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Fieldwork Methodology

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Foreword

This monograph contains a number of the talks given at the 41st Annual Meeting of the Berkeley Linguistics Society, held in Berkeley, California, February 7-8, 2015. The conference included a General Session and the Special Session *Fieldwork Methodology*. The 41st Annual Meeting was planned and run by the second-year graduate students of the Department of Linguistics at the University of California, Berkeley: Kenny Baclawski, Anna Jurgensen, Spencer Lamoureux, Hannah Sande, and Alison Zerbe.

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The BLS 41 Executive Committee
July 2015

Case-Marking in Estonian Pseudopartitives

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1 Introduction

The examples in (1) and (2) exemplify what I will call PSEUDOPARTITIVES in Estonian.[1]

(1) hargi-täis$_{N1}$ põhku$_{N2}$
     pitchfork-ful.NOM straw.PAR
     'a/the pitchforkful of straw'   (EKSS, entry for *hargitäis*)

(2) parv$_{N1}$ pääsukesi$_{N2}$
     flock.NOM swallow.PL.PAR
     'a/the flock of swallows'   (Nemvalts 1996:69)

The examples in (1) and (2) are the simplest kinds of pseudopartitives, containing only two nouns. The first noun (N1) serves a quantifying or measuring role, broadly speaking, like *hargitäis* 'pitchforkful' in (1). The second noun (N2) serves as a substance being measured or quantified, like *põhku* 'straw' in (1). Though I will largely focus on simple pseudopartitives, some examples of slightly more complex constructions are presented in (3) and (4).

(3) parv   väikesi   laevu   ja kalapaate
     flock.NOM little.PL.PAR ship.PL.PAR and fishing.boat.PL.PAR
     'a flock of little ships and fishing boats'   (EKSS, entry for *parv*)

(4) terve rida ne-id   loomi
     whole row DEM.PL.PAR animal.PL.PAR
     'an entire range of these animals'   (PARLIAMENT)

[1]Gloss abbreviations are as follows: 1 *first person*, 2 *second person*, 3 *third person*, ABE *abessive case*, ACC *accusative case*, ADE *adessive*, ALL *allative case*, COM *comitative case*, DAT *dative case*, DEM *demonstrative*, ESS *essive case*, GEN *genitive case*, ILL *illative case*, IMP *imperative*, INE *inessive case*, INF *infinitive*, NOM *nominative case*, PAR *partitive case*, PL *plural number*, PST *past tense*, SG *singular number*, TER *terminative case*, TRL *translative case*.

Naturally occurring examples have their sources indicated: an Estonian language dicionary (EKSS), a corpus of Estonian parliamentary transcripts (PARLIAMENT), and a balanced literary corpus containing equal parts journalism, fiction, and academic writing (BALANCED). All of these resources are available online at `http://www.keeleveeb.ee/`. Unannotated examples are from my fieldwork unless otherwise indicated.

In these examples, the "N2" is syntactically complex, thus it is perhaps more appropriate to refer to it as the N2 PHRASE rather than simply N2. In (3), the entire phrase *väikesi laevu ja kalapaate* 'little ships and fishing boats' is the N2 phrase. In (4), the entire phrase *neid loomi* 'these animals' is the N2 phrase. N2 phrases like these show the same case-marking alternations as pseudopartitives with simple N2 phrases.

For concreteness, the structure I assume for Estonian pseudopartitives is shown in (5).

(5)

```
              DP
           /      \
          D        NP
                 /     \
               N       [DP] ← (N2 Phrase)
              (N1)     /    \
                      D      NP
                             |
                             N
                            (N2)
```
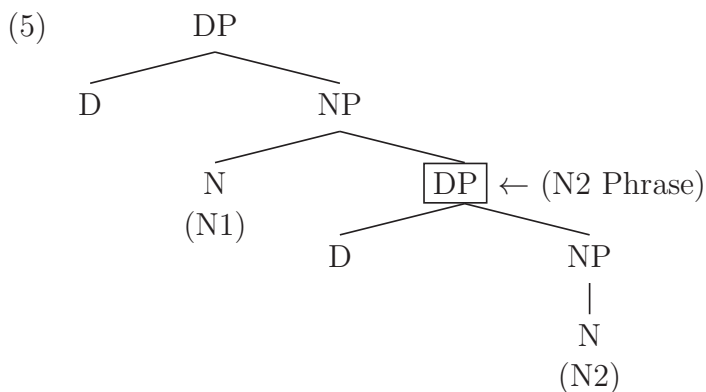
In the Estonian pseudopartitive, I assume N1 is an N^0 taking a DP complement, the N2 phrase. The specifics of this structure are not the focus here, so I will not present direct arguments for it, but see Norris (2014:168–180) for argumentation.

The focus of this paper is on a case-marking alternation which is visible on the N2 phrase, as exemplified in (6) and (7).

(6)　　tükk　　　leiba
　　　　piece.NOM bread.PAR
　　　　'a piece of bread'　　　　　　　　　　　　　　　　　　　PARTITIVE PATTERN

(7)　　tüki-le　　leiva-le
　　　　piece-ALL bread-ALL
　　　　'onto a piece of bread'　　　　　　　　　　　　　　　　MATCHING PATTERN

In (6), we see that N2 *leiba* 'bread' bears partitive case, while N1 *tükk* 'piece' bears nominative case. Because N2 is marked with partitive case, I refer to this state of affairs as the PARTITIVE PATTERN. On the other hand, we have (7), where both N1 and N2 bear the same case; in (7), it is allative, but other cases show this same pattern. Because N2 matches the case of N1, I refer to this state of affairs as the MATCHING PATTERN. At its core, this alternation is about the case-marking on N2, so I will call it the N2 CASE ALTERNATION.

The goal of this paper is to precisely characterize and analyze the N2 case alternation. I will argue that the choice of case pattern can be determined on the basis of case-marking on N1. Further, I will show that the matching pattern and the partitive pattern are mutually exclusive and exhaustive. That is to say, they are the only case patterns seen in pseudopartitives, and the case pattern that a pseudopartitive shows can be predicted based solely on the case borne by N1. I will then argue that the alternation arises due to the syntax of case assignment, not the morphological mechanisms of case realization (*cf.* Brattico 2011; Pesetsky 2013).

More concretely, I will propose that partitive case in Estonian pseudopartitives is an **unmarked case** (in the sense of Marantz (1991)), assigned to caseless complements of N^0

heads. Under this proposal, the N2 case alternation becomes a matter of timing. The matching pattern arises because the independently necessary rule of case concord applies before unmarked partitive can be assigned, so unmarked partitive is unnecessary. The partitive pattern arises because the cases that show the partitive pattern are assigned after unmarked partitive is assigned—too late to affect case-marking internal to the pseudopartitive.

The paper proceeds as follows. I will describe the full range of case patterns in section 2, showing where the matching and partitive patterns appear and motivating the generalization that the case pattern exhibited by a pseudopartitive can be determined on the basis of the case-marking on N1. I will then argue against a morphological analysis in section 3 before proposing a syntactic alternative in section 4. In section 5, I will conclude.

2   Characterizing the N2 case alternation

As I have hinted thus far, the case pattern that a pseudopartitive shows seems to be based on the case-marking borne by N1. We saw in the introduction that a nominative N1 yields the partitive pattern (as in (6)), and an allative N1 yields the matching pattern (as in (7)). The full distribution of case patterns for Estonian pseudopartitives is given in Table 1 below. Before proceeding I want to make two observations about the distribution of case-marking exhibited in the table.

