MANNER AND ADVERB: FUZZY CATEGORIAL BOUNDARIES IN COLLOCATIONS

Geda Paulsen

Abstract. It is a well-known fact that natural languages do not correspond to the linguistic categories without trouble. Regarding the category of word classes, one of the most challenging groups in Estonian is the adverb, characterized by continuing supplementation by case forms of nouns. This article explores the notion of nominal adverb from the perspective of another prototype-based category, manner. The analysis of manner expressions follows Virtanen’s (2008) ‘manner plus’ idea, assuming semantic blends of manner and some other category. This study is induced by work with the Estonian collocations dictionary and the data the compilation is based on. The analysis explicates the collocational behaviour and the types of semantic blends of the selected nominal adverbs in the inner local cases illative, inessive and elative, focusing on adverb-verb combinations.*

Keywords: lexicography, word classes, Estonian

1. Introduction

Identification of the boundaries between word classes is a question that has preoccupied linguists since ancient Greek. It is impossible to avoid the boundary problem of lexical categories in part-of-speech tagging and lexicographic procedures, and one of the most striking issues is that lexical units may occur in more than one word class. A classification of lexical categories must consider the semantic-pragmatic, syntactic and morphological behaviour of a word. These domains do not necessarily display one-to-one correspondence, and one word may relate to several lexicogrammatical combinations. Categorization of word classes is determined by the properties of the language, but also by the purposes of the linguistic description. The discussions about the Estonian word classes in recent years have been related to different language varieties: contemporary written language (Kaaldep et al. 2000) and old written language (Habicht et al. 2011), dialectal language (Lindström et al. 2006) and (contemporary) spoken language (Hennoste 2002), to mention some of

* This research has been supported by the Institute of the Estonian Language and the project “The substantives in adverbial functions from the point of view of verb syntagmatics”.
them. The most recent classification is elaborated by Mati Erelt (2017: 57–61), who divides Estonian words into autonomous content words (verbs, nouns, adjectives, numerals and adverbs), autonomous functional or substituting words (pronouns, proadverbs), non-autonomous functional words or auxiliaries (auxiliary verbs, affixal adverbs, adpositions, conjunctions) and syntactically independent pragmatic words or particles (modal adverbs, interjections).

Reuse of a linguistic unit in different functions, an appearance of the economy principle, is a phenomenon posing categorization problems particularly for lexicographers. One of the most problematic word classes in Estonian is the adverb (Habicht et al. 2011: 22–23). A characteristic feature of Estonian is the partial productivity of the adverb class and its continuing supplementation by case forms of nouns, as the boundary between nominals and adverbs (and adpositions) is rather unclear. Historically, most of the Estonian adverbs have developed via petrification of a case form of a noun and abstraction of its meaning (Erelt et al. 1993: 38), e.g. kõrv ‘ear’ > kõrva-l ‘nearby’. As this process is dynamic and continuous, there are words in modern Estonian currently in a transition stage, appearing both as standard nouns and with more abstract and specific meanings. Compare the examples in (1a), (1b) and (2a), (2b), where the a-examples refer to nominal and b-examples to adverbial use of the same word:

(1a) majade rivi
   house.pl.gen line
   ‘a row of houses’

(1b) rivi-s marssima²
   line-inf march.minf
   ‘to march in line’

(2a) kostab masinate ühtlast mürina-t
   sounds engine.pl.gen even rumbling-part
   ‘a continuing rumbling of engines is heard’

(2b) mürina-l naerma
   thunder-ade laugh.minf
   ‘to laugh rumblingly’

The questions of this study have emerged from work with the Estonian Collocations Dictionary, revealing a wide range of potential adverbs that presently are tagged as nouns³ in dictionaries. These words are analysed as substantives by Sketch Engine, the software processing the corpus material, but in certain collocational patterns, questions arise regarding the lexical category of the word. The main aim of this study is to examine the semantic properties of 26 nouns in inner local cases expressing manner in co-occurrence with certain verbs. The analysis will focus on the following questions: What kind of collocational combinations activate the adverbial functions and what is the influence of the collocate verbs on these words? What kind of semantic relationships do these words display? What is the effect of

