

The distributive “dwarf case” in Estonian

Jussi Ylikoski (Oulu)

Abstract

The article discusses the borderland between nominal case inflection and adverb derivation in Estonian. Estonian grammars customarily present a case system consisting of fourteen cases. The present article takes a step outside the traditional paradigm. The main focus of the study is on certain formations traditionally regarded as denominal adverbs. The previously underdescribed formations in *-ti* have a distributive meaning (e.g., *hommikuti* ‘in the mornings’, *riigiti* ‘across countries; by country’, *keeliti* ‘across languages’). Based on data drawn from billions of words of modern written Estonian on the Internet, the distributive in *-ti* turns out to be a rather productive morphological category. Special attention is given to the syntactic properties of these formations, as the data show that the distributive differs starkly from ordinary adverbs. It is argued that the distributives are not fully denominal forms, but rather show many features characteristic of nouns: they may be accompanied by postmodifying relative clauses as well as genitives, adjectival modifiers and pronominal determiners. The article shows that the inflection–derivation interface of the Estonian noun is far from clear-cut. On the basis of the findings presented in this study, it is proposed that our understanding of the Estonian case system can be advanced by introducing a concept of “dwarf case” in analogy with dwarf planets, which are members of the Solar System and share many features with planets despite not being proper planets in and of themselves. The Estonian distributive in *-ti* can therefore be characterized as a “dwarf case”, an entity that comes quite close to being potentially considered the fifteenth case of the language.

Keywords: adverbs, cases, distributive, Estonian, inflection

1. Introduction

To quote an encyclopedic piece of information provided by the Estonian national encyclopedia *Eesti entsüklopeedia*, the number of cases varies greatly across languages:

- (1) *Kääne-te arv erine-b keeli-ti*
 case-PL.GEN number differ-3SG language-DISTR
suure-sti, eesti keele-s on 14
 great-ADV Estonian language-INE be.3SG 14
kääne-t.
 case-PART
 ‘The number of cases varies greatly across languages; in Estonian,
 there are 14 cases.’ (1)¹

Indeed, according to the received view, the number of morphological cases in Estonian is 14. This number is relatively high in not only a global context, but also among Uralic languages (cf. Iggesen 2013). As noted by Ehala et al. (2003: 37) and Viht (2017: 135, 138–139), the traditional view ultimately goes back to Knüpffer (1817; 1821) and has not been lately affected by occasional revision attempts such as Nevis’ (1986, 1988) proposal to downgrade the comitative, terminative, abessive and essive cases to clitics or clitic postpositions on the basis of their morphosyntactic features. Grammarians have also been aware of the marginally case-like categories known as excessive, instructive and prolative in Estonian and other Finnic vernaculars (Laanest 1982: 172, 175–176; Rätsep 1979: 81–83; Ross 1988; Suoniemi-Taipale 1994; Särkkä 1969; see also Muuk 1927: 43 for such cases mentioned in a school grammar). The most recent discussion on the case inventory of the language has centered on the question about the possibility to differentiate between the so-called long illative (illative) and the short illative (“aditive”), but the mainstream view does not support this hypothesis (see, e.g., Hasselblatt 2000, Siiman 2018 and the references therein).

The present paper focuses on another kind of morphological category that has, to my knowledge, virtually never been considered a candidate for a case in Estonian. The case in point can be seen in (1) above, in which the noun *kääne* ‘case’ is in the genitive plural (*käänete*) and the partitive singular (*käänet*), *arv* ‘number’ is in the nominative and *keel* ‘language’ in the inessive (*keeles*). However, the sentence also includes the formation *keeliti*, glossed as *distributive* (DISTR) in line with the apt characterization by, e.g., Villup (1969: 80), EKG (I: 23) and Kasik (2015: 387–388), as well as its semantic counterpart and namesake in Hungarian:

¹ The sources of the examples from various web pages are numbered here and presented as a list at the end of the paper. With non-specialists in mind, I have glossed certain non-finite verb forms as the progressive (PROG) and converb (CVB) instead of using the idiosyncratic terminology of traditional Estonian grammar (cf. Ereht 2007; Viitso 2007c).

- (2) Hungarian
Az eset-ek szám-a nyelv-enként
 DEF case-PL number-POSS.3SG language-DISTR
nagymértékben változ-ik, az észt
 greatly differ-3SG DEF Estonian
nyelv-ben 14 eset van.
 language-INE 14 case be.3SG
 ‘The number of cases varies greatly across languages; in Estonian, there are 14 cases.’ (personal knowledge)

In traditional Hungarian grammar, *nyelvenként* is often regarded as the distributive case form of the noun *nyelv* ‘language’. In the Estonian grammatical tradition, however, *keeliti* is regarded not as a case but as a denominal adverb based on the noun *keel* ‘language’. The distributive suffix *-ti* is generally regarded as quite productive, but derivational rather than inflectional – to the extent that the question about a possible inflectional status of the distributive has not even been raised before this study. Before discussing the question in more detail, two more examples serve to illustrate the morphological productivity and the general distributive meaning of the Estonian distributive in *-ti*:

- (3) *Kesklinna-s on parkimine tasuline*
 downtown-INE be.3SG parking for.a.fee
tööpäevi-ti piirkonni-ti 8-18 või 8-14.
 workday-DISTR district-DISTR 8–18 or 8–14
 ‘There is a fee for parking on workdays, depending on the district either from 8 a.m. to 6 p.m. or from 8 a.m. to 2 p.m.’ (2)
- (4) – – *sest palk või-b erine-da nii*
 as salary may-3SG differ-INF both
ettevõtte-ti, tegevusharu-ti kui
 enterprise-DISTR branch.of.business-DISTR and
ka paikkonni-ti (nt Harju- ja
 also area-DISTR e.g. Harju(maa) and
Valgamaa-l) üsna olulise-lt.
 Valgamaa-ADE quite substantial-ADV
 ‘– – as salaries may vary by enterprises, branches of business as well as by areas (e.g., in Harjumaa and Valgamaa counties) quite substantially.’ (3)

Example (3) comprises the two most typical functions of the distributive: In *tööpäeviti* ‘on workdays’, the suffix is attached to *tööpäev* ‘workday’, and as

a consequence, the distributive refers to distribution on the time axis, whereas *piirkond* ‘district; area; region; zone’ yields *piirkonniti* ‘by district’ referring to distribution in space. However, the suffix can also be attached to more abstract nouns such as *keel* ‘language’ in (1), along with *ettevõte* ‘enterprise’ and *tegevusharu* ‘branch of business’ in (4), and the resulting distributives have correspondingly abstract distributive readings. The idea of distribution or dispersal is also often conveyed by the governing verb such as *erinema* ‘differ, vary’ in (1) and (4) above. The vague functions of the distributive are *per se* not very different from other grammatical devices such as the countless inessive case forms such as *tööpäevas* ‘during a workday’, *piirkonnas* ‘in an area’ and *tegevusharus* ‘in a branch of business’.

Examples (1) and (3–4) are in no way novel or controversial to those who know the Estonian distributive as depicted in numerous grammars, dictionaries and other descriptions from the early 19th century to our days (e.g., EKS, EKSS, Kasik 2015 and their predecessors). However, the following type of sentences are novel and unexpected in light of earlier descriptions of the language:

- (5) *Tul-gu* *või* *uputus, aga* ***nädalavahetus-te***
 come-IMP.3SG even deluge but weekend-PL.GEN
hommiku-ti *pea-vad* *laua-l*
 morning-DISTR must-3PL table-ADE
ole-ma pannkoogi-d *moosi-ga!*
 be-INF pancake-PL jam-COM
 ‘Let the deluge come, but there must be pancakes with jam on the table
 in the weekend mornings!’ (4)

- (6) – – *kuigi* *vabaturumajanduse-s* *on*
 although free.market.economy-INE be.3SG
loomulik *et* ***teatud regiooni-ti*** *on*
 natural COMP certain region-DISTR be.3PL
hinna-d *erineva-d* *aga* *ühe-s* *ja* *sama*
 price-PL different-PL but one-INE and same
kaupluse-s, *baari-s,* *laeva-s* *teha*
 store-INE bar-INE boat-INE make-INF
rahvuse *tõttu* *vahe-t...* *kl-ge*
 ethnicity.GEN because.of difference-PART listen-IMP.2PL
härrase-d!!!
 gentleman.DIM-PL
 ‘– – although it is natural that in a free market, prices vary across
 certain regions, but to discriminate based on ethnicity in one single
 store, bar or boat... now listen, my gentlemen!’ (5)

In (5), the distributive *hommikuti* is preceded by the genitive modifier *nädalavahetuste* ‘of weekends’, typical of nouns such as *hommik* ‘morning’ from which the alleged adverb is supposedly derived. In a similar manner, the distributive *regiooniti* (from *regioon* ‘region’) in (6) is modified by *teatud* ‘given; certain’, an adjectivized past passive participle of *teadma* ‘know’. According to the received view, Estonian adverbs do not take modifiers such as nouns in the genitive case, nor are they modified by preposed participles or adjectives. Instead, such features are characteristic of nouns, which in Estonian are inflected for fourteen cases. To my knowledge, complex distributive phrases of the type seen in (5–6) have never been presented or discussed in any descriptions of the Estonian language.

This paper focuses on the above-mentioned features of the Estonian distributive. The working hypothesis of the study is that the distributive can be regarded as belonging to the realm of nominal case inflection rather than denominal adverb derivation. Although the distributive as seen in *nädalavahetuste hommikuti* ‘(regularly) on weekend mornings’ (5) and *teatud regiooniti* ‘across certain regions’ (6) can hardly be considered a full-fledged case, I wish to propose that there are nevertheless many good reasons to look at the distributive from an entirely new perspective. This study shows that the inflection–derivation interface of the Estonian noun is far from clear-cut. On the basis of the findings presented in this study it is proposed that our understanding of the Estonian case system can be advanced by regarding the distributive at least as a case-like phenomenon. For the present purposes, I introduce a concept of “dwarf case” in analogy with dwarf planets, which are members of the Solar System and share many features with planets despite not being regarded as proper planets in and of themselves.

The structure of the paper is as follows: Section 2 provides a brief introduction to the Estonian case system, adverb derivation and the traditional position of the distributive within the latter domain. Section 3, the main body of the paper, provides a description of the distributive “dwarf case” in present-day Estonian. Section 3.1 provides a short account of the morphological features of the distributive, followed by a detailed and richly illustrated description of the internal syntax of the distributive phrase (Section 3.2) and further by observations about the semantics of the distributive (Section 3.3). The general discussion in Section 4 draws the threads together and provides a general discussion of the topic by relating the present observations to the established and alternative views on Estonian case declension and adverb derivation, including the so-called instructives and prolatives. Diachronic considerations concerning the Estonian distributive are outside the immediate scope of the present paper. In the same vein, this paper focuses on empirical observations

on real language data, intentionally leaving judgments by native speakers to a forthcoming paper; see, however, brief notes on such judgments in Section 4.

Almost all authentic examples come from contemporary written Estonian. The research data was initially based on the 250M-word Estonian Web Corpus *etTenTen* (<http://keeleveeb.ee/>, <https://www.sketchengine.eu/>) as well as other corpora provided by the Institute of the Estonian Language and the Research Group of Computational Linguistics at the University of Tartu (<https://www.cl.ut.ee/korpused/>), but the study was later extended to many other texts available on the Internet and via common search engines. While acknowledging the importance of the *etTenTen* corpus for this study, I refer to the original sources of my examples whenever possible. The examples deliberately represent all kinds of genres from casual Internet discussions to translations of legal texts. Although the data comes from large corpora, this paper is a mostly qualitative description of phenomena whose actual manifestations often occur on various continua that create challenges for an exact quantitative analysis. Occasional references to the frequency or rarity of a given phenomenon are thus usually to be understood as relatively vague characterizations.²

2. Background

As mentioned above, Estonian is commonly regarded as having 14 morphological cases. All of them distinguish between singular and plural. Of the 14 cases, three (nominative, genitive and partitive) in particular can be labeled as grammatical cases, while the remaining eleven cases can be characterized as adverbial cases. Six of these, in turn, are local cases, and of the five non-local adverbial cases, four have been particularly interesting, as they – the comitative (7a), abessive (7b), terminative (7c) and essive (7d) – are able to undergo conjunction reduction. In other words, these cases yield coordinated phrases in which the case suffix is usually attached to the latter noun only, whereas the former noun is in the genitive (without an overt case suffix):³

² I wish to thank the anonymous reviewer of the paper for thoroughly reading my manuscript and providing a number of helpful comments and suggestions, as well as the audience of my talk “Dwarf cases in Estonian and elsewhere” at the 3rd Conference on Syntax of Uralic Languages, Tartu, on June 18th, 2019. For a brief summary of the major findings of the study in Estonian, with partly overlapping and partly supplementary examples, see Ylikoski (2019). Moreover, Ylikoski (forthcoming) presents a synchronic description of analogous phenomena in Finnish, hopefully to be followed by a contrastive and diachronic analysis of the two languages in a later publication.

³ As the anonymous reviewer has pointed out, it is also possible to analyze these cases in terms of phrase markers, thus regarding the non-last words of such phrases as genitive stems instead of genitive case forms (Metslang 2017: 466). However, as this question falls outside the immediate scope of this study, for the time being I wish to adhere to the more traditional interpretation instead (cf., e.g., EKG I: 52–53).

- (7) a. *lapse* *ja* *ema-ga* ‘with the child and the mother’
 child.GEN and mother-COM
- b. *lapse* *ja* *ema-ta* ‘without the child and the mother’
 child.GEN and mother-ABE
- c. *lapse* *ja* *ema-ni* ‘up to the child and the mother’
 child.GEN and mother-TERM
- d. *lapse* *ja* *ema-na* ‘as a child and a mother’
 child.GEN and mother-ESS

The conjunction reduction seen above is the main motivation for Nevis’ (1986, 1988) proposal to regard the four cases rather as postpositional clitics, but subsequent descriptions of the Estonian case have unanimously supported the traditional view instead (e.g., EKG I [1995]; EKS [2017]; for a concise description in English, see Viitso 2007c).

The distributive in *-ti* has apparently never been considered a case, not even hypothetically. To date, the most comprehensive accounts of the distributive have been provided by Kasik (2015: 387–388, 398–400), who, not unlike her predecessors (e.g., Villup 1969: 78–80; EKG I: 604–605), describes and discusses the phenomenon primarily from a morphological point of view. Kasik’s approach to the element *-ti* is not confined to the distributive, as she notes that the language also has a rather productive category of expressive, onomatopoeic or descriptive adverbs in *-ti*. However, as adverbs like *plaksti* ‘with a bang’ and *prauhti* ‘with a splash’ are seldom based on independent nouns and are clearly semantically distinct from the distributive, they fall outside the scope of the present study. There are also a motley crew of other adverbs ending in *-ti*, such as *pikuti* ‘lengthwise; longitudinally’ (← *pikk* ‘long; tall’), *teisiti* ‘otherwise’ (← *teine* ‘second; other’) and *õieti* ‘actually; really; in fact’ (← *õige* ‘right’). As for noun-based forms in *-ti*, Kasik notes that although the suffix is most often attached to the genitive singular (8), many distributives are based on oblique plural stems (9). Further, she mentions some pairs of non-distributive adverbs such as the positional adverbs *seljati* ‘back to back’ and *seliti* ‘on one’s back’ (← *selg* ‘back’ : *selja* SG.GEN).

