). "Thematic Proto-Roles and Argument Selection." Language, 67(3), 547-619. https://doi.org/10.2307/415037.
- Erelt, M. et al. (1993), Eesti keele grammatika II. Süntaks. Lisa: Kiri (The Grammar of the Estonian Language II. Syntax. Appendix: The Writing System). Tallinn: Eesti Keele Instituut.
- Filip, H. (1997). "Integrating Telicity, Aspect and NP Semantics: The Role of Thematic Structure". Toman, J. (ed.), Formal Approaches to Slavic Linguistics (FASL) III. Ann Arbor Michigan Slavic Publications, 61-96.
- Filip, H. (2003). "Prefixes and the Delimitation of Events". Journal of Slavic Linquistics, 12, 55-101.
- Glaser, E. (2024). "Bare Nouns, Indefinite Articles and Partitivity in an Early New High German Cookbook". Linguistic Variation, 1-29. https://doi. org/10.1075/lv.23045.gla.
- Huumo, T. (2010). "Nominal Aspect, Quantity, and Time: The Case of the Finnish Object". Journal of Linguistics, 46, 83-125. https://doi.org/10.1017/ s0022226709990223.

- Jakobson, R. (1971). "Shifters, Verbal Categories, and the Russian Verb". Jakobson, R. (ed.), Selected Writings II. Word and Language. Paris, The Hague: Mouton. 130-47. https://doi.org/10.1515/9783110873269.130.
- Jurkiewicz-Rohrbacher, E. (2019). Polish Verbal Aspect and Its Finnish Statistical Correlates in the Light of a Parallel Corpus [PhD Dissertation]. Helsinki: University of Helsinki; University of Regensburg. http://hdl.handle.net/10138/300771.
- Kagan, O. (2012). Semantics of Genitive Objects in Russian: A Study of Genitive of Negation and Intensional Genitive Case, vol. 89. Dordrecht; New York: Springer Science & Business Media. https://doi.org/10.1007/978-94-007-5225-2.
- Kennedy, C.; McNally, L. (2005). "Scale Structure and the Semantic Typology of Gradable Predicates". *Language*, 81(2), 345-81.
- Kilgarriff, A. et al. (2004). "The Sketch Engine". Williams, G.; Vessier, S. (eds), Proceedings of the XI EURALEX International Congress. Lorient, France: Université de Bretagne Sud, 105-15. https://doi.org/10.1093/ oso/9780199292332.003.0020.
- Kilgarriff, A. et al. (2014). "The Sketch Engine: Ten Years on". Lexicography, 1, 7-36. https://doi.org/10.1007/s40607-014-0009-9.
- Kiparsky, P. (1998). "Partitive Case and Aspect". Butt, M.; Geuder, W. (eds), The Projection of Arguments. Stanford: CSLI Publications, 265-307.
- Klaas, B. (1999). "Dependence of the Object Case on the Semantics of the Verb in Estonian, Finnish and Lithuanian". Erelt, M. (ed.), Typological Studies III. Publications of the Department of Estonian of the University of Tartu, 11, 47-83.
- Krifka, M. (1992). "Thematic Relations as Links between Nominal Reference and Temporal Constitution". Sag, I.; Szabolcsi, A. (eds), Lexical Matters 24. Stanford: CSLI Publications, 29-53.
- Kryshevich, O. (2010). *The Genitive of Negation in Ukrainian* [MA Thesis]. Cambridge: Newnham College, University of Cambridge.
- Kuznetsova, J.; Nesset, T. (2015). "In Which Case Are Russians Afraid? Bojat'sja with Genitive and Accusative Objects". *Journal of Slavic Linguistics*, 23(2), 255-83. https://doi.org/10.1353/jsl.2015.0009. https://doi.org/10.1353/jsl.2015.0009.
- Larjavaara, M. (2019). *Partitiivin valinta* (The Choice of the Partitive). Helsinki: Suomalaisen Kirjallisuuden Seura.
- Larsson, L.-G. (2001). "Baltic Influence on Finnic Languages". Dahl, Ö.; Koptjevskaja-Tamm, M. (eds), Circum-Baltic Languages: Past and Present. Amsterdam; Philadelphia: John Benjamins Publishing Company, 237-53. https://doi.org/10.1075/slcs.54.12lar.
- Laugalienė, A. (2022). Partitivity in Finnish and Lithuanian: Object Marking [PhD Dissertation]. Vilnius: Vilnius University. https://doi.org/10.15388/vu.thesis.372.
- Lees, A. (2015). Case Alternations in Five Finnic Languages: Estonian, Finnish, Karelian, Livonian and Veps. Leiden: Brill's Studies in Language. Cognition and Culture 13. https://doi.org/10.1163/9789004296367.
- Lehka, N.; Chaika, L. (2022). "Learning Ukrainian 'Partitive' Genitive Verbs with Good Wishes". Paper presented as poster at meeting of the network Partitives in European Languages on September 15th-17th, 2022 at the Faculty of Humanities and Social Sciences, Károli Gáspár University of the Reformed Church in Hungary. MS. KRE, Budapest.