N1 Case	Pseudopartitive	Pattern	Translation
NOMINATIVE	tükk leiba	PARTITIVE	'a piece of bread'
GENITIVE	tüki leiba /	PARTITIVE	'of a piece of bread'
	tüki leiva	MATCHING	'of a piece of bread'
PARTITIVE	tükki leiba	(*can't tell*)	'a piece of bread'
ILLATIVE	tüki-sse leiva-sse	MATCHING	'into a piece of bread'
INESSIVE	tüki-s leiva-s	MATCHING	'in a piece of bread'
ELATIVE	tüki-st leiva-st	MATCHING	'out of a piece of bread'
ALLATIVE	tüki-le leiva-le	MATCHING	'onto a piece of bread'
ADESSIVE	tüki-l leiva-l	MATCHING	'on a piece of bread'
ABLATIVE	tüki-lt leiva-lt	MATCHING	'off of a piece of bread'
TRANSLATIVE	tüki-ks leiva-ks	MATCHING	'for/into a piece of bread'
TERMINATIVE	tüki leiva-ni	SUSPENDED	'until a piece of bread'
ESSIVE	tüki leiva-na	SUSPENDED	'as a piece of bread'
ABESSIVE	tüki leiva-ta	SUSPENDED	'without a piece of bread'
COMITATIVE	tüki leiva-ga	SUSPENDED	'with a piece of bread'

Table 1: Case patterns for the pseudopartitive *tükk leiba* 'piece of bread' (to be revised)

First, note that until now, I have only made reference to two patterns, but Table 1 contains a third pattern termed SUSPENDED. In the suspended pattern, the case-marker appears only on N2, and N1 bears genitive case. This is an obstacle to my claim that the only patterns are the partitive pattern and the matching pattern. Second, note that an N1 with genitive case apparently exhibits both the matching pattern and the partitive pattern. This is an obstacle to my claim that the partitive pattern and matching pattern

are mutually exclusive. That is to say, it is a difficulty for the claim that the case pattern can be determined solely on the basis of the case-marking on N1.

In this section, I will show that these difficulties are only superficial. Following Nevis (1986), I will argue that the cases showing the suspended pattern are not cases, but morphologically-dependent postpositions. Like most postpositions, their complement appears in genitive case, which explains the fact that N1 bears genitive case in the suspended pattern, as we shall see. As for the fact that genitive case apparently shows two case-marking patterns, I will propose that morphological genitive in Estonian is essentially two different cases: genitive and accusative. True genitive exclusively shows the matching pattern, and accusative exclusively shows the partitive pattern.

2.1 The last four cases are postpositions

The first obstacle to discuss is the presence of a third case pattern, which I termed the suspended pattern in Table 1. This pattern is exhibited by the terminative, essive, abessive, and comitative. These cases are typically written last in traditional case paradigms, and they are commonly called the LAST FOUR CASES. I will adopt this terminology for convenience. In pseudopartitives, they all show a pattern that is distinct from the matching pattern and the partitive pattern. Some examples are below.

(8)   Oli-me   taas **tüki**   **leiva-ta.**
      be.PST-1PL again piece.GEN bread-ABE
      'We were once again without a piece of bread.'   (Erelt et al. 1993:145)

(9)   Õpetaja läks   **rühma**   **õpilas-te-ga**   muuseumi.
      teacher go.PST.3SG group.GEN student-PL-COM museum.ILL
      'The teacher went to the museum with a group of students.'   (Erelt et al. 1993:145)

What we see with the last four cases is that N2 bears a special case marker (abessive *-ta* in (8) and comitative *-ga* in (9)). N1 bears genitive case. Under the tentative assumption that the last four cases are cases, these examples clearly do not show the matching pattern, because the case-marking on N1 is distinct from the case-marking on N2. These examples also clearly do not show the partitive pattern, since partitive case is nowhere to be found. They appear to show a unique pattern, which I have thus far called the SUSPENDED PATTERN.

The suspended pattern exhibited by pseudopartitives marked by the last four cases is actually visible even in a normal DP:

(10)   noore(*-na) ajakirjaniku-na
      young.GEN journalist-ESS
      'as a young journalist'

(11)   nende(*-ga) suur-te(*-ga) hoone-te-ga
      these.PL.GEN big-PL.GEN building-PL-COM
      'with these big buildings'

The marking seen in the above examples is identical to the marking seen in pseudopartitives. The last word in the DP bears the case marker, and any preceding modifiers showing concord surface in genitive case. So, the peculiar marking seen in (8) and (9) is not localized to

pseudopartitives—it is a general fact about the last four cases in Estonian. The explanation I will adopt for this peculiar aspect of the last four cases is once again a departure from traditional descriptions: I propose that the last four cases are not "cases" at all, but phonologically dependent postpositions that assign genitive case to their complements. Because most morphological case forms are based on a stem that is identical to the genitive anyway, the end result is that these suffixes look like case forms of the word they attach to. I will call this the POSTPOSITION analysis, as opposed to the traditional CASE analysis.

There is a conspiracy in Estonian that makes it difficult to distinguish between the postposition analysis and the case analysis. First, let me note that genitive is the most common case assigned by postpositions in Estonian. Ehala (1994) conducted a corpus study of the usage of adpositions in 1905, 1972, and 1992. From that sample about 98% of postpositional usages have a genitive complement (Ehala 1994). Some examples are given below.

(12)   Kardina-d   on [akna   **ees**   ].
         curtain-PL.NOM be   window.GEN front
         'The curtains are in front of the window.'   (EKSS, entry for *ees*)

(13)   mehe   **kohta**
         man.GEN about
         'about a man'   (EKSS, entry for *kohta*)

In contrast to postpositions, prepositions are not dominated by genitive marking to the same degree. Even so, the figures Ehala (1994) provides still show that genitive is the most common among usages, at 38.4%, with partitive case second at 29.3% (see Figure 2, p. 181). Put simply, it is normal for adpositions to assign genitive case in Estonian.

This fact becomes relevant when viewed in light of the morphological decomposition of cases in Estonian. With the exception of the nominative and partitive, cases in Estonian are based on what looks like a genitive stem (see Table 2). This is true for the last four cases, but

Stem	Ending	Case	Translation
tigu		NOMINATIVE	'snail'
teo		GENITIVE	'snail's'
teo	-le	ALLATIVE	'(on)to a snail'
teo	-ga	COMITATIVE	'with a snail'
laud		NOMINATIVE	'table'
laua		GENITIVE	'table's'
laua	-le	ALLATIVE	'(on)to a table'
laua	-ga	COMITATIVE	'with a table'

Table 2: Case morphology in Estonian

it is also true for the other seven "semantic cases" in the language: illative, inessive, allative, ablative, adessive, allative, and translative. This means that if the last four cases are cases, then their forms will be based on a genitive stem. If the last four cases are postpositions, they will (most likely) take genitive complements. After they become attached to their hosts, they will look like case markers on a genitive stem. In other words, individual word forms cannot distinguish between the case analysis and the postposition analysis. However, there

are two facts about the distribution of the last four cases that are immediately explained if they are postpositions but must be stipulated if they are lumped together with the other Estonian cases.

First, recall that the last four cases are only realized on the rightmost element in a DP (which is generally the head noun):

(10) noore(*-na) ajakirjaniku-na
      young.GEN journalist-ESS
      'as a young journalist'

(11) nende(*-ga) suur-te(*-ga) hoone-te-ga
      these.PL.GEN big-PL.GEN   building-PL-COM
      'with these big buildings'

Note that it is indeed morphologically possible for adjectives and demonstratives to host the comitative marker whenever they are the rightmost element inside a DP (and identical observations could be made about the terminative -ni, essive -na, and abessive -ta):

(14) Sina võta   suur nukk ja   mina mängi-n **väikese-ga.**
      you take.IMP.2SG big doll and I   play-1SG little.GEN-COM
      'You take the big doll and I'll play with the little one.'