(8)

	SG.NOM	GEN	DISTR
monosyllabic stem	<i>tõug</i> ‘breed’	<i>tõu</i>	<i>tõuti</i> ‘by breed(s)’
bisyllabic stem	<i>liik</i> ‘species’	<i>liigi</i>	<i>liigiti</i> ‘by species’
trisyllabic stem	<i>hommik</i> ‘morning’	<i>hommiku</i>	<i>hommikuti</i> ‘in the morning(s)’

(9)

	SG.NOM	PL	DISTR
monosyllabic stem	<i>õõ</i> ‘night’	<i>õi-</i>	<i>õiti</i> ‘in the night(s)’
bisyllabic stem	<i>päev</i> ‘day’	<i>päevi-</i>	<i>päeviti</i> ‘in the daytime’

In spite of their morphological irregularity, Kasik (2015: 388, 398–400) characterizes noun-based distributives as productive, adding that their productivity is dependent on the semantics of the stems, yet without specifying any possible constraints. Mäearu (2008: 119–120) adds that the distributive is based on plural stems particularly in the case of nouns with *i*-stem plurals (9), whereas nouns like *liige* ‘member’ : *liikme* ‘member.GEN’ (plural stem *liikmei-*) yield distributives such as *liikmeti* ‘by members’. From a prescriptive perspective, she adds that the correct distributives for *inimene* ‘human (person)’ and *esmaspäev* ‘Monday’ are thus *inimesiti* ‘by persons; personwise’ and *esmaspäeviti* ‘on Mondays’ instead of non-standard (yet existing) *inimeseti* and *esmaspäevati*. On the other hand, the colloquial distributive *kevadeti* ‘in spring’ is described as a somewhat acceptable variant of the standard *kevaditi* (← *kevad* ‘spring’).

As regards semantics, formations in *-ti* have not been described in great detail. Expressive and other irregular *-ti* adverbs aside, the main subjects of the present study – the more or less productive noun-based distributives in *-ti* – have been characterized as “distributive” in a wide sense that comprises repeated actions distributed in time (*hommikuti* ‘(regularly) in the morning(s)’, *reedeti* ‘(regularly) on Fridays’) as well as various kinds of distribution in space and in more metaphorical dimensions (see, e.g., Villup 1969: 80; Viitso 2007c: 84–85; Kasik 2015: 387–388, 399).

As regards syntax, the distributive in *-ti* has received little attention. Kasik (2015: 388) and EKG (I: 604) do present about ten sentence examples each, but these are used only to illustrate the morphological productivity of the distributive. More remarkably, the distributive is hardly mentioned in the syntactic descriptions of the language either. For example, the most recent and most comprehensive description of Estonian syntax ever published, the 923-page *Eesti keele süntaks* (EKS), mentions distributives only sporadically. The distributive is not mentioned in the chapter on the noun phrase (Pajusalu 2017), as distributives are conventionally understood as adverbs. However,

the chapter on the adverb phrase does not discuss the distributive much more than that: It appears that the only comment is that local adverbs such as *kohati* ‘by places’ may have distributive meanings (Veismann & Erelt 2017: 423). In the same vein, the chapter on adverbial modifiers mentions only fleetingly that *-ti* adverbs based on nouns with temporal meanings may be used to express frequency, e.g. *teisipäeviti* ‘(regularly) on Tuesdays’ (Veismann et al. 2017: 351). Similar adverbs are also briefly mentioned as expressions of iterativity and habituality in the chapter on predicates (Erelt 2017b: 127).

It appears that the internal syntax of distributive phrases has never been explicitly discussed, neither by Kasik (2015), EKS or any of their various predecessors. This is understandable, as adverbs are notoriously the word class whose members are often labeled adverbs only for lack of reasons to consider them members of any other word class (cf. Sasse 1993: 664; van der Auwera 1999: 8). As mentioned in the introduction, descriptions of the Estonian distributive have not presented or even hypothesized sentences in which the distributives are accompanied by any modifiers such as the genitive in *nädalavahetuste hommikuti* ‘(regularly) on weekend mornings’ (5) or the adjective in *teatud regiooniti* ‘across certain regions’ (6). Instead, the relatively few full example sentences (Villup 1969: 78–80; EKG I: 604; Kasik 2015: 388) include only single distributives such as *hommikuti* ‘in the morning(s)’, *piirkonniti* ‘by/ across areas/districts’ and *episooditi* ‘by episodes’, thus leaving little room for discussion about the potentially case-like morphosyntax of this productive morphological category.

For the sake of completeness, it may be noted that although it was stated above that the distributive has virtually never been considered a candidate for a case in Estonian, a rare and highly marginal exception is Anton Boller’s (1854: 26) pioneering paper “Die Declination in den finnischen Sprachen”, in which he fleetingly mentions a couple of Estonian adverbs such as *pitkuti* (nowadays *pikuti*) ‘lengthwise’ (← *pikk* ‘long; tall’), stating that forms like these express “Bewegung in die Ferne” and that *-ti* can be regarded as a case affix comparable to the Permic penetrative, nowadays known as the prolative (Udmurt *-ti*, Komi *-əd*). This premature curiosity has been duly ignored by later grammarians.

The following sections will scrutinize the nature of the distributives in *-ti* in light of authentic written language data.

3. The distributive “dwarf case” in *-ti*

This section provides a description of the distributive as a “dwarf case” in contemporary Estonian, based on corpora of hundreds of millions of words and ultimately billions of words available on the Internet (see Section 1). Section 3.1 briefly continues the above discussion on the morphological features of the distributive, whereas the most novel observations about the distributive

are presented in Section 3.2 on the internal syntax of the distributive phrase. Section 3.3 briefly comments on the semantics of the distributive.

3.1. Morphology of the distributive

From a historical point of view, Estonian morphology is a complex mixture of the generally conservative and agglutinative nature of (Proto-)Finnic on the one hand, and the relatively many innovative and fusional features – and analogical levelings – of its southernmost vernaculars on the other. Estonian morphology has been a topic of interest to morphologists and other grammarians for centuries, but the lion's share of studies has focused on inflection rather than derivation (see, e.g., Ehala et al. 2003; Kasik 2011; Viht 2017). The most comprehensive descriptions of derivation – the distributive in *-ti* included – have been presented in the accumulated work by Reet Kasik (e.g., 1996, 2013, 2015). As summarized in the preceding section, the distributive is regarded in the literature as a somewhat productive derivational category with mostly semantic restrictions.

The exact degrees of productivity or its restrictions have not, however, been assessed. The possible semantic restrictions are better left to be evaluated in Sections 3.3 and 4, but from a purely morphological point of view, even earlier accounts with occasional examples such as *episooditi* ‘by episodes’ (EKG I: 604) indicate that novel distributives can be formed relatively freely. Indeed, it is not expedient to try to provide a complete list of possible distributives. Instead, it suffices to give a short list of examples, as both official language corpora and the Internet abound with hundreds of sentences with semantically disparate internationalisms such as *horisonditi*, *hotelliti*, *konfessiooniti*, *ministeeriumiti*, *objektiti*, *organisatsiooniti*, *personiti*, *provintsiti*, *sektoriti*, *sessiooniti*, *varianditi* and *žanriti*.

The possibility of a seemingly infinite number of distributives is not equal to morphological regularity, however. Normative issues aside, there are many competing forms such as *inimesiti* ~ *inimeseti* ‘by persons; personwise’, *esmaspäeviti* ~ *esmaspäevati* ‘on Mondays’ and *kevaditi* ~ *kevadeti* ‘in spring’ mentioned above. Likewise, *keeliti* ‘across languages’ (1) could be *keeleti* as well, and *laev* ‘ship’ yields as many distributives as *laevati*, *laeviti* and *laevuti*. On the other hand, variation like this is by no means foreign to inflectional categories either; for concise overviews of inflectional variation in Estonian dialects, in the history of written Estonian as well as in contemporary colloquial Estonian, see Viitso (2007b: 196–225), Laanekask and Ereht (2007) and Keevallik (2007: 361–365), respectively.

To return to the question of productivity and semantic restrictions, it may be added that in actual usage, there seem to be no obvious restrictions as to which nouns can function as a basis for distributives. In addition to the recent ne-

ologisms mentioned above, *-ti* can also be attached to age-old nouns with no inherent features that would relate their referents to expressions of distribution. In addition to *inimesiti* ‘by person(s); personwise’, distributives may also refer to agents such as teachers (*õpetajati*), manufacturers (*valmistajati*), readers (*lugejati*), participants (*osalejati*), speakers (*kõnelejati*), learners (*õpijati*), workers (*töötajati*), users (*kasutajati*), players (*mängijati*) or actors (*näitlejati*), etc. by which a given property or feature may vary or differ, for example. The same can happen to children and their mothers as well:

- (10) *Tita-ga* *kodu-s* *olemise* *aeg* *on*
 baby-COM home-INE being.GEN time be.3SG
inimese-ti (*nii* ***ema-ti*** *kui* ***lapse-ti***)
 person-DISTR both mother-DISTR and child-DISTR
nii *erinev.*
 so different
 ‘The time spent at home with the baby differs greatly from person to person (by mothers as well as by children).’ (6)

The main hypothesis entertained in this paper is that the distributive can be understood as a kind of morphological case in Estonian, perhaps the fifteenth one. Irrespective of the observed morphological irregularity, the suffix *-ti* as seen in *ema-ti* ‘by mothers’ (10) itself fits perfectly into the pattern in which case suffixes include the abessive marker *-ta* and the terminative marker *-ni*, as seen in *ema-ta* ‘without a mother’ in (7b) and *ema-ni* ‘up to the mother’ in (7c) above.

The idea of a distributive case has one major morphological defect, however. Unlike all 14 cases of Estonian, the distributive lacks the number distinction between singular and plural, which is fully in line with other adverbs in the language (Veismann & Ereht 2017: 417). However, the inherent meaning of the distributive is plural: regardless of whether the officially accepted form is *inimeseti* (cf. oblique singular stem *inimese-*) or *inimesiti* (cf. plural *inimesi-*), both forms refer to multiple persons; situations such as those referred to in (10) may vary across persons, mothers and children, but not across a single person, mother or child. On the one hand, it is understandable that a case-like category such as the distributive may have a tendency to align with unmarked singular forms and favor singular stems such as *inimese-*, but then on the other hand it is equally understandable that a form with a plural meaning may have a tendency to look and sound like a plural form. As it happens, there are indeed instances of distributives that are based on the diachronically more recent plural

stem in *-de/-te*.⁴ Instead of the expected singular-based *teemati*, *riigiti* and *kohvikuti*, the distributives of *teema* ‘theme’, *riik* ‘state; country’ and *kohvik* ‘coffee shop’ in (11–13) are composed of the oblique plural stems *teemade-*, *riikide-* and *kohvikute-*; cf. the genitive plural *teemade* in the preceding clause in (11), as well as the allative plural *riikidele* in (12):

- (11) *Teema-de ringi kuulu-vad eelkõige*
 theme-PL.GEN scope.ILL belong-3PL especially
igapäevase-d suhtlussituatsiooni-d.
 everyday-PL communication.situations-PL
Mitmesuguse-d kõnearendusliku-d mängu-d, mis
 various-PL speech-enhancing-PL play-PL REL.PL
varieeru-vad teema-de-ti, mille-ks või-b
 vary-3PL theme-PL-DISTR REL-(PL.)TRA may-3SG
olla: tervitamine ja hüvastijätt, enda
 be.INF greeting and farewell REFL.GEN
ja teis-te tutvustamine, rahvuse
 and other-PL.GEN introducing ethnicity.GEN
ja tegevusala küsimine, – –
 and field.of.activity.GEN asking
 ‘The themes [in foreign language curricula] include first and foremost everyday situations of communication. Various communication-enhancing games that vary by themes, which may include the following: greetings and farewell, introducing oneself and other, asking about ethnicity and occupation, – –’ (7)
- (12) *Euroopa Nõukogu direktiivi-ga on*
 Europe.GEN Council.GEN directive-COM be.3SG
riiki-de-le an-tud palju vabadus-i
 state-PL-ALL give-PASS.PST.PTCP much freedom-PL.PART
käibemaksualas-te säte-te ülevõtmise-l
 subject.to.VAT-PL.GEN statute-PL.GEN adoption-ADE
siseriikliku-sse õiguse-sse ja seetõttu on
 domestic-ILL justice-ILL and therefore be.3PL
riiki-de-ti ka regulatsiooni-d väga erineva-d.
 state-PL-DISTR also regulation-PL very different-PL

⁴ For the past and present of the variety of plural formation in Estonian, see e.g. Raag (1998), Viitso (2007b: 197–201; 2007c: 32–41); in more detail within a larger Finnic context, see the life’s work of Paul Alvre (1921–2008).

‘An EU directive has given states a great deal of freedom to transpose the VAT provisions into their national law, and therefore the regulations vary greatly across states.’ (8)

(13)	<i>Kohviku-te-ti</i>		<i>varieeru-b,</i>	<i>kuid</i>	<i>tavaliselt</i>
	coffee.shop-PL-DISTR		vary-3SG	but	usually
	<i>1</i>	<i>shot</i>	<i>espresso-t</i>	-	<i>20</i>
	1	shot	espresso-PART	20	gram.PART
	<i>ning</i>	<i>2</i>	<i>shotti</i>	<i>40</i>	grammi.
	and	2	shot.PART	40	gram.PART

‘This differs across coffee shops, but usually a single shot of espresso is 20 grams, and a double shot is 40 grams.’ (9)

In addition to the relatively rare distributive plurals such as *teemadeti* (11), *riikideti* (12) and *kohvikuteti* (13), it is also possible to come across dozens of distributives such as *nädalavahetusteti*, *omavalitsusteti*, *inimesteti* ~ *inimestiti* and *sügisteti*, which are apparently based on plural stems of the nouns for ‘weekend’, ‘municipality’, ‘human (person)’ and ‘autumn’, respectively. However, as these forms differ from the more expected distributives such as *nädalavahetuseti* only by the letter *t*, I wish to dismiss them for the time being as possible – yet unexpectedly frequent – typographical errors.

