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MOUTON

*Silvia Luraghi,  
Tuomas Huumo (Eds.)*

# **PARTITIVE CASES AND RELATED CATEGORIES**

**EMPIRICAL APPROACHES  
TO LANGUAGE TYPOLOGY**

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# Partitive Cases and Related Categories

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Silvia Luraghi and Tuomas Huomo

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# **Empirical Approaches to Language Typology**

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### **3 The Partitive Concept versus Linguistic Partitives: From Abstract Concepts to Evidentiality in the Uralic Languages<sup>1</sup>**

Finnic and Sámi (Uralic, Finno-Ugric) languages have a morphological case that is referred to as the partitive. The meaning of the dedicated partitive case, however, diverges from the generally assumed partitive concept of part-whole relationships. Instead, the meaning of the partitives is either bleached, or it has developed to express other categories, such as aspect. Since the partitive also combines with non-finites, further developments have resulted in grammatical markers that are based on the partitive but belong to epistemic modality and evidentiality. As for the part-whole concepts, the Uralic languages tend to express them rather by juxtaposed bare nouns, elatives, or ablatives than by morphological partitives. The article places this mismatch between form and meaning in a wider context of using abstract concepts for comparing grammatical categories across languages. Examining the grammaticalization of TAM categories in Estonian (Finnic) and the partitives among the rich system of Uralic separatives, the analysis employs two terms: the Partitive Concept – a heuristic tool and a basic concept used for comparison – and Linguistic Partitives, dedicated morphological partitive cases and their language-specific further developments. Linguistic Partitives are described via two (or more) concepts. Firstly, they are described via the concepts that they express, such as aspect or evidentiality. Secondly, they are also described in terms of the Partitive Concept. This multiple linking to concepts, the Partitive Concept and for instance TAM concepts, is intended to guarantee that the description of language-specific categories, such as Estonian aspect or evidentiality, reflects the aspectual and evidential nature of these categories as well as the overarching system of partitivity in the Finnic grammatical system. In addition, the Partitive Concept is constructed to serve as a suitable basis for further psycholinguistic testing with the goal of finding out if the abstract concept corresponds to a cognitively motivated linguistic category.

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**Keywords:** source, separative, concepts, grammatical categories, cross-linguistic comparison, Uralic.

## 1 Introduction

Partitive is among the most theory-dependent terms for a case in modern linguistics. This paper targets some of the confusing issues concerning the partitives from the Uralic languages. The main aim is to reduce the uninformed cross-talk between linguists of different traditions and help them see where their coverage of the term “partitive” converges or diverges. What is the uniform conceptual toolkit to tackle the examples discussed under the term “partitive” in (1)?

- (1) a. Russian  
*čaška čaj-u*  
 cup[F.NOM] tea-GEN2  
 ‘a cup of tea’
- b. Hungarian  
*gyerek-e-i-m-ből a leg-fiatal-a-bb*  
 child-LK-PL-POSS.1SG-ELA DEF SUP-young-LK-CMPR  
 ‘the youngest of my children’
- c. Finnish  
*ilman rahaa*  
 without money.PAR  
 ‘without money’
- d. Mari *sõ-i õuna.*  
 M[NOM] eat-PST3s apple.PAR  
 ‘Mary was eating an apple.’
- e. Mari *tule-va-t koju.*  
 M[NOM] come-PERS.PRS.PTCP-PAR home.ILL  
 ‘Allegedly/reportedly, Mary will come home.’

Scholars referring to the category expressed by the Russian *-u* on *čaj-u* in *čaška čaj-u* ‘a cup of tea’ in (1a) may understand why the category expressed by the Hungarian relative *-ből* in the example *gyerekeim-ből a legfiatalabb* ‘the youngest of my children’ (1b) should be referred to as “partitive”, but they will

find it problematic to extend the category to the Finnish partitive *-a* in the complement of *ilman rahaa* 'without money' (1c). Scholars concentrating on the Finnic partitive forms, for instance, the partitives occurring as part of the object (1d) and predicate (1e) in the Estonian, 'Mary was eating an apple' and 'Allegedly/ reportedly, Mary will come home' find it unintuitive to refer to genitives and elatives as "the partitive". The main puzzle is thus how to compare these and many other partitives in relation to each other. The main solutions proposed in this paper follow in (i).

- (i) A distinction between "Linguistic Partitives" and "Partitive Concepts" in describing the partitive phenomena in Uralic is useful for better understanding of the partitive phenomena. Distinguishing the two helps to compare the mismatches between the partitive form and the part-whole meaning across the individual languages.
  - The **Partitive Concept** is an abstract concept that serves for comparing the semantics of grammatical forms to the "part-of-N" (1b) and "amount-of-N" (1a) concepts.
  - The Partitive Concept comprises two metonymically related subconcepts: **the partitive** (N-of-the N, 1b) and **the pseudopartitive** (N-of-N, 1a).
  - A **Linguistic Partitive** is a grammatical form that is conceptually related to the meaning of the Partitive Concept. The partitive cases have developed their specific semantics and pragmatics in each Uralic language where the case appears.
  - The Linguistic Partitive is divided into **functional** (e.g., aspectual, 1d, evidential, 1e) and **structural categories** (e.g., complement case, default case 1c), depending on the semantics of the partitive in the structure of the language at hand.

The term "partitive" is most frequently applied to a type of Indo-European genitive (Koptjevskaja-Tamm 2001: 525). The term typically covers phenomena that are not morphological partitives, but still similar to (1a), the Russian *-u* on *čaj-u* in *čáška čaj-u* 'a cup of tea' or to the Hungarian elative *-ból* in *gyerekeim-ből a legfiatalabb* 'the youngest of my children'. Other aspects of the forms referred to as the partitive have enjoyed considerable attention in theoretical linguistic literature due to the special thematic relationship that the partitive encodes between the predicate and the object as in (1d) (Krifka 1992). Hoeksema (1996) contains several formal and generative papers on the partitive. De Hoop (1996) gives an influential account in terms of quantifiers, and de Hoop (1998) offers an extensive overview of the theoretical approaches to the phenomenon and a thorough bibliography. At the interface between cognition and language,

Jackendoff (1991) relates cognition and theoretical linguistics with the concept of partitivity and parts, and interpretational peculiarities of some partitive phenomena via discourse and pragmatics. In psycholinguistics, Reed (1991) discusses several constraints of the partitive constructions, arguing that these constraints stem from discourse requirements.

Some of these influential typological, theoretical and cognitive accounts mention a lesser known, but nevertheless theoretically and typologically intriguing phenomenon: a dedicated partitive case. The Uralic languages, more specifically, the Finnic and Sámi languages are a whole group of related languages where there is a morphological partitive. This case marks objects, subjects, predicatives, other complements, and even measure adjuncts. It combines with various non-finites (nominalizations) that vary in their degree of finiteness. The combinations of nonfinites and the partitive case formant are either transparent or opaque, and are combined productively or have completely grammaticalized as intersubjective markers. Especially several recently analyzed Estonian partitive case phenomena are an interesting object of study between form, meaning, cognition, and communication in general. Modern Estonian has a wide range of further developments of the partitive, covering distinct *functional* categories such as aspect or evidentiality. The partitive evidential is an intersubjective marker the understanding of which requires a Theory of Mind. The partitive has also developed a wide variety of desemanticized uses and is a *structural* case because it behaves as a formal, semantically opaque complement case.

There are many questions this contribution wishes to address. What is the relationship between the idea we have about partitivity and the various occurrences of a dedicated partitive form? How are these occurrences related? How does the partitive distinguish itself from other similar cases, such as the accusative, or the source cases? Is there a uniform partitive concept that can be taken as a reference point for comparisons? How should we map the partitive meanings to the partitive forms across languages? What is the function of the partitive in communication? A wider perspective on partitive and partitive-like concepts in the Uralic languages provides valuable material for further studies into the relationship between language, communication, and the cognition of concepts. Up until now, the description has been fragmented for the specific purposes of particular studies. This article wishes to give a representative overview of the properties of the morphological partitives and related cases in the Uralic languages.

The partitive is by now a well-studied grammatical phenomenon in Uralic linguistics. It has been discussed in grammar books of Finnic languages and general collections on Uralic languages such as Abondolo (1998), or particular descriptive or diachronic studies on the partitive case in Finnic, such as Tveite

(2004) on Livonian, Ritter (1989) on Veps, or Denison (1957) on Finnish. There are informative works on the semantic or syntactic conditions of the partitive case in Finnic languages, such as aspect, indefiniteness, or grammatical relations (e.g., Heinämäki 1984, Rajandi and Metslang 1979, Metslang 2001, 1994, Hiietam 2003). In-depth studies on the partitive across the Finnic languages include parallel text-based quantified comparisons (Lees 2005) and diachronic investigations (Larsson 1983). Some questionnaire-based targeted typological research on Uralic languages includes the topic of the partitive, as the edited volume on negation (Miestamo et al. *forthc.*). More theory-oriented and less data oriented approaches are almost exclusively on Finnish: cognitive (e.g. Huumo 2009), formal (Kiparsky 1998), generative (Brattico 2011, Vainikka and Maling 1996), or Optimality Theoretic (Kiparsky 2001, Anttila and Fong 2000). Several phenomena where the Estonian partitive is central are discussed from typological, cognitive and comparative generative and lexical viewpoint in the research of Tamm (e.g., Tamm 1999, 2012c). Master's theses or articles and monographs based on doctoral dissertations discuss the partitive in Estonian (e.g., Tauli 1968, 1980, Nemvalts 2000, Vaiss 2004, Metslang 2007). This volume also contains analyses of the Estonian partitive phenomenon, mainly, the subjects, in a typological framework (Metslang, this volume, Huumo and Lindström, this volume).

The current understanding in typology, most recently argued for in Haspelmath (2010) is that one cannot do comparative and language-specific analyses simultaneously by using cross-linguistic categories. Instead, comparative linguists should try to reach an agreement on concepts that can serve as comparison. As opposed to previous approaches, my article wishes to improve the current understanding of this issue by comparing the partitive concepts and various uses of separative (source) cases with a dedicated partitive form. The expression of the partitive concept in Uralic separatives or source cases will be compared to the concepts and functions expressed by the Finnic partitives. Most of the examples are taken from a language that has the highest type and token frequency of morphologically encoded partitive phenomena in spoken as well as written registers – Estonian. Any theoretical bias is deliberately avoided in order to be “legible” for linguists across frameworks. A classical generative and typological mapping or linking problem is central in this paper. Methods from several frameworks are applied in order to reach a better understanding of the partitive. Hopefully, this wall-to-wall linguistic approach contributes more to the interdisciplinary study of the phenomenon than a strictly specialized analysis, carried out within the confines of a single theory and methodology.

More specifically, this paper first applies the method that is typical for typologists, establishing the correspondences from a concept to forms. Then it addresses

the data with descriptive linguists' methods, linking forms to meaning and use and, finally, makes use of pragmatics and cognitive semantics to explain the current polyfunctionality, cross-linguistic variation, and diachronic aspects of the partitive phenomena. Section 2 introduces the conceptual coverage of the Partitive Concept and points at data that are not covered by the Partitive Concept. Section 3 classifies the partitive forms that do not always match the Partitive Concept under Linguistic Partitives and introduces the term Linguistic Partitive in more detail. Section 4 shows that the Uralic languages are a suitable test-bed for studying various kinds of the partitive, with the Finnic, Skolt and Inari Sámi languages, which all have a dedicated partitive case, and that have both functional and structural instances of the partitive. The section also describes the empirical data and discusses some of the cases that express the Partitive Concept in the Uralic languages. Section 5 concentrates on the structure and the conceptual content of one instance of the linguistic partitive: the Estonian partitive evidential. The conclusion can be found in Section 6.

## 2 The conceptual coverage of the Partitive Concept

The discussion of this section is about a general conceptual notion of the partitive. It also makes reference to language-specific conceptualizations and the desemanticized instances of the partitive to emphasize the distinction.

### 2.1 Comparative concepts and psychologically real concepts

The labeling of the categories and the problem of language-specific versus more universal heuristic concepts has been subject of debates and research in typology, recently taken up in a number of articles by Haspelmath (2007, 2010) and works cited in these two sources. The discussion of the Uralic partitives will relate to the current debate on comparative concepts versus descriptive categories, as there is a discrepancy between the forms and meanings across the various Uralic languages. This paper envisages the Partitive Concept as a sort of comparative concept, distinguished from other comparative concepts in that a cognitive basis is also intended to be part of the concept (following Jackendoff 1991). The Linguistic Partitives of languages and language groups are diachronic descriptive categories, in the sense that they form a diachronically motivated partitive

category in each of the languages. Synchronically, the Linguistic Partitives express a number of other concepts such as complementhood, subjecthood, objecthood, aspect, epistemic modality, indefiniteness, or evidentiality.

I aim at constructing a cognitively plausible concept for comparison, whereas typologists face the problem of the comparability of languages via artificial or language-specific concepts. Haspelmath (2010) argues that descriptive categories and comparative concepts should be distinguished. More specifically, descriptive categories are the categories of particular languages, and comparative concepts are constructed for cross-linguistic comparison. The latter are created for the purpose of comparison, since the criteria for category-assignment are different from language to language, and so descriptive categories cannot be equated across languages. Linguists compare languages and need a toolkit for describing the correspondences, which is why they identify some cross-linguistic categories. The status of the latter is also a matter of debate. Many typologists do not support the idea of cross-linguistic formal categories. Newmeyer (2007: 133) criticizes typology, pointing out the contradiction between rejecting the idea of cross-linguistic formal grammatical categories, and the policy of utilizing cross-linguistic formal categories, which is opted for in many entries of *World Atlas of Language Structures* (WALS, Haspelmath et al. 2005), despite the position of two of the editors that such categories do not exist (Newmeyer 2007: 138). Haspelmath (2007, 2010) argues that the categories used in the WALS are rather comparative concepts, not cross-linguistic formal concepts. Haspelmath suggests that since semantic analysis provides a method for determining meaning, it can be used for making categories of languages comparable, even on a large scale.

What are comparative concepts in typology according to Haspelmath? Comparative concepts are concepts created by comparative linguists, for the specific purpose of cross-linguistic comparison. Comparative concepts are designed to be universally applicable, and they are defined on the basis of other universally applicable concepts: universal meanings and universal formal notions, or on the basis of other comparative concepts. Comparative concepts are more or less suited for the task of permitting cross-linguistic comparison; each comparative linguist can make their own comparative concepts. Comparative concepts are heuristics that help to identify comparable phenomena across languages and to formulate cross-linguistic generalizations. Comparative concepts have to be universally applicable in typology. Language typology is made possible because of comparative concepts that serve as *tertium comparationis*, as argued for by Haspelmath (2010).