(15) Ma ole-n **selle-ga**   rahu-l.
      1SG be-1SG this.GEN-COM peace-ADE
      'I am happy with this.'

Because there is no overt noun in (14) or (15), -ga attaches to whatever happens to be rightmost.

In this respect, the last four cases are just like postpositions and unlike case markers. Postpositions are always adjacent to the rightmost element in the DP, and true cases must be marked on all the modifiers showing concord.

(16) Postpositions appear rightmost:

      a. kollase   (*kohta) teo   kohta
          yellow.GEN   snail.GEN about
          'about a/the yellow snail'

      b. suure   (*ees) mäe   ees
          big.GEN   hill.GEN front
          'in front of a/the big hill'

(17) Cases appear on all modifiers showing concord:

      a. selle*(-s) suure*(-s) maja-s
          this-INE big-INE   house-INE
          'in this big house'

      b. nende*(-ks)   inimes-te-ks
          these.PL-TRL person-PL-TRL
          'for these people'

Treating the last four cases as postpositions thus immediately explains why they only occur once in the DP whereas the other elements appear in genitive case.

The second context where normal cases and postpositions show divergent behavior is in marking in coordinate structures, as noted by Nevis (1986). Postpositions can either appear in both conjuncts or only in the right conjunct.

(18)   Postpositions:

    a.   isa   ees ja ema   ees
        father.GEN front and mother.GEN front
        'in front of father and in front of mother'

    b.   isa   ja ema   ees
        father.GEN and mother.GEN front
        'in front of father and mother'

There is a straightforward explanation for these facts. In (18a), what we see is coordination of full PPs; in (18b), there is a single P⁰ taking a coordinated DP as a complement. Case concord ensures that the case assigned by the preposition in (18b) is marked on both conjuncts.

In contrast, normal cases must appear on both conjuncts. This is represented below for the allative *-le*.

(19)   a.   isa-le   ja ema-le
        father-ALL and mother-ALL
        'to father and to mother'

    b. * isa   ja ema-le
        father.GEN and mother-ALL
        Intended: 'to father and mother'

This receives a straightforward explanation with the understanding that nominals in Estonian show case concord when these normal cases are involved. Thus, if the entire coordination receives allative case, case concord will ensure that each individual conjunct is marked with allative case as well. (19b) is ungrammatical because the conjuncts fail to show case concord.

It is known within the traditional literature (Erelt et al. 2000:519) that the last four cases behave like postpositions in coordinate structures—marking on the first conjunct is optional:

(20)   jõe(-ni)   ja metsa-ni
          river(.GEN)-TER and forest(.GEN)-TER
          'as far as the river and the forest'   (Nevis 1986)

(21)   maalikunstniku(-ga) ja   skulptori-ga
          painter(.GEN)-COM and sculpter(.GEN)-COM
          'with a painter and a sculpter'   (Erelt et al. 2000:519)

The endings of the last four cases can be left out of the first conjunct just like with normal postpositions, but unlike true cases.

Taking stock, the last four cases have the following distributional properties: (i) they do not show full concord in normal DPs, and (ii) in coordination, they are only obligatorily marked on the rightmost conjunct. It seems that the last four cases are more similar to

postpositions than they are to true cases. I thus propose that the last four cases are, in fact, postpositions. They assign genitive case to their complements, and postsyntactically, they attach to the element on their left. The variation in (20) and (21) is structural, just as with postpositions.

It is worth commenting on another diagnostic that Nevis uses to argue for the adpositional status of the last four cases, because it concerns pseudopartitives. Citing the examples in (22)–(24), he observes that the head of a pseudopartitive (=N1) "cannot be separated from its complement by a postposition or [one of the last four cases]."

(22) * See on tüki   ees   leiba
     it   be.3 piece.GEN in.front.of bread.PAR
     Intended: 'It is in front of the piece of bread.'   (Nevis 1986:83)

(23) * See läks   tüki-ni   leiba.
     it   go.PST.3SG piece(.GEN)-TER bread.PAR
     Intended: 'It went up to the piece of bread.'   (Nevis 1986:83)

(24) * See on tüki-ga   leiba.
     it   be.3 piece(.GEN)-COM bread.PAR
     Intended: 'It is with the piece of bread.'   (Nevis 1986:83)

Indeed, examples like those in (22)–(24) are sharply ungrammatical. Nevis notes that speakers must use alternative structures to express the intended meetings given above. However, the alternative structures he suggests do not include the fully grammatical examples where N1 is marked genitive and N2 bears one of the last four cases.

(25) See läks   tüki   leiva-ni.
     it   go.PST.3SG piece.GEN bread(.GEN)-TER
     'It went up to the piece of bread.'

(26) See on tüki   leiva-ga.
     it   be.3 piece.GEN bread(.GEN)-COM
     'It is with the piece of bread.'

When we were still operating under the assumption that the last four cases were true case markers, we referred to this as the suspended pattern: the "case" morpheme is suspended until N2. In light of the postpositional analysis of the last four cases, we can hold that N1 and N2 in fact bear the same case-marking in (25) and (26): genitive. This means that the last four cases show the matching pattern (because N1 and N2 must match in case). Because the last four cases are actually postpositions assigning genitive case to their complements rather than true cases themselves, anything that we say from this point forward about the behavior of genitive case should extend to DPs bearing one of the last four cases as well.

2.2 Morphological genitive has two sources in Estonian

This brings us to the second issue with the distribution of case patterns in Estonian pseudopartitives. When N1 of a pseudopartitive bears morphological genitive case, the pseudopartitive can either show the matching pattern or the partitive pattern. Thus, the following strings are well-formed pseudopartitives in Estonian:

(27)   a.   tüki   leiba
            piece.GEN bread.PAR
            'a piece of bread'

       b.   tüki   leiva
            piece.GEN bread.GEN
            'a piece of bread'

This fact is an obstacle to the claim that the case pattern of a pseudopartitive in Estonian can be wholly determined on the basis of the case-marking of N1. In other words, it is an obstacle to the view that the case patterns in Estonian pseudopartitives are mutually exclusive. However, there is reason to believe that this problem is only apparent. In order to see this, we must take a moment to look into object case-marking in Estonian, and I will turn to this now.

There is a distinction made in Finnic linguistics between "total objects" and "partial objects." The distribution is affected by many factors— see Tamm 2007 for a thorough discussion of the alternation in Estonian. We will simplify things here, as what is relevant for us is simply that there is a distinction. The alternation is connected to nominal semantics on the one hand and verbal semantics on the other. A partial object is one that is **either** (i) quantitatively indefinite, or (ii) the object of an ongoing (i.e., atelic) action. A total object is an object that is **both** (i) quantitatively definite and (ii) the object of a completed (i.e., telic) action (Tamm 2007). The distinction manifests in the case-marking of the object. Partial objects are always marked with partitive case. Traditionally, total objects are described as showing a split: singular objects surface in genitive case, but plural objects surface in nominative case (Erelt et al. 1993, 2000). This is summarized in Table 3 and some examples are given in (28) and (29).