As regards the above distributives based on plural stems in *-de-/te-*, it is of special interest that although such forms have not been presented in earlier descriptions of the distributive, it is possible to observe, by careful reading, that their existence has never been denied either. Instead, when scholars such as Mäearu (2008: 119) and Kasik (2015: 399) speak of distributives based on plural stems and give examples like *õiti* and *päeviti* as seen in (9), they do not spell out that the phenomenon is limited to the *-i-* plural alone. In other words, while it seems obvious that they have not intended to refer to the existence of distributives like *nädalavahetusteti* or those in (11–13), such forms are not downright counterexamples to what has been said about the formation of the distributive. On the other hand, Mäearu (2008: 119) adds that the stem is not in the plural for nouns with an *i*-stem in the singular (*sessiooni-ti* [session-DISTR]) or when the plural stem would contain a diphthong (*liikme-ti* [member-DISTR] instead of **liikme-i-ti* [member-PL-DISTR]). Thus, the distributives *riikideti* (12) and *kohvikuteti* (13) could also be regarded as counterexamples, but on the other hand Kasik’s wordings do not disavow these forms either.⁵ Be that as it may, the fact that a great number of distributives – always plural in meaning

⁵ Cf. the alternative plural stem *kohviku-i-*, yet impossible or at least unattested **kohviku-i-ti*.

(Section 3.3) – are genuinely based on plural stems (*-i-ti*) quite obviously may result in analogous distributive plurals in *-deti/-teti* as well.

In spite of the interesting observations presented above, the main reasons for viewing the distributive as a case-like phenomenon lie not in its morphological properties, but first and foremost in its syntax, which will be the theme of the following section.

3.2. Syntax of the distributive

This section describes the noun-like syntactic features of the distributive as a “dwarf case”. The discussion first addresses distributives with postmodifying relative clauses (Section 3.2.1) and continues with ample examples and remarks on distributives with genitive modifiers (Section 3.2.2.), adjectival (participial) modifiers (Section 3.2.3.), and pronominal determiners (Section 3.2.4.).

3.2.1. Postmodifying relative clauses

Estonian relative clauses have been described quite comprehensively in grammars such as EKG (I: 311–315) and EKS (Erelt 2017a: 738–750). In its prototypical meaning, (*postmodifying*) *relative clause* refers to a situation where a noun is followed by a finite clause with a clause-initial relative pronoun or pro-adverb. In the most recent descriptions of Estonian syntax, Erelt (2014: 72, 122; 2017a: 738) extends the concept to clauses headed by local and temporal (pro-)adverbs such as *kõikjal* (*kus* – –) ‘everywhere (where – –)’ and *nüüd* (*mil* – –) ‘now (when – –)’ (cf. EKG II: 296). However, he does not provide examples of relative clauses headed by productive adverbs derived from lexical stems, and it remains nevertheless doubtful whether the distributive in *-ti* should be seen only as local and temporal adverbs; for example, Kasik (2015: 387–388) labels the distributives as adverbs of manner.

In light of the fact that a relative clause is most often understood as a modifier of a noun – and thus as a part of the noun phrase – there are reasons to assume that, for many scholars of Estonian and structurally similar European languages, the following examples make the distributive in *-ti* look analogous to nouns with case suffixes such as *-ta* and *-ni* seen in (7) above. As a matter of fact, the curious plural distributive *teemadeti* seen in (11) is already followed by the non-restrictive relative clause *milleks võib olla* – – ‘(vary by themes), which may include – –’. Regardless of the morphological acceptability of the remarkably case-like *teemadeti*, large enough corpora provide hundreds of sentences in which various ordinary distributives are followed by many kinds of relative clauses. Examples (14–22) illustrate the versatility of this previously undocumented feature of the distributive.

In (14–16), the relative clauses modify distributives referring to inherently distributional periods such as summers (*suvi*), Saturdays (*laupäev*) and periods (*periood*):

- (14) *Aga suvi-ti, mis on*
 but summer-DISTR REL(.PL) be.3SG/3PL
ühtlasi ka minu
 at.the.same.time also 1SG.GEN
lemmikaastaaeg, käi-n Ridali
 favorite.season visit-1SG Ridali(.GEN)
Lennuklubi-s lenda-mas (asu-b Võru
 gliding.club-INE fly-PROG be.located-3SG Võru.GEN
külje all).
 side.GEN under
 ‘But in the summer, which is also my favorite time of year, I go flying
 at the Ridali gliding club (located in the vicinity of Võru).’ (10)

- (15) *Kaheksa kuu-d peale se-da,*
 eight month-PART in.addition that-PART
kui neli adventisti vallanda-ti
 as four Adventist.PART dismiss-PST.IMPERS
Bessarabka raudteejaama-st, kuna nad ei
 Bessarabka.GEN railway.station-ELA as 3PL NEG
ol-nud valmis tööta-ma laupäevi-ti,
 be-ACT.PST.PTCP ready work-INF Saturday-DISTR
mis on adventisti-de jaoks
 REL(.PL) be.3SG/3PL Adventist-PL.GEN for
jumalateenistusepäeva-ks, kinnita-s riigi
 day.of.worship-TRA confirm-PST.3SG state.GEN
apellatsioonikohus nii kohaliku kui ka
 court.of.appeal both local.GEN and also
regionaalse kohtu otsuse-d.
 regional.GEN court.GEN decision-PL
 ‘Eight months after four Adventists were dismissed from Bessarabka
 railway station because they were not willing to work on Saturdays,
 which is the day of worship for Adventists, the National Court of
 Appeal confirmed the decisions of both the local and regional courts.’
 (11)

- (16) *Kobarpeavalu-d* *esine-vad* ***perioodi-ti,*** ***mis***
 cluster.headache-PL occur-3PL period-DISTR REL.PL
või-vad ***kesta*** ***4-8*** ***nädala-t.***
 may-3PL last-INF 4–8 week-PART
 ‘Cluster headaches occur in periods that may last from 4 to 8 weeks.’
 (12)

In (17), the head of the relative clause is a *par excellence* expression for location (noun *regioon*), but in (18–22), the distributive phrases – with postmodifying relative clauses – express distribution and variation across communities (*kogukond*), teams (*meeskond*, *võistkond*), groups (*rühm*) and pairs (*paar*).

- (17) *Tulemus-i* *analüüsi-takse* ***regiooni-ti,*** ***mis***
 result-PL.PART analyze-IMPERS region-DISTR REL(.PL)
on ***moodusta-tud*** ***järgnevalt:***
 be.3SG/3PL form-PASS.PST.PTCP as.follows:
Põhja-Eesti – *Tallinn,* *Harju*
 Northern.Estonia Tallinn Harju
maakond *ja* *Lääne-Viru* *maakond;*
 county and Lääne-Viru county;
Kesk-Eesti *Jõgeva maakond,* *Järva*
 Central Estonia Jõgeva county, Järva
maakond *ja* *Rapla maakond;* – –
 county ja Rapla county
- ‘The results are analyzed by regions, which are formed as follows:
 North Estonia: Tallinn, Harju County and Lääne-Viru County; Central
 Estonia: Jõgeva County, Järva County and Rapla County; – –’ (13)
- (18) *Raadiosaade-t* *tee-me* ***meeskonniti,*** ***mi-da***
 radio.broadcast-PART do-1PL team-DISTR REL-(PL.)PART
on ***3–4,*** ***seega*** ***igati*** ***saa-b***
 be.3SG 3–4 therefore everyone can-3SG
saate *tegemise-s* *osale-da* *oma* *tiimi*
 broadcast.GEN making-INE participate-INF own team.GEN
koosseisu-s *umbes* *kord* *kuu-s.*
 composition-INE about once month-INE
 ‘We do radio broadcasts in teams of 3 to 4, so that everyone can participate in the team about once a month.’ (14)

- (19) *Poolfinaali-de-s ja finaali-de-s jätku-b*
 semifinal-PL-INE and final-PL-INE continue-3SG
võistlus võistkonniti, mis moodusta-takse
 competition team-DISTR REL.PL form-IMPERS
eelvoorud paremusjärjestuse aluse-l:
 preliminary.GEN ranking.order.GEN basis-ADE
Koha-d 1,6,12 vs koha-d 4, 5 ja 10
 position-PL 1, 6, 12 vs. position-PL 4, 5 and 10
ning 2,7, 11 vs 3, 8, 9.
 and 2, 7, 11 vs. 3, 8, 9
 ‘In the semifinals and finals, the competition will continue by teams that are formed on the basis of the preliminary rounds: positions 1, 6, 12 vs. positions 4, 5 and 10 and 2, 7, 11 vs. 3, 8, 9.’ (15)
- (20) *Võrrel-des rooma rauaaja-ga suurene-s*
 compare-CVB Roman Iron.Age-COM increase-PST.3SG
rahvasterännuaaja-l, eriti aga viikingiaaja-l,
 Migration.Period-ADE especially but Viking.Age-ADE
taas nais-te rõivas-te kinnitamise-l
 again woman-PL.GEN garment-PL.GEN fastening-ADE
ehte- ehk rinnanõel-te kasutamine.
 decoration or brooch-PL.GEN use
Nei-d kan-ti paari-ti, mis
 that.PL-PART wear-PST.IMPERS pair-DISTR REL.PL
või-si-d omavahel olla ühenda-tud
 can-PST-3PL mutually be.INF connect-PASS.PST.PTCP
keti-ga.
 chain-COM
 ‘Compared to the Roman Iron Age, women’s use of decorative brooches increased during the Migration Period and especially during the Viking Age. They were worn in pairs that could be connected together in a chain.’ (16)

- (21) *Kuid enamasti asu-vad galaktika-d*
 but mostly be.located-3PL galaxy-PL
rühmi-ti, mille-s erineva-i-d
 group-DISTR REL-(PL.)INE different-PL-PART
galaktika-i-d ei ole koos rohkem kui
 galaxy-PL-PART NEG be.CNG in.total more than
poolsada.
 half.a.hundred
 ‘But in most cases, galaxies occur in clusters in which the number of galaxies is not more than half a hundred.’ (17)
- (22) *NSVL-i aja-l praeguse*
 USSR-GEN time-ADE present.GEN
EV territooriumi-le
 Republic.of.Estonia(.GEN) territory-ALL
tul-nud isiku-d asu-si-d siin
 come-ACT.PST.PTCP person-PL settle-PST-3PL here
ela-ma kogukonni-ti, kus põhiliselt
 live-INF community-DISTR where basically
kujunda-s elukeskkonda nõukogulik
 shape-PST.3SG living.environment.PART Soviet
mentaliteet, vene keel ja kultuur
 mentality Russian language and culture
ning vähene või olematu side kohaliku
 and minor or non.existent tie local.GEN
eesti ühiskonna-ga.
 Estonian society-COM
 ‘People who came to the territory of the present Republic of Estonia during the Soviet era were settled here in communities in which the living environment was basically shaped by the Soviet mentality, Russian language and culture, and little or non-existent ties with the local Estonian society.’ (18)

Relative clauses often modify distributives with otherwise general meanings, so as to make the phrases more informative. In the above examples, the referents of the distributive phrases extend not only from Saturdays to Estonian regions, but also from pairs of medieval and pre-medieval brooches to groups of galaxies. As is also the case elsewhere in Estonian, there are no formal differences between restrictive and non-restrictive relative clauses, and the relative clauses seen above belong to both types – mostly non-restrictive ones, but also restrictive ones such as in (17) and (19). The interrogative relative

pronoun *mis* is inflected in case and less commonly in number (with singular forms usually used for plural), and the corresponding pro-adverb *kus* is also possible. In a word, Estonian distributives can be modified by relative clauses just like virtually all undisputed nouns in the language.

3.2.2. Genitive modifiers

Although it may be possible to think that the distributives with relative clauses can be regarded as adverbs, the same reasoning cannot easily be applied to genitive modifiers. The first example of this was given in (5) with the distributive phrase *nädalavahetus-te hommiku-ti* [weekend-PL.GEN morning-DISTR] ‘on weekend mornings’. This is by no means a unique curiosity; rather, it is a small wonder that such phrases have not been mentioned in earlier descriptions of the language. For example, it takes only a handful of Internet searches to find hundreds of phrases like *esmaspäeva/teisipäeva/kolmapäeva/... hommikuti/õhtuti* ‘on Monday/Tuesday/Wednesday/... mornings/evenings’, but as such phrases could in principle be dismissed as misspelled compounds such as *esmaspäevahommikuti* ‘on Monday mornings’, less controversial examples are desirable. It is almost equally easy to find dozens of sentences in which distributives are preceded by genitives with various functions, most of which can be vaguely characterized as genitives of reference and genitives of composition. Once again, the distributives in question may refer to periods of time (23), areas and regions (24) and other groupings as disparate as occupational groups (25) and different types of cat hair (26):

- (23) *Mõel-des* *eelkõige* *just* *nei-le*
 think-CVB especially just that.PL-ALL
gümnasisti-de-le, *kes* *valikaine-na*
 high.school.student-PL-ALL who.PL elective-ESS
oma õppekava-sse majandus- ja
 own curriculum-ILL economics and
ettevõtlusõppe *on* *vali-nud,*
 entrepreneurship.studies.GEN be.3PL choose-ACT.PST.PTCP
hakka-vad *loengu-d* *toimu-ma* *iga*
 begin-3PL lecture-PL occur-INF every
kuu ***teise*** ***nädala*** ***teisipäevi-ti.***
 month.GEN second.GEN week.GEN Tuesday-DISTR
 ‘Taking into account first and foremost those high school students who have chosen economics and entrepreneurship in their curriculum, the lectures will be held on the Tuesday of the second week of each month.’
 (19)

- (24) *Kategooria-d on malli-de-l riigi-ti*
 category-PL be.3PL template-PL-ADE state-DISTR
ja ka Eesti maakonni-ti erineva-d.
 and also Estonia.GEN county-DISTR different-PL
 ‘The categories in the templates differ by states and also by the counties of Estonia.’ (20)
- (25) *Küll on aga võimalik võrrel-da*
 indeed be.3SG however possible compare-INF
tunnitasu-sid ja nende
 hourly.pay-PL.PART and it.PL.GEN
proportsioon-e ametiala-ti ja
 proportion-PL.PART occupation-DISTR and
ametiala pearühmi-ti.
 occupation.GEN main.category-DISTR
 ‘However, it is possible to compare the hourly rates and their proportions to the occupation and the main categories of occupation.’ (21)
- (26) *Kassitõugu-de vajaduse-d on karvkatte*
 cat.breed-PL.GEN need-PL be.3PL fur.GEN
tüübi-ti erineva-d.
 type-DISTR different-PL
 ‘The needs of cat breeds differ by fur type.’ (22)

To provide more examples, the following ones contain distributives modified by genitive plurals (27–32), which, in turn, may be have adjectival modifiers of their own (29–32):