The Partitive Concept is also a concept created for comparison, and it is linked to several language-specific categories. The different levels of semantics

are seen as follows: the Partitive Concept is a comparative concept, an abstraction and a standard of comparison, and thus a heuristic tool. Language-specific categories expressed by morphological partitives are called Linguistic Partitives. Linguistic Partitives are described along two (or more) comparative concepts. Firstly, Linguistic Partitives are described via other concepts, such as subject, object, complement, evidentiality, aspect, genericity, or definiteness. Secondly, Linguistic Partitives are also described in terms of the Partitive Concept. This multiple linking to concepts, the Partitive Concept and other concepts, is intended to guarantee that the description of the particularly Finnic categories such as Finnish objects, Votic aspect, or Estonian evidentiality is linked to objecthood, aspect, and evidentiality across languages and also to the overarching system of partitivity in the Finnic grammatical system. The semantic features of the Finnic objects, aspect, and evidentiality are related to the comparative concept either directly or indirectly, by multiple metonymical or metaphorical extensions. In addition, there are instances where the conceptual content has disappeared altogether (it has bleached), and the partitive encodes a syntactic function of a complement or functions as a default.

However, it should be emphasized that there is a difference between the Partitive Concept and a comparative concept. The partitive concept that I construct for comparative purposes is constructed in a way that it could serve as a hypothesis for cognitive testing. Comparative concepts are like measuring units – arbitrary, but indispensable units for comparing objects of study. As opposed to comparative concepts that are created by comparative linguists for the purpose of formulating readily testable cross-linguistic generalizations, the Partitive Concept is created in order to be able to test at a later stage whether the concept is also psychologically existent. While comparative concepts are like liters, meters or kilograms, the Partitive Concept could be understood more like items in the analog magnitude system (Carey 2009). This means that independently of language, there is a partitive relation that is perceived differently from other relations, for instance, a possessive relation. Linguists can construct nonlinguistic stimuli (pictures, videos, artificial social situations) and observe speakers' reaction in a systematic way. The present paper has the aim of creating a suitable concept for further investigations into the cognitive properties of quantificational and spatial-separative linguistic concepts such as the partitive. One of the most intriguing questions in modern cognitive science concerns how the human prelinguistic perceptual concepts are related to linguistic and language-specific, more refined concepts (Carey 2009). A basic concept that has multiple uses with highly varying domains of application in natural language – from spatial to intersubjective – is a promising area for discovery in cognitive science as well.

## 2.1 The labeling problem of some instances of the partitive in synchronic linguistics

It would be perfectly justified to refer to the case that is referred to as "the partitive" in the Estonian grammar rather as "the accusative". After all, it is the case that marks most of the objects in Estonian transitive clauses, as in (2).

(2) Estonian

*Mari armasta-b Jaanus-t.*

M[NOM] love-3SG J-PAR

'Mary loves John.'

Only because of the awareness of the historical origin of this case morpheme, which typically but not always ends in *-t*, one of the object cases, "the accusatives", is referred to as "the partitive" and not as "the accusative number 1". The Estonian partitive is thus a kind of accusative in its function of being the predominant object case. The peculiarity of the Estonian object case system is that there are two object cases, the total and the partitive. The object case alternation has been linked to various semantic and pragmatic distinctions, predominantly to the aspectual ones in the linguistic literature since the link between the Finnish partitive and the Russian imperfective was established (Dahl and Karlsson 1975). The total and the partitive are semantic as well as structural-grammatical cases (cf. Kiparsky 1998). Since historical records are available, the more frequent object case is not referred to as the accusative but as the partitive.

Linguists can agree or disagree about labeling one of the many structural or semantic relationships in language structure as "the partitive". The term Partitive Concept is no less a matter of convention. The example in (2) has little to do with anything related to parts. The object *John* is marked with the partitive case, but the sentence does not express that Mary loves only some concrete or abstract part of John, e.g. his eyes or his good manners, as opposed to someone else, whom she would love in total, regardless of his parts. In order to keep apart the diachronic motivation behind the changes that have led to the current polyfunctionality in the synchronic situation, it is useful to make a distinction between the assumed original semantics of the formative that is now referred to as the partitive and its later developments. The example in (2) is thus not an instance of the core meaning, the Partitive Concept, but an instance of a typical Linguistic Partitive in the Finnic languages.

- (ii) A typical Linguistic Partitive (the morphological partitive case) in the Finnic languages covers a wider spectrum of meanings and functions than the Partitive Concept.

What is the core partitive meaning, then, and is it possible to establish it on the basis of the variety that is covered by the morpheme called “the partitive”? Do we need one more grammatical term, a new label; why cannot we just have the labels Accusative 1 and Accusative 2 for Finnic object cases, as in some freshly described languages with no written historical records and grammaticographic traditions? The rationale behind finding a suitable label for a phenomenon is the existence of a grammatically encoded distinction or an expression in a language, preferably in many languages. Ideally, the distinction – the concept or relationship – would make an impression of being basic, real, and clear-cut.

The Partitive Concept can be understood as the term that stands for the most primitive or elementary concept of the partitive. The core meaning is relational. More specifically, it belongs to spatial relationships and identity conditions.

- (iii) In terms of spatial relationships, the Partitive Concept instantiates a **separative relationship** of an individual or matter to another individual or matter.
- (iv) In terms of identity, the partitive instantiates **the same kind identity** (not difference or similarity).

The Partitive Concept stands for separation from identical matter. The following passages will go through some instances that are typical or possible with the European genitive-based partitives, but not typical or possible with the Uralic ones.

There is an illustrative example from Estonian culture that suits the explanation of the partitive concept. The figure indicated on a website under example (3) is the most famous and highly ambiguous political cartoon in the Estonian art history. It nicely illustrates the essence of the partitive relationship. It has a cognitive linguistic *pointe* based on the visual image and the partitive concept in the nominal phrase *Sitta kah*. One reading of *Sitta kah* ‘Some manure, too’ (3a) corresponds to a literal Partitive Concept, and the other reading is idiomatic, a colloquial pragmatic phrase ‘I don’t give a shit/damn. / Who cares’ (3b).<sup>2</sup>

<sup>2</sup> There are several other political interpretations that I do not discuss here, related to the protest movement referred to as the Phosphorite War in spring 1987. Also, the cartoon marks a tipping point in history, see the details in Lõhmus (2004). The more prevailing English title of the cartoon deviates from the translation in order to convey the spirit of the anti-Soviet sentiments in Estonia more adequately to the outside world: “Just shit”. Estonians wanted the outsiders to know that they were treated by the Soviets as “just shit”.

### (3) *Sitta*

- manure, too
- a. ‘Let us have some manure, too!’
- b. ‘I don’t give a shit/damn.’
- c. ‘Just shit!’

The Partitive Concept... the field’ (Päim 1987) [wikipedia.org/wiki/File:Sitta\\_kah.jpg](http://wikipedia.org/wiki/File:Sitta_kah.jpg)

I provide now some background of Soviet “writing between the lines”. This cartoon part of a whole as identified the partitive noun phrase from the heap of manure one bigger lump of manure message exactly as any man have. The political cartoon nation and much before Reagan’s speech in Berlin June 1987. So it was crucial the viewer, patterned different of the related visual associations images of art depicting human interpreted as applauding Peasant Class, in his effort is an impeccable picture *sitta kah* in Google Translation is what the censor or a non-intellectual peasant working starving people.

However what is written nominal partitive case separated mass is of the same cart.<sup>3</sup> The shape of the manure Estonia. The message between

<sup>3</sup> For some, the horse lacks one wrong direction, and for others, to assume responsibility for any

- (3) *Sitta kah...*  
 manure.PAR too  
 a. '(Let us take/throw some) manure (to the field), too.'  
 b. 'I don't give a shit/damn. / Who cares.'  
 c. 'Just shit.' (The English title for outsiders, which can be googled.)

The Partitive Concept, as in: 'throw (some of the) manure from the cart onto the field' (Pärn 1987: 16) can be viewed on the Wikipedia page at: [http://en.wikipedia.org/wiki/File:Priit\\_P%C3%A4rn\\_Sitta\\_kah.jpg](http://en.wikipedia.org/wiki/File:Priit_P%C3%A4rn_Sitta_kah.jpg) (9 November 2012).

I provide now some background knowledge to explain why this typical instance of Soviet "writing between the lines" has found its way to a book on the partitives. This cartoon plays with the perception of the viewer in categorizing the parts of a whole as identical or different, and the interpretational ambiguity in the partitive noun phrase. First of all, please look at the lumps that are taken from the heap of manure on the cart and thrown onto the field. If you see one bigger lump of manure and two smaller lumps, then you get the explicit message exactly as any innocent Soviet citizen at the end of the eighties would have. The political cartoon was published in May 1987 in the time of deep stagnation and much before the Berlin wall came down in 1989, and even before Reagan's speech in Berlin ("Mr Gorbachov, tear down this wall") took place in June 1987. So it was crucial to create an image that, after falling on the retina of the viewer, patterned differently for the two opposite ideological camps because of the related visual associations. For those whose memory was imprinted with images of art depicting humans and animals at work, the image could have been interpreted as applauding a weary but heroic collective farm worker of the Peasant Class, in his efforts to fertilize the field in the face of adversity. Thus, it is an impeccable picture for the Party leadership and its censorship (if you write *sitta kah* in Google Translate, it would give you an innocent 'of shit, too'). This is what the censor or a random Soviet citizen would get: the picture of an un-intellectual peasant working hard, suitable to boost the waning morale of the starving people.

However what is written and drawn between the lines? On the basis of the nominal partitive case marking of the text ("some of the manure, too"), the separated mass is of the same kind with the rest of the manure mass on the cart.<sup>3</sup> The shape of the manure that is thrown out corresponds to the contours of Estonia. The message between the lines is readable only by those who recognize

<sup>3</sup> For some, the horse lacks one eye and, therefore, pulls the rickety carriage of the party to a wrong direction, and for others, the peasant looks obviously dumb, uninspired and unelegant to assume responsibility for any progress.

the difference in the identity between the mass on the cart and the separated object that is thrown on the field. The separated object is clearly Estonia. In the eyes of the more informed beholder there is the violation of the identity condition of the partitive, which causes the exclusion of the reading (3a) '(Let us take) some manure (to the field), too.' For the separation of objects belonging to different kinds, a native speaker of Estonian would use the elative instead of the partitive. Instead of "take *some of* the manure" – something of the same kind, partitive case – the action is interpreted as "take *something from* the manure" – something of a different kind. Therefore, the literal meaning is not the default one for those who recognize the shape. Only the idiomatic reading of the colloquial *Sitta kah* "I don't give a shit / Who cares" and not "some manure, too" is activated for those who see the contours of Estonia instead of the three blots of manure. In the context of several countries seeking independence of the Soviet Union, the disgraceful heap of manure transforms into the Soviet Union. The half-blind horse pulling a half-wheeled cart turns into the senseless state machinery, and the unelegant and uninspired peasant becomes the mindless party leadership. The field is the free world. The message between the lines is the wishful thinking of those who would soon be tearing down the wall in Berlin, coaxing the mindless leaders: "just throw some of this manure out, anyway, this cart is too heavy, take this lump from the manure for instance, *who cares (sitta kah)*, throw it well, far onto the field, please!"

The moral of the story is that the elative separative is less specific about the identity of the object or matter that is separated, since the identity of it can be different; the partitive separative requires identity between the parts and wholes. Note that the picture emphasizes motion or dynamicity. An entity that is perceived as having a clear identity (manure) of its own is divided in two in the course of movement. It is the question what is the kind of the two newly created objects is, that is, how the two parts are categorized: *manure + manure* or *manure + something of a different kind*. The two separated parts are transformed into new objects. The two entities differ in shape and size from each other and from the original entity.<sup>4</sup> In many other respects, however, the two new entities belong to the same kind. The parts share all other properties, such as color, texture, smell, and most plausibly, function related to human use (something to drink, something to eat, something to feed animals with, something to make clothes of, something to fertilize the fields with) and so forth.

In static relationships, parts of matter with identical properties cannot be perceived easily; in order to be perceivable, the part should be somewhat different from the whole. In order to be perceived as a part, the entity must be focused

<sup>4</sup> In some cases, they may differ in number (as in an instance of strawberries in strawberry-picking).

on or highly salient in its essential and perceivable properties. Focusing is controversial, because the focused part would be categorized away as something of a different kind located inside or on top, or in the close vicinity. Therefore, if the identity of the parts and the whole is the same, then the salience of the parts has to be created in one or another way, since the image of the part as such has to be perceived as a part belonging to the same kind. Note again how the picture emphasizes the dynamicity of the separation of the part. It is problematic to envisage proper partitive relationships without motion. In the course of actions of removing, some of the matter of the same kind becomes a part without other salient features interfering with the categorization of the part.

Possibly, separation of some matter from matter of the same kind is a concept that humans (and possibly, animals) can form a category of. Moreover, it is likely that it can be expressed by all human languages. These plausible hypotheses remain to be tested. The core semantics of the Partitive Concept is “part of N that can be referred to as N”. As a matter of regular polysemy – metonymy – the referent of a part can become analyzed as a whole, and the partitive semantics corresponds to “amount-of-N”, referring to a part or quantity out of a group or amount of substance.

- (v) a. “separable part of N that belongs to the same kind with N” (4a) →  
b. → “amount of N” (metonymic extension of v-a) (4c)

Whereas the core partitive meaning, as in (v-a), “part-of-N” is relational, the basic extension of this meaning, (v-b), “amount-of-N” is not. In the Hungarian sentence (4-a), the youngest of my children is in a relation to other individuals referred to as my children, while in the Hungarian sentence (4b) (“a glass of wine”), the wine does not necessarily belong to any larger amount of wine, it is just an amount. I set the partitive forms of the forms carrying the partitive meaning boldface in this paper. Sentence (4a) illustrates (v-a), part-of-N, and sentence (4c) illustrates the meaning (v-b).<sup>5</sup>

5 The reading in (v-a) corresponds to real partitives and the reading (v-b) to pseudopartitives in the typological literature, as in Koptjevskaja-Tamm (2001). Pseudopartitives are generally taken to refer to an amount or quantity of some (indefinite) substance (e.g., *a cup of tea*, *a package of butter*, *a box of chocolates*). Real partitives refer to a part/subset of a (definite) superset (e.g., *a hot cup of this green tea*, *a large package of this Danish butter*, *a small box of these chocolates*). Languages differ in terms of how they encode real partitives and pseudopartitives. Koptjevskaja Tamm (2001) establishes that there is considerable variation between languages in the grammatical marking of the substance-denoting expression in partitive and pseudopartitive constructions, ranging from case inflections to prepositions to zero marking, denoting typically conventionalized measures (*a litre of x*), fractions (*a slice of x*), quanta (*a lump of x*), collections (*a group of x*), or forms (*a pile of x*).

## (4) Hungarian

- a. *gyerek-e-i-m-ből*      *a leg-fiatal-a-bb*  
 child-LK-PL-POSS.1SG-ELA DEF SUP-young-LK-CMPR  
 'the youngest of my children'
- b. *az egyik belől-ük*  
 DEF one[NOM] ELA-3PL  
 'one of them'
- c. *egy pohár bor*  
 INDF glass[NOM] wine[NOM]  
 'a glass of wine'

Examples (4a) and (4b) illustrate the core meaning of the Hungarian Partitive Concept: the youngest of my children, one of them. The construction with the relative represents the core meaning, because it refers to an individual, "one child of mine", namely, the youngest, or "one of them", that has the same identity with other members of the set where it belongs to (the set "my children"). It is not an "amount-of partitive": I cannot refer to my child as the youngest of my children or as one of my children if I do not have more children than one or two.<sup>6</sup> All of my children form a whole, and the youngest one is separated from them in conversation as part of this whole.