- Levin, B. (1993). English Verb Classes and Alternations. Chicago: University of Chicago Press. https://doi.org/10.2307/415968
- Luraghi, S.: De Smit, M.: Igartua, I. (2020). "Contact-Induced Change in the Languages of Europe: The Rise and Development of Partitive Cases and Determiners in Finnic and Basque". Linguistics, 58(3), 869-903. https://doi. org/10.1515/ling-2020-0083.
- Macjuk, Z. (2013). "Vydovi formy dijesliv jak ob"jekt vyvčennja v kursi ukrajins'koji movy jak inozemnoji" (Aspectual Verb Forms as an Object of Studying Ukrainian as a Foreign Language). Theory and Practice of Teaching Ukrainian as a Foreign Language, 8, 168-77.
- Mehlig, H. (1996). "Some Analogies between the Morphology of Nouns and the Morphology of Aspect in Russian". Folia Linguistica, 30(1-2), 87-110. https://doi.org/10.1515/flin.1996.30.1-2.87.
- Metslang, H. (2001). "On the Developments of the Estonian Aspect: The Verbal Particle ära". Dahl, Ö.; Koptjevskaja-Tamm, M. (eds), Circum-Baltic Languages: Grammar and Typology 2. Amsterdam: Benjamins, 443-79. Studies in Language Companion Series 55. https://doi.org/10.1075/ slcs.55.07met.
- Mežov, O. (2008). "Osoblyvosti vžyvannja rodovoho vidminka u vtorynnij semantyko-syntaksyčnij funkciji ob"jekta" (Features of the Use of Genitive Case in the Secondary Semantic-syntactical Function of Object). Filolohični nauky: Movoznavstvo, 10, 69-74. https://core.ac.uk/download/pdf/153578245.pdf.
- Młynarczyk, A.K. (2004). Aspectual Pairing in Polish [PhD dissertation]. Utrecht: Universiteit Utrecht.
- Neidle, C. (1988). The Role of Case in Russian Syntax. Studies in Natural Language & Linguistic Theory 10. Dordrecht: Kluwer. https://doi. org/10.1007/978-94-009-2703-2.
- Padučeva, E. (1998). "On Non-Compatibility of Partitive and Imperfective in Russian". Theoretical Linguistics, 24(1), 73-82. https://doi.org/10.1515/ thli.1998.24.1.73.
- Partee, B.H.; Borschev, V.; Paducheva, E.V.; Testelets, Y.; Yanovich, I. (2012). "The Role of Verb Semantics in Genitive Alternations: Genitive of Negation and Genitive of Intensionality". Grønn, A.; Pazelskaya, A. (eds), Oslo Studies in Language, 4(1), 1-29. https://doi.org/10.5617/osla.229.
- Pavkin, K. (2014). "The Russian Partitive and Verbal Aspect". Luraghi, S.: Huumo, T. (eds), Partitive Cases and Related Categories. Berlin: Walter de Gruyter, 379-97. https://doi.org/10.1515/9783110346060.379.
- Pljušč, M.J. (2005). Hramatyka ukrajins'koji movy. Morfemika, slovotvir, morfolohija (Ukrainian Grammar. Morphemics, Word Formation, Morphology), vol. 1. Kyiv: Višča škola.
- Pljušč, M.J. (2018). Katehoriji sub"jekta i ob"jekta v strukturi prostoho rečennja (Category of Subject and Object in Structure of Simple Sentence). Kyiv: Vydavnyctvo NPU imeni M.P. Drahomanova.
- Pugh, S.M.; Press, I. (1999). Ukrainian: A Comprehensive Grammar. London: Routledge. https://doi.org/10.4324/9780203215586.
- Rozwadowska, B.; Willim, E. (2004). "The Role of the Accusative/Partitive Alternation in Aspectual Composition in Polish". Poznań Studies in Contemporary Linguistics, 39. School of English, Adam Mickiewicz University, Poznań.