- (27) *Veel=gi ettevaatliku-m pea-ks ole-ma*
 even=also cautious-CMPV must-COND.3SG be-INF
reaalpalka-de puhul sest
 real.wage-PL.GEN as.regards because
tarbija-te rühmi-ti on tarbimisstruktuuri-d
 user-PL.GEN group-DISTR be.3PL consumption.structure-PL
erineva-d ning seega – –
 different-PL and thus
 ‘One should be even more cautious as regards real wages, because consumption patterns vary across consumer groups, and thus – –’ (23)

- (28) *Suvekuu-de pühapäevahommiku-ti saa-vad lapse-d*
 summer.month-PL.GEN Sunday.morning-DISTR can-3PL child-PL
Löwenruh pargi-s lusti-da.
 Löwenruh park-INE have.fun-INF
 ‘On the Sunday mornings of the summer months, children can enjoy
 the fun of Löwenruh Park.’ (24)
- (29) *Praegu on nii, et hommiku-l*
 nowadays be.3SG so COMP morning-ADE
kohvijoomise aja-ks või-b küll
 coffee.drinking.GEN time-TRA may-3SG DPT
oma piima ja padja-ga tulla
 own milk.GEN and pillow-COM come-INF
ja se-da ta vaba-de päeva-de
 and that-PART 3SG free-PL.GEN day-PL.GEN
hommiku-ti ka tee-b.
 morning-DISTR also do-3SG
 ‘Nowadays s/he may come with his/her own milk and pillow at the
 time of morning coffee, and s/he indeed does so in the mornings of
 free days.’ (25)
- (30) *Enne oli ainult jalga-de valu, see=gi*
 earlier be.PST.3SG only leg-PL.GEN pain that=too
p[õ]hiliselt veenilaiendi-te-st ja pikka-de
 mostly varicose.vein-PL-ELA and long-PL.GEN
päeva-de õhtu-ti.
 day-PL.GEN evening-DISTR
 ‘Earlier, there was pain in the legs only, mostly due to the varicose
 veins and in the evenings of long days only.’ (26)
- (31) *Pärnaka-d saa-vad luksussõiduke-i-d*
 person.from.Pärnu-PL may-3PL luxury.vehicle-PL-PART
imetle-da järgneva-te päeva-de
 admire-INF following-PL.GEN day-PL.GEN
hommiku-ti ning õhtu-ti Rannahotelli
 morning-DISTR and evening-DISTR Rannahotell.GEN
ees.
 in.front.of
 ‘People of Pärnu can admire luxury vehicles in front of Rannahotell
 in the mornings and evenings of the following days.’ (27)

- (32) *Tõepoolest, QT-intervalli pikendamise*
 indeed QT.interval.GEN prolonging.GEN
suutlik[k]us varieeru-b sageli kõnealus-te
 ability vary-3SG often in.question-PL.GEN
ravimi-te klassi-de liikme-ti ja
 medicine-PL.GEN class-PL.GEN member-DISTR and
selle toime potentsiaali pole võimalik
 it.GEN effect.GEN potential.PART be.NEG possible
ravimi välja töötamise-l täpselt
 medicine.GEN out working-ADE accurately
ennusta-da.
 predict-INF

‘In fact, the ability to prolong the QT interval often varies across members of these drug classes, and the potential for this effect cannot be predicted accurately during drug design and development.’ (28)

Finally, (33) shows that in addition to genitives of nouns, genitive forms of pronouns can also occur:

- (33) *Komisjon märki-s, et liidu-s*
 commission observe-PST.3SG COMP union-INE
kehti-vad üheaegselt liikmesriigi-ti või
 apply-3PL simultaneously member.state-DISTR or
nende rühmi-ti erineva-d
 it.PL.GEN group-DISTR different-PL
kaubandustingimuse-d, ning selle tagajärje-l – –
 commercial.condition-PL and it.GEN result-ADE
 ‘The Commission observed that different commercial conditions coexist within the Union, varying from one Member State or group of Member States to another, and as a result of this – –’ (29)

It seems superfluous to refer to descriptions of the Estonian genitive and phrase structure here. To put it briefly, genitives are modifiers of nouns, not of adverbs; see Pajusalu (2017: 388–400) as well as Veismann and Erelt (2017) and the references therein. Therefore, the only expected and logical interpretation of the above examples of distributives with genitive modifiers is that the internal structure of the distributive phrase is that of noun phrases.

3.2.3. Adjectival (participial) modifiers

Although the preceding sections present postmodifying relative clauses (Section 3.2.1) and preposed genitives (Section 3.2.2), the Estonian noun phrase

has even more characteristic features, and not all of them can be attested in the distributives. Most importantly, nearly all demonstratives, adjectives, and present participles that modify nouns agree with their heads in number and most cases (Nurkse 1937; Erelt 1986: 39ff.; EKG II: 115–119; Erelt 2007: 113; Pajusalu 2017: 381–386). The most important exception are the four cases – the comitative, abessive, terminative and essive – already described as exceptional “postpositional clitics” as labeled by Nevis (1986, 1988). For example, the words *nädalavahetuste hommikud* ‘weekend mornings’ may be preceded by the plural demonstrative *need* ‘those’ and the plural adjective *päikeselised* ‘sunny’ in the nominative (34a), but when the noun is in the adessive case, these words must agree with their head (34b). If the head is in a case such as the comitative, the modifiers still agree in number and must be in the genitive case (34c). However, the distributive hardly ever has modifiers like this. Although phrases like *nädalavahetuste hommikuti* ‘(regularly) on weekend mornings’ (5) are possible, I have not attested more complex phrases such as (34d) or (34e):

- (34) a. *need päikeselise-d nädalavahetus-te hommiku-d*
 that.PL sunny-PL weekend-PL.GEN morning-PL
 ‘those sunny weekend mornings’
- b. *nende-l päikeselis-te-l nädalavahetus-te hommiku-te-l*
 that.PL-ADE sunny-PL-ADE weekend-PL.GEN morning-PL-ADE
 ‘on those sunny weekend mornings’
- c. *nende päikeselis-te nädalavahetus-te hommiku-te-ga*
 that.PL.GEN sunny-PL.GEN weekend-PL.GEN morning-PL-COM
 ‘with those sunny weekend mornings’
- d. **nende-ti päikeselis-te-ti nädalavahetus-te hommiku-ti*
 that.PL-DISTR sunny-PL-DISTR weekend-PL.GEN morning-DISTR
 ‘(regularly) on those sunny weekend mornings’

- e. */?nende päikselis-te nädalavahetus-te
 that.PL.GEN sunny-PL.GEN weekend-PL.GEN
 hommiku-ti
 morning-DISTR
 '(regularly) on those sunny weekend mornings' (personal knowledge)

The absence of distributive phrases such as (34d) or (34e) is not the whole story, however. As seen already in the introduction, it is possible to come across phrases like *teatud regiooniti* 'across certain regions' (6), in which the distributive is accompanied by the adjectivized past passive participle *teatud* 'given; certain' (from *teadma* 'know'). Such participles are known to be an exception to the agreement rules; premodifying words like *teatud* are indeclinable in all cases (e.g., *teatud hommikud/hommikutel* [certain morning.PL/morning.PL.ADE] '(on) certain mornings' (Pajusalu 2017: 386). The following examples show a similar usage of distributives:

- (35) *Sest teatud perioodi-ti see neela-b*
 because certain period-DISTR it swallow-3SG
mehe, töö siis.
 man.GEN work DPT
 'Because it absorbs the man over certain periods, the job I mean.' (30)
- (36) *Tallinna-s on üürivõlglas-i teatud*
 Tallinn-INE be.3SG rent.debtor-PL.PART certain
paikkonni-ti üle 30%.
 location-DISTR over 30%
 'In Tallinn, over 30 per cent of the residents in certain locations have rental debts.' (31)

In addition to *teatud regiooniti* (6), *teatud periooditi* (35) and *teatud paikkonni-ti* (36), I have attested especially the adjective *teatud* as a modifier to more than dozen distributives such as *erialati* 'across (certain) specialties', *grupiti* 'across (certain) groups', *reedeti* 'on (certain) Fridays', *teemati* 'across (certain) themes' and *tööpäeviti* 'on (certain) workdays'. According to the received view on nominal, adjectival and adverbial syntax in Estonian, such distributive phrases ought to be as ungrammatical as the analogous phrases **certain regionally* and **certain periodically* are in English. For example, in his thorough description of the syntax of the Estonian adjective, Erelt (1986: 40–41, 58, 63–64) also presents rare examples of adjectives modifying pronouns instead of nouns, but he does not even hypothesize the possibility of adverbs having adjectival modifiers.

Although *teatud* is the most common adjective modifying distributives, it is not the only one. In (37), the distributive is preceded by *loetletud* ‘listed’, and in (38), the modifier *nimetatud* ‘mentioned’ itself retains an adverbial modifier to the verb for ‘mention’; even more examples could be presented:

- (37) *Kui vaada-ta töötaja-te suhtearv-e*
 when look-INF worker-PL.GEN ratio-PL.PART
ehitussektori-s loetle-tud valdkonni-ti,
 construction.sector-INE list-PASS.PST.PTCP area-DISTR
siis või-b väita, et – –
 then can-3SG argue-INF COMP
 ‘When one looks at the ratio of employees in the construction sector by the listed fields, it is possible to argue that – –’ (32)

- (38) *Teise võimaluse-na või-vad eksperdi-d*
 other.GEN possibility-ESS can-3PL expert-PL
üles näida-ta oma huvi allpool
 up show-INF own interest.PART below
nimeta-tud valdkonni-ti.
 mention-PASS.PST.PTCP area-DISTR
 ‘Alternatively, experts can register their own interests by the fields mentioned below.’ (33)

For the sake of completeness, a more exceptional example can be given:

- (39) *Möödunud öösi-ti kuni 10 kraadi-ni*
 past night-DISTR up.to 10 grade-TERM
ulatu-w külm on kaaneta-nud
 extend-ACT.PRS.PTCP cold be.3SG cover-ACT.PST.PTCP
Emajõe terwe-s pikkuse-s.
 Emajõgi.GEN entire-INE length-INE
 ‘The cold that has fallen to minus ten degrees in recent nights has covered the entire River Emajõgi with ice.’ (34)

Firstly, *möödunud* ‘past’ in (39) is a lexicalized adjective, based on the active past participle of *mööduma* ‘pass’, unlike the passive participles seen in (6) and (35–38). Secondly, (39) comes from a newspaper published as early as in 1935. Thirdly, *öösi* is not a fully transparent distributive based on the noun *öö* ‘night’, but is rather based on the stem *ööse-* that is usually considered an adverb stem; however, it is also possible to regard *ööse-* as a kind of allomorph to *öö-* (Velsker 2006; 2018: 282–284), and, from this point of view, *öösi* is not

that exceptional after all (*öö*-based distributives *ööti* and *öiti* as well as *ööseti* are also possible, but less frequent than *öösiti*). One should never give too much attention to single occurrences like this, but on the other hand the phrase *möödunud öösiti* ‘in recent nights’ is fully in line with the above examples. The intended meaning is obvious and unproblematic, just like the meanings of other distributives seen in the preceding examples.

However, (40) clearly differs from the above phrases with past participles as modifiers of the distributive:

(40)	<i>Siiamaani</i>	<i>on</i>	<i>ol-nud</i>	<i>alati</i>	<i>patendi</i>
	thus.far	be.3SG	be-ACT.PST.PTCP	always	patent.GEN
	<i>taotlemise-ks,</i>	<i>kas</i>	<i>siis</i>	<i>taotle-takse</i>	
	applying-TRA	whether	then	apply-IMPERS	
	<i>siseriiklikku</i>	<i>patendikaitse-t</i>	<i>või</i>	<i>nn</i>	
	national.PART	patent.protection-PART	or	so-called	
	<i>täna</i>	<i>olemasoleva-t</i>	<i>Euroopa</i>	<i>patenti,</i>	
	today	existing-PART	Europe.GEN	patent.PART	
	<i>mille-l</i>	<i>on</i>	<i>omakorda</i>	<i>piirangu-d</i>	
	REL-ADE	be.3PL	in.turn	restriction-PL	
	<i>erineva-te</i>	<i>riigi-ti</i>	<i>jne,</i>	<i>jne,</i>	<i>väga</i>
	different-PL.GEN	country-DISTR	etc.	etc.	very
	<i>keerukas</i>	<i>süsteem.</i>			
	complex	system			

‘Thus far, the procedure for applying for a patent has involved a very complex system, when it comes to applying for both national patent protection or the so-called European patent, which in turn has restrictions across different countries, etc., etc.’ (35)

In (40), the distributive *riigiti* (from *riik* ‘state; country’) is preceded by *erinev* ‘different’, the lexicalized active present participle of *erinema* ‘differ, vary’, the most common verb with which distributives occur. However, unlike the past participles in (6) and (35–39) above, and not unlike the present participles that modify Estonian nouns, *erinev* appears to agree with its head, as it is realized as the genitive plural *erinevate*. It is true that this is not a distributive like the fully hypothetical **erinevati*, but as I am not aware of any adjective-based distributives, it is much less surprising to observe the form *erinevate*, which actually fits very well with the working hypothesis of this study: If the distributive were to be interpreted as the fifteenth, albeit very marginal and somewhat defective case in Estonian, it is quite legitimate to expect that if it does not possess the most prototypical features of an Estonian case, it might instead resemble the

group of four less prototypical cases – the comitative, abessive, terminative and essive – discussed above (see, e.g., Nevis 1986: 81–82; 1988: 173).

All in all, this is exactly how the genitive plural *erinevate* can be understood; this form would make a perfect adjectival modifier to the comitative plural *hommikutega* ‘with mornings’ (34c), for example. This is to say that from another point of view, the distributive *riigiti* seems to be on a par with case forms like the comitative plural. It is good to remember in this connection that at least some language users have demonstrably replaced *riigiti* with the analogous distributive plural *riikideti* seen in (12) in Section 3.1. To pull all the threads together, the next imaginable stage would be to observe distributive phrases like *??erinevate riikideti*, which are fully in line with phrases like *erineva-te riiki-de-ga* [different-PL.GEN country-PL-COM] ‘with different countries’ or *erineva-te riiki-de-na* [different-PL.GEN country-PL-ESS] ‘as different countries’. It has not been possible to find the very combination *??erinevate riikideti*, but the circle is closed with the structurally analogous phrase based on the noun *kohvik* ‘coffee shop’; cf. (41) seen above:

- (41) *KUI SA TELLI-D AMERICANO...*
 if 2SG order-2SG Americano.GEN
 ... *siis esiteks Americano on erineva-te*
 then first Americano be.3SG different-PL.GEN
kohviku-te-ti erinev selle osa-s,
 coffee.shop-PL-DISTR different that.GEN part-INE
kas lisa-takse 1 või 2 shotti
 whether add-IMPERS 1 or 2 shot.PART
espresso-t, kuid tehniliselt on ta espresso
 espresso-PART but technically be.3SG it espresso
 + *ekstra vesi.*
 plus extra water
 ‘IF YOU ORDER AN AMERICANO ...
 ... first, Americano varies across different coffee shops as to whether one adds one or two shots of espresso, but technically speaking, it is espresso plus extra water.’ (36)

It must be emphasized that (41) is a hapax legomenon and, as such, would most likely be rejected by many and probably most speakers of Estonian. Irrespective of the question of to which extent phrases such as *erinevate kohvikuteti* ‘across different coffee shops’ are accepted, they definitely cannot be considered adverb phrases. As far as expressions like these exist, the only tenable analysis would be to regard the words as a noun phrase in the distributive plural. Many of the examples seen above are more common and apparently better accepted

than (41), and, as such, provide more support for the working hypothesis of this study. On the other hand, in light of the participial modifiers in (6) and (35–39), it seems quite logical that sentences like (40) and even (41) can occasionally be attested.