The relationships between parts and wholes are different with the wine in the glass and wine. The wine in the glass can exist without any more wine in a bottle, a cask or a barrel. The wine as expressed in the bare nominal construction is not necessarily a proper part of another amount of wine, that is, anything else of the same identity. It is an "amount-of partitive", because the wine in the glass can exist without being in relation to any other amount of wine, that is, without the existence of anything else of the same kind. The partitive noun rather refers to a kind.

### 3 The conceptual coverage of a Linguistic Partitive

If the Partitive Concept is a heuristic tool to get a grip on the ways a specific meaning content can be expressed in a wide variety of languages, then what is the term Linguistic Partitive good for? In the Estonian example (3), *Sitta kah*

<sup>6</sup> Perhaps the infelicity is evoked by a scalar implicature. If you have one child, it is the youngest and the oldest child, but it is not felicitous to evoke a comparison when there is none, and the superlative is infelicitous if there are no more than two children.

'some manure, too,' there is a straightforward link between the morphological partitive and the Partitive Concept. The morphological partitive matches the definition in (v-a), encoding the concept of "separable part of N that belongs to the same kind with N". The morphological partitive in (1d), *Mari sô-i ôuna* M [NOM] eat-PST3SG apple.PAR 'Mary was eating an apple' matches the definition in (v-b), encoding the concept "amount of N", which is a metonymic extension of (v-a). These examples are not sufficient to argue for the necessity of extra items in the conceptual toolkit of describing and comparing partitives. Theoretically, a new term is justified only if (a) there are instances that clearly show a mismatch between partitive forms and the Partitive Concept or (b) that demonstrate the synchronically arbitrary relationship between morphological partitives and the Partitive Concept. A working definition about the Linguistic Partitive is worded in (vi) to proceed with clear examples as well as borderline cases.

- (vi) A Linguistic Partitive is a form that is derived from a special subtype of separative (source argument) form.

On the basis of numeral and adpositional complement systems I will argue that there are instances where the link between the partitive form and concept is not consistently realized in the grammatical system, and that there are instances that clearly display a mismatch between partitive forms and the concept.

The link between the partitive form and concept is not consistently realized in the grammatical system of Inari Sámi. The Inari Sámi example of the partitive on 'river' in 'eight rivers' appears with numerals higher than 7, as in (5).

- (5) Inari Sámi  
*Mun uáinám käävci juuhâd.*  
 1SG.NOM see.1SG eight river.PAR  
 (Toivonen 2003: 66)

In example (5), it is not clear if the link to the Conceptual Partitive is direct or the partitive is lexical-constructional. Synchronically, the system case-marking in numeral complements is opaque. The Partitive Concepts in the numeral phrases represent the amount partitive concept: numerals and their complements are partitive concepts in any language. However, only in numbers higher than seven, the Partitive Concept is expressed by a Linguistic Partitive in this language, which indicates the lack of consistent cognitive link between the amount-partitive concept and number complement marking. More specifically, lower numbers do not require the morphological partitive, and the non-partitive cases do not instantiate a link between Conceptual and Linguistic Partitives. The partitive in higher numbers displays a match between Conceptual and Linguistic Partitives, eight

of the rivers (the core meaning), or an amount of rivers, eight of the kind 'river'. However, the partitive in this construction is not a matter of regular meaning extension; the distinction between the lower and higher numbers is not cognitively motivated. Instead, it is a matter of convention.<sup>7</sup> In 'six rivers' there is no partitive on 'river', although there is no known perceptually, conceptually, or psycholinguistically significant distinction between more or less than seven rivers that would motivate the difference in case encoding. A difference in encoding would be plausibly motivated if it occurred between one and more, two or more, or three or more. In sum, although all complements of the Inari Sámi numerals are instances of Partitive Concepts, because they match the amount partitive concept, only the 7+ ones are also Linguistic Partitives, because they are instantiated by a formative that corresponds to the historically motivated Partitive Concept. The fact that the divergence in the system of numeral complements is cognitively not motivated shows that the partitive assignment is arbitrary, that is, lexically and not cognitively determined.

The correspondence may be conceptually motivated, meaning that the use can be conceptually linked to the Partitive Concept, but the relationship with the Partitive Concept can be opaque as well. The morphological partitive semantics is opaque in (5), since the Partitive Concept does not unambiguously determine the morphological partitive case encoding in the construction. The partitive marking in (5) is restricted more by convention than by semantics, even if the semantics of the Partitive Concept is present. Therefore, the term Linguistic Partitive is useful to distinguish between Partitive Concepts that are only partly realized by morphological partitives.

Are there any Linguistic Partitives that do not match Partitive Concepts at all? The example above is both Partitive Concept and Linguistic Partitive. Now I turn to instances that clearly display a mismatch between partitive forms and the concept and therefore justify the inclusion of a separate Linguistic Partitive heuristic in the conceptual toolkit of talking about partitives. Many Finnic partitives that mark structural relationships such as complementhood are an instance of Linguistic Partitives that are not Partitive Concepts and, synchronically, they can be considered instances of the *structural* or default partitive. The noun *jōgi* 'river' is marked with the same morphological partitive (the partitive form is *jōge*) if it is the complement of the numeral 'two' and the verb 'look at' in examples (6a) and (6b), as well as if it is the complement of a preposition or a postposition in examples (6c) and (6d).

7 See also Nelson (2003) for a comparison between the partitive use of Inari Sámi and Finnish. This convention of numbers does not have a conceptual but rather arbitrary basis, perhaps best to be compared to the arbitrary relation between the number concept of forty and the Russian word for 40 (*sorok*). This simplex lexeme for the number originates from fur trade – forty furs were a unit necessary for sewing a coat (Shanskiy and Bobrova 1994).

## (6) Estonian

a. *kaks jõe*

two[NOM] river.PAR

'two rivers'

b. *vaata-n jõe*

look-1SG river.PAR

'I am looking at the river.'

c. *mööda jõe*

along river.PAR

'along the river (prepositional phrase)'

d. *jõe mööda*

river.PAR along

'along the river (postpositional phrase)'

The complement of the numeral 'two' is marked with the partitive in example (6a) and it is a Conceptual and a Linguistic Partitive. In the complement of the verb 'look at' in example (6b), the link with the Partitive Concept is semantically motivated via the amount-of partitive but not as obviously as in the case of the complement of the numeral quantifier. The amount pertains to the unbounded looking-at event and not to parts of the river, as on a map. As the complement of a preposition or a postposition in examples (6c) and (6d), the partitive noun is not an instance of a Partitive Concept, but an instance of a Linguistic Partitive that has evolved into a general grammatical complement marker.<sup>8</sup>

<sup>8</sup> Previous formal linguistics literature contains many good examples of morphological partitives without clear semantic content or function. Vainikka and Maling (1995) analyze the partitive as a structural relationship, the default complement case of complements in Finnish. Kratzer (2004) also 'de-semanticizes' the Finnish partitive in the sense of regarding it as a default. The use of the partitive in these examples bears striking resemblance to the bare nominal use of Hungarian nouns; namely, bare uninflected nouns are used in Hungarian in the same environment. Hungarian has otherwise cases such as the accusative and the dative that could hypothetically be "recruited" as default complement cases. The dependents of the numeral heads and postpositions are bare uninflected nouns in Hungarian. In addition, the predicative use of Hungarian bare and plural nouns and the predicative use of the Estonian partitive (Tamm 2008a), as well and the pseudo-semantically incorporated Hungarian bare nouns and a subset of Estonian abstract or deadjectival partitive objects and subjects (Tamm 2014) are also an interesting parallel to explore in the light of an indefiniteness account, such as Luraghi and Kittilä (this volume).

- (vii) Linguistic Partitives are forms that have evolved in the course of language change from a morpheme or a construction in a language that stands for a Partitive Concept (as defined in (v)). They may but do not have to correspond to the Partitive Concept in one of their synchronic uses. Their relation to the Conceptual Partitive can be transparent, partly or wholly opaque in the grammatical system of a language.

The Linguistic Partitives may have bleached meaning; they have diverse semantics and syntax but are "kept together" as a category by their morphological form. An illustration of a highly diverse semantics couched under an identical formative is exemplified by an instance of a partitive expressing part-whole quantity, definiteness, boundedness, aspectual, epistemic modal, irrealis, and evidential meanings.

In the following, I illustrate briefly two paths of grammaticalization of the Estonian Linguistic Partitive as a functional and structural category in (vii) and (viii), respectively.

- (vii) The emergence of functional partitives, the TAM categories
- a. "part of N" →
  - b. → "part of V" (N-obj has the morphological partitive marking)
  - c. → (N-object is a non-finite, deverbal nominalization and partitive marked)
  - d. → "indirect evidence" (V-nonfin (main predicate) has the morphological partitive formative)
  - e. → "part of/incomplete evidence" (V-nonfin (main or embedded predicate) has the morphological partitive formative)
  - f. → "part of/incomplete evidence for the completion/completability of the event" (partitive object case)
- (viii) The emergence of default (structural) partitives, complement marking
- a. "part of N" (the morphological partitive marking has disappeared) →
  - b. → "amount of N" (has the morphological partitive marking)
  - c. → "amount of V" (N has the morphological partitive marking)
  - d. → "N-obj" (N has the morphological partitive marking)
  - e. → Adposition "N-obj" (N has the morphological partitive marking)

The path in (vii) sketches the emergence of epistemic modals, evidentiality, and epistemic modal object case alternation. More discussion of the examples will follow in Sections 4 and 5.

(vii)' The emergence of functional partitives, the TAM categories

(vii) a.' "part of N, incomplete N" →

The original part-of-N meaning (vii-a) is expressed by the elative in Estonian (7), and it can be a marginal meaning of the partitive in consumption verbs. I signal this fact by means of a question mark in front of the partitive form, and a separative without any indication of ill-formedness in grammaticality judgments. This basic meaning gives rise to part-of-V meaning in (vii-b), which is the main interpretation of the partitive in example (7).

(7) Estonian

*Mari sõ-i ?õuna / õuna-st.*

M[NOM] eat-PST.3SG apple.PAR apple-ELA

'Mary ate some quantity of the apple.' (bounded event, (non)quantized apple)

(vii) b.' → "part of V, incomplete V" (N-obj has the morphological partitive marking).

The original part-of-N meaning (vii-a) gives rise to part-of-V meaning in (vii-b) via metonymy. More specifically, a nominal quantization meaning, as in *Mary ate a part of apple* becomes an event quantization meaning, as in *Mary is halfway eating the apple*. This is the extension of the nominal meaning to the aspectual meaning of the partitive (7), (8a), and (8b).<sup>9</sup>

The partitive of negation falls under this development, since the incompleteness of the event coincides conceptually with the negated event (8c). Incompleteness or insufficiency compared to a predicate-related norm is a possible explanation for the theme-subject partitives as well, in positive or negative, as in (8d). These examples overlap with the partitive types in (viii-b), (viii-c), and (viii-d) and are presented here without repeating them under (viii).

(8) Estonian

a. *Mari sõ-i õuna.*

M[NOM] eat-PST.3SG apple.PAR

'Mary was eating an apple.' (unbounded event, quantized or nonquantized apple)

<sup>9</sup> Historical overview can be found in two sources concentrating on Finnic, Larjavaara (1991) on the development of an aspectual object and Campbell (1991) and Ikola (1953) on the development of the partitive evidential.

- b. *Mari kuul-is lindu.*  
 M[NOM] hear-PST.3SG bird.PAR  
 'Mary heard a bird.' (unbounded event, quantized bird)
- c. *Mari ei söö-nud õuna ära.*  
 M[NOM] NEG eat-CNG.PST apple.PAR TELIC  
 'Mary was not eating an apple.'  
 'Mary did not eat an apple (up).'  
 (unbounded, telic or atelic, quantized or nonquantized apple)
- d. *Mari-l on / ei ole õunu.*  
 M[NOM] be.3SG NEG eat-CNG apple.PAR.PL  
 'Mary has/ does not have apples.'

In instances that underly the diachronic development to evidential and epistemic modal partitives, the aspectual partitive object of verbs of perception and mental verbs has a deverbal modifier (as in *I heard a sing+ing bird*), which agrees in case with the head noun of the object (9). Thus it has a partitive encoding.

- (9) *Mari kuul-is lindu laul-va-t.*  
 M[NOM] hear-PST.3SG bird.PAR sing-PERS.PRS.PTCP-PAR  
 'Mary heard a singing bird.'

- (vii) c.' → N-object is a non-finite, deverbal nominalization and partitive marked

When a deverbal modifier of the object was reanalyzed as a predicate on its own, the partitive did not disappear but started to be interpreted as a modal marker, a kind of subjunctive or conjunctive in instances like (10).

- (10) *Mari kuul-is, et lind laul-va-t.*  
 M[NOM] hear-PST.3SG that bird[NOM] sing-PERS.PRS.PTCP-PAR  
 'Mary heard that the bird was singing.'

- (vii) d.' → "indirect evidence"  
 (V-nonfin (main predicate) has the morphological partitive formative)

As the complement of saying verbs, the meaning of the subjunctive-conjunctive marking is associated with the matrix saying verb, as in (11).

- (11) *Mari üt-le-s, et lind laul-va-t.*  
 M[NOM] say-PST.3SG that bird[NOM] sing-PERS.PRS.PTCP-PAR  
 'Mary said that the bird was singing.'

As the complement of saying verbs, the matrix saying verb was dropped in the construction, giving rise to the indirect evidential, which still preserved the formative of the partitive, as in (12).

- (12) *(Mari üt-le-s, et) lind laul-va-t.*  
 M[NOM] say-PST.3SG that bird[NOM] sing-PERS.PRS.PTCP-PAR  
 '(Mary said that) the bird was singing.'

- (vii) e.' → "part of/incomplete evidence"  
 (V-nonfin (main or embedded predicate) has the morphological partitive formative)

However, in communication the hearer infers that indirect evidence is incomplete evidence, because it is not taken for granted by the speaker. Therefore, the partitive evidential has a double function: to encode the multiple speaker-hearer relationships and epistemic modality, indirect and incomplete evidence in (13).

- (13) *Lind laul-va-t.*  
 bird[NOM] sing-PERS.PRS.PTCP-PAR  
 'Allegedly, the bird is singing.'

- (vii) f.' → "part of/incomplete evidence for the completion/completability of the event" (partitive object case)

The epistemic modal meaning of the partitive objects is also reinforced. The strengthened meaning is understood as incomplete *evidence* about the completion or completability of an event instead of incomplete *event* in a number of achievement verbs, as in (14).

- (14) *Silvi üllata-s Toomas-t.*  
 S[NOM] surprise-PST.3SG T-PAR  
 'Silvia surprised Thomas.'