- Schwanenflugel, P.J. (1991). "Why are Abstract Concepts Hard to Understand?". Schwanenflugel, P.J. (ed.), The Psychology of Word Meanings. New York: Psychology Press, 235-62, https://doi.org/10.4324/9780203772119.
- Smith, C.S. (1991). The Parameter of Aspect. Dordrecht: Kluwer. https://doi. org/10.1007/978-94-015-7911-7.
- Seržant, I.A. (2014). "The Independent Partitive Genitive in North Russian". Contemporary Approaches to Dialectology: The Area of North, Northwest Russian and Belarusian Vernaculars, 270-329. Slavica Bergensia 13. https:// doi.org/10.1163/19552629-00802006.
- Seržant, I.A. (2015). "The Independent Partitive as an Eastern Circum-Baltic Isogloss". Journal of Language Contact, 8(2), 341-418. https://doi. org/10.1515/9783110732221.
- Sleeman, P.; Giusti, G. (eds) (2021). Partitive Determiners, Partitive Pronouns and Partitive Case. Berlin, Boston: De Gruyter. https://doi. org/10.1515/9783110732221.
- Ševčuk, N. (2010). "Hramatyčni osoblyvosti ob"jekta pry dijeslovax na poznačennja tvorennja". (Grammatical Features of the Object with Verbs Denoting Creation). Kul'tura slova, 72, 126-32.
- Šypovyč, M.V.; Ihnatolja, A.A.; Dančenko, O.B. (2020). "Semantyčni funkciji vidminkiv imennyka v ukrains'kij movi" (Semantic Functions of Noun Cases in Ukrainian). Naukovvi visnvk Mižnarodnoho humanitarnoho universitetu. Filolohija, 46(2), 198-201.
- Tamm, A. (2007). "Perfectivity, Telicity and Estonian Verbs". Nordic Journal of Linguistics, 30(2), 229-55. https://10.1017/S0332586507001746.
- Tamm, A. (2011). "Scalarity and Dimensionality across Categories. Estonian Pseudopartitive Constructions". Linguistica Uralica, 47(1), 22-40. https:// doi.org/10.3176/lu.2011.1.02.
- Tamm, A. (2014). "Cross-Categorial Scalar Properties Explaining Differential Object Marking". Linguistics, 52(2), 469-511. https://doi.org/10.1515/ ling-2013-0070.
- Timberlake, A. (1975). "Hierarchies in the Genitive of Negation". The Slavic and East European Journal, 19(2), 123-38. https://doi.org/10.2307/306765.
- Vaiss, N. (2022). "Eesti vaatama-verbi ja selle vene ja ukraina vastete sihilisusest" (On the Transitivity of the Verb 'Watch'/'Look' in Estonian, Russian and Ukrainian). Lähivõrdlusi. Lähivertailuja, 32, 213-36. https://doi. org/10.5128/LV32.07.
- Van Hout, A.M.H.A. (2000). "Event-Semantics in the Lexicon-Syntax Interface: Verb Frame Alternations in Dutch and their Acquisition". Tenny, C.; Pustejovsky, J. (eds), Events as Grammatical Objects. Stanford: CSLI, 239-82.
- Vendler, Z. (1957). "Verbs and Times". The Philosophical Review, 66(2), 143-60. https://doi.org/10.2307/2182371.
- Verkuyl, H. (1993). A Theory of Aspectuality: The Interaction between Temporal and Atemporal Structure. Cambridge: Cambridge University Press.
- Vyxovanec', I.R. (1992). Narysy z funkcional'noho syntaksysu ukrajins'koji movy (Essays on Functional Syntax in Ukrainian). Kyiv: Naukova dumka.
- Vyxovanec', I.; Horodens'ka, K. (2004). Teoretyčna morfolohija ukrajins'koji movy (Theoretical Morphology of Ukrainian). Kyiv: Ukrajins'ke vydavnyctvo "Pul'sary".
- Vymazalová, T. (2014). Aspectuality in Czech and Dutch [Diploma Thesis]. Praha: Charles University.

- Wiemer-Hastings, K. (1998). "Abstract Noun Classification: Using a Neural Network to Match Word Context and Word Meaning". Behavior Research Methods. Instruments. & Computers. 30, 264-71, https://doi.org/10.3758/ BF03200654.
- Wierzbicka, A. (1967). "On the Semantics of Verbal Aspect in Polish". To Honour Roman Jakobson. Essays on the Occasion of His 70th Birthday, vol. 3. The Hague: Mouton, 2231-49. https://doi.org/10.1515/9783111349138-037.
- Zuchewicz, K. (2020). On the Veridicality of Perfective Clause-Embedding Verbs in Polish: A Unified Aspect-Based Analysis of Incremental Theme Verbs with Nominal and Propositional Complements [PhD Dissertation]. Berlin: Humboldt University.