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¹ Riho Grünthal (2003: 26) states that there are no absolutely clear boundaries between adpositions, nouns and adverbs in Finnic languages.
² In the Estonian tradition of linguistics, the basic form of a verb is represented by the ma-infinitive form.
³ The Explanatory Dictionary of Estonian (Langemets et al. 2009) marks some of the studied words with the note adverbialasne ‘adverb-like’.
case semantics on the nominal adverbs? As these words occur regularly in similar functions to adverbs, I use the term *nominal adverbs* (NA). Since manner is also far from a clear-cut category, the article is a case study of the peripheral areas of two categories with fuzzy boundaries. A motivating hypothesis of this study is the idea that the manner category functions as the prototype, attracting new members of adverbs from the class of substantives.

The background to the study is given in sections 2 and 3, giving an overview of the Estonian Collocations Dictionary and its compilation principles, and a short résumé over the concepts of manner and (manner) adverbs (and very briefly also manner adverbials) in Estonian. The analysis of NAs in inner local cases follows in section 4. The results are discussed in the final section 5.

2. The Estonian Collocations Dictionary

The impulse for this study comes from the compilation process of the Estonian Collocations Dictionary, a project currently being carried out at the Institute of Estonian Language (2014–2018). The collocations dictionary is a learner dictionary (appropriate for the B2–C1 level), with also L1 users as the target audience. The main goal of this project is to help (advanced) language learners and language users choose linguistic forms that express their thoughts idiomatically.

The collocations dictionary is an e-lexicographic pilot project of the Institute, employing automatic content recognition of large corpora. The compilation process is based on the automatically generated database using the corpus lexicographic software Sketch Engine (Kilgarriff et al. 2004). The corpora applied for Estonian by the Sketch Engine system are the 463 million-word Estonian Reference Corpus\(^4\) (containing 75% newspaper texts, also fiction, science and legislation texts from 1990 onwards) and the 260 million-word web corpus etTenTen\(^5\) (also including spontaneous language use). The word sketch rules for Estonian (the grammatical relations that the Sketch Engine system searches from the corpus) are written by Jelena Kallas (2013). Collocations are in this project defined as lexicogrammatical constructions – semantically and statistically significant combinations of content words with other lexical and grammatical items, for instance:

\[
\text{(3) lahina-}l \quad \text{nutma} \\
\text{cry.m} \quad \text{cry.mINF}
\]

‘cry loudly’

\[
\text{(4) silmanurga-st} \quad \text{märkama} \\
\text{corner_of_eye-ELA} \quad \text{notice.mINF}
\]

‘notice from the corner of the eye’

The headwords (about 10,000 entries) are grouped according to word classes – substantives, adjectives, verbs, selected adverbs, particularly manner adverbs – and morphological and syntactic categories. (Kallas et al. 2015.) Word class definition helps the language user in the searching process and gives information about the morphosyntactic properties of the word. Adverbs as collocates of verbs are important

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\(^5\) Available via [https://the.sketchengine.co.uk/auth/corpora/](https://the.sketchengine.co.uk/auth/corpora/) (30.3.2018).
distinguishers of verb polysemy: the adverb may indicate if there is a question of concrete or figurative meaning of the verb, cf. *sukelduma sügavale* ‘dive deep into smth.’ (both concrete and figurative meanings are possible) and *sukelduma jäägi-tult* ‘dive entirely’ (only the figurative meaning is activated). The set of manner adverbs a verb collocates with is significant collocational information about the verb’s semantics for the language learner.

3. Manner and adverb

There seems to be an (implicit or explicit) assumption that adverbs of manner are prototypical in terms of morphology, syntax and semantics (i.a. Ernst 2002, Ravid, Shlesinger 2000, Swan 1997, Virtanen 2008). At a closer look, however, manner adverbs prove to be a rather heterogeneous and open group, and in Estonian, there exists a fair number of nouns attracted to this class. Adverbs are in Estonian grammar defined as uninflected words occurring in adverbial functions and modifying the meaning of an adjective, verb, or other adverb (Erelt et al 1995: 23, Veismann, Erelt 2017: 417). Most Estonian adverbs are morphologically complex, mainly inflected forms or derivatives. The typical Estonian manner adverb is derived by the suffix *-lt* or *-sti*, and it modifies the verb and specifies how, in what way or manner the event in question takes place. The adverb *rõõmsa-lt* in *Ta naeris rõõmsalt* ‘He laughed merrily’ hence corresponds to the English adverb *merri-ly*, and we can paraphrase the adverb as ‘in a merry manner’. There are also other (less productive) suffixes in Estonian, and in addition to derived adverbs, there are a few simple adverbs in Estonian (*otse* ‘straight’, *viltu* ‘awry’). (About the forms of adverbs in Estonian, see Kasik 2015: 381–405.)