The examples illustrating the sketch can be found in the following subsections in the context of other examples, phenomena, and languages.

The path in (viii) sketches the emergence of the "default partitive" with completely bleached semantic content.

- (viii)' The emergence of default (structural) partitives, complement marking  
 (viii) a.' "part of N" (the morphological partitive marking has disappeared) →

First of all, it should be pointed out that the semantic part-of meaning has lost the link with morphological partitive marking; it is not known when it dis-

appeared in contexts such as (15). More discussion of this example can be found in (vii-a), concerning example (7). Example (15b) is an instance of a typical partitive construction, which is realized by the elative. Erzya (Mordvinian) is discussed as an example of thwarted development of an aspectual partitive. The ablative complement of verbs of consumption, as in (15c) is referred to as an object (Collinder 1960: 124). Therefore, Erzya seems to have an object case alternation comparable to instances of the aspectual object case alternation in Finnic. However, although the ablative is used in more abstract contexts, as in *kortams mezedejak* 'speak about something' (Niina Aasmäe, p.c.), the case allows an interpretation where the identity of the separated matter is different. The example can be understood as part-of and amount-of partitive.

## (15) Estonian

- a. *Mari sõ-i ?õuna / õuna-st.*  
 M[NOM] eat-PST.3SG apple.PAR apple-ELA  
 'Mary ate some quantity of the apple.' (bounded event, (non)quantized apple)
- b. *noorim mu laste-st*  
 young.SUP 1SG.GEN child.PL-ELA  
 'the youngest of my children'

## Mordvin

- c. *kšede jarcy, vinado simi*  
 bread.ABL eats wine.ABL drinks  
 'he eats bread, drinks wine' (Collinder 1965: 125)

## (viii) b.' → "amount of N" (has the morphological partitive marking)

Only the "amount of N" has the morphological partitive marking (viii-b). Here the partitive nouns have kind reference. See the examples and discussion in (vii-b) as well.

## (16) Estonian

- a. *klaas veini*  
 glass[NOM] wine.PAR  
 'a glass of wine'
- b. *kaks jõge*  
 two[NOM] river.PAR  
 'two rivers'
- c. *viis kraadi sooja*  
 five[NOM] degree.PAR warm.PAR  
 'plus 5 degrees'

## (viii) c.' → "amount of V" (N has the morphological partitive marking)

This meaning is metonymically carried over to the predicate level, as in (17), to mean “amount of an event”, but it is not the verb that is marked but the object noun that retains the partitive marking. See the examples and discussion in (vii-b) as well.

(17) Estonian

*Mari sõ-i õuna.*

M[NOM] eat-PST.3s apple.PAR

‘Mary was eating an apple.’ (unbounded event, quantized or nonquantized apple)

(viii) d. → “N-obj” (N has the morphological partitive marking)

In the next step, the partitive nouns become the general object markers without any partial meaning element related to the object noun (18). The partitive is used for conveying aspectual unboundedness.<sup>10</sup> Since the non-finite temporally unlinked telic verbs without any finite environment display partitive objects, the partitive is a default and not determined by lexical aspect (telicity, 18d) or indefiniteness (see 18a, 19d). See the examples and discussion in (vii-b) as well.

(18) Estonian

a. *Mari armasta-b Jaanus-t.*

M[NOM] love-3SG J-PAR

‘Mary loves John.’

b. *Mari vaata-b jõge.*

M[NOM] look-1SG river.PAR

‘Mary is looking at the river.’

c. *Mari kuul-is lindu.*

M[NOM] hear-PST.3SG bird.PAR

‘Mary heard a bird.’

d. *seda jõge ära reosta-ma*

this.PAR river.PAR TELIC pollute-M\_ILL

‘to completely pollute this river’

(viii) e. → Adposition “N-obj” (N has the morphological partitive marking)

<sup>10</sup> Only a few constructions have retained the accusative-total as a default object option (more analysis can be found in Tamm 2008a, 2008b).

The object is a complement of a verb, but the partitive is generalized into a more general complement case in a language, perhaps also on the analogy of the partitives found in numeral and other measure phrases (19). Partitive tends towards becoming a general complement case in Estonian.

(19) Estonian

- a. *mööda jõge*  
 along river.PAR  
 'along the river (prepositional phrase)'
- b. *jõge mööda*  
 river.PAR along  
 'along the river (postpositional phrase)'

I put aside constructions where the partitive has little or no semantic content. Generally, semantic content is missing in combinations with adpositions. Therefore, the partitive could be viewed as developing into a general complement case occurring with certain prepositions, postpositions, numeral phrases, and verbs in the Finnic languages.

## 4 The Partitive Concept in the Uralic languages

This section takes a look at the empirical data and discusses some of the cases that express the Partitive Concept in the Uralic languages. Before the discussion I emphasize that the case appears only in argument or predicative functions and should be understood as such. I illustrate the meaning extension of the partitive concept, the pseudopartitive, without embedding the form into a sentence.

### 4.1 The empirical data

What is special about the Uralic partitives? Embeddedness in rich case systems: the multitude of source (separative) cases and a mismatch between the Partitive Concept and the semantics of the various linguistic partitives. Thus, firstly, the Uralic languages have many cases that express Partitive Concepts as well as morphological Linguistic Partitives. The Linguistic Partitives either express the Partitive Concept or related concepts, some of which have developed far from the original concept. There is a wide spectrum of "what the partitive is used for" in languages with the morphological Linguistic Partitive – the partitive

interacts with various aspects of the TAM system. The interaction between TAM and the partitive is exceptionally clear in these languages, which display the aspectual DOM, DSM, and DAM, definiteness effects, telicity, and partitive arguments. These languages have a range of other cases than the morphological Linguistic Partitive, covering the Partitive Concept. Uralic languages are special about their cross-categorial case – case on non-finites and verb stems. In several Uralic languages, the Linguistic Partitives and cases that express the Partitive Concept are an integral part of these unusually rich cross-categorial case systems and constitute, therefore, a unique area of partitive studies.

Uralic languages are typically characterized by rich case systems with approximately ten members, and many have case systems of approximately fifteen or twenty cases. In the selection of languages in the WALS, on the map by Iggesen (2008), there are 24 languages recorded with black dots, which stand for systems with more than 10 cases.<sup>11</sup> Five of those listed are Uralic (Erzya Mordvin, Estonian, Finnish, Hungarian, and Udmurt). The North-Eastern European and North-Western Asian area would be studded with black dots on the WALS map if all Finno-Ugric languages were represented. Table 1 summarizes the number of cases in some Uralic languages.<sup>12</sup>

<sup>11</sup> The following languages have “black dots” in WALS: Awa Pit, Basque, Brahui, Chukchi, Epena Pedee, Estonian, Evenki, Finnish, Gooniyandi, Hamtai, Hungarian, Hunzib, Ingush, Kayardild, Ket, Lak, Lezgian, Martuthunira, Mordvin (Erzya), Nez Perce, Nunggubuyu, Pitjantjatjara, Toda, Udmurt.

<sup>12</sup> Erzya Mordvin has twelve cases: nominative, genitive/accusative, dative/allative, interior illative, inessive, elative, exterior ablative, lative, prolative triplets, translative, abessive, comparative, and Moksha Mordvin thirteen cases (Zaicz 1998: 192–194), with the additional causative. Eastern Mari has eight productive and three nonproductive cases (Kangasmaa-Minn 1998: 226). Udmurt sixteen cases (Riese 1998: 268), nominative, accusative, genitive, dative, approximative, genitive/ablative, inessive, elative, ablative, terminative, instrumental, egressive, caritive, adverbial, prolative 1 and 2. Komi has eighteen cases (Riese 1998: 268), nominative, accusative, genitive, dative, approximative, genitive/ablative, inessive, elative, ablative, terminative, instrumental, egressive, caritive, adverbial, prolative 1 and 2, consecutive, comitative. Komi Permyak has seventeen cases (Lytkin et al. 1962: 184). Tundra Nenets seven cases (Salminen 1998: 537), nominative, accusative, genitive, dative, locative, ablative, prosecutive (this is the suggested Proto-Samoyedic inventory, Janhunen 1998: 469). Kamas has seven cases (Szimoncsics 1998: 585–586), nominative, accusative, genitive, lative, locative, ablative, instrumental. Selkup has thirteen (Helimski 1998b: 560–561), nominative, accusative, genitive, instrumental, co-ordinative, caritive, translative, dative/allative, illative, locative, elative, prolative, vocative, Nganasan eight to eleven (Helimski 1998a: 496), nominative (=absolute form), accusative, genitive, lative (=dative, or dative-lative), locative (=locative/instructive), elative (=ablative), prolative (=prosecutive). The Sámi languages are described having systems with six to nine cases. Inari, Pite, Skolt Sámi nine or eight, Southern Sámi eight or seven, Lule

Table 1: The number of cases in some Uralic languages

| Language                | Number of cases               |
|-------------------------|-------------------------------|
| Erzya Mordvin           | 12                            |
| Moksha Mordvin          | 13                            |
| Eastern Mari            | 8+3                           |
| Udmurt                  | 16                            |
| Komi                    | 18                            |
| Komi Permyak            | 17                            |
| Votic                   | 14                            |
| Võro                    | 13 (+3 less productive cases) |
| Northern Sámi           | 7 or 6                        |
| Lule Sámi               | 7                             |
| Southern Sámi           | 8 or 7                        |
| Inari, Pite, Skolt Sámi | 9 or 8                        |
| Khanty                  | 3–11                          |
| Mansi                   | 6–7                           |
| Nganasan                | 8–11                          |
| Selkup                  | 13                            |
| Kamas                   | 7                             |
| Tundra Nenets           | 7                             |
| Estonian                | 14                            |
| Finnish                 | 15                            |
| Meänkieli               | 13                            |
| Ingrian                 | 10                            |
| Karelian                | 12–16                         |
| Veps                    | 22–23                         |

In sum, the Uralic languages are a suitable testbed for studying several kinds of partitive. On the one hand, there are several cases that denote separation and source. There is a whole sub-branch of languages, the Finnic ones, that all have a dedicated partitive case.

Sámi seven, Northern Sámi seven or six (Wikipedia). Khanty (three to eleven, including the fact that the alignment system has variants, e.g. the Khanty Vakh dialect may have an ergative-accusative alignment), Mansi (six to seven) (Honti 1998: 343). Hungarian eighteen cases (but there are heavy debates whether what has been referred to as case is in fact case, or nominal marking of different nature). Veps has 22–23 cases (Viitso 1998), Karelian twelve to sixteen (Markianova 2002), Ingrian more than ten (Viitso 1998). Meänkieli (Finnish in Sweden) has two cases less than Standard Finnish, which has fifteen cases. Võro is described as having thirteen productive and three nonproductive cases (Iva 2007: 41). The Votic dialect reported by Tsvetkov (2008: 27) has an inventory identical to that of Estonian, consisting of fourteen cases. The additional unproductive excessive and instructive, and the accusative object case are recorded in the dialect studied by Ariste (Ariste 1968: 17).

**Table 2:** Languages with a linguistic partitive and languages with a morphological separative case

| Languages with a linguistic partitive | Languages with a morphological separative case                        |
|---------------------------------------|-----------------------------------------------------------------------|
| Finnic, some Sámi languages           | The rest of the Uralic languages, with the exception of some dialects |

**Source cases in poor paradigms.** The Samoyedic, Sámi, and the Siberian Ob-Ugric languages have somewhat poorer case systems where the inventory of source cases is also poorer than in the rest of the Uralic languages. This tendency seems to be more a matter of a South-North opposition. Source cases in the poorer paradigms express the part-of partitive relationships, and the amount-of partitive is typically expressed by juxtaposition.<sup>13</sup>

## 4.2 Partitive cases that denote separation from source

In most of the Uralic languages, there are several cases that denote separation from source. The specialization of source cases is typical but not unique for Finnic languages. What makes the Finnic system special is the specialization of source cases so that one of them denotes the separation or division into two entities of the same kind.

Source cases in the Uralic languages are the ablative, elative, delative, egressive, genitive-ablative and exessive. The ablative (Erzya, Estonian, Finnish, Hungarian, Mansi, Vepsian, Votic, etc) denotes movement away from something (e.g., away from the house). The elative (Erzya, Estonian, Finnish, Hungarian, Lule Sámi, Pite Sámi, Votic, etc) denotes "out of something" (e.g., out of the house). The delative (Hungarian) indicates movement from the surface, e.g., from (the top of) the house. The egressive (Veps, Udmurt) marks the beginning of a movement or time (e.g., beginning from the house). The excessive (Karelian,

<sup>13</sup> The following lists present the case systems of poorer Uralic languages, and the source cases that can express the conceptual partitive are set in the boldface. The Tundra Nenets system of seven cases (Salminen 1998: 537, the nominative, accusative, genitive, dative, locative, prosecutive) has the **ablative**. The Kamas system of seven cases (Szimoncsics 1998: 585–586) comprises nominative, accusative, genitive, lative, locative, **ablative**, instrumental. The Selkup system of thirteen cases (Helimski 1998: 560–561), comprises the nominative, accusative, genitive, instrumental, co-ordinative, caritive, translative, dative/allative, illative, locative, prolative, vocative has the **elative**. The Nganasan system of eight to eleven cases (Helimski 1998: 496) contains the nominative (=absolute form), accusative, genitive, lative (=dative, or dative-lative), locative (=locative/instructive), prolative (=prosecutive) and it has an **elative (=ablative)**. The poorest system can be encountered in some dialects of Khanty.

Ingrian, Livonian, Votic, Estonian, etc) denotes a transition away from something (from a house). The genitive-ablative of Komi stands for a source of information, or for a resource; this case is interesting in combining the genitive and separative meaning in a discourse setting.

In the Uralic languages, the Partitive Concept seems to be generally expressed by the elative case. If there is no dedicated elative case, then the Partitive Concept is expressed by a case called the ablative and understood as the most general separative case. The genitive case is not present in all Uralic languages. Most notably, the largest Uralic language in terms of number of speakers, Hungarian, lacks it altogether. It seems that the Uralic partitives are not marginal extensions of genitives, but they are specific, dedicated same-kind separatives. At this point of research, a hypothesis can be worded as in (ix).

- (ix) Hypothesis: the Uralic partitives are specialized separatives. More specifically, the Uralic partitives are same-kind separatives expressed by a case.

It is worth investigating how the Partitive Concepts are expressed in languages that do have a genitive alongside with an elaborate system of separative cases. The Indo-European languages do not have any elaborate system of source cases that would be comparable to the Finnic ones, but they have genitives, and their partitives are frequently based on the genitive semantics. In the Finnic languages, the typical partitive functions of the Indo-European genitives, such as in Russian in the example in (1a) (*čaška čaj-u* 'a cup of tea'), are never covered by genitives but by partitives. If there are no partitives, then these functions are expressed by elatives or other general separatives, or by no case marking. It is a good question if some Partitive Concept meanings are covered by genitives in languages combining a rich separative system with a genitive in the case paradigm. The following sections present the types of Uralic languages according to the place of the partitive within the overall system of separatives. Type 1 is illustrated by the Partitive as one of the source cases. Type 2 has no linguistic partitive but several source cases. Type 3 exemplifies a system with a linguistic partitive but no grammatically encoded source cases. Type 4 illustrates a system with no morphological partitive or separative cases.