Online Resources

Bilodid, I. et al. (2018). Slovnyk ukrajins'koji movy Akademičnyj tlumačnyj slovnyk (1970-80). [Dictionary of the Ukrainian language. Academic Explanatory Dictionary (1970-80)] = https://sum.in.ua/.

MRC Psycholinguistic Database = https://websites.psychology.uwa. edu.au/school/MRCDatabase/uwa mrc.htm.

OSF Repository = https://osf.io/gcnx8/.

SketchEngine = https://www.sketchengine.eu/.

Ukrainian-English Dictionary (Online) = https://dict.com/.

ukTenTen 2020 = https://www.sketchengine.eu/uktenten-ukrainiancorpus/.

Partitive Constructions and Partitive Elements Within and Across Language Borders in Europe

edited by Elvira Glaser, Petra Sleeman, Thomas Strobel, Anne Tamm

Index of Terms

```
ablative 5, 9, 105, 122
                                                    NP 135, 142, 144, 146, 149
abstract noun 14, 175-218
                                                    temporal 162
accusative 10, 12, 62, 62 fn 7, 107, 174 fn 2,
                                                 agreement 20, 104, 108, 108 fn 4, 117-19, 121,
   176 fn 3, 182-3, 187, 191-2, 203, 206-7,
                                                    154
   211-12, 214 fn 26, 215-16
                                                    marker 117
   accusative-partitive 166, 176 fn 3
                                                    object 111-14
   case 10-12, 14, 33, 62 fn 6, 62 fn 6, 107,
                                                    person and number 108 fn 4
   112, 166-7, 173-218
                                                    possessive 13, 101-23
   genitive- 174, 178, 188, 191, 191 fn 17,
                                                    subject 111 fn 6
   198, 201, 211
                                                    suffix 104, 108, 110, 121
   -marked 167
                                                    verb(al) 156-8
   marker 112
                                                Aktionsart 176-8, 188
   object 11, 14, 173, 178-9, 181, 188, 192,
                                                    prefix 14, 173-4, 178, 184, 186, 217
   194, 197, 197 fn 19, 201, 203, 208, 210-11
                                                 allophoric 152, 155-6, 158, 160, 166, 168-9
   verb 216
                                                 amount 5, 10, 32, 46, 78 fn 3, 82, 84, 89, 96,
adessive 161
                                                    103, 185, 189, 201-3, 210-11
adjective 13, 32, 43, 56-72, 133-49, 176, 182,
                                                    vague 19-20, 44, 47
   213 fn 24, 214 fn 25
                                                 anaphora
adposition 5, 13, 58 fn 2, 62 fn 8, 101, 104-5,
                                                    null 7
   107-8, 119, 122-3, 173-218
                                                article
   spatial 5
                                                    definite 4, 23, 31, 37, 40, 49, 49 fn 36, 112,
adpositional phrase 105
                                                    indefinite 4, 13, 19-51, 136, 142, 144, 146
adverbial
   locative 156
                                                    partitive 3-6, 11, 28, 212-13
                                                    zero 26 fn 13
   noun phrase 129
```