The discussion on adjectival yet indeclinable modifiers will continue in the following section on pronominal modifiers of distributives.

3.2.4. Pronominal determiners

The last subsection on adnominal modifiers – or better here, determiners – discusses elements that are mostly labeled as pronouns.⁶ Like many languages, Estonian has a miscellaneous and somewhat unclear group of grammatical words that can be subsumed under the category of pronouns *sensu lato*. These include words such as the determinative pronoun *iga* ‘every’, the possessive or reflexive pronoun *oma* ‘one’s (own)’ and the indefinite pronoun *mingi* ‘some; a kind of’. While many pronouns do agree with the nouns they occur with, these three words belong to those that often do not. According to the received view, these pronouns – just like relative clauses (Section 3.2.1), genitival modifiers (Section 3.2.2) as well as adjectives and participles (Section 3.2.3) – occur with nouns in phrases like *iga hommik* ‘every morning’, *mingi hommik* ‘some morning’, *mingi piirkond* ‘some region’ and *oma piirkond* ‘one’s own region’. They are not supposed to occur as modifiers or determiners of adverbs, but again, distributives in *-ti* constitute an anomalous exception:

- (42) *Iga hommiku-ti kontrolli-n hobus-te*
 every morning-DISTR control-1SG horse-PL.GEN
tervislikku seisundi-t, kuna avasta-si-n
 healthy.PART condition-PART when discover-PST-1SG
teisipäeva hommiku-l ühe-l hobuse-l
 Tuesday.GEN morning-ADE one-ADE horse-ADE
kabjaliigese paistetuse.
 hoof.joint.GEN abscess.GEN
 ‘I check the health of the horses every morning, and on Tuesday morning I discovered a hoof abscess on one horse.’ (37)

⁶ For different views on the concepts of modifier and determiner, see, e.g., Matthews (2007: 61ff.; 2014: 67–85) and the references therein.

- (43) *Iga nädalavahetuse-ti sõit-si-me ranniku*
 every weekend-DISTR drive-PST-1PL coast.GEN
äärde, Burnett Head'si väikse-sse karavaniparkki
 to.side Burnett Heads.GEN small-ILL caravan.park.ILL
puhka-ma.
 rest-INF
 ‘Every weekend we drove to the coast, to rest in the small caravan park at Burnett Heads.’ (38)
- (44) *Lisa-ks töise-le ja veidi*
 addition-TRA work.like-ALL and little
mängulise-ma-le poole-le sa-i-d kooli-d
 playful-CMPV-ALL side-ALL can-PST-3PL school-PL
ühiselt kui ka oma piirkonni-ti valmista-da
 together as also own region-DISTR prepare-INF
ja serveeri-da erineva-i-d toidukord-i.
 and serve-INF different-PL-PART meal-PL.PART
 ‘In addition to working and showing a little more playful side, schools prepared and served different meals all together as well as by their own regions.’ (39)
- (45) *Aga maailmameri on juba nii erinev*
 but World.Ocean be.3SG DPT so different
oma piirkonni-ti.
 own region-DISTR
 ‘But the World Ocean is so different from region to region.’ (40)
- (46) *Mingi hommiku-ti on tiba paha olla*
 some(.GEN) morning-DISTR be.3SG a.bit bad be.INF
kui üles ärka-n, nagu sees keera-b
 when up wake-1SG as.if inside rotate-3SG
või nii.
 or thus
 ‘Some mornings, I feel a little sick when I wake up, as if something is rotating inside or something like that.’ (41)

- (47) *Sissepääs* *pida-vat* *ole-ma* *kuskil* 7
admission shall-QUOT be-INF somewhere 7
euri *ja* *takso-ga* *on* *kuskil*
euro.PART and taxi-COM be.3SG somewhere
10 *km,* *aga* *seal* *on* *teine* *süsteem* *kui*
10 km but there be.3SG another system than
siin, ***mingi*** ***piirkonni-ti*** *on* *hinna-d*
here some(.GEN) zone-DISTR be.3PL price-PL
vms.

or.something

‘Admission costs around seven euros and the taxi trip is around ten kilometers, but there is another system than here, prices vary by some kind of zones, or something like that.’ (42)

- (48) *Eelmise* *aasta* *suve-l* *tul-i-d*
previous.GEN year.GEN summer-ADE come-PST-3PL
need *juba* *otsa* *ette* *ja*
it.PL DPT forehead.GEN in.front and
kulmu-de *vahele* *ning* *lõpu-ks* *ka*
eyebrow-PL.GEN between and end-TRA also
lõua-le. *Ja* *kogu* *see* *süsteem* *käi-b*
chin-ALL and whole this system go-3SG
mingi ***perioodi-ti.*** *Kord* *on* *otsaesine*
some(.GEN) period-DISTR once be.3SG forehead
hulle-m *ning* *siis* *on* *jälle* *lõug*
crazy-CMPV and then be.3SG again chin
täiesti *pekki-s.*
fully fat-INE

‘In the summer of last year, they [acne pimples and bumps] appeared on my forehead and between my eyebrows and finally also on my chin. And the whole thing seems to proceed in some kind of periods. At one time, my forehead is worse, and at another time, my entire chin is again full of oil.’ (43)

The pronouns *iga* ‘every’ (42–43) and *oma* ‘own’ (44–45) are not particularly frequent with distributives, and *iga* in particular seems to bring little extra value to distributives like *hommikuti*, which often carry the meaning of continuous, regular distribution *per se*. On the other hand, it is easy to find dozens of distributives with *mingi* ‘some’, which clearly diminishes the number or certainty of, say, mornings (46), zones (47) or periods (48) in question. To repeat, while *hommikuti* on its own means vaguely ‘(regularly) in the mornings’, *iga hommi-*

kuti (42) tells that something happens ‘every morning’, and *mingi hommikuti* (46) means ‘on some mornings’.

Boundaries between adjectives and pronouns like this are somewhat fuzzy, and the last examples in this section belong to such border zones. A case in point is *eri* ‘different; various; separate’, which is regarded as a so-called defect (indeclinable) adjective (*vaegomadussõna*) in most Estonian grammars (Viitso 2007c: 76; Ereht 2007: 113; EKG I: 116; Pajusalu 2017: 386), but alternatively as a determinative or indefinite pronoun even by the same grammarians (Viitso 2007a: 884; Ereht 2008: 445–446). Be that as it may, *eri* is once again a word that occurs with not only undisputed nouns, but distributives as well; note also that functional differences between *eri* and the adjective *erinev* ‘different’ (40–41) are far from obvious (Raadik 1993):

- (49) *Eri riigi-ti on professori*
 different country-DISTR be.3SG professor.GEN
nimetuse-l erinev tähendus, kuid
 title-ADE different meaning but
meie riigi-s/ülikooli-s kasutuse-l
 1PL.GEN country-INE/university-INE use-ADE
ole-va-st süsteemi-st või-ks
 be-ACT.PRS.PTCP-ELA system-ELA can-COND.3SG
ikkagi ülevaade olla.
 anyway overview be-INF
 ‘The title of professor has different meanings from country to country,
 but the system used in our country or university could still be reviewed.’
 (44)

- (50) *On tea-da, et edukus eri*
 be.3SG know-INF COMP success different
kooliastme-ti ja hilise-ma-s elu-s
 school.level-DISTR and late-CMPV-INE life-INE
pole omavahelise-s korrelatsiooni-s.
 be.NEG mutual-INE correlation-INE
 ‘It is known that success at different school levels and in later life do
 not correlate with each other.’ (45)

Two more words can also be added to the list. Without delving into the details of the multifaceted *enamus* ‘majority; most’ and *omaette* ‘on its own; separately; separate’, it suffices to note that even though the former has been labeled as a noun and the latter as an adverb (EKSS s.v.), both are also used as adnominal

determiners, and in the following examples, both seem to belong to the same sphere as the pronouns discussed above:

- (51) *Me sõida-me enamus hommiku-ti*
 1PL ride-1PL most morning-DISTR
töö-le, armsa-d bussijuhti-de-le
 work-ALL dear-PL bus.driver-PL-ALL
tööandja-d.
 employer-PL
 ‘Dear employers of bus drivers, we go to work on most mornings.’
 (46)

- (52) *Jah pea-ks küll, sest apteegi-d*
 yes shall-COND.3SG DPT because pharmacy-PL
on lahti kella kuue-ni ja
 be.3PL open clock.GEN six-TERM and
enamus pühapäevi-ti üldse
 most Sunday-DISTR completely
sule-tud, aga inimene või-b
 close-PASS.PST.PTCP but human may-3SG
abi vaja-da peale se-da.
 help.PART need-INF in.addition that-PART
 ‘Yes, they should, because pharmacies are open until 6 p.m., and completely closed on most Sundays, but people may need help in addition to that.’ (47)

- (53) *Kõik ol-i-d üks, ke-l vähegi*
 everyone be-PST-3PL one who-ADE at.least
õllekann peo-s. Omaette
 beer.jug hand-INE separate
laudkonni-ti joriseja-i-d ei ol-nud.
 group.by.table-DISTR babblers-PL-PART NEG be-ACT.PST.PTCP
 ‘Everyone was as one, all who had beer jugs in their hands. There were no isolated groups babbling and being divided into separate tables.’ (48)

I am aware of seven distributives preceded by *enamus* (as in 51–52), and one accompanied by *omaette* (53). Again, single occurrences such as *omaette laudkonni* ‘across separate tables; divided into separate tables’ (53) are admittedly rather unimpressive as such, but observations like these in unison support the hypothesis that distributives such as *laudkonni* (from *laudkond* ‘group

sitting by a table’) are to be considered inflectional forms of nouns instead of an apparently infinite number of denominal adverbs that exhibit surprisingly many syntactic features characteristic of the Estonian noun.

3.3. Semantics of the distributive

Many semantic features of the distributive have already been touched upon in previous sections. When speaking of *distributives* and their relation to nominal inflection, it has been self-evident to exclude other formations such as onomatopoeic adverbs *plaksti* ‘with a bang’ and *prauhti* ‘with a splash’ from the discussion (see Section 2). One of the first decisions made in describing the Estonian distributive has been the adoption of the label *distributive*, which describes the category in question rather concisely: distributives in *-ti* are used to refer to participants and other entities involved in states of affairs in which something is viewed as some kind systematic variation or regular distribution either on the time axis, in space or in other, more abstract dimensions.

While distributives have been characterized as a productive category, Kasik (1996: 179; 2013: 187; 2015: 399–400) has repeatedly linked their productivity to the semantics of their stems. The stems may refer to various units of measurement as well as other concrete, countable entities (Kasik 1996: 179), and she mentions nouns derived with the suffix *-kond* as a particularly productive type of stem for distributives. Indeed, many of the above examples include distributives such as *piirkonniti* ‘by/across areas’, *paikkonniti* ‘by localities’, *meeskonniti* ‘by teams’, *võistkonniti* ‘by teams’, *kogukonniti* ‘by communities’, *maakonniti* ‘by counties’, *paikkonniti* ‘by districts’ and *valdkonniti* ‘by fields; by domains’. However, it has been seen that distributives also abound in countless internationalisms such as *horisonditi*, *hotelliti*, *konfessiooniti*, *ministeeriumiti*, *objektiti*, *organisatsiooniti*, *persooniti*, *provintsiiti*, *sektoriti*, *sessiooniti*, *varianditi* and *žanriti*, and on the other hand they can be based on vocabulary as universal as *ema* ‘mother’ and *laps* ‘child’ (10), as soon as one wants to refer to distribution or variation across mothers (*emati*) or children (*lapseti*). As seen throughout the examples, the distributive inevitably refers to plural entities.⁷ The plural meaning is transparent in the phrase *erineva-teriiigi-ti* [different-PL.GEN country-DISTR] ‘across different countries’ and more commonly in contexts where the distributive is modified by subject relative clauses with plural verbs; cf. the fully unambiguous plurals in (16) and (20).

The above view is in principle acceptable, but not fully sufficient for understanding the nature of the distributive. In the previous sections, I have also

⁷ The anonymous reviewer has pointed out that at least in (14), the head of the distributive phrase *suviti, mis on ühtlasi ka minu lemmikaastaag* ‘in the summer, which is also my favorite time of year’ can be interpreted as singular (summer as one’s favorite season), but on the other hand, here, too, the distributive simultaneously refers to ever-recurring individual summers.

occasionally referred to the fact that the meaning of distribution, variation or dispersal is also conveyed by verbs in the sentences where distributives occur. The examples presented above speak for themselves: the distributives in (1) and (4) occur with the verb *erinema* ‘differ, vary’; those in (6), (10), (12), (24), (26), (27), (33), (45) and (49) with the deverbal adjective *erinev* ‘different’; and those in (11), (13) and (32) with *varieeruma* ‘vary, differ’. Other frequent and semantically related distributive verbs include *jagama* ‘share; divide’, *jagunema* ‘divide; branch; be distributed’, *jaotama* ‘divide; spread; sort’, *sorteerima* ‘sort’ and *kõikuma* ‘fluctuate; vary’.

This list of verbs brings us to the phenomenon known as case government, and indeed, there seems to be reason to ask whether the use of the distributive with these verbs – and the adjective *erinev* ‘different’ in particular – should at least partly be ascribed to government. The only major obstacle to this proposal is its incompatibility with the way the distributive and government have been traditionally understood. As stated by Erelt (2017c: 66–67), verbs and other governing items such as adjectives may govern either cases, adpositions, non-finite verb forms or complementizers. Again, distributives are implicitly left outside, as they are not considered case-marked nouns but adverbs, which in turn seem to fall outside the scope of government. Inconsistently enough, the closest semantic equivalents of the distributive, namely the distributive postpositions *kaupa* ‘by; across’, *viisi* and *lõikes* id. (see Mäearu 2008: 120), could nevertheless be subsumed under the notion of government.