Estonian is characterized by relatively free word order (see Lindström 2017: 547), hence the position of the adverbial in a clause cannot be considered as a measure for classification of adverbs. The typical adverb cannot modify a noun (*’üksinda vend* ‘alone brother’) but allows for intensifiers (*väga kiiresti* ‘very fast’), and it usually lacks nominative and genitive forms (as for instance the pair *rikki* [defect. ill.] ‘(go) broke’ and *rikis* [defect.incl.] ‘(be) broken’ without any further forms in contemporary Estonian). There are also no agreement relations between adverb and verb. (About the criteria for adverbs, see Veismann et al. 2017: 417–418.)

Manner adverbs are in Estonian grammar (Erelt et al. 1995: 24) discussed under a united category with sc. state (*seisund*) adverbs, comprising words encoding the way an event is occurring or the state/posture of the participant in an event, both answering the question *how?* In the recent treatment of adverbials (Veismann et al. 2017: 357–367), manner and state adverbials are classified as separate groups, but the difficulty of splitting these concepts apart is recognized. Consider some examples of the multifaceted group of manner/state adverbs:

(5)  

<table>
<thead>
<tr>
<th>Estonian</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>hăsti</em> ‘well’</td>
<td></td>
</tr>
<tr>
<td><em>vapralt</em> ‘bravely’</td>
<td></td>
</tr>
<tr>
<td><em>kiiresti</em> ‘fast’</td>
<td></td>
</tr>
<tr>
<td><em>üksinda</em> ‘alone’</td>
<td></td>
</tr>
<tr>
<td><em>sosinal</em> ‘under one’s breath’</td>
<td></td>
</tr>
</tbody>
</table>

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6. The suffix *-lt* is the most productive adverbial suffix in contemporary Estonian (Erelt et al. 1995: 599).

7. It is, however, possible for an adverb to modify deverbal nouns, e.g. *üksinda olemine* ‘being alone’. (I thank the anonymous reviewer for this observation.)
Diverse semantic subclasses have been proposed for manner, overlapping with other close categories (means, instrument, degree etc.). The Estonian grammar mentions manner adverbs expressing a state, time flow and qualitative difference or similarity (Erelt et al. 1993: 265, 26, 137). Rodney Huddleston and Geoffrey K. Pullum (2002: 670) note that manner, means and instrument can all be questioned by how; also, the Estonian kuidas ‘how’ may cover in addition to manner e.g. cause, reason and means (Metslang 1981: 83). Considering manner adverbials (where manner adverbs occur), these can be seen as part of the adverbial class expressing circumstances of an event (alongside local, temporal, quantity and state adverbials, see Erelt 2017: 82). The broad term ‘process adjuncts’ includes concrete manner (means and instrument: surgically), non-concrete manner (cleverly), comparison (like a vacuum cleaner), accompaniment (I jog with my friends) and agent adjectives (scratched by thorns) (Quirk et al. 1991: 776–778). Oliver Bonami, Daniele Godard and Brigitte Kamps-Matthe (2004: 177–181) also take into consideration the semantic object the adverb is associated with and distinguish four types of manner: agent-oriented manner adverbs (skillfully – X has been skillful in doing Y); mental states (psychological adverbs, calmly/sadly); resultative object-oriented adverbs (Luc furnishes comfortably his studio); V-adverbs modifying the event (profitably).