aspect 12, 167, 177	spatial 115
episodic 20, 34, 40-2, 45	vocative 183
grammatical 173-4, 177-8, 184, 189, 211,	case alternation 12-14, 154, 157-8, 166,
215, 217	174-5, 176 fn 3, 178, 187-8, 190, 210-11,
habitual 20,40-2 non-episodic 40,50	217
perfective 14, 158, 173-218	accusative-partitive 166, 176 fn 3 genitive-accusative 14, 174, 188
progressive 11	nominative-partitive 14, 174, 158, 166
atelic 11, 184 fn 10	classifier 56, 65 fn 11, 73
dette 11, 10 mm 10	clitic 6-7, 128
bare	conative 161
nominal 41 fn 29	conditional 158, 165
noun 7, 10, 34, 59, 128, 139, 143	connegative 158
plural 36, 37 fn 24, 49-50, 62, 142-4, 147,	contrast 30, 32, 32 fn 19, 37, 45-8, 50-1
179	copula 153-4, 156-8, 168-9
bleaching	culmination 11
semantic 158, 168	non- 11
boundedness 10, 12, 177 fn 5, 188, 213 fn 24,	
214 fn 25	definiteness 11-12, 215
l'	desiderative 165, 169
cardinal 91-2, 92 fn 6, 93, 108, 128-9	determiner 3, 21, 23, 59-61, 92 fn 17
case 5-6, 12, 14, 20, 59, 62, 62 fn 6, 101, 103-7,	definite 36,40 doubling 20,31
116, 118 ablative 9, 105	indefinite 32-3, 40, 140, 142
accusative 10-12, 14, 33, 62 fn 6-7, 107,	inflected 59
112, 166-7, 173-218	partitive 3-4, 7-8
adessive 161	phrase 103
alternation 12-14, 154, 157-8, 166, 174-5,	zero 40
176 fn 3, 178, 187-8, 190, 210-11, 217	Differential Object Marking 12-13
assignee 33 fn 21	DOM 12
assigner 33 fn 21	Doubly filled Comp Filter 48
assignment 62 fn 6	
dative 33 fn 21, 183, 193	ein 8, 13, 19-51
elative 9, 20, 105-6, 106 fn 3, 107, 118,	elliptical
122, 164	noun phrase 127-8, 128 fn 1, 129, 140,
genitive 8-10, 12-14, 20, 28, 30, 45, 48, 55-74, 77, 78, 81-4, 95, 117, 166, 173-218	148-9 NP 14, 133, 135, 147, 147 fn 11
inessive 105, 107, 116	en 6-7
instrumental 183, 196	er 7-8, 13-14, 127-49
locative 183	ere 8
marker 5, 59	<i>ervan</i> 7,122
marking 9, 12, 59, 103, 107, 158, 166, 178,	existential 10-12, 14, 30, 44, 46, 50, 103, 114,
183, 211, 213-17	154, 156-7, 159, 162, 216 fn 28
nominative 10, 12, 14, 33, 62 fn 6, 83-4,	exo-skeletal 21, 43, 51
154, 157-8, 166-7, 183, 192	
object 12, 14, 173-218	gender 62, 92, 147 fn 11, 182-3, 183 fn 9, 191
partitive 5, 10-11, 14, 20, 102, 106, 122,	generic 20, 23, 26 fn 13, 30 fn 18, 31, 34-5,
156-7, 166-7, 176 fn 3, 214 fn 24	38-40, 42, 44-5, 49-50
partitive genitive 12, 14, 58 fn 2, 62 fn 8, 173-218	genitive 8, 10, 12-13, 30, 45, 48, 56-8, 58 fn 2, 59-60, 60 fn 5, 61-3, 65-8, 72-4, 77-8, 81-5,
phrase 105	173-218
Pillage 100	110 210

adnominal 13,57,58,60 case 8-10,12-14,20,28,30,45,48,55-74, 77-8,81-4,95,117,166,173-218 marking 28,30,55-8,61-2,64 fn 10,67, 73-4 measure 192,195 object 173-218 of negation 179 fn 7 partitive 12, 14, 20, 58 fn 2, 62 fn 8, 173-218	intransitive 155-6, 166, 169 verb 111 fn 6, 129-30, 135, 142, 154, 157 invenitive 157, 168-9 juxtaposed 13 juxtaposition 6, 56, 58 kind 9, 32. 36-9, 46, 49-51, 64-5, 71-2 proper 32, 36, 44, 46, 49-50
pronoun 8,117 second 10 strong 60-1 verb 179	locational 153-8, 162, 168-9 locative 5, 156, 162 locuphoric 14, 153-69
glottonym 77-8, 81, 83 grammaticalisation 4,45 fn 32,48, 102, 122, 175, 214	mass 5,20,22 fn 7,24-6,26 fn 12,27 fn 15,28, 33-7, 39, 41-4, 48-51, 64-5, 68, 71, 176, 178-9, 188-90, 211, 212 fn 23, 213 fn 24, 215
homonymy 86	noun 8, 10, 13-14, 19-51, 65, 65 fn 11, 84-5, 106, 134, 138, 140, 142, 144, 146-7,
illative 164	149, 173-218
imperfective 14, 173-218	measure 73, 176, 192, 195
imperfectivity 178	noun 5, 30, 56, 73, 142, 144, 146, 148-9,
impersonal 14, 153, 166-7	180
passive 14, 166 incremental theme 177, 188, 214-16, 218	phrase 29-30, 47 fn 35, 48-9, 51, 129, 135, 176
indefinite 139	middle marker 155, 163, 169
determiner 32-3, 40, 140, 142 determiner doubling 20, 31	mirative 163-5, 167, 169
noun phrase 133, 139-40, 147	nano-syntactic 44,48
NP 128	ne 6-7, 128
indefiniteness 5, 10-12	negation 11,139,144,147,158,180,192,194,
individual 13, 41, 44, 46-50, 64	197 fn 19, 216 fn 27, 216 fn 28
individual-level 40-1	particle 180
individuation 13, 30, 47 fn 34, 48-9, 55-74	negative 158-9, 193-6
scale 55, 64-5	indefinite 47
inflection 33 fn 21, 34, 50, 59, 110	quantifier 143
accusative 62 fn 7	nominal
adjectival 21, 59, 62, 67	inner 55-8, 61-2, 62 fn 7, 63-5, 67-71, 71
adnominal 130	fn 15, 73-4
article 31,33	outer 56 fn 1, 6, 62 fn 6, 65, 67, 71, 73
dative 62 fn 7	non-uniqueness 30,43 fn 30,46
genitive case 174, 176 nominal 58	noun
strong 59	abstract 14, 40, 84-5, 173-218 abstract mass 173-218
weak 62 fn 7	bare 7, 10, 34, 59, 128, 139, 143
intensional 42	classifier 65 fn 11, 73
verb 36, 38-9, 42, 51, 177, 179-80, 188, 189	collective 180
fn 14, 196, 208, 214, 216	common 147 fn 11
interrogative 7, 106, 110, 158-9	concrete 85