	Total	Partial
Singular	GEN	PAR
Plural	NOM	PAR

Table 3: Morphological case of transitive objects in Estonian

(28)   Total objects:

       a.   Heiko   luge-s   raamatu läbi.
            HeikoNOM read-PST.3SG book.<u>GEN</u> through

            'Heiko read a/the book (and he finished it).'

       b.   Heiko   luge-s   raamatu-d   läbi.
            HeikoNOM read-PST.3SG book-PL.<u>NOM</u> through

            'Heiko read some/the books (and finished them).'

(29)   Partial objects:

       a.   Heiko   luge-s   raamatu-t.
            HeikoNOM read-PST.3SG book-<u>PAR</u>

            'Heiko was reading a book.'

b. Heiko   luge-s   raamatu-id.
    HeikoNOM read-PST.3SG book-PL.<u>PAR</u>
    'Heiko was reading some books.'

This section will be devoted to an exploration of the marking of total objects. The glosses in the examples in (28) are unquestionably morphologically accurate: *raamatu* 'book.GEN' is the genitive singular form of *raamat*, and *raamatu-d* is the proper nominative plural form. There are no distinct word forms in Estonian that can be identified as the more familiar case for objects cross-linguistically, ACCUSATIVE.

However, this is not true for some of Estonian's close genetic relatives. From a morphological perspective, an accusative can be identified for Finnish, but it is only weakly present.[2] The structural cases in Finnish (following Kiparsky (2001)) are given in Table 4. Note that

	'bear'		'he, they'	
	Singular	Plural	Singular	Plural
Nominative	karhu	karhu-t	hän	he
Accusative	karhu, karhu-n	karhu-t	häne-t	he-i-dä-t
Genitive	karhu-n	karhu-j-en	häne-n	he-i-dä-n
Partitive	karhu-a	karhu-j-a	hän-tä	he-i-tä

Table 4: Finnish structural cases (Kiparsky 2001)

nouns do not have a distinct accusative form in Finnish. For singular nouns, the so-called ∅-accusative is identical to the nominative, and the so-called *n*-accusative is identical to the genitive. The choice between the ∅-accusative and the *n*-accusative is traditionally described as being governed by JAHNSSON'S RULE:

(30) JAHNSSON'S RULE (informal): Verbs which have no overt subjects govern the ∅-accusative; verbs with overt subjects govern the *n*-accusative (Kiparsky 2001:317).

In contrast to common nouns, pronouns do have a distinct accusative form, marked by *-t*. Some examples are provided in (31).

(31) Finnish accusative:

a. Anna Mati-n   näh-dä karhu   / sinu-t!
    let.IMP Matti-GEN see-INF bear-ACC / you-ACC
    'Let Matti see the(/a) bear / you!'   (Kiparsky 2001:317)

b. Matti   anta-a häne-n   näh-dä karhu-n   / sinu-t.
    Matti.NOM let-3SG him-GEN see-INF bear-ACC / you-ACC
    'Matti will let him see the(/a) bear / you.'   (Kiparsky 2001:317)

In (31a), the common noun *karhu* is in the form traditionally described as the ∅-accusative.[3] In (31b), it is in the *n*-accusative form, which is identical to the genitive. Note, however,

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[2]Ariste (1968) also identifies an accusative in Vod/Votic, but like Finnish, it is largely morphologically syncretic (pp. 54–55). Ariste notes that the first and second person plural pronouns have an accusative with a separate marker (*-d/t*) in only a few villages. Otherwise, it exhibits the same nominative/genitive syncretism as Estonian and Finnish.

[3]Kiparsky (2001) actually glosses *karhu* in (31a) as nominative, following many others who treat the ∅-accusative as nominative. I have chosen the more traditional gloss of accusative for reasons of simplicity.

that the pronoun is in the distinct accusative form in both examples. I will not discuss the details of Kiparsky's (or any others') analysis of the Finnish structural case system— it suffices to note that the language has a morphological form corresponding to traditional accusative case.

The slightly more distantly related Saami languages also have fairly clear evidence for an accusative case. The accusative in Skolt Saami is syncretic with genitive in the singular, but illative (not nominative) in the plural (Feist 2010). The accusative in Northern Saami is syncretic with genitive for everything except some numerals and the pronoun meaning *what* (Nickel 1990:69). The accusative in Pite Saami is indicated by *-v* (singular) and *-jt* (plural), morphemes which are unique in the case paradigm presented by Wilbur (2014:93). There are thus good reasons for proposing an accusative case from a genealogical perspective. If Estonian had an accusative case, this would be the case that is assigned to total objects, and possibly only total objects if it is anything like the Finnish accusative. However, Estonian accusative would be purely syntactic— its actual morphological realization would be genitive in some instances and nominative in others.

(32)

$$\text{ACCUSATIVE} \overset{\text{SG}}{\underset{\text{PL}}{\Longrightarrow}} \begin{array}{l} \text{GENITIVE} \\ \\ \text{NOMINATIVE} \end{array}$$

Syntactic case   Morphological form
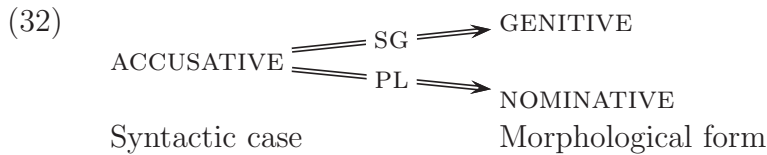
In fact, this is the position analysis that Caha (2009), Hiietam (2003) and Tamm (2007) argue for.[4] Hiietam gives a number of arguments for treating direct object genitives and direct object nominatives as distinct from true genitives and nominatives.[5] I will not review her arguments here; they are certainly suggestive of a distinction, but I believe they are compatible with either an accusative analysis of Estonian objects or one that does not make use of an accusative. Instead, I want to provide what I believe is a novel argument from pseudopartitives in favor of treating direct object genitive as distinct from true genitives. The examples are not new, but their relevance for the accusative hypothesis has not been discussed, so far as I know. First, note that pseudopartitives in the position of true genitives (i.e., possessors or objects of adpositions) show the matching pattern: both N1 and the N2 phrase are in genitive case.

(33) Pseudopartitives as objects of adpositions show the matching pattern:

 a. Putukas roomas ümber klaasi vee / *vett.
   bug.NOM crawl-PST.3SG around glass.GEN water.GEN / water.PAR

   'A/the bug crawled around a/the glass of water.'

 b. Kui palju sa koti kartuli-te / *kartule-id eest
   how much you.NOM bag.GEN potato-PL.GEN / potato-PL.PAR for
   mak-si-d?
   pay-PST-2SG

   'How much did you pay for the bag of potatoes?' (Erelt et al. 1993:145)

---

[4]Tamm calls the case TOTAL CASE (for 'total object' case), but she still crucially distinguishes it from genitive/nominative in the language.

[5]See Miljan 2008 for a rebuttal.

(34) Pseudopartitives as possessors show the matching pattern:

    a.   Kolmandiku tordi   / *torti   hind   oli   kaks
         third.<u>GEN</u>   tart.<u>GEN</u> / tart.PAR price.NOM be.PST.3SG two.NOM
         rubla.
         ruble.PAR

         'The price of a third of a tart was two rubles.'   (Erelt et al. 1993:145)

    b.   enamiku   inimes-te   / *inimesi   soov
         majority.<u>GEN</u> people-PL.<u>GEN</u> / people.PL.PAR wish.NOM
         '[the majority of people]'s wish'   (Erelt et al. 1993:142)

In both circumstances, the N2 phrase must be genitive. This is true whether N2 is singular, as in (33a) and (34a), or plural, as in (33b) and (34b). Genitive case-marking in pseudopartitives behaves uniformly across these two common contexts for genitive case in Estonian: it always results in the matching pattern. If the genitive case borne by objects is the same as the case borne in these positions, then we expect direct object genitives to show the matching pattern as well.