As the last new remark on the semantics of the distributive, it is possible to assert that the governing verbs really do govern the distributive to the extent that this overrides the asserted restriction that the distributive can occur with countable nouns only. In the following examples, the stems of the distributives are primarily mass nouns:

- (54) *Kõik liha-d on B3- ja B6-vitamiinirikka-d,*
 all meat-PL be.3PL B3 and B6-rich.in.vitamin-PL
teis-te B-vitamiiniderikkus varieeru-b
 other-PL.GEN richness.in.vitamin.B vary-3SG
liha-ti.
 meat-DISTR
 ‘All types of meat are rich in vitamins B₃ and B₆, while the amount of other B vitamins varies from meat to meat.’ (49)

- (55) *Tavalis-te-s šokolaadi-de-s on palju*
 ordinary-PL-INE chocolate-PL-INE be.3SG much
rafineeri-tud suhkru-t ning selle-ga
 refine-PASS.PST.PTCP sugar-PART and that-COM
pole tark liialda-da, ka sisalda-vad
 be.NEG wise exaggerate-INF also contain-3PL
šokolaadi-d erineva-i-d lisaine-i-d
 chocolate-PL different-PL-PART additive-PL-PART
(nende liik ja rohkus või-b
 that.PL.GEN type and abundance may-3SG
šokolaadi-ti päris erinev olla).
 chocolate-DISTR quite different be-INF
 ‘In ordinary chocolates, there is a lot of refined sugar, and it is not wise to go too far, as chocolate also contains different additives (their types and proportions may be quite different from chocolate to chocolate).’ (50)
- (56) *Ka hinna-d on erineva-d nii*
 also price-PL be.3PL different-PL both
joogi-ti kui baari-ti.
 beverage-DISTR and bar-DISTR
 ‘Prices also vary from beverage to beverage and from bar to bar.’ (51)

To be sure, nouns like *liha* ‘meat’, *šokolaad* ‘chocolate’ and *jook* ‘beverage; (something to) drink’ can function as countables in other contexts as well, but the above examples illustrate the fact that at least under the government of verbs such as *varieeruma* ‘vary’ (54) or *erinema* ‘differ’ or deverbal adjectives like *erinev* (55–56), the distributive is apparently possible for all mass nouns referring to substances that may nevertheless have internal variation or be able to be divided and distributed in a way that makes a countable reading possible. From another point of view, it can be observed that distributives thus do not fundamentally differ from nouns in other cases – Estonian mass nouns and other uncountables can generally function as countables in the language when needed (EKG I: 61–62). In other words, inherent countability as such is not a requirement for the nouns with which the distributive occurs; instead, distributives can be used to refer to plural referents of inherently countable and uncountable nouns alike.

4. Discussion

The above sections have described a bundle of previously unidentified features of the Estonian distributive in *-ti*. It has been possible to observe that in

present-day Estonian, the category seems to be if not fully, at least potentially highly productive. The suffix *-ti* can be attached to stems as old and elemental as *ema* ‘mother’, as well as to countless internationalisms and other new words as soon as they and the concepts behind them are introduced in the language. Although the formation of the distributive shows at times considerable irregularity and variation, it appears that almost all noun stems can be made into distributives whenever there is need to tell that something varies across mothers (*emati*), organizations (*organisatsiooniti*), coffee shops (*kohvikuti*), or types of chocolate (*šokolaaditi*) or meat (*lihati*), for example.

The distributive is used to refer to various kinds of variation and distribution, and the most novel observations presented in this paper deal with the morpho-syntax of the “distributive phrase” – phrases headed by distributives that may be followed by postmodifying relative clauses and preceded by adjectival and genitival modifiers as well as pronominal determiners. As an interim conclusion, the following sentences serve as examples of distributives that have more than one type of modifier, even on both sides (57–59):

- (57) *Tõsi, selle areng on maailma*
 true this.GEN development be.3SG world.GEN
eri paigu-ti väga erinev aga
 different place-DISTR very different but
vaatamata selle-le on iga paaritaja
 despite this-ALL be.3SG every breeder
osa selle-st globaalse-st ürituse-st.
 part this-ELA global-ELA business-ELA
 ‘It is true that its development is very different in different parts of the world, but despite this, every breeder is part of this global business.’
 (52)

- (58) *Jah, ma pole sõna 'kõdistamine'*
 yes 1SG be.NEG word.PART *kõdistamine*
vist varem kuul-nud=ki, ikka
 probably earlier hear-ACT.PST.PTCP=even always
'kõditamine'. Ehk on see ka erinev
kõditamine perhaps be.3SG this also different
Eesti eri piirkonni-ti nagu
 Estonia.GEN different region-DISTR like
mõne-d seal põhjapool ütle-vad 'öösseks jääma',
 some-PL there in.the.north say-3PL *öösseks jääma*
mis on no nii vale kui olla saa-b.
 REL be.3SG well as wrong as be.INF can-3SG

‘Yes, I think I haven’t heard the word *kõdistamine* [for ‘tickling’] before, always *kõditamine*. Perhaps this varies by different regions of Estonia, just like some people in the north say *öösseks jääma* [for ‘stay overnight’], which is as wrong as can be.’ (53)

- (59) – – *ning* *teistkordselt* *saa-vad* *rallipaari-d*
 and secondly get-3PL rally.pair-PL
kiiruskatse-te-ga *tutvu-da* ***rallipäeva-de***
 special.stage-PL-COM get.acquainted-INF rally.day-PL-GEN
hommiku-ti, ***mi-l*** *on* *luba-tud*
 morning-DISTR REL-ADE be.3SG permit-PASS.PST.PTCP
läbi-da *vasta-va* *päeva*
 go.though-INF correspond-ACT.PRS.PTCP.GEN day.GEN
kiiruskatse-d.
 special.stage-PL
 ‘– – and secondly, rally driver teams get acquainted with special stages in the mornings of rally days, when they are allowed to go through the special stages of the day.’ (54)

Although the distributive is inherently plural in meaning, it differs from ordinary inflectional forms of nouns in not having the most explicit markers of plural. However, this rule is not without exceptions, as it is also possible to come across distributives containing the oblique plural stem marker *-te/-de-*, and on the other hand even many of the common distributive forms are based on oblique plural stems in *-i-* (Kasik 2015: 399; see Sections 2 and 3.1). From a historical, functional and economical point of view, the situation may be understood as an ongoing tug-of-war between economy (“if the distributive has always a plural meaning, why underline it more than needed”) and iconicity (“if the distributive has a plural meaning, why not make it explicit”).

Furthermore, even the adjectival modifier in distributives may marginally be inflected in the genitive as occurs with four other cases of the language (40–41), and at its most extreme, the distributive phrase *erineva-te kohviku-te-ti* (41) looks just like an ordinary Estonian noun phrase in the comitative, terminative, abessive or essive plural, with the plural (genitive stem) marker *-te-* appearing in both its head and in the partially agreeing modifier. I do not wish to claim that such phrases are generally accepted by speakers of Estonian; instead, there are good reasons to assume that there are very few speakers for whom sentences like (41) sound fully unproblematic. However, the limits of grammatical rules in a language cannot be determined without exploring the ultimate borderline cases such as the examples above. As has been seen throughout the preceding sections, the limits and borders of the Estonian distributive greatly

exceed those of ordinary adverbs. Adverbs are often labeled as such for lack of reasons to consider them members of other word classes (Sasse 1993: 664; van der Auwera 1999: 8), but the data presented in this paper unveils that the Estonian distributive does not really suffer from a lack of noun-like features. For this reason, I have preferred to characterize the distributive with the label “dwarf case” in analogy with dwarf planets, which are members of the Solar System and share many features with planets despite not being proper planets in and of themselves.

The best-known dwarf planet is Pluto. Without delving into the history of astronomical concepts, it suffices to note that the term “planet” was never officially defined before 2006, and it was not until this time that the International Astronomical Union declared that Pluto was no longer a planet. Since then, Pluto has been called a dwarf planet. An important point to note here is that definitions of concepts such as planets and cases come and go, and they may not even exist. To my knowledge, the Estonian concept of case has never been defined in detail. Those who have questioned the traditional paradigm and tried to define and delineate traditional labels, partly in novel ways, have had little success. For example, Rätsep’s (1977: 740) arguments for regarding the so-called instructive as a case were soon turned down by Hint (1979: 205–207) and less directly in later descriptions of the language – mainly with reference to the very low productivity of the instructive (see the end of this section). Later, attempts to distinguish the so-called short illative (“aditive”) from the illative proper also failed (see, e.g., Hasselblatt 2000, Siiman 2018 and the references therein) partly for same reasons.

Another case in point is Nevis’ (1986, 1988) proposal to downgrade four cases – the comitative, terminative, abessive and essive – to clitics or clitic postpositions. Mainstream descriptions of Estonian have not been affected by such attempts, nor will they most likely be affected by Norris’ (2015: 374–378) recent statement about the “postpositions” *ga*, *ni*, *ta* and *na*. Partly for this reason, I wish not to define the Estonian case anew, or even attempt to sneak a new case into the traditional paradigm – although the distributive in *-ti* would be my primary candidate for an amendment if needed. The observations made on the distributive nevertheless show a lack of some features typical of nouns – for example, modifiers in adverbial cases (cf. Pajusalu 2017: 387–388) – and some noun-like features that can be observed may not necessarily be accepted by most speakers. However, the number and volume of the observable noun-like features of the distributive is significant, and, for the time being, the new label “dwarf case” can be proposed. It must be emphasized that in analogy with the dwarf planets that are not planets, a dwarf case such as the Estonian distributive is not a case, only a part of grammar that resembles cases so much that this resemblance can and must not be overlooked.

Admittedly, the proposed concept of “dwarf case” is partly a stopgap to avoid potentially endless disputes on how the category of case is or ought to be defined in Estonian and elsewhere. For such discussions elsewhere in Uralistics, the reader is referred to Kiefer’s (1987) and Anhava’s (2010) essays on criteria for case forms in Hungarian and Finnish, Ylikoski’s (2015) study on the so-called prolatives in South Saami and Lule Saami, and Sirola-Belliard’s (2016) monograph on the Finnish comitative. Of particular interest is also Siegl’s (2013: 166–167; 2017) and Jalava’s (2017) label “minor case” for the so-called essive-translatives in Forest Enets and Tundra Nenets, and the prolative in Forest Enets: such forms are on the borderline between inflection and derivation, lacking enough noun-like features to be considered (major) cases, but having enough such features in order not to be called plain adverbs.

As many such noun-like features are language-specific and based on the ways noun phrases are formed and used in individual languages, the case paradigm of an individual language must be mapped rather individually. For example, the Hungarian distributive seen at the beginning of this paper (2) might be semantically quite close to that of Estonian discussed in this study, but the criteria by which it can be regarded as a Hungarian case are not directly applicable to Estonian (cf. Kiefer 1987; Payne & Chisarik 2000: 183–184; Anhava 2010). As regards the Estonian distributive, there may not be many crucial noun-like features that are entirely missing, but some features – such as the partially agreeing adjectival modifiers seen in (40–41) – are realized only very marginally in searchable texts that consist of perhaps billions of words. On the other hand, even the most marginal phenomena, such as the hapax legomenon *erineva-te kohviku-te-ti* [different-PL.GEN coffee.shop-PL-DISTR] ‘across different coffee shops’ (41), have been produced by native Estonians, and regardless of the general acceptability of this phrase, it cannot be considered an adverb phrase. The only logical alternative is to analyze the words as a noun phrase in the distributive plural – an instance of a dwarf case.

Estonian and its case inflection have been well described for a long time, and presenting new cases or case-like categories is not an everyday occurrence. In the words of Carl Sagan, “extraordinary claims require extraordinary evidence”, and this is the main reason for the multitude of authentic example sentences in the preceding sections. Hundreds more examples could be provided. The examples represent all kinds of genres, from Internet discussions to translations of legal texts; the only major deficiency is the scarcity of fiction in the available electronic material.⁸

This study has intentionally focused on empirical observations based on authentic language data, but after the lengthy discussion of my findings, I wish

⁸ Many grammarians may be inclined to regard translations of legal texts as a somewhat suspicious genre, but such translations are often among the most carefully composed texts.

to add that my preliminary findings based on judgments by native speakers support the main observations presented here. A pilot questionnaire study, conducted with a group of seventeen native informants who are students of linguistics at the University of Tartu, indicates that most speakers unconditionally accept many distributives with relative clauses (Section 3.2.1), genitive (3.2.2) and participle modifiers (3.2.3) as well as with pronominal determiners (3.2.4). What is more, the preliminary results neatly correlate with empirical data: The most common modifiers of distributives consist of relative clauses and genitives, and such phrases are also favored over other types of modifiers. Grammaticality judgments will be discussed in detail in a forthcoming paper.

Finally, a couple of additional remarks on morphology and syntax are in order:

In addition to the slight disorder between exclusively plural meaning and partially singular, partially plural morphology discussed above, a more profound deficiency as regards the main hypothesis of this study is that there are no signs whatsoever of distributives based on pronouns or adjectives.⁹ Even though the 14 canonical cases of the language certainly are used also for most pronouns and adjectives (e.g., *selle-ga* [that-COM] ‘with that’, *nende-ga* [that.PL-COM] ‘with those’, *punas-te-ga* [red-PL-COM] ‘with the red ones’), distributives like **selle-ti* or **nende-ti*, or **punase-ti* or **punas-te-ti*, cannot be found. It goes without saying that a category like this cannot be considered a full-fledged case within the established paradigm.

While the distributive clearly differs from canonical and relatively uncontroversial cases, it also seems to depart from other denominal adverbs, in other words within the derivational subclass under which the distributive is traditionally subsumed. For example, Kasik (2015: 387–388, 398–400) describes the distributive unpretentiously as being on a par with a multitude of denominal adverbs in *-kuti* (e.g., *kael* ‘neck’ → *kaelakuti* ‘neck to neck’), *-kill/-kile* (*nina* ‘nose’ → *ninakil*, *ninakile* ‘on one’s nose’), *-ldasa* (*aeg* ‘time’ → *ajaldasa* ‘in time; with respect to time’), *-li* (*selg* ‘back’ → *seljali* ‘on one’s back’), *-misi* (*rida* ‘row’ → *ridamisi* ‘in a row; serially’), *-si* (*jalg* ‘foot; leg’ → *jalgsi* ‘by foot’) and *-stikku* (*koht* ‘place’ → *kohastikku* ‘in opposition; aligned with each other’).

Although absence of evidence is not evidence of absence, adverbs like this are far less productive and often more opaque than the distributive in *-ti*. From a syntactic perspective, neither the available electronic corpora nor the entire Internet readily provide signs of noun-like morphosyntax such as multi-word

⁹ However, some opaque and etymologically depronominal and deadjectival adverbs may be historically related to the distributive marker (e.g., *igati* ‘in every way’, *mitmeti* ‘in many ways’, *mõneti* ‘to some extent’, *õieti* ‘actually, right’, *samuti* ‘likewise’, *teisiti* ‘otherwise’, *viimati* ‘last time’).

phrases in which the adverbs in question were accompanied by modifiers or determiners of the type discussed in Section 3.2. In other words, the wealth of noun-like features of the distributive sets them clearly apart from truly uncontroversial denominal adverbs, as these do not appear to occur with modifiers of the type **higistu-nud kaelakuti* [get.sweaty-ACT.PST.PTCP neck.to.neck] ‘sweaty neck to sweaty neck’, **teatud ridamisi* [certain in.a.row] ‘in certain rows’ or **jalgsi mi-da uue-d kinga-d pigista-si-d* [by.foot REL-PL.PART new-PL shoe-PL pinch-PST-3PL] ‘by feet pinched by the new shoes’.