concrete mass 14, 173-218	-indefinite 7
container 29-30, 48, 73,	marker 121-2
count 8, 30, 36-7, 39-41, 44, 46, 49, 158,	marking 107
183, 190	preposition 45 fn 33, 212
countable 65 fn 11, 67, 81, 85, 87-8, 213	pro-form 21
fn 24	pronoun 3, 6-8, 13-14, 47, 127-49
deadjectival 59 fn 4	proper 3, 5-7, 9, 13, 20 fn 1, 77, 102-3, 107,
empty 128 fn 1, 139, 145	114, 120-3
genitive 57, 59-60, 188	pseudo- 5-7, 9-10, 13, 20 fn 1, 48, 55-74,
mass 8, 10, 13-14, 19-51, 65, 65 fn 11,	77-96, 83, 103, 106, 122
84-5, 106, 134, 138, 140, 142, 144, 146-7,	quantitative 176, 186
149, 173-218	structure 4-5, 9, 13, 31, 77-96, 102-3, 121,
measure 5, 30, 56, 129, 142, 144, 146,	214
148-9	temporal 176
pair 77-96	true 5, 77, 79, 91, 93, 95
plural 10, 13, 59, 84, 89, 138, 142-4, 147,	partitivity 3, 6-7, 9, 12-13, 20, 30-1, 43, 45, 50,
149	58, 104, 107-8, 122, 182, 188, 210, 213
predicational 35, 42-3	proper 58, 101-2, 104, 106, 118, 121
singular 8, 63, 68, 73, 89, 182-3, 191 fn 17,	pseudo- 62
216	semantic 106
strong 59	situational 45-7, 47, 50-1
uncountable 81, 84-5, 88	passive 155, 163-4, 166, 195-6
weak 59-60	impersonal 14,66
number 13, 44, 49, 62-3, 65, 70, 89, 89 fn 13,	perfective 14, 158, 173-218
102, 104, 108 fn 4, 109-10, 114-15, 117-22,	perfectivity 173, 177 fn 5, 178
158, 160, 178, 182-3, 193 fn 9	person 13, 102, 104, 108, 108 fn 4, 109-10,
numeral 30, 41, 44 fn 32, 86, 90, 90 fn 15,	114-15, 117-22
92-3, 95, 108, 110, 135-6, 140	first 14, 93, 116-17, 119, 158, 160, 162,
cardinal 108, 128	166, 168, 183 fn 9
collective 91	non-third 117
personal 13, 77-8, 91, 92 fn 16, 93-6	second 14, 154, 160, 166
	third 8, 89, 111, 116-18, 121-2
part 5, 9, 13, 20, 38, 45, 77-8, 84, 93, 103-4,	plural 4, 8, 40, 49-50, 55-7, 59, 59 fn 3, 60,
121-2 body 13, 77-8, 84-91, 96	62-3, 64 fn 10, 65, 67, 69, 71, 84, 90, 93, 108,
partiality 174, 178, 182, 186, 188, 217	111, 114-19, 119, 139, 147 fn 11, 158, 162,
partial object 10	183, 191 fn 17, 193, 195-6, 216 fn 27 agreement 116
partition 4, 13, 19-51, 210	bare 36, 37 fn 24, 49-50, 62, 142-4, 147,
partition 4, 13, 13-31, 210	179
article 3-6, 11, 28, 212-13	form 86, 90, 182
canonical 5, 103	indefinite 215, 218
case 5, 10-11, 14, 20, 103, 106, 122, 156-7,	marking 65, 116
166-7, 176 fn 3, 214 fn 24	mass 49,73
constraint 5	morphology 49,73
construction 3-14, 21, 43, 84, 105, 156	noun 10, 13, 59, 84, 89, 138, 142-4, 147,
determiner 3-4, 7-8	149
element 3	number 70, 117-18
function 7-8	strong 59,86
generalised 5	suffix 44,118
genitive 12, 14, 58 fn 2, 62 fn 8, 173-218	weak 86