This prediction is not borne out. When a pseudopartitive is assigned "genitive" in direct object position, N1 still bears genitive case, but the N2 phrase cannot. Instead, it must be partitive.

(35) Pseudopartitives as total objects show the partitive pattern:

    a.   Juku   suusata-s tüki   maa-d   / *maa.
         Juku.NOM ski-PST.3SG piece.<u>GEN</u> land-<u>PAR</u> / land.GEN

         'Juku skiied a piece of land (i.e., an unspecified distance)'   (Erelt et al. 1993:142)

    b.   Tõi-n   koti   kartule-id   / *kartuli-te.
         bring.PST-1SG bag.<u>GEN</u> potato-PL.<u>PAR</u> / potato-PL.GEN

         'I brought a bag of potatoes.'   (Erelt et al. 1993:145)

Thus, whether the N2 is singular as in (35a) or plural as in (35b), it must be marked with partitive case. This is different from genitives assigned to possessors and genitive assigned by adpositions. The existence of this split suggests that not all genitives have the same status in the language; there is something special about the total object genitive case that sets it apart from other instances of genitive. I propose that this generalization be captured in the syntax by adopting the view that Estonian does have an accusative case. To be concrete, the case assigned to total objects is not genitive/nominative, but a (covert) accusative. The examples from (35) are thus more properly glossed as follows:

(35)   a.   Juku   suusata-s tüki   maa-d.
             Juku.NOM ski-PST.3SG piece.<u>ACC</u> land-PAR

             'Juku skiied a piece of land (i.e., an unspecified distance)'   (Erelt et al. 1993:142)

         b.   Tõi-n   koti   kartule-id.
             bring.PST-1SG bag.<u>ACC</u> potato-PL.PAR

             'I brought a bag of potatoes.'   (Erelt et al. 1993:145)

Making this move allows us the possibility of treating the distribution of the matching pattern and the partitive pattern as truly being about the properties of individual cases. If we do not separate morphological genitive into two cases—accusative and genitive—we cannot properly state the generalization about marking in the N2 case alternation without reference to both (i) the particular case, and (ii) its syntactic function or position of the pseudopartitive, i.e., whether it is in direct object position or some other genitive position.

2.3 The case-marking of N1 determines the case pattern

If we adopt the two proposals about the Estonian case system outlined in the preceding sections, we can state the choice between case patterns in terms of case-marking on N1. If N1 is nominative or accusative, the pseudopartitive will show the partitive pattern. Otherwise, it will show the matching pattern. This revised distribution is presented below in Table 5. This is significant, because the case-marking on N1 always reflects the case-marking of the

N1 Case	Pseudopartitive	Pattern	Translation
NOMINATIVE	tükk leiba	PARTITIVE	'a piece of bread'
ACCUSATIVE	tüki leiba	PARTITIVE	'a piece of bread'
PARTITIVE	tükki leiba	(*can't tell*)	'a piece of bread'
GENITIVE	tüki leiva	MATCHING	'of a piece of bread'
ILLATIVE	tüki-sse leiva-sse	MATCHING	'into a piece of bread'
	⋮		

Table 5: Case patterns for the pseudopartitive *tükk leiba* 'piece of bread' (final version)

entire pseudopartitive constituent. Thus, the case pattern a pseudopartitive exhibits can be linked directly to its case. With this established, we are ready to consider possible analyses. I will begin with a morphological approach along the lines of Pesetsky's (2013), and we will see that it is not able to account for the N2 case alternation in a straightforward way.

3 A realizational analysis of the N2 case alternation

In a recent monograph, Pesetsky (2013) analyzes a case-marking alternation in Russian numeral phrases that is very similar to the N2 case alternation. The basic pattern is presented below.

(36) a. dva   nov-yx   stol-a
         two.NOM new-GEN.PL table-GEN.SG
         'two new tables'   (Pesetsky 2013:28)

     b. k dv-um   xoroš-im   stol-am
         to two-DAT.PL good-DAT.PL table-DAT.PL
         'to two good tables'   (Pesetsky 2013:35)

When the entire numeral construction is in a nominative (or accusative) position, the adjective and noun are marked genitive.[6] This is the Russian equivalent of the partitive pattern.

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[6]There is a number distinction as well in the Russian examples—the adjective is plural while the noun is apparently singular. See Pesetsky (2013) for more discussion.

When the entire construction is in another environment, e.g., dative, then all of the elements are marked with that case: the Russian equivalent of the matching pattern.

   Some of the specifics of Pesetsky's analysis are particular to the Russian pattern, but the basic idea of the analysis can be ported over to Estonian fairly straightforwardly. Assume first that the partitive case sometimes borne by the N2 phrase is assigned by N1, as in (37).

(37)

```
            NP
      ┌──────┴──────┐
  N ══ [PAR] ══⟹ DP
  N1           ┌──┴──┐
            N2 phrase
```
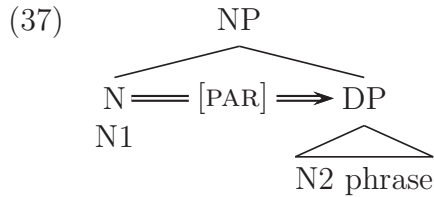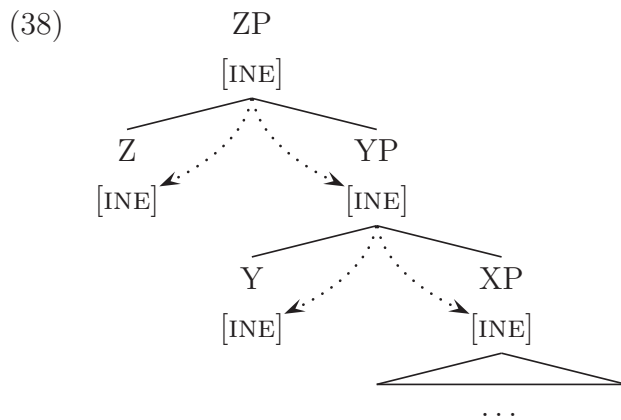
Further material is merged with the structure in (37) until the entire pseudopartitive is built and merged with the clausal spine. At that point, it is assigned some other case based on its syntactic position. When that occurs, the case value is spread through the pseudopartitive, assuming a model of case concord where case spreads from a node to its daughters (Babby 1987; Chomsky 1981, 1986; Delsing 1993; Matushansky 2008; Pesetsky 2013; Richards 2012). A schematic tree is provided in (38).

(38)

```
            ZP
          [INE]
      ┌─────┴─────┐
    Z            YP
  [INE]         [INE]
            ┌─────┴─────┐
          Y            XP
        [INE]         [INE]
                   ┌───┴───┐
                      …
```

In (38), the case value of ZP is spread to its daughters, Z^0 and YP. YP's case value is spread to its daughters, and so on. Note that a mechanism of case concord is independently necessary in Estonian, which exhibits concord in case and number in its nominal system. Some canonical examples are provided in (39).

(39)   a.   kõigi-s   nei-s   raske-te-s   küsimus-te-s
            all.PL-INE this.PL-INE hard-PL-INE question-PL-INE
            'in all these hard questions'   (BALANCED)

       b.   iga-le   konkreetse-le   ettevõtja-le
            each-ALL particular-ALL entrepreneur-ALL
            'to each particular entrepreneur'   (PARLIAMENT)

In (39a), the quantifier *kõik* 'all/every', the demonstrative *see/need* 'this/that', and the adjective *raske* 'difficult' all inflect for plural number and inessive case, just like the noun *küsimus* 'question'. The words in (39b) inflect in a similar way for singular number (null) and allative case.