As a solution, Tuja Virtanen proposes that there is a continuum of ‘manner plus’ phenomena, i.e. semantic blends between manner and some other category. Consider some possible “hybrids” suggested by Virtanen (2008: 273–276):

a) manner + result (irreversibly, productively)
b) manner + degree of perfection (successfully, poorly)
c) manner + time (at first blush, gradually)
d) manner + motion (sidewise, tottering)

Following the ‘manner plus’ approach of Virtanen, assuming that manner is a basically fuzzy prototype-based category, the focus in next section is on semantic blends of manner from the point of view of collocational patterns of the NAs collected during the compilation process of the Estonian collocations dictionary. The aim of the analysis is to establish the subtypes of manner related to the NAs and to examine the semantic properties characterizing these words.

4. Nominal adverbs expressing ‘manner plus’ elements

The analysis below is grounded on the explanation of manner adverbs as defined in Estonian grammar (Erelt et al. 1995), i.e. manner and state adverbs are not separated. Structurally, the analysis covers the NAs in inner local cases, forming a semantic and morphological microsystem. The NAs are analysed in the collocational company of the salient verbs. The verb selection is based on the word sketches of

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8 In the literature discussing adverbs, the notion ‘agent-oriented’ usually relates to ‘subject-oriented’, proposed by Ray Jackendoff (1972).
Sketch Engine; examples are mostly taken from the database used by Sketch Engine. The frequency numbers are given in the analysis only where the use of a NA form is salient. Some representative examples are taken additionally from the web using Google search. The authentic examples may be slightly modified, leaving only the relevant parts for the analysis.

4.1. The local cases in Estonian

The preliminary examination of substantives in adverbial function suggests that there are NAs in all 11 semantic cases of the altogether 14 cases of Estonian, both spatial and special ones (leaving out the grammatical cases, i.e. nominative, genitive and partitive). There is a non-productive instructive case explicitly indicating manner in Estonian, occurring in certain idiomatic expressions. The semantic cases can be further classified as interior local cases (illative, inessive, elative), exterior local cases (allative, adessive, ablative) and other oblique cases (essive, translative, comitative, abessive, terminative). Both interior and exterior local cases split up into a tripartite distinction of lative (moving toward), locative or static (being at) and separative (moving away from) relations. (About the case system in Estonian, see Erelt et al. 1995: 48–51.) The lative and separative cases express path-relations, involving direction (which implies the presence of the semantic features source, route and goal, see Nikanne 2000), and the local cases express place-relations. All the local cases in Estonian have other, often quite abstract uses beside the spatial senses. The grouping of inner local cases in Estonian is found in Table 1:

Table 1. Inner local cases in Estonian

<table>
<thead>
<tr>
<th>Lative</th>
<th>Locative</th>
<th>Separative</th>
</tr>
</thead>
<tbody>
<tr>
<td>raamatu-sse</td>
<td>raamatu-s</td>
<td>raamatu-st</td>
</tr>
<tr>
<td>‘into a/the book’</td>
<td>‘in a/the book’</td>
<td>‘from a/the book’</td>
</tr>
</tbody>
</table>

The tripartite local case system also makes it possible to divide adverbs into three corresponding groups: lative (transition into a state), locative (being in a state) and separative (departure from a state) (see Veismann et al. 2017: 363). Reet Kasik (2013: 193) notes that the incomplete case paradigm is quite common when it comes to adverbs in local cases, involving usually two or three forms (ette ‘to the front’: ees ‘at the front’: eest ‘from the front’) and in the case of state adverbs usually a bipartite paradigm (purju ‘become drunk’: purjus ‘be drunk’). In the following subsections I will discuss the NAs in interior local cases incorporating a manner component and the other possible semantic elements.

4.2. Illative

The illative case refers typically to the goal the theme’s referent is moving into (or into close contact with). The NAs with an illative ending encode this basic meaning, involving direction and result, which implies the occurrence of (spatial or abstract)

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9 Traces of the instructive case in Estonian reveal in connection with some rare noun stems, mostly expressing body parts (Ross 1988: 38), e.g. padjala ‘barefooted’.
motion. All these components plus the elements of shape and speed are represented in the NAs presented in Table 2; the salient collocate verbs of each NA are presented in the right column. The verbs are divided further according to presence or absence of the causative component, in order to determine the semantic properties of the NA in different local cases and its collocate verb. Causation is here understood as the relation between two events if the occurrence of one event, the cause, leads to the occurrence of another event, the result. Reflexive self-induced activity is analysed as non-causative (as e.g. the verb võtma ‘take’ in võtma haneritta ‘gather into single line’). Causative verbs are marked with a (c), while non-causatives are left unmarked. If a verb occurs with both the NA in a causative and a non-causative meaning, the optionality is marked with the brackets < >.