All of these languages have also postpositions that can express source, but the present article confines itself to one illustrative example. The system of parallel ways of expressions in a more elaborate system of postpositions is from Estonian separative postpositions. Relationships that are similar to case relationships are instantiated by a rich system of postpositions. In Estonian, a separated position or movement away from an entity can be expressed by postpositions that stand (in terms of language history) in the elative or the ablative

case, as in (20). They typically end in *-st* or *-lt*, thus the elative or ablative endings. The examples containing postpositions that are semantically roughly interchangeable with source cases are set bold in the example.

(20) Estonian

a. ***paadi see-st***

boat.GEN inside-ELA

'from inside a boat'

b. ***paadi juure-st***

boat.GEN close-ELA

'from the vicinity of a boat'

c. ***paadi ääre-st***

boat.GEN near-ELA

'from the (outer, longish) side of a boat'

d. ***paadi külje-st***

boat.GEN side-ELA

'from the (inner) side of a boat, from being attached to a boat'

e. ***paadi otsa-st***

boat.GEN top-ELA

'from the topmost, outmost, close-fitting, or sharp top or end of a boat'

f. ***paati-de sea-st***

boat.GEN.PL among-ELA

'from among the boats'

g. ***paati-de hulga-st***

boat.GEN.PL amount-ELA

'from among the boats'

h. ***paadi pea-lt***

boat.GEN top-ABL

'from top of a boat'

i. ***paadi koha-lt***

boat.GEN over-ABL

'from above a boat'

j. ***paadi kõrva-lt***

boat.GEN side-ABL

'from the outer side of a boat'

- k. *paadi*      *ümbert*  
boat.GEN    around.ABL  
'from around a boat'
- l. *paadi*      *alt*  
boat.GEN    under.ABL  
'from under a boat'

The composite forms that are based on postpositions that have a recognizable elative component are the following: ‘from inside a boat’ (20a), ‘from the vicinity of a boat’ (20b), ‘from the (outer, longish) side of a boat’ (20c), ‘from the (inner) side of a boat, from being attached to a boat’ (20d), ‘from the topmost, outmost, close-fitting, or sharp top or end of a boat’ (20e), ‘from among the boats’ (20f) and (20g). Other composite forms are based on postpositions that have a recognizable ablative component: ‘from top of a boat’ (20h), ‘from above a boat’ (20i), ‘from the (outer) side of a boat’ (20j). Some forms have just a recognizable *-t* in the postposition, which we see in the elative and ablative formants as well: ‘from around a boat’ (20k) and ‘from under a boat’ (20l). The present study is carried out proceeding from the assumption about the relevance of the difference between cases and adpositions in carving up the conceptual space, as in (x).

- (x) The distinction between cases and adpositions is grammatically relevant in languages that have cases as well as adpositions expressing many separative concepts. More particularly, if the semantic field of separative motion is diverse, then the linguistic partitive meanings are specialized so that they express separation of matter of the same kind.

The digression into the postpositions was necessary to illustrate the position of partitives and separatives encoded by cases in a larger system of numerous and complex conventionalized means of expressing separation. In several instances, it can be observed that the multitude of forms are composite in the sense that the elative or ablative cases can be reconstructed as parts of the composite forms. There are also forms that are formally similar, containing an ending with a *-t*, but not reconstructable with the elative or ablative cases (e.g. *ümbert* 'from around'). This paper will only be addressing cases.

Note that the works explicitly contrasting partitive meanings are missing in languages that grammaticalize partitives as case and as adposition simultaneously. This is a curious fact, since there are several studies that demonstrate a contrast between a spatial case with a spatial adposition, or that contrast adpositional and non-adpositional forms of genitives. This brief digression into

separatives has hopefully demonstrated that there are still vast gaps in the research on the topic.

### 4.3 Source (separative) cases and the partitive

This subsection examines which languages have source cases and the partitive, and what their patterns are.

#### 4.3.1 The partitive as one of the source cases

The system incorporating a partitive and several source cases is illustrated by Estonian in Table 3. The source cases are set boldface.

Table 3: The Estonian case system

| case        | translation N               | example N         |
|-------------|-----------------------------|-------------------|
| Nominative  | book                        | raamat            |
| Genitive    | of a book                   | raamatu           |
| Partitive   | <b>(of) a book</b>          | <b>raamatu-t</b>  |
| Illative    | into the book               | raamatu-sse       |
| Inessive    | in a book                   | raamatu-s         |
| Elative     | <b>from (inside) a book</b> | <b>raamatu-st</b> |
| Allative    | onto a book                 | raamatu-le        |
| Adessive    | on a book                   | raamatu-l         |
| Ablative    | <b>from the book</b>        | <b>raamatu-lt</b> |
| Translative | in(to), as a book           | raamatu-ks        |
| Terminative | until a book                | raamatu-ni        |
| Essive      | as a book                   | raamatu-na        |
| Abessive    | without a book              | raamatu-ta        |
| Comitative  | with a book                 | raamatu-ga        |

The development from source to origin or cause is a possible but rather rare meaning extension of the partitive in a system that is rich in source cases and has a partitive. The following example illustrates the cause partitive on the so-called “infinitives”, that is, non-finites in Karelian (21).

- (21) Karelian  
*Suurdu keittä-miä pada musten-i.*  
 big.PAR cook-M.NMLZ.PAR pot[NOM] blacken-PST.3SG  
 ‘Intensive cooking made the pot turn black.’

Since the partitive marked adjective *suurdu* 'big, intensive' as in (21) can modify the partitive form in question, the latter cannot be an infinitive, but another type of nominalization with more nominal properties than infinitives would have. The meaning of a cause event emerges with the Karelian event predicates and partitive marking. This rare instance of linguistic partitive gives evidence of the meaning element of causation and event structural properties of the predicates involved.

#### 4.3.2 No partitive, several source cases

A system without the partitive but with several source cases can be found in Udmurt, illustrated by Table 4. The source cases – ablative, elative, and egressive – are set boldface.

Table 4: Cases in the Udmurt noun paradigms

| Case          | noun + case        |
|---------------|--------------------|
| Nominative    | s'ik               |
| Genitive      | s'ik-len           |
| Accusative    | s'ik/s'ik-ez       |
| Ablative      | <b>s'ik-les'</b>   |
| Dative        | s'ik-ly            |
| Adessive      | s'ik-len           |
| Instrumental  | s'ik-en            |
| Abessive      | s'ik-tek           |
| Inessive      | s'ik-yn            |
| Illative      | s'ik-e             |
| Elative       | <b>s'ik-ys'(t)</b> |
| Terminative   | s'ik-oz'           |
| Egressive     | <b>s'ik-ys'en</b>  |
| Prolative     | s'ik-eti           |
| Approximative | s'ik-lan'          |

Hungarian lacks a morphological partitive, but its inventory of three separative cases allows interpreting these cases, especially the elative, as parts of constructions expressing Partitive Concepts. The elative, illustrated in (22a), denotes separation from a container, the ablative denotes separation from the vicinity of something (22b), and the delative denotes the separation from the object by movement from a surface (22c).

(22) Hungarian

a. *Adóval*

*Adóval*

*Adóval*

b. *Adóval*

*Adóval*

*Adóval*

c. *Adóval*

*Adóval*

*Adóval*

Also, several other cases can be interpreted as partitive. In Hungarian, for example, the instrumental case, if the instrument is realized by the patient,

(23) Hungarian

*Adóval*

*Adóval*

*Adóval*

4.3.3 Partitive constructions

Partitive constructions

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## (22) Hungarian

a. *ház-ból*

house-ELA

'from (inside) a house'

b. *ház-tól*

house-ABL

'from (the vicinity of) a house'

c. *ház-ról*

house-DELA

'from (the top of) a house'

Also, several other Uralic languages have separative cases that are not referred to as partitive, but their semantics is that of a prototypical partitive. As in Hungarian, the typical Partitive Concepts are realized by the elative (or the ablative, if there is no elative). Example (23) illustrates the Estonian Partitive Concept realized by the elative (the youngest of my children).

## (23) Estonian

*noorim mu laste-st*

young.SUP SG1.GEN child.PL-ELA

'the youngest of my children'

## 4.3.3 Partitive and no source case: Sámi

Inari Sámi, which I use for illustration, has nominative, genitive, accusative, illative, locative, comitative, abessive, essive and the partitive – the last two cases only exist in their singular form, as described in Toivonen (2003: 36) in Table 5. The partitive is set bold.

Table 5: The Inari Sámi case paradigm for *kietâ* 'hand' (Toivonen 2003: 36)

|            | singular              | plural              |
|------------|-----------------------|---------------------|
| nominative | <i>kietâ</i>          | <i>kieðah</i>       |
| genitive   | <i>kieðâ</i>          | <i>kieðâi</i>       |
| accusative | <i>kieðâ</i>          | <i>kieðâid</i>      |
| illative   | <i>kietân</i>         | <i>kieðâid</i>      |
| locative   | <i>kieðâst</i>        | <i>kieðâin</i>      |
| comitative | <i>kieðâin</i>        | <i>kie'ðâigui'm</i> |
| abessive   | <i>kie'ðâttâá</i>     | <i>kie'ðâittâá</i>  |
| essive     | <i>kiettân</i>        |                     |
| partitive  | <b><i>kiettâd</i></b> |                     |

Sámi comparative constructions are a possible extension of the partitive in a system with no source or separative cases but a partitive that appears in singular only, as in (24a). In Inari and Skolt Sámi, the partitive case cannot be regarded as a general complement case like the partitives of the Finnic languages, since its use is restricted to specific constructions only (e.g. restricted postpositional, number phrases, etc.).

At this point it is worthwhile to make a digression into an interesting variation that regularly involves the partitive or a source case in Uralic languages. There are several comparative construction types in the Uralic languages. Among them, there is one where the standard of comparison is marked with a source case, which is frequently the elative or the partitive. In Inari Sámi, the standard of comparison is marked with the partitive, as in (24a). Marking the meaning of 'N has the property Adj more than someone/something' is not rendered (only) by 'N is Adj-er than someone/something', but (also) by 'N is of/from someone/something Y(-er)'. In source case systems with source cases and the partitive, the marking of the standard of comparison varies. In Estonian, the standard of comparison is marked with the elative (24d), but Finnish has variation between the partitive (24b) and the elative (24c).

(24) a. Inari Sámi

*Muorâ lii táállud ucceeb.*  
 tree[NOM] be.3SG house.PAR smaller  
 'The tree is smaller than the house.'  
 (Toivonen 2003: 65)

b. Finnish

*Miehe-ni on 3 kk minu-a vanh-empi.*  
 man[NOM]-POSS.1SG be.3SG 3 months 1SG-PAR old-CMPR  
 'My husband is three months older than I.'

c. Finnish

*...nainen ol-i minu-sta vanh-empi<sup>14</sup>*  
 woman[NOM] be-3SG.PST 1SG-ELA old-CMPR  
 'The woman was older than I.'

d. Estonian

*Toomas on Peetri-st van-em.*  
 T[NOM] be.3SG P-ELA old-CMPR  
 'Tom is older than Peter.'

<sup>14</sup> <http://keskustelu.suomi24.fi/node/10906453>

The example sentences in (24) are instances of Linguistic Partitive where the link to the Conceptual Partitive is considerably weaker than, for instance, example (23).

#### 4.3.4 No partitive or separative

Almost all Uralic languages have a source case that is used for marking the source argument. The poorest case system can be encountered in some dialects of Khanty, where there is a distinction between four cases only. In the Kazim dialect, the separative cases are missing altogether, in others, there is still an ablative.

**Table 6:** The case system of some Khanty dialects (on the basis of Ruttkay 2003: 20)

| case                    | Kazym dialect | Vakh dialect   | Vasyugan dialect |
|-------------------------|---------------|----------------|------------------|
| nominative              | ∅             | ∅              | ∅                |
| accusative              | -t            | -t             | -t               |
| lative-dative           | -a            | -a             | -a               |
| approximative           |               | -pa/-pă        |                  |
| translative             |               | -γə/-γă, -γ    | -γə/-γă, -γ      |
| locative                | -ən           | -nə/-nă        | -nə/-nă          |
| instrumental-final      |               | -tə/-tă, -ə/-ă | -tə/-tă, -ə/-ă   |
| instrumental-comitative |               | -nat/-năt      | -nat/-năt        |
| distributive            |               | -təltə/-təltă  | -təl/-təl        |
| ablative                | missing       | -oy/-öy        | -ow/-öw, -oy/-öy |
| abessive                | -             | -ləy/-ləy      | -ləy/-ləy        |
| comparative             | -             | -niŋit         | -niŋə            |

#### 4.4 Pseudo-partitives

This subsection deals with the reading (xi-b), the amount-partitive or the pseudopartitive.

- (xi) a. “separable part of N that belongs to the same kind with N” →  
 b. → “amount of N” (metonymic extension of xi-a)

In this subsection, I collect the evidence for the following hypotheses.

- (xii) The Linguistic Partitive is more characteristic of pseudopartitive constructions in the Uralic languages that have a Linguistic Partitive.
- (xiii) Pseudopartitive constructions are expressed predominantly via juxtaposition in Uralic languages that do not have a Linguistic Partitive.

First of all, it is not completely clear at this stage if all Uralic languages have any partitive constructions with the structure N-measure + N-substance (e.g., a glass of wine). Many Uralic languages express pseudo-partitives with juxtaposition, as in N and W Sámi, Hungarian, Mari, Mordvinian, Komi, and Udmurt, according to Koptjevskaja-Tamm (2001: 555). Juxtaposition (pseudo-partitive) is illustrated by a Hungarian example in (25).

- (25) Hungarian  
*egy pohár bor*  
 INDF glass[NOM] wine[NOM]  
 'a glass of wine'

Estonian has a morphological partitive. Note that the proper partitive relationship is realized by the relative, but the pseudo-partitive (a glass of wine) is realized with the partitive case-marking, as in (26).

- (26) Estonian  
*klaas veini*  
 glass[NOM] wine.PAR  
 'a glass of wine'

There are languages where the morphosyntactic encoding of the two types of partitive semantics clearly differs as shown by Koptjevskaja-Tamm (2001). This seems to be the case in Estonian as well. Koptjevskaja-Tamm (2001) contains a detailed typological study on Finnish and Estonian pseudopartitives. The illustration contrasting the two concepts is taken from Finnish. Example (27a) is a partitive nominal construction (PC) and (27b) is a pseudo-partitive nominal construction (PPC) in Koptjevskaja-Tamm (2001). See also the discussion in Luraghi and Kittilä (this volume).