More research on other adverbs is certainly needed, though. One of the most promising topics may be the so-called prolatives in *-tsi* ‘through; via; by’ (e.g., *meri* ‘sea’ → *meritsi* ‘by sea’, *meil* ‘email’ → *meilitsi* ‘by email’; see, e.g., Villup 1969: 67; Kasik 2015: 389–390, 400). Although only rarely characterized as a case (Muuk 1927: 43), it has apparently gone unnoticed that the prolatives can indeed sometimes be accompanied by the possessive pronoun *oma* ‘own’, which makes (60–61) resemble the use of the distributive in the phrase *oma piirkonniti* ‘by their own regions’ (44–45):

- (60) *Sa kiviaegne inimene, kirjuta oma*
 2SG stone-age human write.IMP.2SG own
käsi-tsi kaardi-d kodu-s valmis.
 hand-PROL card-PL home-INE finished
 ‘You stone-age man, write the cards with your own hand at home.’
 (55)

- (61) *Koheselt saa-d jaga-da foto-sid,*
 immediately can-2SG share-INF photo-PL.PART
video-i-d ja palju muu-d oma
 video-PL-PART and much else-PART own
telefoni-tsi NFC ja MHL-ühenduse-ga.
 telephone-PROL NFC and MHL-connection-COM
 ‘You can instantly share photos, videos and much more through your own phone with NFC and MHL connectivity.’ (56)

It is also instructive to compare the distributive with another partially case-like category, namely the so-called instructive, as seen in constructions like *suletud silmi* [close-PASS.PST.PTCP eye.(PL.)INST] ‘with one’s eyes closed’, *lehviv-i hõlmu*. [flutter-PRS.PTCP hem.(PL.)INST] ‘with fluttering hemlines’ and *palja jalu* [bare.GEN/INST foot.(PL.)INST] ‘with bare feet’ (EKG I: 61). The pan-Finnic instructive case was reintroduced and propagated by the language planner Johannes Aavik (1920: 9–17), but if the instructive is to be compared with the other fourteen cases, Aavik’s results are commonly considered meager (see,

e.g., Rätsep 1977: 740; Kross 1979; 1983; Hint 1979: 205–207; 2011: 815; EKG I: 51, 60–61 *et passim*; Kasik 2015: 71).

In short, the instructive is mostly used to express concomitant circumstances, which makes it reminiscent of the comitative case. Not unlike the distributive, the instructive does not generally have a number distinction, but it usually refers to plural referents. From a syntactic perspective, the most distinctive feature of the instructive is that it is almost always obligatorily accompanied by a preposed adjectival modifier. From a morphological perspective, the instructive has been characterized as a quite unproductive and highly lexicalized category, and constructions such as *palja jalu* [bare.INSTR foot.(PL.)INST] ‘with bare feet’ are also commonly spelled as single words (adverbs), e.g. *paljajalu* (EKSS s.v.) instead of what may look like noun phrases with modifiers.

On the other hand, even when lexicalized, especially the adjectival modifiers clearly set the instructive apart from other adverbs, and it is understandable that the instructive has at times been characterized as a category “at the border of cases and adverbs” (EKG I: 51, 60–61). However, at least the instructive as described in earlier studies appears to have much fewer case-like features than the distributive. A systematic comparison between the two would undoubtedly shed more light on the Estonian case, but this task must be left to future studies.

The dwarf case distributive has a great number of case-like features that ordinary adverbs by definition do not have, as well as significantly more such features than the distantly case-like prolatives and instructives seem to have.

5. Conclusion

In conclusion, it can be restated that the so-called distributive adverbs in Estonian are much more than plain adverbs. According to the received view, Estonian noun has 14 cases, and the Estonian noun phrase may contain, *inter alia*, genitival and adjectival modifiers that precede their head, which in turn may be followed by relative clauses. Most adjectival modifiers for most cases fully agree with their heads, but some adjectives do not, and certain cases require only partial agreement with the head. Due to the highly case-like character of the distributive in *-ti*, I have chosen to characterize the phenomenon as a “dwarf case” in analogy with dwarf planets. As far as the distributive phrases seen throughout the examples in the preceding sections are concerned, it would be difficult to claim that they are adverb phrases instead of noun phrases. Nevertheless, more important than providing a definitive label for these formations is a due description of the phenomena that have remained ignored by earlier grammarians and other scholars of Estonian. It must be noted, however, that this study has not attempted to delve into the origins of the distributive as a dwarf case; the only somewhat historical remark was made in connection to the phrase *möödunud öösiti* ‘in recent nights’ from 1935.

As traditional Estonian grammars categorize morphemes in terms of prototypical inflection and derivation, it is understandable that even morphemes as atypical as *-ti* must have fallen into either of the ready-made slots available. However, the above discussion shows that at least in contemporary written Estonian, the highly productive distributives have too many noun-like morphological and syntactic features to remain neatly and tidily in the adverb slot into which they have traditionally been deposited. Therefore, it is necessary to carve out space for the richness of authentic distributive phrases in grammatical descriptions of Estonian – even at the expense of the most pedagogical differentiation between inflection and derivation. It must be admitted that many of the phenomena described in the previous sections are rather marginal and rare among hundreds of thousands of distributives available on the Internet. That said, as long as they exist and are continuously used and accepted by native speakers, they must definitely not be ignored, but instead described and even marveled at in light of the fact that the multiple case-like properties of the distributive have not attracted scholars’ attention before this study.

This study is merely an objective description of the Estonian distributive as it is used in authentic texts in various genres, ultimately in all kinds of texts available in corpora and on the Internet. The study does not take a stance on how the forms in question ought to be used according to the prescriptive grammar; this task belongs to those in charge of such issues, and to my knowledge, such work has not yet begun. Estonian is an internationally well-known example of a language whose lexicon and structure have been shaped by conscious language planning to the extent that the present-day language abounds with *ex nihilo* items of basic vocabulary and even artificially created (or intentionally borrowed) inflectional categories such as the purposive converb in *-maks* and the superlative in *-im* (see, e.g., Aavik 1925, and for wider discussion Raag 1998). I am not aware of any attempts to cultivate the Estonian distributive into an indisputable inflectional case. Instead, it appears that the dwarf case in *-ti* has developed into its present form quite spontaneously, perhaps without any external stimulation. There are thus good reasons to speculate that if Johannes Aavik (1880–1973) and his contemporaries had decided to rear the distributive

into a more or less full-fledged case, there would be no need whatsoever to introduce a concept of dwarf case in the Estonian grammar.¹⁰

Abbreviations

ABE	abessive	IMPERS	impersonal
ACT	active	INE	inessive
ADE	adessive	INF	infinitive
ADV	adverb	INST	instructive
ALL	allative	NEG	negation
CMPV	comparative	PART	partitive
CNG	connegative	PASS	passive
COM	comitative	PL	plural
COMP	complementizer	POSS	possessive
COND	conditional	PROG	progressive
CVB	converb	PROL	prolative
DEF	definite	PRS	present
DIM	diminutive	PST	past
DISTR	distributive	PTCP	participle
DPT	discourse particle	QUOT	quotative
ELA	elative	REFL	reflexive pronoun
ESS	essive	REL	relative pronoun
GEN	genitive	SG	singular
ILL	illative	TERM	terminative
IMP	imperative	TRA	translative

Sources of Internet examples

- 1) <http://entsyklopeedia.ee/artikkel/kääne2> (Accessed on 2019-05-06.)
- 2) <https://parnu.postimees.ee/484594/parnus-vahetub-1-juulist-parkimiskorraldaja> (Accessed on 2019-05-06.)
- 3) <https://www.digar.ee/arhiiv/et/download/141700> (Accessed on 2019-05-06.) (*Õiguskeel* 1/2004, p. 33)
- 4) <http://www.kokkama.ee/2016/06/isetehtud-kohuke.html> (Accessed on 2019-05-06.)

¹⁰ Incidentally, it was not until finishing the final draft of this paper that I encountered O'Connor and Maling's (2014) paper "Non-promotional passives and unspecified subject constructions: Navigating the typological Kuiper Belt", which makes similar use of a linguistic analogy based on the existence of trans-Neptunian objects such as Pluto. The authors wish to challenge the canonical understanding of "passive" by paying attention to less canonical passive-like phenomena. Regardless of whether we want to explore the boundaries of planetary systems, grammatical voices or inflectional cases, it is easy to agree with their concluding statement (p. 34): "By looking closely at these contested boundaries, we can see more clearly both the nature of our work as linguists (in its scientific and sociological aspects), and that of our object of study."

- 5) <https://www.biker.ee/phpbb/viewtopic.php?t=46365&start=30> (Accessed on 2019-05-06.)
- 6) <http://lapseestis.blogspot.com/2012/02/lapsega-kodus.html> (Accessed on 2019-05-06.)
- 7) http://www.tallinnakeeltekoool.ee/w/images/b/bb/Prantsuse_keele_A1-A2_vestluskursuse_kirjeldus.pdf (Accessed on 2019-05-06.)
- 8) http://www.kvmagnaadid.ee/sites/default/files/kornak_angela_loputoo.pdf (Accessed on 2019-05-06.)
- 9) <http://karboom.blogspot.com/2018/02/kuidas-kohvi-ostes-mitte-idioot-olla.html> (Accessed on 2019-05-06.)
- 10) <https://dea.digar.ee/cgi-bin/dea?a=d&d=valgusorava20140201.2.9> (Accessed on 2019-05-06.) (*Valgus* 1/2014, p. 5)
- 11) <http://www.advent.ee/artikkel/822/moldova-adventkirik-appeleerib-kohtuotsuse/> (Accessed on 2019-05-06.)
- 12) <https://www.virtuaalkliinik.ee/uudised/2016/03/03/kusimused-arstile-kelle-juurde-on-raske-paaseda> (Accessed on 2019-05-06.)
- 13) https://www.tlu.ee/sites/default/files/Instituudid/%C3%9CTI/RASI/2008_koolinoored%20ja%20uimastid.pdf (Accessed on 2019-05-06.)
- 14) <http://www.nooredliidrid.ee/tartu-noorte-reformiklubi/> (Accessed on 2013-01-10) *apud* <http://keeleeveeb.ee/> (Accessed on 2019-05-06.)
- 15) http://www.peronabowling.ee/perona_bowling_club/klubivoistlused/vorsti-turniir_2019/reglement.html (Accessed on 2019-05-06.)
- 16) <http://tutulus.ee/muinasesemed/kraud/614.html> (Accessed on 2019-05-06.)
- 17) http://www.novaator.ee/ET/kosmos/kuidas_mojutab_umbrus_galaktikate_arengut/ (Accessed on 2019-05-06.)
- 18) <https://www.ohtuleht.ee/24574/kurtide-dialog> (Accessed on 2019-05-06.)
- 19) <https://arileht.delfi.ee/news/uudised/tipptegijad-hakkavad-gumnasistidele-ettevotlust-opetama?id=32997007> (Accessed on 2019-05-06.)
- 20) https://et.wikipedia.org/wiki/Malli_arutelu:Haldus (Accessed on 2019-05-06.)
- 21) <https://blog.stat.ee/2012/10/02/tunnitasu-tousis-2010-aastal-void-korgharidusega-palgatootajatel/> (Accessed on 2019-05-06.)
- 22) <http://www.purina.nestle.ee/Home/About+Purina/Science+at+Work/Research+News.htm> (Accessed on 2013-01-10) *apud* <http://keeleeveeb.ee/> (Accessed on 2019-05-06.)
- 23) <https://yloennuste.wordpress.com/2013/09/13/heale-postimehele/> (Accessed on 2019-05-06.)
- 24) <http://www.pealinn.ee/newset/tasuta-puhapaevased-lastehommikud-lowenruh-pargis-n16231> (Accessed on 2019-05-06.)
- 25) <http://eppppp.tahvel.info/2006/03/20/rahvusvahelised-huvitavad-foorumid/> (Accessed on 2019-05-06.)

- 26) <https://www.kliinik.ee/endokrinoloogia/id-33/noustamine/nakkushaigused&question=27447> (Accessed on 2019-05-06.)
- 27) <http://www.pealinn.ee/tarbija/skandinaavia-supersportautode-juhid-politseile-lisatood-toonud-pole-n148659> (Accessed on 2019-05-06.)
- 28) <https://www1.epa.ee/ep/EPtolked/E008745.pdf> (Accessed on 2019-05-06.)
- 29) <http://curia.europa.eu/juris/document/document.jsf?text=&docid=136881&pageIndex=0&doclang=ET> (Accessed on 2019-05-06.)
- 30) <https://www.kodutud.com/viewthread.php?tid=7373&page=1> (Accessed on 2019-05-06.)
- 31) <http://stenogrammid.riigikogu.ee/en/199309141000> (Accessed on 2019-05-06.)
- 32) <https://annaabi.ee/Kooliraamatukogu-turundusplaan-II-VI-osa-mx88502.html> (Accessed on 2019-05-06.)
- 33) https://ec.europa.eu/info/jobs-european-commission/experts/become-expert-european-commission_et (Accessed on 2019-05-06.)
- 34) <https://dea.digar.ee/cgi-bin/dea?a=d&d=postimeesew19351123.2.27> (Accessed on 2019-05-06.) (*Postimees* 1935-11-23, p. 6)
- 35) <https://www.valitsus.ee/et/uudised/vabariigi-valitsuse-pressikonverents-14-veebruari-2013> (Accessed on 2019-05-06.)
- 36) <http://karboom.blogspot.com/2018/02/kuidas-kohvi-ostes-mitte-idiotolla.html> (Accessed on 2019-05-06.)
- 37) <http://ratsamatkad.blogspot.com/2016/11/on-tana-alles-ilm-sajab-ja-teedon.html> (Accessed on 2019-05-06.)
- 38) <http://liilianluik.blogspot.com/2014/03/> (Accessed on 2019-05-06.)
- 39) <http://www.valgagym.ee/kagu-eeesti-riigigumnaasiumide-opilasesinduste-koostookohtumine/> (Accessed on 2019-05-06.)
- 40) http://mk.eestiselts.org/Reisikiri_nr_7_480.htm (Accessed on 2019-05-06.)
- 41) <http://naistekas.delfi.ee/foorum/read.php?10,1830398> (Accessed on 2019-05-06.)
- 42) <http://pink-ego.blogspot.com/2010/04/paus-suveplaanide-tegemiseks.html> (Accessed on 2019-05-06.)
- 43) <http://blackmylove.blogspot.com/2014/09/kurivaim-minu-sees.html> (Accessed on 2019-05-06.)
- 44) <https://www.ttu.ee/doc.php?14930> (Accessed on 2019-05-06.) (*Mente et Manu* 2009-06-05, p. 3)
- 45) <https://epl.delfi.ee/arvamus/ulo-vooglaid-koolilaste-le-hindeid-pannes-on-vaja-hoida-vaartuslikke-traditsioone?id=51000539&com=1> (Accessed on 2019-05-06.)
- 46) https://www.facebook.com/story.php?story_fbid=692896210894533&id=285457008305124 (Accessed on 2019-05-06.)