Table 2. Combinations of manner + path + motion + (collective shape) + (speed) + result

| Haneritta [lit. goose_line.ill] ‘into single file’ | Võtma ‘take’; Aajama ‘impel’ (c), Koondama ‘assemble’ (c) |
| Sappa  [tail.ill] ‘to the end of the line’ | Võtma ‘take’; Haakima ‘hook’ (<c>), Panema ‘put’ (c) |
| Rivi [line.ill] ‘into a row/line’ | Võtma ‘take’, Naasma ‘return’; Saatma ‘send’ (c) |
| Lendu [flight.ill] ‘(move) fast (upwards)’ | Minema ‘go’, Tõusma ‘rise’; Saama ‘get (c); Saatma ‘send’ (c) |

The notion of ‘collective shape’ is due to the nature of the first three NAs in Table 2, haneritta ‘into single file’, sappa ‘to the end of the line’ and rivi ‘into the row/line’. These words imply a movement into a line or a file formed typically of (two or more) humans; in case of rivi, both back-to-back and side-by-side orderings are possible. The motion component may involve, in addition to the basic event (motion into the basically static figure/place) as in the example (6a), an overall motion event (6b), where the whole figure shaped by the multiple agents is moving as well. The illative ending of the NA may coerce even a stative verb into a situation involving motion (6c):

(6a) Mängijad võtavad võistkonna kaupa haneritta.  
players take.3PL team.GEN PP goose_line.ILL  
‘The players gather into single file by team.’

(6b) Ratturid võtavad läbi linna sõites haneritta.  
cylists take.3PL PP city.GEN drive.conv goose_line.ILL  
‘The cyclists gather into single file while cycling through the city.’

(6c) Rühmad seisavad haneritta. (Google)  
groups stand.3PL goose_line.ILL  
‘The groups gather into single file.’

Of the three first NAs, haneritta collocates with two causative verbs, aajama ‘impel’ and koondama ‘assemble’; the only causative collocate verb of rivi is saatma ‘send’. An ambiguous collocate verb of sappa is haakima ‘hook’, altering between

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10 I consider transitivity a syntactic notion and leave it out of this analysis.
non-causative and non-causative readings (7b), (7c). The significant difference between the causative and non-causative reading is that the adverb has either an agent-oriented or a patient-oriented reading, depending on the verb the adverb modifies. A non-causative verb thus links the adverb with the agent and a causative verb with the patient (7a).

(7a) kurjategijaile pandi sappa politseikoerad.
criminal.PL.ALL put.PPS.PST tail.ILL police_dog.PL
'The police dogs were set after the criminals.'

(7b) Ühest sillast ülesõitmise järel haagib sappa politseitsikkel.
one.ELA bridge.ELA crossing.GEN after hooks tail.ILL police_motorcycle
'After crossing a bridge, a police bike hooks behind us.'

(7c) Otsustavad sündmused toimusid kolmandal ringil,
crucial.PL events happened third.ADE lap.ADE
kui Aus viis meest sappa haakis.
when Aus five man.PART tail.ILL hook.PST.3PL
'The crucial events happened in the third lap, when Aus hooked five men after him.'

The last NA, lendu ‘flight’, is derived by conversion from the verb lendama ‘fly’. This NA differs from the others in that the shape component falls out and the focus is on the speed of the mover argument, emphasizing a fast and swift movement (sometimes also a movement through the air (8b)). This movement can also be abstract (8c):

(8a) Hobune läks lendu.
horse went flight.IIL
'The horse took off.'

(8b) Sain palli lendu.
get.PST.1SG ball.GEN flight.IIL
'I got the ball into (fast) motion.'

(8c) Ta saadab lendu särava naeratuse.
s/he sends flight.IIL bright.GEN smile.GEN
'(S)he shoots a smile into the air.'