- (27) Finnish  
 a. *pala tästä hyvästä kaku-sta*  
 bit[NOM] this-ELA good-ELA cake-ELA  
 'a bit of this good cake'

- b. *säkki peruno-ita*  
sack[NOM] potato-PAR.PL  
'a sack of potatoes'

Not all Uralic languages use case in these expressions, and it is not clear if the pseudopartitives are clearly different from the real partitives. Anttila and Fong (2000) discuss Finnish examples where the distinction does not emerge clearly, and Tamm (2011b) demonstrates examples where even Anttila's improved account would not work either for the data set of abstract nouns in Estonian. The state of the art in the data research of conventionalized measure structures in temperature in rarer Uralic languages is as follows. Khanty (28), Udmurt (29), and Komi-Permyak (30) have a juxtaposition of nominative nouns in these constructions.

(28) Khanty, Eszter Ruttkay p.c. email, July 1st, 2010

- a. *kamən näljan grad iški*  
outside 40 degree[NOM] cold[NOM]  
'The outside temperature is 40 below zero.'
- b. *näljan grad t'emperatura täjl*  
40 degree[NOM] temperature[NOM] be.3SG  
'He has a fever of 40 degrees.'

(29) Udmurt, Svetlana Edygarova, email, June 28th, 2010

- a. *temperatura Celsi-ja 40 gradus*  
temperature[NOM] C-ADV 40 degree[NOM]  
'40 degrees Celsius'
- b. *n'yl-don gradus kez'yt/ shunyt*  
40 degree[NOM] cold[NOM]/ warm[NOM]  
'40 degrees below/above zero'

(30) Komi-Permyak, Larisa Ponomareva, email, July 2nd, 2010

- a. *t'emperatura 40 gradus celsija*  
temperature[NOM] 40 degree[NOM] C-ADV  
'40 degrees Celsius'
- b. *n'ol'das gradus ködzyt/ shonyt*  
40 degree[NOM] cold[NOM]/ warm[NOM]  
'40 degrees below/above zero'

Hungarian does not allow partitive-like constructions at all, as seen in (31), and Estonian realizes a linguistic partitive, as in (32). The linguistic partitive is possible if the semantics of the noun that is measured is linguistically scalar, since it

is possible with derivations of *warm* and *cold*, but not with the underived noun *temperature* in Estonian.

(31) Hungarian

- a. *kint negyven fokos meleg/ hideg van*  
 outside 40 degree-ADJ warm[NOM] cold[NOM] be.3SG  
 'The outside temperature is 40 above/below zero.'

- b. *negyven fok-o-s láza van*  
 40 degree-LK-ADJ fever[NOM].POSS.3SG be.3S  
 'He has a fever of 40 degrees.'

(32) Estonian

- a. *viis kraadi sooja*  
 five[NOM] degree.PAR warm.PAR  
 'plus 5 degrees'

- b. *viis kraadi külma*  
 five[NOM] degree.PAR cold.PAR  
 'minus 5 degrees'

- c. *#viis kraadi temperatuuri*  
 five[NOM] degree.PAR temperature.PAR  
 '5 degrees'

Note that the Hungarian lacks the construction and there is an adjectival construction expressing the content in measure phrases, whereas complements of the complements are marked partitive in the Estonian measure phrases in (32).

#### 4.5 The partitive concept and aspect

The Hungarian elative is a form in the case inventory of Hungarian that corresponds closely to the Partitive Concept, as illustrated in (xi-a). Bare nouns compare to other Uralic zero marked bare nouns. The following examples illustrate Udmurt (33) and Komi (34) part-of-partitives, the (xi-a) type, in their embedded environment. Aspect and definiteness related to explicit accusative marking seem to coincide in these languages.

(33) Udmurt: accusative, Partitive Concept, unmarked/accusative opposition

- a. *n'an' s'i-i (odig judes)*  
 bread[ACC] eat-INF (one[ACC] piece[ACC])  
 'to eat (a piece of) bread.'

- b. *n'an'-ez judes s'i-i*  
bread-ACC piece[ACC] eat-INF  
'to eat a piece of this bread.'
- c. *n'an'-ez s'i-i*  
bread-ACC eat-INF  
'to eat (a piece of) this bread up.'  
(Svetlana Edygarova, p.c.)
- (34) Komi, elative, Partitive Concept, unmarked/accusative alternation
- a. *kurčč-i n'an'-s'ys tor.*  
bite-PST.1SG bread-ELA piece[ACC]  
'I have bitten some bread.'
- b. *n'an' sōj-i.*  
bread[ACC] eat-PST.1SG  
'I was eating bread, I ate some bread.'
- c. *sōj-i n'an'-sō.*  
eat-PST.1SG bread-ACC.DEF  
'I ate the bread (some of the bread).'
- (Nikolay Kuznetsov, p.c.)

Interaction with the aspectual properties of the clause vary with different partitive uses involving the verbs that trigger partitive meanings. Example (35) illustrates Hungarian (see the discussion on the partitive function of the elative and examples in Moravcsik 1978: 261). The partitive-elative argument and the telic particle do not constitute a well-formed sentence (35c).

- (35) Hungarian
- a. *Evelt a pizzá-ból.*  
eat.PST3s DEF pizza-ELA  
'She ate some of the pizza.'
- b. *Meg-ette a pizzá-t.*  
TELIC-eat.PST3s DEF pizza-ACC  
'She ate up the pizza.'
- c. \**Meg-ette a pizzá-ból.*  
TELIC-eat.PST3s DEF pizza-ELA  
('She ate up of the pizza.')
- d. *Pizzá-t evett.*  
pizza-ACC eat.PST3s  
'She was eating pizza.' (unbounded)

The partitive yields an unbounded reading for Estonian, as in (36).

(36) Estonian

- a. *Mari sõ-i (neid) pitsa-sid.*  
 M[NOM] eat-PST.3SG this.PAR.PL pizza-PAR.PL  
 'Mary was eating (these) pizzas.' (unbounded, nonquantized)

- b. *Mari sõ-i pitsa-d / %pitsa-sid ära.*  
 M[NOM] eat-PST.3SG pizza-NOM.PL pizza-PAR.PL up  
 'Mary ate the pizzas (up).' (bounded, quantized)

Table 7 summarizes the situation with affectedness and the object cases in the studied languages.

**Table 7:** Affectedness of the incremental theme and the object case

| Incremental theme argument totally affected | Incremental theme argument partially affected |
|---------------------------------------------|-----------------------------------------------|
| Accusative                                  | ELATIVE (Hu)                                  |
|                                             | PARTITIVE (Est)                               |
|                                             | Unmarked (Hu,Kh,U)                            |

The question however is, whether the data in (36) is an instance of the Partitive Concept or the Linguistic Partitive? It is both. The object has partitive marking, so it is a Linguistic Partitive. It is a Partitive Concept, since the meaning extension has come into being by means of metonymy: the disappearance of the pizzas is temporally related to the event where the pizzas are disappearing. Therefore, the pizzas in the event and the temporal evolving of the event itself are related by spatiotemporal contiguity. The boundedness of the event is not determined by the boundedness of the object matter any more in the partitive languages such as Modern Estonian. The loss of the relationship is demonstrated by the combination of the quantized "these pizzas", which is bounded, and the partitive case on the noun denoting pizzas.

In presentational or existential sentences and certain transitive sentences with achievement verbs, the mass or count properties of the argument, as in (37a), are observed to influence the possibility of partitive case encoding.<sup>15</sup> On the basis of typical examples illustrating this regularity, one could argue that in presentational or existential sentences, partitive is possible with mass (abstract, unbounded, or bare plural) nouns. The examples that those scholars would

<sup>15</sup> See also Erelt et al. 1997, available at <http://www.eki.ee/books/ekk09/index.php?p=5&p1=2&id=387> (accessed on 17 November 2012).

employ would be as presented in the Estonian intransitive sentences in (37a) and as in the transitive sentences in (37b). I have added the semantically unacceptable options with a hash mark.

- (37) a. *Taigna sees on pipar-t /#sõrmus-t.*  
 batter.GEN in be-3SG pepper-PAR /ring-PAR  
 'There is (some) pepper in the batter.'  
 Not possible: 'There is (some/a) ring in the batter.'
- b. *Mari sokuta-s taigna sisse pipar-t /#sõrmus-t.*  
 M[NOM] manage-PST.3SG batter.GEN into pepper-PAR /ring-PAR  
 'Mary managed to add (secretly) pepper to the batter.'  
 Not possible: 'Mary managed to add a ring to the batter.'

Further research has shown that there should be a another subdivision among mass nouns, and that concrete mass nouns belong to just one of these types. Abstract nouns that are also mass nouns can be divided according to their appearance with the partitive marking in the same environment with other, concrete mass nouns, or not. Some abstract mass nouns cannot be marked with the partitive if all other conditions hold equally. The contrast is demonstrated by the nouns *valgus* 'light' versus *pimedus* 'darkness'. In its case-marking behavior, the mass noun *valgus* 'light' patterns with other mass nouns, such as *pipar* 'pepper', but the mass noun *pimedus* 'darkness' does not, patterning with the count noun *sõrmus* 'ring' instead. The contrast is illustrated in transitive and intransitive sentences (38).

- (38) Estonian
- a. *Saali tekki-s valgus-t /#pimedus-t.*  
 hall.ILL appear-PST.3SG light-PAR darkness-PAR  
 'Light/darkness emerged in the hall.'
- b. *Mari tekita-s saali-s valgus-t /#pimedus-t.*  
 M[NOM] create-PST.3SG hall-INE light-PAR /darkness-PAR  
 'Mary created light/darkness in the hall.'

The possibility of the partitive is determined by factors that are similar to example (32). In example (32), the linguistic partitive emerges if the noun measured is semantically scalar. The contrast is observable in the difference between the derivations of *soe* 'warm' and *külm* 'cold', which can be partitive, and the non-derived noun *temperatuur* 'temperature', which cannot. In example (38), the difference between the nouns 'light' and 'darkness' consists in the scalar properties of the base adjective, and also the existence of pragmatic standards or norms

(see the details in Tamm 2014). As opposed to the Finnish Partitive Concepts that are expressed by a linguistic partitive, there are examples from Uralic where partitive-like phenomena are actually neither Partitive Concepts nor linguistic partitives. Consider the so-called Nenets partitive objects as in *jī-k? tādā?* 'give [me some] water' (Hajdú 1968/1982: 69). Is the Tundra Nenets dative plural a partitive (*-k?* above, the more general dative plural suffix form is *xV?* Hajdú 1982: 38)? A Linguistic Partitive is ruled out, since the dative plural has no links to nominal morphology denoting source. Hajdú (1982: 69) interprets the dative plural NPs as "partial objects". As the result of grammaticalization processes that significantly diverge from those leading to the Finnic case alternation, the Nenets NP that stands for the event participant with the semantic role of a Theme can be marked with either the accusative or dative plural (*jī-k?* water-dat.pl). Tereščenko (1973), however, refrains from classifying the nominal marker as case, and the NP as an object, and since the dative plural NP does not trigger objective conjugation in Nenets, there are reasons to prefer Tereščenko's analysis.

Do the specialized uses of the Tundra Nenets dative plural correspond to the Partitive Concept? No part of a quantized whole is implied. Some examples in Tereščenko (1973) are close to the Partitive Concept, namely, close to the extension of the amount-of partitive in that the nouns in the examples seem to refer to a kind rather than concrete – moreover, plural – referents. These uses seem to coincide with the "Mordvinian Partitive", namely, the Erzya ablative in example (15c), but Tereščenko (1973: 185–187) provides a range of many other uses. The noun 'meat' does not refer to a whole in the accusative example either. Tereščenko finds parallels with the Finnic linguistic partitive-accusative object case alternation only in the semantic totality and partiality and indefiniteness, which later in the explanation boils down to a broader notion of nominal divisibility (Tereščenko 1973: 187). This suggests that there is no evidence of any part-whole opposition in the Nenets grammar system. In sum, the dative plural-accusative alternation has led researches acquainted with the Finnic grammaticographic tradition to consider the parallel with the Finnic Linguistic Partitive as part of total-partial opposition. We have rather the case where the language-specific categories of Finnic grammaticography have influenced the description of the categories in another Uralic language.

## 4.6 Cross-categorical cases and separative relationships in source cases

### 4.6.1 Partitives among the source cases as cross-categorical case

This subsection takes a closer look on how separative cases and partitives appear as cross-categorical cases, because having extensive cross-categorical case

systems in various levels of development is a particular feature of the Uralic languages. Cross-categorical case refers to the appearance of nominal markers, in particular, case formants, as markers that pertain semantically to verbal categories, sometimes forming case paradigms in the verbal marking system, such as the TAM categories or negation. The goal of this subsection is to present several points.

- Firstly, Uralic languages are particularly rich in cross-categorical source cases and the partitive. There are several strategies, two of which are discussed in connection with the source cases in the cross-categorical case systems.
- Secondly, the partitive developments in the Finnic languages must be seen as an exceptional development among the source cases. The source cases diverge from each other in languages with several source cases in terms of cross-categorical case. Source spatial cases are also different from non-source spatial cases. Especially in the Hungarian aspectual preverb system, the contrast between source and non-source cases is observable.
- Last but not least, the discussion of the non-finites of this subsection is necessary to understand the role of the partitive case in the TAM categories. More specifically, it is a necessary introduction in order to move on to the topics of how the TAM categories have developed their current spectrum of meanings in the instance of the Estonian linguistic partitive. The Estonian partitive evidential, discussed in Section 5, is an instance of cross-categorical case.

Unusual TAM marking by nominal case is attested in many languages (Nordlinger and Sadler 2004). Recent research has drawn attention to “verbal” or “versatile” case that appears in the verbal paradigm (Aikhenvald 2008, Butt 2006, Spencer 2009). Blake (2001) and Butt (2006) belong to the classic literature addressing case that contains instances of cross-categorical case, and Aikhenvald (2008) has published a journal article dedicated to case that appears on nouns as well as verbs in language typology. Spencer (2009) discusses instances of the phenomenon as “case marking on verbs” (39).

(39) Quechua

*Rima-y-ta xalayu-ru-n.*

Speak-3SG-ACC begin-3SG-PRF

‘He began to speak.’

(Adelaar and Muysken [2004: 226] in Spencer [2009: 189])

According to the author’s description, the non-finite verb form is marked with the accusative and it functions as the object of the verb ‘begin’ in Quechua.

This example adds another dimension of cross-categorical case ridden with puzzles – non-finites combining with cases.

The semantic regularities of cases appearing cross-categorially have been discussed in a more detailed account by Aikhenvald (2008) in recent literature. Her term for the phenomenon is versatile case (Aikhenvald 2008: 565). It can express temporal, causal and other relationships between clauses, or aspectual and modal meanings within a clause. Versatile case comprises case on various verb forms and falls in three types on the basis of its distributional characteristics: appearing on verb roots, on fully or partially inflected verbs, or on non-finite verbs. Aikhenvald describes versatile case as “chameleon morphemes”; these morphemes can mark different categories and have related but also different meanings. As one instance from her rich typological sample, Aikhenvald provides examples of case on nouns and verbs in Manambu, where the objective-locative case marks a core or oblique argument, as demonstrated in (40). The locative case appears on the verb as well, as on *wukemar* ‘forget’, adding completeness to the event structure; locative case on a verb triggers the aspectual completive interpretation of ‘completely forget’.