plurality 11,55,57,64-5,67,71,73-4,117 polarity 12 portion 13,28,32,41-2,70-1,77-8,84,176-7, 188,210-11,215,217-18	quantifier 5, 13, 27, 27 fn 15, 28, 34, 43, 49, 49 fn 37, 77-8, 81, 83, 95, 101, 104, 108, 110-12, 114-21, 123, 127-8, 128 fn 1, 134, 136-7, 140, 188, 192-6
possessee 104, 109	construction 5
possessive 122	definite 142
agreement 13, 101-23	existential 30, 114
	-ik- 110-14
construction 79, 102, 109-10	
marker 102, 108, 110-11, 117, 121-2	indefinite 129, 132
marking 108, 115-17, 119, 123	negative 143
partitive marker 118, 122	non-presuppositional 136-8
partitive strategy 13, 101-23	overt 4, 104
pronoun 84-8, 90-1, 96	partitive 108, 110
strategy 5, 103-4, 115, 122	phrase 103
structure 82, 112, 121	possessively marked 110
suffix 13, 101, 104, 108, 110-12, 114-17, 121	presuppositional 136-8, 142, 147, 149
possessor 104, 108 fn 4, 109	weak 24-5, 27-9, 34-5, 43 fn 31, 48, 51,
postposition 13, 101, 104-9, 115-22, 161	108, 128
predlocative 156-7	zero 4
prefix 14, 178, 184 fn 11, 184-6, 186 fn 12,	quantitative 6-7, 113, 113 fn 8, 114, 176, 186
188-9, 203, 208, 210-11, 217	quantity 4, 6-7, 9, 65, 81, 88, 96, 176, 210-11,
Aktionsart 176-8, 188	213, 215, 217-18
preposition 6, 9, 20, 28, 33 fn 21, 57, 67, 72,	bounded 10
86, 93, 95-6, 102-3, 121-2, 212	expression 65
presentational 156, 161	noun 142, 144, 146, 149
pronoun 7-8, 47, 84, 86, 88, 92 fn 7, 109-10,	object 176
112, 119, 128, 133, 147 fn 11, 157, 166	unbounded 10
bare 84	vague 30, 45
definite 128 fn 1, 132, 133 fn 5, 138-42,	
144-5, 147	reading
genitive 8, 117	content 73
indefinite 8, 108-9, 111	count 49
interrogative-relative 109	episodic 40
neuter 147 fn 11	existential 14, 46, 50, 157
partitive 3, 6-8, 13-14, 47, 127-49	future 11
partitive-indefinite 7	generic 23, 30 fn 18, 31, 39
personal 104, 108 fn 4, 110, 115, 119,	habitual 41
141-2, 166	idiomatic 64-5,71
possessive 84-8, 90-1, 96	incremental theme 215, 218
prepositional 93,95	individual 41,49
quantitative 7-8, 10, 12, 14, 128	individuation 73
silent 115	kind 9, 36, 38-9, 44, 49-51
weak 128	mass 41, 49, 64-5
property 36, 46, 49	mirative 164
property 66, 16, 15	non-episodic 40
quantificational 141,177-8,213 fn 24,214-15	non-generic 30 fn 18
construction 140, 148	ordering 42
NP 144, 146	partition 19,37,47
structure 13	partitive 36-7,43
quantified adverbial NP 129, 135, 142, 144,	passive-resultative 163
146, 149	portion 41
± 10, ± 10	Polition 1±

Index of Terms

situational partitivity 50-1	-ik 110-11
sort 44	inflectional 33 fn 21
stuff 42, 44	plural 44, 118
subkind 32, 37 fn 25, 38-9, 42, 47 fn 34,	possessive 13, 101, 104, 108, 110-12,
50-1	114-17, 121
substance 49	superset 4-6, 9, 13, 20, 101, 103-8, 110,
type 44, 64	114-23
referent	syncretism 44,48
animate 69-70, 74, 181	
human 63, 64 fn 10, 69-70	telic 11, 184 fn 10
referential 133, 136, 138-9, 141, 144, 146, 177	telicity 177 fn 5
non- 132-3, 133 fn 5, 138-41, 144, 146-7,	total object 10
149	transitive 11, 111 fn 6, 159, 166
reflexive 155, 188	transitivity 192 fn 18
resultative 164, 181	
root 43, 48, 51, 110, 155, 157, 185	unaccusative 11-12
	unboundedness 10
sen 8	
separative 5, 102, 121-2	welch- 7
spatial 5, 115, 164	
stage-level 40	zero 67
subkind 13, 19, 30, 32, 36-9, 42, 44-7, 47 fn 34,	article 26 fn 13
50-1	determiner 40
subset 4-6, 9, 13, 19-20, 30, 45-6, 50, 101,	element 59
103-5, 107-8, 114-16, 118, 121-2, 133	exponent 48
suffix 82, 104, 109-10, 116-20, 122, 165, 188-9	form 47
agreement 104, 108, 110, 121	-marking 28, 30-1, 40, 61, 67
derivational 110-11	quantifier 4