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Returning to the main point, in a Pesetsky-style analysis, when this spreading reaches the N2 phrase of a pseudopartitive, the new case value (e.g., allative) is "stacked" outside the previously assigned partitive (Baker and Vinokurova 2010; Pesetsky 2013; Richards 2012). For Estonian pseudopartitives, this builds representations like those in (40).

(40)   a. **Partitive Assignment:** [bag [potatoes-PAR]]

        b. **External Assignment:** [bag-ALL [potatoes-PAR-ALL]]

In the first step (40a), the N2 phrase is assigned partitive case (by N1). The second case value is "stacked" on the N2 phrase outside of the previously assigned partitive, as in (40b). Note that this requires that syntactic elements be able to receive case more than once. This is transparently true in some languages (e.g., Lardil (Richards 2012)), but Estonian exhibits no visible case stacking (see, for example, (41)–(42)).

(41)   * mees-t-le

       man-PAR-ALL

(42)   * mehe-le-t

       man-ALL-PAR

Words like the forms in (41) and (42) do not exist in Estonian. Thus, something more must be said about how the abstract representations in (40) are realized morphologically.

To handle the realization of such case stacks Pesetsky (2013) proposes an algorithm that realizes the outermost case in a case stack. I will call this algorithm PRONOUNCE OUTERMOST.[7]

(43)   PRONOUNCE OUTERMOST: only the outermost case in a case stack is realized.

PRONOUNCE OUTERMOST predicts the matching pattern straightforwardly, as demonstrated in (44).

(44)   PRONOUNCE OUTERMOST predicts the matching pattern

        a. **Partitive Assignment:** [bag [potatoes-PAR]]

        b. **External Assignment:** [bag-ALL [potatoes-~~PAR~~-ALL]]

In (44a), *bag* is merged, and it assigns partitive case to the N2 phrase *potatoes*. In (44b), the entire pseudopartitive receives allative case, and this case value suppresses the realization of partitive case on the N2 phrase, resulting in the matching pattern. This is exactly what we want.

However, PRONOUNCE OUTERMOST extends the matching pattern too far: as formulated in (43), it is not capable of producing the partitive pattern, as shown in (45).

(45)   PRONOUNCE OUTERMOST does not predict the partitive pattern

        a. **Partitive Assignment:** [bag [potatoes-PAR]]

        b. **External Assignment:** [bag-ACC [potatoes-~~PAR~~-ACC]]   ✖

        c. **Desired Outcome:** [bag-ACC [potatoes-PAR-~~ACC~~]]   ☹

---

[7]Pesetsky initially calls it the ONE-SUFFIX RULE (p. 11) and later replaces it with the ONE-PROTOTYPE RULE (p. 120).

As before, partitive is first assigned to the N2 phrase in (45a), but when the entire pseudopartitive is assigned accusative case in (45b), PRONOUNCE OUTERMOST predicts that the accusative case stacked outside of partitive case will suppress the realization of partitive case on the N2 phrase. This would yield the matching pattern for accusative case, but what we want is the partitive pattern, as in (45c). The matching pattern requires pronunciation of the outermost case, but the partitive pattern requires pronunciation of the innermost case, which is something that PRONOUNCE OUTERMOST does not allow.

To give the PRONOUNCE OUTERMOST algorithm a bit of flexibility, we could augment it with a bit of morphology. Concretely, it has been proposed that such case pronunciation algorithms can consider whether or not a particular exponent is overt (Baker and Vinokurova 2010; Brattico 2008, 2010, 2011), as in (46).

(46)   PRONOUNCE OUTERMOST OVERT: pronounce the outermost case with an overt realization.

The motivation for this move is straightforward— the only case that is trumped in the languages explored in that research is nominative case, and nominative case has no identifiable affix in those languages. This is, of course, also true in Estonian. However, this explanation cannot straightforwardly account for marking in Estonian pseudopartitives, because partitive case trumps both nominative and accusative— both would have to count as "not overt."

(47)   a.   tükk   leiba
             piece.NOM bread.PAR.~~NOM~~
             'a piece of bread'
       b.   tüki   leiba
             piece.ACC bread.PAR.~~ACC~~
             'a piece of bread'

Given that the nominative and accusative forms of *tükk* and *tüki* are distinct, it is clear that we must say that at least one of them is overt.[8]

Furthermore, any account that pins the choice between the matching pattern and the partitive pattern on case **morphology** runs into difficulty accounting for the difference between genitive and accusative in Estonian. Recall that, for singular nouns, genitive and accusative case are morphologically identical. Yet, they show different case patterns: accusative pseudopartitives show the partitive pattern (see (48)), and genitive pseudopartitives show the matching pattern (see (49)).

(48)   tüki   leiba   / *leiva
       piece.ACC bread.PAR /   bread.ACC
       'piece of bread'

(49)   tüki   leiva   / *leiba
       piece.GEN bread.GEN /   bread.PAR
       'piece of bread'

---

[8]Note that we also cannot say that the choice between case-marking patterns is a distinction between fusional cases (like nominative and accusative) and affixal cases (like allative). Such an analysis might hold that cases with an overt affix yield the matching pattern while cases without an overt affix yield the partitive pattern. This analysis would miscategorize genitive case, which has no overt affix in Estonian—it is fusional like nominative and accusative. However, as we have seen, genitive case shows the matching pattern.

In the examples above, note that the ungrammatical variants of the examples in each are exactly the grammatical variants of the other. In other words, there is nothing wrong morphologically with a string like *tüki leiva*, it is just not a well-formed ACCUSATIVE pseudopartitive. This suggests strongly that the choice between the matching pattern and the partitive pattern is not driven by morphemes *qua* strings of phonological segments, but by the abstract representations that ultimately get spelled out by those strings. I will now argue for a proposal that derives the N2-case alternation without appealing to exponents of morphological case.

4 Partitive as a DP-internal unmarked case

Descriptively speaking, we can state the generalizations about the N2-case alternation as a hierarchy like the one in (50). In this hierarchy, cases are ranked, with nominative and accusative ranked the lowest and all the cases yielding the matching pattern ranked the highest. The higher-ranked cases must be pronounced at the expense of the lower-ranked cases.

(50)   MATCHING CASES[9] $\gg$ PARTITIVE $\gg$ NOMINATIVE, ACCUSATIVE

But stopping here would simply be a stipulation. I believe it is no accident that the only two cases yielding the partitive pattern are nominative and accusative. These cases are a natural class in many languages—the (clausal) structural cases—and they are a natural class in Estonian as well. Nominative and accusative are only assigned to DPs based on their clausal position, i.e., they are never assigned inherently and they are never assigned DP-internally. This generalization is missed if they are simply listed as in (50).

In this section, I will pursue the idea that nominative and accusative yield the partitive pattern because they come into play later than other cases. More concretely, I will propose that partitive case is an UNMARKED CASE inside of DPs (or more correctly, KPs).

(51)   **Unmarked Partitive Hypothesis:** Partitive case in Estonian nominals is an unmarked case, assigned to complements of nouns that do not already have a case value.

If we adopt (51) as well as the assumptions about the spreading of case features from the previous section (i.e., case concord), the alternation between the partitive pattern and the matching pattern falls out as a matter of timing. This analysis is couched within the framework of case proposed by Marantz (1991) and developed in subsequent work. I will now turn to a discussion of the general system.