- (40) Manambu  
 Wun [de-ke-m] wukemar-e-m  
 I he-LK-OBJ/LOC forget-LK-OBJ/LOC  
 ‘I completely forgot him.’  
 (Aikhenvald 2008: 587)

The Manambu case expresses TAM categories; in the Quechua example it is not clear if the accusative marks aspectual inchoativity on the verb or simply the object. Aikhenvald generalizes that core cases tend to express aspectual and modal meanings, while oblique cases tend to be used as clause-linkers.

In addition to attaching to nouns (and in languages with adjective-noun agreement, to adjectives), case in Uralic also attaches to verbs (verb stems) and to verbs with a nominalizing suffix, forming infinitives and in-between forms. These are the forms that are also referred to as cross-categorical cases. Some examples of the types of cross-categorical case are listed in (xiv) in order to introduce in a nutshell the basic types of examples discussed below in more detail.

(xiv) Cross-categorical case types

1. Cross categorical case-like form attaches to verb stems
  - Hungarian case form in preverbs+verb (*be-megy* ‘in-go, enter’), or
  - Udmurt V+abessive, or
  - to verb stems forming a non-finite, such as the Selkup infinitive marker: V+translative.

2. Cross-categorical case attaches to nominalizations (Udmurt cases V+m +case, V+n+case),
3. Cross-categorical case appears as a part of non-finites (Finnic, the case formants are part of a morpheme of a non-finite verb)
4. Cross-categorical case attaches to an argument or adjunct but carries TAM meanings (Finnish aspectual accusative-partitive case alternation, accusative case on temporal adverbials that bound the situation).

In a cross-categorical case paradigm, not all nominal cases are necessarily cross-categorical; in addition, cases are cross-categorical in various ways as specified in (xiv). However, the Uralic languages rarely combine all types of cross-categorical case and have their particular language-specific strategies in using case formatives for expressing the TAM meanings. It is also typical that there is more than one strategy within one language, but across the Uralic languages, the pattern of the strategies does not overlap.

In order to understand the extended semantics of linguistic partitives, the difference between simple nouns and nominalizations should be considered. A simple noun has relatively concrete properties, and a case relates it to a verb in a rather unambiguous way. The result of relating verbs with nominalizations is more complicated. A nominalization has its own predicate-argument structure and a case relates events or abstract entities. In this linguistic environment, which is semantically and pragmatically similar to the combinations of adpositions and nominalizations, several TAM meanings may develop; Bybee et al. (1994) discuss for instance how the progressive develops from locative expressions (Tamm 2011a or Ross et al. 2010 can be consulted for the details of the development of the progressive semantics and pragmatics in the Finnic languages).

#### 4.6.2 Rich source case system with asymmetries in combining with the nominalization paradigm, and case on bare verb: Udmurt

The goal of this subsection is to illustrate a stage in the development of semantics that goes beyond encoding only argument relationships in a predicate. The example is from Udmurt, where cases that mark nouns can mark bare verb stems and two types of non-finites or nominalizations. The data presented in Table 8 illustrates the case system in Udmurt.<sup>16</sup> It highlights the source cases and

<sup>16</sup> The Udmurt data are provided by Svetlana Edygarova, p.c, to whom I am grateful for her help.

the abessive as they are found on non-derived nouns, and in the forms between verbs and nouns containing *-n-* or *-m-* as bound nominalizing morphemes.

**Table 8:** Cases in the Udmurt noun (house) and non-finite case paradigms (the verb *go*)

| Case          | noun + case  | verb + n + case | verb + m + case | verb + case |
|---------------|--------------|-----------------|-----------------|-------------|
| Nominative    | s'ik         | myn-on          | myn-em          |             |
| Genitive      | s'ik-len     | myn-on-len      | myn-em-len      |             |
| Accusative    | s'ik/s'ik-ez | myn-on-ez       | myn-em-ez       |             |
| Ablative      | s'ik-les'    | myn-on-les'     | myn-em-les'     |             |
| Dative        | s'ik-ly      | myn-on-ly       | myn-em-ly       |             |
| Adessive      | s'ik-len     |                 |                 |             |
| Instrumental  | s'ik-en      | myn-on-en       | myn-em-en       |             |
| Abessive      | s'ik-tek     | missing         | missing         | myny-tek    |
| Inessive      | s'ik-yn      | myn-on-yn       | myn-em-yn       |             |
| Illative      | s'ik-e       | myn-on-e        | myn-em-e        |             |
| Elative       | s'ik-ys'(t)  | missing         | myn-em-ys'      |             |
| Terminative   | s'ik-oz'     | myn-on-oz'      | myn-em-oz'      |             |
| Egressive     | s'ik-ys'en   | missing         | missing         |             |
| Prolative     | s'ik-eti     |                 |                 |             |
| Approximative | s'ik-lan'    |                 |                 |             |

The source case-marking of nominalizations is relatively uninteresting from the point of view of syntax. Once a verb is nominalized, it can be case-marked as any other argument in the source role. Therefore, one would predict an even distribution of forms all over the nominalizations and non-finites. However, we do not see an even distribution.

In Table 8 illustrating the case system in Udmurt, also the abessive on bare stems is included for illustration of the nature of the phenomenon, in addition to the case system on *n*-nominalizations and on *m*-nominalizations. Although the system is regular, not all cases appear on the two nominalizations, and only one morpheme is cross-categorical in the sense of combining with a verb stem (the abessive, see Tamm *forthc.*, 2011c). This demonstrates a system with transparent cross-categorical case, that develops some additional meanings to the argument relationships. Table 1 on Estonian records a more restricted and opaque cross-categorical case system, with more TAM meanings.

In sum, Udmurt presents a rich source case system with asymmetries in combining with verbs and the nominalization paradigm. The relationships are transparent, but the paradigms are deficient. The elative source case does not occur with the *n*-nominalizations, but it is there with the *m*-nominalizations. The ablative source case occurs with the *n*-nominalizations as well as with the *m*-nominalizations. The abessive, which combines directly with the bare stem,

does not combine with the two non-finites. It is also clear that the elative and the illative appear asymmetrically, the elative is missing where the illative is present, showing the constraints on combining with more abstract meanings. The source-goal asymmetry is the topic of the following subsection as well.

#### 4.6.3 Source-goal asymmetry in cross-categorical case

One of the best examples of cross-categorical case in the aspectual domain is the Hungarian verbal particles (preverbs). I illustrate the Hungarian aspectual telicizing particles that have the same origin with the pronominal forms of goal cases INTO (-ba/-be), ONTO (-ra/-re), and TO (-hez/-hoz/-höz) in (41).<sup>17</sup>

(41) Hungarian

- a. *Feri be-ment az épület-be.*  
 F[NOM] into-go.PST.3SG DEF building-INTO  
 'Ferenc entered the building.' (into-went into the building)
- b. *Gábor rá-lépett a sajt-ra.*  
 G[NOM] onto-step.PST.3SG DEF cheese-ONTO  
 'Gábor stepped on cheese.' (on-stepped on the cheese)
- c. *Gregor Bernadett hozzá-ment egy sámán-hoz.*<sup>18</sup>  
 GB[NOM] to.him-go.PST.3SG INDF shaman-TO  
 'Gregor Bernadett married a shaman.' (to-went to a shaman)

The Hungarian stative particles have the form of the adverb or pronominal case forms denoting the location IN, ON, or IN THE VICINITY OF with the verb *marad* 'stay'. The point is that it is not only interesting what there is in the grammatical inventory of a language, but what there isn't. In the triad of stative location preverbs, IN and ON appear with an obligatory argument in the case that corresponds to the preverb, as in (42a), (42b). The form *nála* 'near' that stands for IN THE VICINITY location may appear with the verb *marad* 'stay' (42c), but there is no obligatory argument marked with *-nál/-nél*.

<sup>17</sup> Surányi (2009) treats several of these examples as incorporated locative adverbials in Hungarian. See É. Kiss (2006) and Kiefer (2006) for the event structural properties of preverbs in Hungarian.

<sup>18</sup> <http://velvet.hu/celeb/gregor0610/> 05/10/2011 16:12

## (42) Hungarian

- a. *Nikolas megsirat-t-a, hogy benn-marad-t a verseny-ben.*<sup>19</sup>  
 N[NOM] lament-PST.3SG-DEF that in-remain-PST.3SG DEF competition-INE  
 'Nikolas was sad that he remained in the competition.'  
 (Literally: in-stayed in the competition)
- b. *Rajt-a marad-t Thaci-n a szervkereskedelem*  
 on-3SG remain-PST.3SG T-SUPERESS DEF organ.trafficking[NOM]  
*vád-ja*<sup>20</sup>  
 accusation[NOM]-POSS.3SG  
 'The accusations of organ trafficking remained on Thaci.'  
 (Literally: on-stayed on Thaci.)
- c. *\*nála marad-t a barát-jái-nál*  
 near remain-PST.3SG DEF friend-POSS.3PL-ADE  
 'He remained at his friends' place.'  
 (Literally: at-stayed at his friends' place)

In (43), the separative direction is not realized in the aspectual preverb system. Separative preverbs are something that is paradoxically and unexpectedly missing in the highly developed Hungarian aspectual preverb system.

## (43) Hungarian

- a. *\*ról-jött a tető-ről*  
 from.top.of-come.PST.3SG DEF roof-DELA  
 The following content cannot be expressed with these grammatical means: 'He came down from top of the roof.'
- b. *\*ből-jött a ház-ból*  
 from.inside-come.PST.3SG DEF from-ELA  
 The following content cannot be expressed with these grammatical means: 'He came out of the house.'
- c. *\*től-jött től-e*  
 from.the.vicinity-come.PST.3SG ABL-him/her  
 The following content cannot be expressed with these grammatical means: 'He came from his place.'

<sup>19</sup> [www.borsonline.hu/news.php?hid=36212](http://www.borsonline.hu/news.php?hid=36212) 02/10/2011 13:45:28

<sup>20</sup> <http://www.mr1-kossuth.hu/hirek/kulhon/rajta-maradt-thacin-a-szervkereskedelem-vadja.html> 02/10/2011 13:45:28

#### 4.6.4 Source-goal cross-categorical case and the special status of the Linguistic Partitive

Partitives and source cases appear on non-finites in Estonian. Non-finite forms in Estonian frequently originate from case-marked non-finite verb forms, which originally were complements but developed into base predicates of larger predicate complexes. This process resembles the Udmurt paradigm, which is more regular but less grammaticalized. These cross-categorical case complexes have developed case-related semantics and TAM meanings in Estonian.

**Table 9** The Estonian case system and case in the non-finite system

| case        | translation N        | example N   | example V          | translation V     |
|-------------|----------------------|-------------|--------------------|-------------------|
| Nominative  | book                 | raamat      |                    |                   |
| Genitive    | of a book            | raamatu     |                    |                   |
| Partitive   | (of) a book          | raamatu-t   | tule-va-t          | allegedly, coming |
| Illative    | into the book        | raamatu-sse | tule-ma            | to come           |
| Inessive    | in a book            | raamatu-s   | tule-ma-s, tulle-s | coming            |
| Elative     | from (inside) a book | raamatu-st  | tule-ma-st         | from coming       |
| Allative    | onto a book          | raamatu-le  |                    |                   |
| Adessive    | on a book            | raamatu-l   |                    |                   |
| Ablative    | from the book        | raamatu-lt  |                    |                   |
| Translative | in(to), as a book    | raamatu-ks  | tule-ma-ks         | in order to come  |
| Terminative | until a book         | raamatu-ni  |                    |                   |
| Essive      | as a book            | raamatu-na  |                    |                   |
| Abessive    | without a book       | raamatu-ta  | tule-ma-ta         | not having come   |
| Comitative  | with a book          | raamatu-ga  |                    |                   |

The embeddedness of case in the system of non-finites helps understand the role of source cases in the TAM categories and, more specifically, how the TAM categories have developed their current spectrum of meanings. The partitive developments in the Finnic languages must be seen as an exceptional development among the source cases, because of the asymmetry between the source and goal cases in the cross-categorical case systems. The exceptionally developed source case cannot be explained with frequency, because source cases are less frequent as parts of non-finites. This is shown in well-known case studies on the development of non-finites (infinitives), which are usually based on goal and not source cases. For instance, Haspelmath (1989) discusses the development of infinitives on the basis of allatives (e.g. *I go to eat* and not *I come from eat*). He also discusses the Hungarian infinitive as a form that has developed from a nominalizer and a lative case form in the Hungarian language history. Moreover, Pajusalu and Orav (2008) have shown that in Estonian the elative

source case is statistically far more rare as part of the non-finite with the *m*-formative compared to the other *m*-formative spatial cases in non-finites. The Estonian partitive evidential is therefore fairly special, and this is discussed in Section 5.

#### 4.7 Summary

After the discussion of this section, the quantificational relationships between the nominal parts of partitives can be presented in a table. The relationships between the two nouns in the two Partitive Concepts are represented in Table 10.

**Table 10:** Partitive Concepts and the quantification of the nouns in the constructions

|                         | Part-of-N                       | Amount-of-N                                                                                                              |
|-------------------------|---------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| N quantified            | Yes/no                          | no                                                                                                                       |
| Construction quantified | Quantified nonspecifically      | Either specific quantity (if amount is specified) or non-specific quantity (if amount is not specified or non-quantized) |
| Combined with verbs     | Quantizes quantifiable activity | De-quantizes a quantifiable activity                                                                                     |

The different morphological and syntactic realizations with extended or core meanings in the Linguistic Partitives and Partitive Concepts are in Table 11. The equation mark stands for identical kinds of matter, whereas the hash mark stands for different kinds of matter. N1 stands for measure unit and N2 for the substance.

**Table 11:** Linguistic Partitives and Partitive Concepts and the relationship between the two nouns

|                                                     | Morphological partitive N1-of-N2 | Separatives in languages with morphological partitives             | Separatives in languages without a dedicated partitive                                |
|-----------------------------------------------------|----------------------------------|--------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Identity of the relationship between the partitives | N1 = N2                          | The relationship is underspecified, but typically, N1# N2          | The relationship is underspecified, but typically, N1# N2                             |
| The form                                            | Case                             | Elative, ablative, delative, several source/separative adpositions | Another case, one function of which is the partitive, or an adposition, juxtaposition |

## 5 The semantics and pragmatics of the Estonian partitive evidential

### 5.1 An instance of a Linguistic Partitive

This section presents some instances of the partitive that have already less relation with the Partitive Concept (Section 5.1) because they have entered the epistemic modal and evidential domain. Then the section concentrates on the conceptual content of the Estonian partitive evidential in the light of cross-categorical cases and partitive relationships (Section 5.2).