A special case of the mutual semantic influence between verb and case ending appears by the verb jääma ‘stay’: the motion and result components fall off and the collocational unit expresses stative meaning. The verb semantics hence overrules the adverbial meaning, showing an opposite tendency compared to example (6c). However, this is quite rare regarding the NAs in illative, and motion may still be involved (9a). Notably, other stative verbs (e.g. püsima ‘remain’) do not combine with the NAs in illative case.
Table 3. Combinations of manner + place + state

<table>
<thead>
<tr>
<th>Manner</th>
<th>Place</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>rivvi</td>
<td>[line.ill]</td>
<td>'into a line/row'</td>
</tr>
<tr>
<td>sappa</td>
<td>[tail.ill]</td>
<td>'to the end of the line'</td>
</tr>
<tr>
<td>haneritta</td>
<td>[lit. goose.line.ill]</td>
<td>'into single line'</td>
</tr>
</tbody>
</table>

(jaām) jaāb sappa sōitma (Google) 
[the one that has to drive behind another] stays tail.ill. drive.minf
'[the one that has to drive behind another] stays driving at the end of the line'

(9b) [soomuslaev] sai kaks tabamust, kuid jää rivvi
[ironclad battleship] got.pst.3sg two hit.part but stay.pst.3sg line.ill
'[ironclad battleship] got two hits, but stayed in formation'

4.3. Inessive

The inessive is clearly the most productive case of the NAs among the interior local cases in the materials of the Estonian Reference Corpus and etTenTen13. Since the basic function of the inessive is interior location, being within or in close contact with something, one can expect the NAs in inessive to refer to states. However, if the collocates are action verbs, for instance motion verbs, the NAs in inessive are part of activities in a Vendlerian sense (about the aspectual verb classes, see Vendler 1967: 606–610). Depending on the collocate verb's characteristics, the activity takes place on a path with undefined source or goal boundaries (encoding the route only), or when the verb inclines the situation towards a state, it is located at a concrete or abstract place. A common feature for this group in general is that causative verbs seem not to form collocational pairs with manner NAs in inessive.

Table 4. Combinations of manner + place/path + (motion) + (shape) + (speed)

<table>
<thead>
<tr>
<th>Manner</th>
<th>Path</th>
<th>Movement</th>
<th>Shape</th>
<th>Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>kamba-s</td>
<td>[gang-ne]</td>
<td>in cahoots, together</td>
<td>tegutsema 'act', tegema 'do', liikuma 'move', massima 'march'</td>
<td></td>
</tr>
<tr>
<td>hanera-s</td>
<td>[goose_line-ne]</td>
<td>in single file</td>
<td>liikuma 'move', minema 'go', kepsutama 'skip', paterdama 'waddle', komberdama 'hobble'</td>
<td></td>
</tr>
<tr>
<td>saba-s</td>
<td>[tail-ne]</td>
<td>in the end of the line</td>
<td>seisma 'stand', kaima 'go', jooksma 'run', särkima 'trot', lõhisema 'draggle', jõlkuma 'loaf'</td>
<td></td>
</tr>
<tr>
<td>rivi-s</td>
<td>[line-ne]</td>
<td>in line/row</td>
<td>seisma 'stand', istuma 'sit', püsuma 'stay', ootama 'wait', massima 'march', minema 'go', tantsima 'dance'</td>
<td></td>
</tr>
<tr>
<td>esirea-s</td>
<td>[forefront-ne]</td>
<td>at the forefront</td>
<td>asuma 'be located', istuma 'sit', seisma 'stand', sammma 'tread', massima 'march'</td>
<td></td>
</tr>
</tbody>
</table>