4.1 Marantz (1991): more than one way to assign case

One of the insights of Marantz's proposal is that there is more than one way for a DP to end up bearing morphological case. The various kinds of case that Marantz proposes are given in (52), with somewhat modernized descriptions of where they are assigned.

(52)   Mechanisms of case assignment (Marantz 1991, *et seq*):

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[9]This is simply a placeholder for an actual list of all the cases in Estonian that show the matching pattern.

a. **lexical/inherent case**: assigned by the selecting V^0 or P^0.

b. **dependent case**: assigned to one of two caseless DPs in an asymmetric c-command relationship.

- C-commanded DP: accusative
- C-commanding DP: ergative

c. **unmarked case**: assigned to otherwise caseless DPs; may be sensitive to syntactic environment (e.g., an unmarked case for caseless nominals inside DPs).

d. **default case**: case assigned to any DP that is not in a position to receive case (Schütze 2001).

Though Marantz (1991) proposes the four different kinds of case given above, he primarily focuses on an exploration of the behavior of dependent case, and much of the research in this framework has since followed suit.[10] The hypothesis that I pursue here holds that partitive case in Estonian pseudopartitives is an unmarked case. A first approximation of this proposal is given in (53).

(53)   Unmarked Partitive, to be revised: Assign partitive case to complements of N^0 that do not already have a case value.

Unfortunately, there has not been much research exploring rules or mechanisms of unmarked case assignment. In fact, unmarked case and default case are often collapsed (Bobaljik 2008; Levin and Preminger 2015). According to Schütze's (2001) tests for default case, it must be nominative in Estonian. Thus, I will pursue an analysis of unmarked case as distinct from default case in Estonian.

## 4.2   A syntactic distinction between the case patterns

The cases that yield the partitive pattern—nominative and accusative—are the two cases in Estonian that are only assigned based on a DP's position in the clausal spine. All other cases in the language yield the matching pattern. To capture the difference between these two sets of cases, I follow Bittner and Hale's (1996) proposal that case features are located on K^0 heads, which take DP complements. In Bittner & Hale's system, lexical/inherent cases K^0-heads that are merged with a case value. There are also K^0-heads that are merged without a value; these K^0-heads are ultimately assigned accusative case in nominative/accusative languages. Nominative case is formalized as the absence of a K^0-head.

(54)   a.   Valued K^0:   b.   Unvalued K^0:   c.   No K^0:

---

[10]See, for example, Baker 2014 on Shipibo, Baker and Vinokurova 2010; Levin and Preminger 2015 on Sakha, Poole 2014 on Finnish, or Tucker 2013 on Maltese.

The upshot of adopting this characterization is that the case pattern a pseudopartitive exhibits can be determined entirely on the basis of its K^0-head. If the K^0-head is merged with a value, then the pseudopartitive will show the matching pattern (see (55)). Otherwise, the pseudopartitive will show the partitive pattern (see (56)).

(55)   Valued K^0: Matching Pattern

KP

K [VAL]   DP

piece-VAL bread-VAL
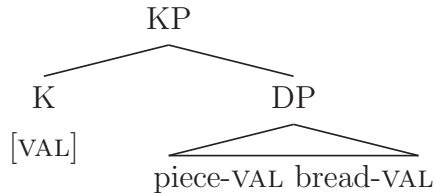
(56)   Else: Partitive pattern

(KP)

(K) [ ]   DP

piece bread-PAR
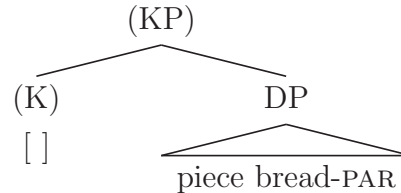
If we adopt this proposal, then the particular case pattern that a pseudopartitive exhibits will be determined at the moment the entire pseudopartitive is constructed. I thus propose that this is also the moment when the conditions for Unmarked Partitive assignment are checked. This leads us to the final characterization of the Unmarked Partitive case in Estonian, given below in (57).

(57)   Unmarked Partitive: Assign partitive case to complements of N^0 that do not already have a case value when the pseudopartitive extended projection is complete.

In other words, it is only when the entire KP is built, as in (55)-(56), that the conditions for unmarked case can be checked.

I will now turn to two illustrations showing how these assumptions derive the matching pattern and partitive pattern in a straightforward way.

4.3   Deriving the patterns

When a head like $K^0_{[ADE]}$ is merged, its case value spreads downward via case concord. Because the N2 phrase has no case value of its own, adessive case spreads all the way down to N2 itself, as in (59).

(58)   enamiku-l   inimes-te-l
       majority-ADE person-PL-ADE

       '(on) a majority of people'

(59)

```
                    KP
         ┌──────────┴──────────┐
     K[ADE]                    DP
                              [ADE]
                    ┌──────────┴···──────┐
                    D                    NP
                  [ADE]                 [ADE]
                          ┌──────────────┴──────┐
                          N                     DP
                        [ADE]                  [ADE]
                       √ENAMIK              ┌────┴────┐
                                            ...N2...
                                           √INIMENE
```
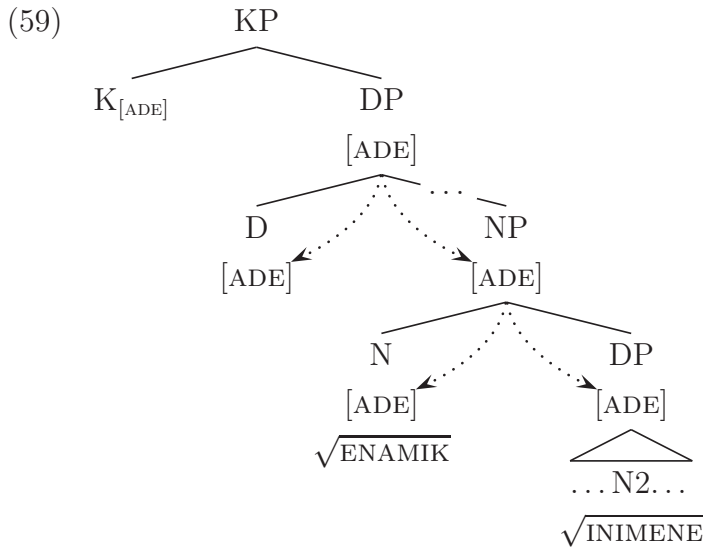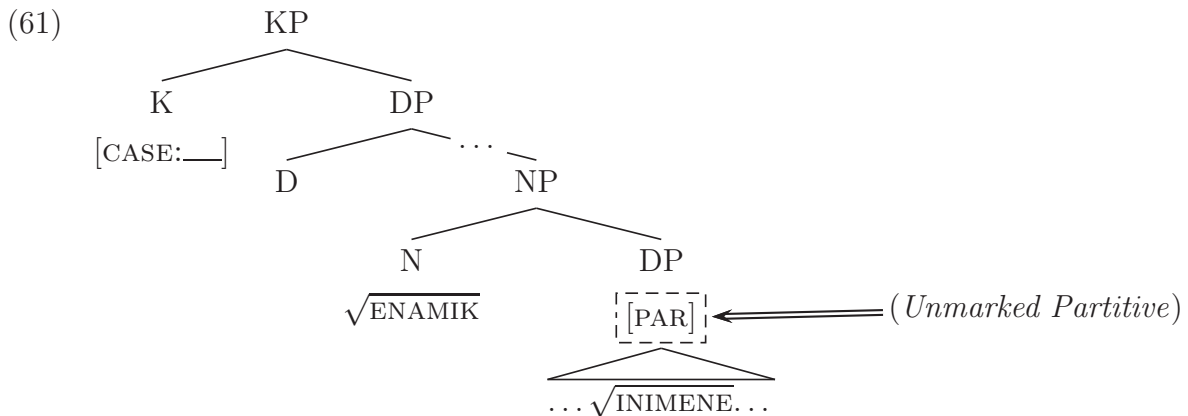
This yields full case matching between N1 and the N2 phrase. Under this analysis, the matching pattern is just another example of case concord, derived from the same mechanism as case concord between adjectives and nouns. Unmarked partitive case is not invoked, because there are no caseless complements of N^0.