In most Uralic languages that have a partitive case, the latter is semantically motivated, especially in Finnic. Instead of the “part-of-N” semantics, the semantics of the Finnic partitives is related to other semantic notions, typically, event structural properties or aspect, as in (44) (Ackerman and Moore 2001, Kont 1963, Tveite 2004). Indefiniteness and irrealis have also been mentioned in some sources. Sentences with the partitive object are referred to as non-bounded, irresultative, imperfective, and atelic. Sentences with an accusative (total) object are referred to as bounded, resultative, perfective, and telic. Presently, the Estonian partitive object case appears in sentences that have the semantics of incomplete event realization, unboundedness, atelicity, or imperfective aspect (Kiparsky 1998, Erelt et al. 1993, Metslang 1994, Metslang 2001, Larsson 1983, Lees 2005, Sulkala 1996), irrespective of part-whole relationships or partial affectedness (Tamm 2012c, 2007, 2004). The partitive marking of incremental themes denoting the part-of the object relationship with the verb, (44a) versus (44b), have given rise to a general aspectual marker of aspectual unboundedness, unrelated to affectedness. Hearing does not affect, let alone, piecewise, or in any possible way, the one who is being heard in the event, as in (44c). The noun phrase ‘Thomas’ is not an affected object, since it refers to a quantized and specific referent. Therefore, the case marking on the basis of affectedness of the incremental theme has given rise to the meanings of atelicity/telicity and aspect in general.

- (44) a. *Silvi sõ-i pitsa-sid.*  
 S[NOM] eat-PST.3SG pizza-PAR.PL  
 ‘Silvia was eating the pizzas.’
- b. *Silvi sõ-i pitsa-d ära.*  
 S[NOM] eat-PST.3SG pizza-NOM.PL up/TELIC  
 ‘Silvia ate the pizzas up.’
- c. *Silvi kuul-is Toomas-t.*  
 S[NOM] hear-PST.3SG T-PAR  
 ‘Silvia heard Thomas.’

Another analysis of these examples can be given in terms of epistemic modality and is connected in an intricate way to evidentiality. This analysis integrates the discourse and perceptual properties of the partitive objects (Tamm 2012b). The multiple previous attempts at defining the Finnic partitive can be replaced by an overarching epistemic modal approach. Instead of viewing the Finnic partitive as a matter of encoding definiteness, boundedness, quantization, perfectivity, or telicity oppositions, it is possible to view it as encoding an opposition in terms of having sufficient *evidence* for definiteness, boundedness, quantization, perfectivity, or telicity. This approach explains many unexplained facts about verb classes as well. The epistemic modal feature completely overrules the aspectual feature – previously thought to determine object case encoding – in a whole class of psychological predicates (*üllatama* ‘surprise’, *ehmatama* ‘frighten’, *solvama* ‘offend’).

(45) a. *Silvi üllata-s Toomas-t.*

S[NOM] surprise-PST.3SG T-PAR

‘Silvia surprised Thomas.’

b. *Silvi ehmata-s Toomas-t.*

S[NOM] frighten-PST.3SG T-PAR

‘Silvia frightened Thomas.’

c. *Silvi solva-s Toomas-t.*

S[NOM] offend-PST.3SG T-PAR

‘Silvia offended Thomas.’

The psych-verbs denote events with clear temporal endpoints and are, thus, aspectually telic in (45). Therefore, they are predicted to have total (non-partitive, accusative, nominative) objects according to the hypothesis of linking partitive to aspect. However, these verbs have partitive objects. An utterance that originally encodes the speaker’s aspectual meaning and conveys the endpoint also encodes a lower degree of evidence, thus, epistemic modality. The crucial link between the aspect and evidential categories is instantiated when the hearer overgeneralizes some examples where there is clearly no cognitively reliable immediate evidence of the endpoint (psych-verbs) to more fuzzy cases. The deviant behavior of the psych-verbs can be explained in terms of epistemic modality: it is difficult to have evidence about the endpoint of offending, for instance. In an event of surprising or frightening as well, it is not easy to have evidence when an event reaches its inherent endpoint and how effectively the endpoint is reached. Therefore, the evidence for events that are encoded by

psych-verbs is incomplete. The incompleteness of the evidence and not just aspect determines the partitive encoding of the object's case with these verbs.

This analysis is based on the speaker's cognition and inferences combined with the hearer's inferences. The pragmatic and semantic account concentrates on the property of partitive to encode a speaker's evaluation of evidence and certainty. It is not surprising to find that the partitive evidential expresses a speaker's evaluation about the evidence for the truth of a proposition and certainty about the proposition. However, unexpectedly, this pragmatics can be found in the Estonian core case marking system. More specifically, the data show that the inference about the total objects is that they express total evidence and certainty and that the partitive objects express incomplete evidence and uncertainty.

This explanation can capture some previously unexplained Finnish data as well. Finnish mental epistemic verbs with translative secondary predicates display an object case alternation that cannot be fit into an explanation based on the telicity-atelicity opposition either. The two sentences illustrated below, with *tietää* 'know' in (46a) and *luulla* 'think, believe' in (46b), are atelic and should, therefore, have partitive object case marking if the telicity hypothesis is correct. However, the use of *tietää* 'know' versus *luulla* 'think, believe' expresses the beliefs of the speaker about Mary's knowledge about the smartness of George. The degree of the speaker's evidence for George being smart is lower if *luulla* 'think, believe' is used, and the degree of evidence is complete if *tietää* 'know' is used. The difference in evidence is reflected in the speaker's choice of the accusative case with *tietää* 'know' and confirmed by the choice of the matrix verb.

(46) Finnish

- a. *Mari tietä-ä Jyri-n viisaa-ksi.*

M[NOM] know-PST.3S J-ACC smart-TRAN

'Mary knows that George is smart.'

(Tuomas Huumo, p.c.)

- b. *Mari luule-e Jyri-ä viisaa-ksi.*

M[NOM] believe-PST.3S J-PAR smart-TRAN

'Mary believes that George is smart.'

(Tuomas Huumo, p.c.)

Mary (the subject) may believe that George is smart in (46a) and (46b), but the belief of the subject does not matter for the object case encoding. What matters are the speaker and her beliefs. The speaker believes that Mary is right in (46a) and George is smart, but that she (the speaker) has insufficient evidence in (46b). In (46b), the evidence may be insufficient, for instance, because (a) the

speaker does not trust Mary when Mary says *George is smart*, or *I know that George is smart* or, (b) the speaker trusts Mary, but Mary utters *I think that George is smart (but I do not know for sure)*.

The Finnish examples with the mental epistemic verbs (*tietää* 'know' versus *luulla* 'think, believe') seem to have lexicalized the epistemic modal distinction in the verbal features. The epistemic modal feature completely overrules the aspectual feature in Finnish object marking in this minimal pair. Several Finnish perception verbs and mental epistemic verbs have accusative objects in Finnish as in (47a), unlike Estonian, which has partitive objects with this group of verbs (47b) (*tuntea/tundma* 'feel' and *nähdä/nägema* 'see'). It is difficult to say if epistemic modality or the categorization of events is involved in this difference. The same Finnish verb may also appear with a partitive object because of aspectual reasons, which means perception as a lexicalized change of state from not feeling to feeling (corresponding to accusative marking, 47a) versus a continuous state of feeling (corresponding to partitive marking, as in 47c).

(47) a. Finnish

*Tun-si-n sen melkoisen selvästi.*<sup>21</sup>  
 feel-PST-1SG this.ACC pretty clearly  
 'I could feel it pretty clearly.'

b. Estonian

*Tund-si-n seda üsna selgesti.*  
 feel-PST-1SG this.PAR pretty clearly  
 'I could feel it pretty clearly.'

c. Finnish

*Osa minu-sta tun-si sitä tuska-a,*  
 part[NOM] 1SG-ELA feel-PST.3S this.PAR anguish-PAR  
*mitä Jacob tun-si.*<sup>22</sup>  
 that.PAR J[NOM] feel-PST.3S

'Part of me felt the kind of pain that Jacob felt.'

In any case the lexicalization pattern involves a whole distinct cognitive area of perception and reasoning in a language, and this fact is too conspicuous to ignore. Table 12 summarizes the correspondence between the speaker's evidence about the endpoint and the object case marking in Estonian.

<sup>21</sup> <http://keskustelu.suomi24.fi/node/9776187> (accessed 18 September 2011).

<sup>22</sup> <http://www.vampirelove.net/fanfiction/onnieiseuraa.php> (accessed 18 September 2011).

Table 12: The speaker's evidence about the endpoint and the object case

| The speaker's evidence, certainty | Complete           | Incomplete |
|-----------------------------------|--------------------|------------|
| Object case                       | total (accusative) | partitive  |

## 5.2 Cross-categorical cases and partitive relationships

Another peculiarity of the Uralic languages-case on non-finite verb forms (cf. Aikhenvald 2008) – has lead to the situation where the partitive semantics has spread to the domain of epistemic modality and evidentiality (the *vat*-form, as in Erelt et al. 2006, Kehayov 2008). As the result of the diachronic development of the partitive case, the Estonian evidential, epistemic modal, aspectual and NP categories share similarities. The overlap between the epistemic modal and evidential categories (Van der Auwera & Plungian 1998) is due to these developments. Aspects of the diachronic development have been dealt with in Larjavaara (1991), Campbell (1991), or Aikhenvald (2004), but a coherent motivated link between the semantics of the various Uralic partitives will be given in this presentation is a new research question that is addressed in this article only. Partitive has the following stages of development in Estonian:

1. an NP-stage (Krifka 1992), that is, the stage where the meaning of the partitive pertains to parts of a whole
2. an aspectual stage (Larjavaara 1991, Laanest 1975),
3. epistemic modal and evidential phase (Campbell 1991).

The aspectual partitive marks objects in sentences describing incomplete events, and the partitive evidential appears in sentences that encode incomplete evidence compared to the expectation of complete evidence (Tamm 2009).

The partitive case provides the example of cross-categorical case, which in present-day Estonian preserves the diachronic evolution path from a spatial case to an aspectual case and further, to a marker of epistemic modality and evidentiality. The categories of aspect and evidentiality preserve the basic semantics of the spatial partitive; the example provides an illustration of the shared structure of these categories.

Once the participle was used with an object, the partitive case marking was applied to participles as well if they modified the object of an atelic verb. As a consequence, epistemic modal meanings emerged in the embedded clauses (Wälchli 2000, Tamm 2008b, 2009). In modern Estonian, there is still considerable variation, but clear tendencies can be noticed as well. With auditory evidence, the partitive form is used (47a), since evidence from hearing is not as reliable as evidence from seeing. Visual evidence is not partial; another non-finite tends to be used with visual evidence (47b). In independent clauses, the

partitive-marked participle began to be used as an indirect evidential (47c). If evidence is not in question, no partitive evidential is used (47d).

- (47) a. *Mari kuul-is teda koju tule-va-t.*  
 M[NOM] hear-PST.3S s/he.PAR home.ILL come-PERS.PRS.PTCP-PAR  
 'Mary heard him/her come home.'
- b. *Mari näg-i Jüri-t koju tule-mas.*  
 M[NOM] see-PST.3SG J-PAR home.ILL come-M\_INE  
 'Mary saw George coming home.'
- c. *Mari tule-va-t.*  
 M[NOM] come-PERS.PRS.PTCP-PAR  
 'Allegedly/reportedly, supposedly Mary will come.'
- d. *Mari tule-b.*  
 M[NOM] come-3SG  
 'Mary will come.'

Table 13 summarizes the correspondences between the completeness of the speaker's evidence or certainty and the presence or absence of the partitive evidential. Complete evidence and certainty is not specifically marked, but incomplete evidence or certainty of the speaker is marked by the partitive evidential.

**Table 13:** The completeness of the speaker's evidence or certainty and the partitive evidential

| speaker's evidence, certainty | complete                | incomplete           |
|-------------------------------|-------------------------|----------------------|
| mood/modality                 | no partitive evidential | partitive evidential |

## 6 Discussion and conclusions

The partitive has stood in the center of descriptive studies for long decades in the Finnic linguistic tradition, and in the last two decades the phenomena of partitivity have thrilled formal linguists as well. A recent debate on the comparability of grammatical concepts across languages has involved cognitive, generative, and typological linguistic frameworks. The present paper has united the agendas of these pursuits with the some older and some more recent studies and analyses of the partitives and partitive like concepts across the Uralic languages, with the aim of creating a suitable basis for further investigations into the cognitive properties of linguistic concepts such as the partitive. One of the

intriguing questions concerns how the human prelinguistic perceptual concepts are related to linguistic and language-specific, more refined concepts. The diverse patterns of the Uralic separative and partitive phenomena have been studied in more detail in the present article in order to establish the correspondence between variations of a central concept.

In the hope that further empirical, experimental or language historical methods will confirm the existence of the partitive as a naturally occurring – that is, a perceived and communicated – category, this article has proposed a hypothesis about the cognitive content of the Partitive Concept. It has provided examples from the Uralic languages, and it has discussed some case studies of particular instances of the Linguistic Partitives.

Several Uralic languages have cases that are referred to as the partitive; however, the semantics of these cases diverge from the generally assumed notion of partitive. All Uralic languages can, however, express the concept of part-whole relationships by means of a restricted set of constructions that typically contain juxtaposed bare nouns, elatives, or ablatives. Therefore, on the basis of examples of one language family, this paper made a distinction between Partitive Concepts that can be expressed by all Uralic languages and the morphological, linguistic partitives.

A characteristic of the Uralic languages is that there are many source (separative) cases, and this article concentrated on the place of the partitive within the system of source cases. The interaction between TAM, definiteness, and the partitive can be observed in many areas: the aspectual DOM, definiteness effects, telicity, and case on non-finites. The Uralic languages are particularly rich in cross-categorical case, that is, the use of case formants as markers of verbal categories such as TAM categories. There are several processes that lead to case formants developing into TAM categories, two of which have been discussed in connection with the source cases in the cross-categorical case systems. The source cases are different from each other in languages with many source cases in terms of cross-categorical case, and also different from non-source spatial cases. Especially, in the Hungarian aspectual preverb system, the contrast between source and non-source cases has been made visible. Therefore, the partitive developments in the Finnic languages must be seen as an exceptional development among the source cases.

This article has illustrated the current spectrum of TAM meanings in the instance of the Estonian linguistic partitive, in particular, the Estonian partitive evidential. The Estonian partitive case provides an example of cross-categorical case, which in present-day Estonian preserves the diachronic evolutionary path in present-day uses. The present diversity in the meanings and functions allows us to assume a development of a concept from a spatial relation, to an aspectual

relation and further, to epistemic modal and evidential interpretations. The categories of aspect and evidentiality preserve the basic semantics of the spatial partitive; the example provides an illustration of the shared structure of these categories.

The Partitive Concept is a heuristic, a comparative concept to enable us to compare variations of it across languages. Additionally the Partitive Concept can be hypothesized to correspond to a prelinguistic perceptual concept. In the descriptions given in the present article, it has fixed "standard" semantic properties, and the Linguistic Partitive cases have developed their specific semantics and pragmatics, or have bleached meanings in each Uralic language where the partitive case appears. The message for linguistic typology is that typology needs cross-linguistic cognitive conceptual categories, which can be established in pre-linguistic humans by experimental testing.

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