Partitive Constructions and Partitive Elements Within and Across Language Borders in Europe

edited by Elvira Glaser, Petra Sleeman, Thomas Strobel, Anne Tamm

Index of Languages

Arabic 122 Armenian 9

Baltic 175, 176 fn 3

Catalan 128 Celtic 78, 122 Czech 176 fn 3, 186 fn 13

Dutch 6-8, 49 fn 37, 122, 127-49, 176 fn 3, 177 Belgian 12, 14, 127-48 dialects 136, 140 Heerlen standard Dutch 135, 140, 148 Netherlandic 14, 127-48 northern 140 southern 140 Standard 7, 13, 127-48 Surinamese 132, 148

English 6, 9, 9 fn 1, 20, 24, 34, 36 fn 23, 39 fn 28, 40, 44, 78, 90-1, 93, 96, 102, 105, 108, 121-2, 128 fn 1, 132, 156, 163, 177, 190 Estonian 12, 104, 106, 122, 157, 192 fn 18, 213, 213 fn 24, 214 **European languages** 123, 155, 157, 163

Finnic 102, 106, 122, 176 fn 3, 214-5 Finnish 9, 11-14, 104-6, 153-69, 213 fn 24 Finno-Ugric 102 French 3-7, 10-11, 29-30, 122, 128, 138, 142, 146, 146 fn 10, 156, 212-3 Modern 11

Gaelic Early 83

Irish 12-13, 77-96 German 8

Alemannic 7, 13, 19-51 Austrian 30 fn 18.66

Bavarian 8, 13, 19-20, 24, 26, 28, 28 fn 16, 29-30, 30 fn 18, 31, 33 fn 21, 34, 43-4, 47-8, 50-1

Belgian 66 Central 66 colloquial 67

dialects 7-9, 19-20, 30-1, 57, 64

Franconian Fast 8 Hessian 21 Central 8

Middle High 28,58 fn 2

Index of Terms

non-standard 8 Italian 3-7, 10, 128-9, 142, 146, 155 Northern 66 Modern 4-5, 11 Southern 13, 19-20, 30-1, 66 Old 4 Southwestern 7 spoken 57 Latin 157 Standard 28.57 Late 4 Substandard 12 Swabian 27 Mari 13, 77-96, 123 East 27, 213 Swiss 28, 31, 43, 66 Polish 176, 176 fn 3 Walliser 8 Walser 8 Romance 9, 12, 28, 45, 49, 49 fn 36, 122, 128, West Central 8 212-4 Germanic 6, 8-10, 21, 45, 49, 49 fn 36, 122, Russian 9, 155, 168-9, 176 fn 3, 179 fn 6, 192 128, 176 fn 3, 184 fn 10, 212-4 fn 18, 214 fn 26, 216, 216 fn 28 Greek Ancient 12 Slavic 14, 175, 176 fn 3, 177 fn 4, 186 fn 13, 214.216 Spanish 12 Hungarian 13, 101-23 Swedish 168-9 Icelandic 60 fn 5 Ugric 102 Indo-European 12, 89, 168 Irish 12-13, 77-96 Ukrainian 12-14 Early 83 fn 8 Uralic 12-13, 101-23, 212-4 Middle 92 Modern 89 fn 13, 92 fn 18, 91-2 Volgaic 102 Old 84, 92, 92 fn 18

The volume collects contributions that were presented at the PARTE workshop in Budapest in September 2022 or at the Partitive Online Talks, with the goal of investigating the universal and varying properties of partitive constructions and partitive elements. Since the expression of partitivity in Romance languages has been studied extensively, in this volume special attention is paid to other European languages, such as Germanic, Gaelic, Finno-Ugric and Slavic languages. With data from microvariation and variation that spans over vast geographical distances and involves various contact situations, this volume brings new insights into what is universal and what is particular in partitive constructions and elements in Europe.