If the K^0-head has no case value, the N2 phrase remains caseless (just like the rest of the KP). This is the environment that underlies the assignment of partitive case, so partitive case is assigned to the N2 phrase, as in (61).

(60)   enamiku   inimesi
       majority.ACC person.PL.PAR
       'a majority of people'

(61)

```
                    KP
         ┌──────────┴──────────┐
         K                     DP
     [CASE:__]        ┌─────────┴···────┐
                      D                 NP
                             ┌──────────┴──────┐
                             N                 DP
                           √ENAMIK         ⌐[PAR]⌐  ⟵──── (Unmarked Partitive)
                                           ┌───┴───┐
                                           ...√INIMENE...
```

When the pseudopartitive in (61) is merged with the clausal structure, it is eventually assigned accusative case, and this case value spreads as far as the N2 phrase by case concord. I then assume that the case value spreads no further, i.e., that accusative case spreads only as far as N1, and there is no case overwriting or stacking in Estonian.

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(62)

KP
[ACC]

K [ACC] DP [ACC]

D [ACC] NP [ACC]

N [ACC] DP [PAR]

...N2...
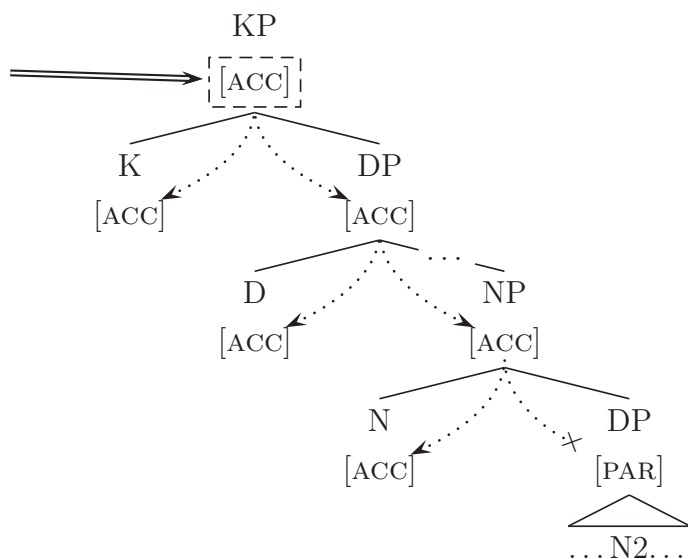
This is not a necessary assumption, but I adopt it here for the sake of simplicity, as this analysis can account for the matching pattern without appealing to a mechanism of case overwriting.[11] The end result is that the N2 phrase is marked with partitive case, while the N1 and every structurally higher element in the pseudopartitive is in accusative case (or nominative, as the case may be).

4.4 Analysis summary

This analysis gives teeth to the oft-noted generalization that structural cases (e.g., nominative and accusative) are treated differently from inherent cases (Babby 1980; Moravcsik 1995; Richards 2012). Descriptively speaking, inherent cases overwrite the DP-internal partitive case in Estonian, but structural cases apparently cannot. Though this notion is straightforward to state, the proper way to formalize it is not obvious. Ideally, these effects would be derived from independently observable facts about structural and inherent cases without recourse to identifying such-and-such case as [+STRUCTURAL] (for example). The unmarked partitive analysis derives these effects as a matter of timing. The cases that yield the matching pattern enter the derivation **before** the unmarked partitive can be assigned, and thus, unmarked partitive is not necessary. The cases that yield the partitive pattern enter the derivation **after** the unmarked partitive is assigned, and thus, too late to have any effect.

5 Conclusions

In this paper, I have proposed an analysis of the N2 case alternation in Estonian pseudopartitives based on the way different cases are assigned, and more concretely, **when** they are assigned. Under the analysis proposed here, the matching pattern arises as a result of case

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[11]If we allowed accusative to spread all the way down to the N2 phrase, we could then follow Baker and Vinokurova (2010) and assume that the innermost case value is always realized; this would account for the partitive pattern just as well. I make the stronger claim here and propose that case stacking does not occur in Estonian.

concord. Estonian is not unique in showing case concord in its pseudopartitive construction. This has been documented at least for Greek (Stavrou 2003) and German (van Riemsdijk 1998). Estonian differs from Greek and German in that it also has a DP-internal unmarked case—partitive case—and that case is assigned before nominative and accusative enter the picture. The emergence of two case-marking patterns is thus a byproduct of the timing of case assignment combined with the existence of a DP-internal unmarked case.

The N2 case alternation is not unique to the Estonian pseudopartitive. Similar alternations have been described and analyzed in Russian and Finnish numeral-noun constructions, and in fact, the alternation exists in Estonian numeral-noun constructions as well (see Norris 2014 for discussion). However, the specifics of the alternation in Estonian pseudopartitives are uniquely revealing about its possible analysis in Estonian, and by extension, in other languages. Estonian pseudopartitives unambiguously show the partitive pattern in two contexts: nominative and accusative. It is this fact that sets them apart from similar phenomena documented in the literature, as they arguably only show the partitive pattern in nominative contexts. As we saw, purely (or essentially) morphological accounts cannot straightforwardly account for the alternation in Estonian pseudopartitives. Pseudopartitves thus reveal that a syntactic account of this kind of case-marking alternation is needed in addition to (or in the place of) the existing morphological accounts.

More broadly, this investigation serves as an exploration of one possible formalization and implementation of Marantz's notion of unmarked case, distinct from default case. According to Marantz's original proposal, case assignment takes place in the morphological component: cases must "wait" to be assigned, even when the requisite syntactic structure is built. Recent analyses following Marantz's general research program (e.g., Baker and Vinokurova 2010; Levin and Preminger 2015; Preminger 2014) have proposed (*contra* Marantz) that case is assigned in the syntax. Furthermore, they argue that case is assigned as soon as its structural description is met, which will not work for the partitive in Estonian pseudopartitives (for reasons explored in §3). My conclusions are thus in line with the conclusions of Baker (2014): Marantzian case competition takes place at dedicated points during the derivation, and the requirements of case assignment are not checked until that time. The novel extension proposed here is that one of those points is the completion of the nominal extended projection.

The analysis presented here also supports a view of case assignment in which some cases are assigned as a last resort. That much is assumed in many modern analyses of case-marking systems. However, the results of this investigation suggest a stronger and more nuanced view, in which there is more than one kind of default: one that is context-free (like nominative in Levin and Preminger's (2015) account) and one that is context-dependent (like partitive in this analysis). Though I will not do so here, it is worth considering whether this account could be extended to other case-related last resort puzzles. For example, it has been suggested that *of* in English is sometimes inserted through last resort means (see, e.g., Harley (2009) and Harley and Noyer (1998)).[12] These investigations will be important as we continue to develop our understanding of the differing morphological and syntactic behaviors of case in natural language.

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[12]See also Harizanov (2014) for an analysis involving DP-internal unmarked case in Bulgarian.

6 References

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