- 47) <http://www.delfi.ee/news/paevauudised/rahvahaal/anna-teada-kas-ka-simuugiravimid-peaks-olema-poelettidel?id=60902273&com=1&no=20> (Accessed on 2019-05-06.)
- 48) <https://www.ohtuleht.ee/108595/ollesummer-kui-iguli-taassund> (Accessed on 2019-05-06.)
- 49) <http://tervisekool.ee/tervisekool/failid/File/lugemist/tervislk%20toitumine/toitainelised%20koostised/Liha%20vitamiinide-%20ja%20mineraalainete-sisaldus.pdf> (Accessed on 2019-05-06.)
- 50) <http://kerttutoit.blogspot.com/2014/08/maailma-parim-sokolaad.html> (Accessed on 2019-05-06.)
- 51) <http://simsimaa.net.ee/Sims3/3lisad-03ln-nipid.htm> (Accessed on 2019-05-06.)
- 52) <http://pisi.ee/viewtopic.php?p=6495> (Accessed on 2019-05-06.)
- 53) <https://mallukas.com/2013/12/22/kodi-kodi-aka-ma-murran-su-kaed/> (Accessed on 2019-05-06.)
- 54) <https://sport.delfi.ee/news/auto/f1/kuprose-rallil-mille-pistes-sustem?id=7003475> (Accessed on 2019-05-06.)
- 55) <https://arhiiv.saartehaal.ee/2018/12/21/paberil-joulukaardid-ikka-popid/> (Accessed on 2019-08-08.)
- 56) <https://kaup24.ee/et/kodumasinad-kodutehnika/telerid-ja-tarvikud/telerid/teler-teler-sony-kdl-65w855c?id=292321> (Accessed on 2019-08-08.)

References

- Aavik, Johannes 1920. *Katsed ja näited. IV. Koguke keeleproovidena tõlgitud novelle ühes keelelise sissejuhatusega*. Tartu: Istandik.
- Aavik, Johannes 1925: Uus verbivorm -maks. *Keeleuendus* 1: 2, 17–18.
- Anhava, Jaakko 2010: Criteria for case forms in Finnish and Hungarian grammars. In Karttunen, Klaus (ed.): *Anantaṁ Śāstram. Indological and Linguistic Studies in Honour of Bertil Tikkänen*. Helsinki: Finnish Oriental Society, 239–244.
- Boller, Anton 1854: *Die Declination in den finnischen Sprachen*. Aus dem XI. und XII. Bande der Sitzungsberichte der philos.-histor. Classe der kais. Akademie der Wissenschaften besonders abgedruckt. Wien.
- Ehala, Martin – Heiki-Jaan Kaalep – Annika Kilgi – Ülle Viks 2003: Tänapäeva eesti kirjakeele uurimine: morfoloogia. In Ereht, Mati (ed.): *Eesti keele uurimise analüüs. Emakeele Seltsi aastaraamat* 48. Tallinn: Eesti Teaduste Akadeemia, 36–48.
- EKG I = Ereht, Mati – Reet Kasik – Helle Metslang – Henno Rajandi – Kristiina Ross – Henn Saari – Kaja Tael – Silvi Vare 1995: *Eesti keele grammatika I. Morfoloogia. Sõnamoodustus*. Tallinn: Eesti Keele Instituut.

- EKG II = Erelt, Mati & Kasik, Reet & Metslang, Helle & Rajandi, Henno & Ross, Kristiina & Saari, Henn & Tael, Kaja & Vare, Silvi 1995: *Eesti keele grammatika II. Süntaks. Lisa: kiri*. Tallinn: Eesti Keele Instituut.
- EKS = Erelt, Mati – Helle Metslang (eds.) 2017: *Eesti keele süntaks*. Eesti keele varamu III. Tartu: Tartu Ülikooli Kirjastus.
- EKSS = Langemets, Margit (et al., ed.): *Eesti keele seletav sõnaraamat*. Tallinn: Eesti Keele Instituut. (Accessed at <https://www.eki.ee/dict/ekss/> on 2019-05-06.)
- Erelt, Mati 1986: *Eesti adjektiivisüntaks*. Tallinn: Valgus.
- Erelt, Mati 2007: Structure of the Estonian language: Syntax. In Erelt, Mati (ed.) 2007, 93–129.
- Erelt, Mati 2008: Veel kord vaegomadussõnadest. *Keel ja Kirjandus* 51, 442–449.
- Erelt, Mati 2014: *Eesti keele lauseõpetus: Komplekslause*. Tartu: Tartu Ülikool.
- Erelt, Mati 2017a: Liitlause. In EKS, 647–755.
- Erelt, Mati 2017b: Öeldis. In EKS, 93–239.
- Erelt, Mati 2017c: Sissejuhatus süntaksisse. In EKS, 53–89.
- Erelt, Mati (ed.) 2007: *Estonian language*. Tallinn: Estonian Academy.
- Hasselblatt, Cornelius 2000: Eesti keele ainsuse sisseütlev on lühike. *Keel ja Kirjandus* 43, 796–803.
- Hint, Mati 1979: Minevikuline ja tulevikuline aines keelesüsteemis. Nõrgaastmeline *i*-mitmus. *Keel ja Kirjandus* 22, 142–149, 200–208.
- Hint, Mati 2011: Kas ynned sa olbama sirnangot? Johannes Aaviku visionäärsus keeleteoreetilisest vaatepunktist. *Keel ja Kirjandus* 54, 809–820.
- Iggesen, Oliver A. 2013: Number of cases. In Dryer, Matthew S. – Martin Haspelmath (eds.): *The world atlas of language structures online*. Leipzig: Max Planck Institute for Evolutionary Anthropology. (Accessed at <http://wals.info/chapter/49> on 2019-05-06.)
- Jalava, Lotta 2017: The essive-translative in Tundra Nenets. In de Groot, Casper (ed.): *Uralic essive and the expression of impermanent state*. Amsterdam & Philadelphia: John Benjamins, 397–426.
- Kasik, Reet 1996: *Eesti keele sõnatuletus*. Tartu: Tartu Ülikooli Kirjastus.
- Kasik, Reet 2011: *Stahli mantlipärijad. Eesti keele uurimise lugu*. Tartu: Tartu Ülikooli Kirjastus.
- Kasik, Reet 2013: *Komplekssete sõnade struktuur*. Tartu: Tartu Ülikool.
- Kasik, Reet 2015: *Sõnamoodustus*. Eesti keele varamu I. Tartu: Tartu Ülikooli Kirjastus.
- Keevallik, Leelo 2007: Colloquial Estonian. In Erelt, Mati (ed.) 2007, 343–378.
- Kiefer, Ferenc 1987: The cases of Hungarian nouns. *Acta Linguistica Academiae Scientiarum Hungaricae* 37, 93–101.

- Knüpfner, Arnold Friedrich Johann 1817: *Bemerkungen über die Declinations- und Casusformen der Ehstnischen Sprache. Dem Herrn Doctor der Theologie, Probst und Consistorial-Assessor David Gottlieb Glanström, zur Jubelfeyer des fünfzigsten Jahresfestes seiner Predigeramts-Führung, an den Kirchen zu Weissenstein und St. Annen, den 13ten Juny 1817*. Reval: Johann Hermann Gressel.
- Knüpfner, Arnold Friedrich Johann 1821: Ueber das Suffix oder die Casus-Endung: na. *Beiträge zur genauern Kenntniss der ehstnischen Sprache* 13, 122–127.
- Kross, Kristiina 1979: Eesti instruktiivist. *Keel ja Kirjandus* 22, 474–480.
- Kross, Kristiina 1983: Instruktiivi võimalikkus nüüdiseesti kirjakeeles. *Keel ja Kirjandus* 26, 241–247.
- Laanekask, Heli – Tiiu Erelt 2007: Written Estonian. In Erelt, Mati (ed.) 2007, 273–342.
- Laanest, Arvo 1982: *Einführung in die ostseefinnischen Sprachen*. Autorisierte Übertragung aus dem Estnischen von Hans-Hermann Bartens. Hamburg: Helmut Buske Verlag.
- Mäearu, Sirje 2008: Sõnamoodustusabi. In Raadik, Maire: *Keelenõuanne soovitab 4*. Tallinn: Eesti Keele Sihtasutus, 95–120.
- Matthews, P. H. 2007: *Syntactic relations: A critical survey*. Cambridge: Cambridge University Press.
- Matthews, P. H. 2014: *The positions of adjectives in English*. Oxford: Oxford University Press.
- Metslang, Helle 2017: Kvantorifraas. In EKS, 463–478.
- Muuk, Elmar 1927: *Eesti keeleõpetus. Hääliku- ja vormiõpetus*. Tartu: Eesti Kirjanduse Selts.
- Nevis, Joel A. 1986: The comitative, terminative, abessive, and essive as clitics in Estonian. *Ural-Altische Jahrbücher* 7, 79–98.
- Nevis, Joel A. 1988: On the development of the clitic postposition category in Estonian. *Finnisch-Ugrische Forschungen* 48, 171–197.
- Norris, Mark 2015: Case-marking in Estonian pseudopartitives. *Proceedings of the Annual Meeting of the Berkeley Linguistics Society* 41, 371–395.
- Nurkse, Rein 1937: *Adjektiiv-atribuudi kongruentsist eesti keeles*. Tartu: Akadeemiline Emakeele Selts.
- O’Connor, Catherine – Joan Maling 2014: Non-promotional passives and unspecified subject constructions. Navigating the typological Kuiper Belt. In Bourns, Stacey Katz – Lindsay L. Myers (eds.): *Perspectives on Linguistic Structure and Context. Studies in honor of Knud Lambrecht*. Amsterdam & Philadelphia: John Benjamins, 17–38.
- Pajusalu, Renate 2017: Nimisõnafraas. In EKS, 379–404.

- Payne, John – Erika Chisarik 2000: Demonstrative constructions in Hungarian. In Alberti, Gábor – István Kenesei (eds.): *Approaches to Hungarian: Papers from the Pécs conference*. Szeged: JATE, 179–198.
- Raadik, Maire 1993: Mis vahe on sõnadel eri ja erinev? *Hommikuleht* 24.9.1993, 11–12. (Accessed at <http://keeleabi.eki.ee/artiklid/erinev.html> on 2019-05-06.)
- Raag, Virve 1998: *The effects of planned change on Estonian morphology*. Uppsala: Uppsala University Library.
- Rätsep, Huno 1977: Õigekeelsussõnaraamat 1976. („Keele ja Kirjanduse“ ringküsitus). *Keel ja Kirjandus* 20, 739–741.
- Rätsep, Huno 1979: *Eesti keele ajalooline morfoloogia. II*. Tartu: Tartu Riiklik Ülikool.
- Ross, Kristiina 1988: *Instruktiiv läänemeresoome keeltes*. Tallinn: Valgus.
- Särkkä, Tauno 1969: *Itämerensuomalaisten kielten eksessiivi*. Helsinki: Suomalaisen Kirjallisuuden Seura.
- Sasse, Hans-Jürgen 1993: Syntactic categories and subcategories. In Jacobs, Joachim – Arnim von Stechow – Wolfgang Sternefeld – Theo Vennemann (eds.): *Syntax: An international handbook of contemporary research*. Berlin: Walter de Gruyter, 646–686.
- Siegl, Florian 2013: *Materials on Forest Enets, an Indigenous Language of Northern Siberia*. Helsinki: Finno-Ugrian Society.
- Siegl, Florian 2017: The essive-translative in the Enets languages. In de Groot, Casper (ed.): *Uralic essive and the expression of impermanent state*. Amsterdam & Philadelphia: John Benjamins, 427–459.
- Siiman, Ann 2018: Variation of the Estonian singular long and short illative form: A multivariate analysis. *SKY Journal of Linguistics* 31, 139–167.
- Sirola-Belliard, Maija 2016: *Suomen komitatiivi. -ine ja kanssa*. Tampere: Tampere University Press.
- Suoniemi-Taipale, Inga 1994: *Itämerensuomalaisten kielten prolatiivi*. Helsinki: Suomalaisen Kirjallisuuden Seura.
- van der Auwera, Johan 1999: Adverbs and adverbials. In Brown, Keith – Jim Miller (eds.): *Concise encyclopedia of grammatical categories*. Amsterdam: Elsevier Science, 8–12.
- Veismann, Ann – Mati Erelt – Helle Metslang 2017: Määrus. In EKS, 300–375.
- Veismann, Ann – Mati Erelt 2017: Määrsõnafraas. In EKS, 416–429.
- Velsker, Eva 2006: Ööd tähistavad ajaväljendid eesti murretes, ühis- ja kirja-keeles. *Emakeele Seltsi aastaraamat* 51, 184–207.
- Velsker, Eva 2018: Ööpäev ja aastaag eesti murretes. *Emakeele Seltsi aastaraamat* 63, 260–291.
- Viht, Annika 2017: Eesti sõnamuutmise uurimise lühiülevaade. *Mäetagused* 69, 133–152.

- Viitso, Tiit-Rein 2007a: Nn vaegomadussõna ja selle taust. *Keel ja Kirjandus* 2007, 878–887.
- Viitso, Tiit-Rein 2007b: Rise and development of the Estonian language. In Ereht, Mati (ed.) 2007, 130–230.
- Viitso, Tiit-Rein 2007c: Structure of the Estonian language: Phonology, morphology and word formation. In Ereht, Mati (ed.) 2007, 9–92.
- Villup, Astrid 1969: *Adverb eesti keeles. Õppematerjal*. Tallinn: ENSV Kõrgema ja Kesk-erihariduse Ministeerium.
- Ylikoski, Jussi 2015: From compounds to case marking: Prolatives in South Saami and Lule Saami. *Finnisch-Ugrische Mitteilungen* 39, 101–155.
- Ylikoski, Jussi 2019: Eesti keele distributiiv. *Oma Keel* 2/2019.
- Ylikoski, Jussi (forthcoming): Kielemme kääpiösijoista: prolatiivi, temporaali ja distributiivi. *Virittäjä*.

Jussi Ylikoski

Giellagas Institute for Saami Studies, P.O. Box 1000, 90014 University of Oulu, Finland
E-Mail: jussi.ylikoski@oulu.fi