The NA kambas ‘in cahoots’ collocates specifically with general activity verbs such as tegutsema ‘act’, tegema ‘do’(10a), or with general motion verbs. The NA hanereas ‘in single file’ in inessive occurs with diverse motion verbs, including verbs encoding a manner component themselves, e.g. kepsutama ‘skip’, paterdama ‘waddle’, komberdama ‘doddle, hobble’; no stative verbs collocate with hanereas. A similar tendency also characterizes the NA saba ‘in the end of the line’, collocating
with sörkima ‘jog’, lohisema ‘trail, draggle’, jökuma ‘linger’. However, the most salient collocate verbs of sabas are the stative verbs seisma ‘stand’, ootama ‘wait’ and püsima ‘stay’. Intuitively, I would have expected the NA kambas to collocate with rather “unorganized” activity verbs, such as jökuma ‘linger’ or luusima ‘prowl’, yet the corpus material points to controlled, organized activities (marssima ‘march’). The search jõlguvad kambas ‘(they) linger in cahoots’ gives several results in Google. The NA rivis ‘in line/row’ refers in addition to the spatial configuration (10b) also to the normal state of affairs – someone or something is in order or in good shape and ready to fulfil its basic function (10c). The stative collocates prevail, but motion verbs are possible, too.

(10a) Taskuvarjad tegutsevad kambas.

pickpockets operate.3PL gang.INE

‘Pickpockets operate in cahoots.’

(10b) Kaks võistkonna istuvad rivis üksteise vastas.

two team.PART sit.3PL row.INE each_other across

‘Two teams are sitting in rows across from each other.’

(10c) Kuni veel viis meest rivis püsib,

as_long_as yet five man.PART line.INE stays

can.3SG and must.3SG play.mINF

‘As long as at least five men stay in line, (we) can and must play.’

The NA esireas ‘in the forefront’ collocates mainly with stative verbs, but motion verbs are possible, too. This NA makes an antonymous pair with sabas ‘in the end of the line’, as both give an estimation of the location of the agent in some ranking: esireas puts the agent on the first position in a scale and sabas, on the contrary, to the backmost part. This enables an assessment of the successfulness of the respective positions (11a), (12a). Both forms function also as postpositions (11b), (12b).

(11a) Eesti on tulesurmade arvukuselt esireas

Estonia is fire_death.pl.gen multitude.abl forefront.INE

‘Estonia is at the forefront in deaths caused by fire.’

(11b) Sühkrul hinna esireas sammub kaubamaja.

sugar.gen price.gen forefront.INE treads emporium

‘At the forefront of sugar prices [sugar.gen price.gen] treads the emporium.’

(12a) Kas sörgime sabas või oleme tegijad?

q ‘trot.1PL tail.INE or be.1PL players

‘Are we trotting behind or being players?’

(12b) Meie sabas jõlkusiid pikalt kolm noormeest.

we.gen tail.INE loaf.pst.3PL for_a_while three lad.PART

‘Three lads were loafing at our tail for a while.’
There are a couple of NAs relating to music terms and expressing motion and repetitiveness. These adverbs take mainly motion verbs as collocates:

Table 5. Combinations of manner + motion + recurrence (rhythm)

<table>
<thead>
<tr>
<th>manner + motion</th>
<th>recurrence</th>
</tr>
</thead>
<tbody>
<tr>
<td>marsitaktis</td>
<td>liikuma 'move'; sammuma 'tread'; plaksutama 'applaud'</td>
</tr>
<tr>
<td>valsitaktis</td>
<td>kulgemaa 'proceed'; mööduuma 'elapse'; liikuma 'move'</td>
</tr>
</tbody>
</table>

The word sketches of marsitakt and valsitakt reveal that both words are mainly used in the inessive case (marsitakt 'march time' has altogether 23 hits, 20 of them inessive; valsitakt 'waltz time' has altogether 32 hits, 31 inessive). By comparison, polkatakt 'polka time' has only 6 results, all in inessive, while for instance samba-/rumbatakt 'samba-/rumba time' get 0 hits. The meaning of valsitaktis can be defined as 'lightly, carelessly'; marsitaktis expresses an antonymous relation 'peremptorily, bossily':

(13a) Esimesed minutid rattasõitu mööduvad valsitaktis.
first.pl minutes cycling.part elapse.3pl waltz.time.INE
'The first minutes of cycling elapse in waltz time.'

(13b) Kuid ega kõik alati heljuvas valsitaktis kulgenud.
yet nor all always soaring.INE waltz.time.INE pass.pst.ptc
'Yet everything did not always pass in soaring waltz time.'

(14a) Mõnel on raske aru saada,
some ade is difficult mind get.dnf
et kodanikuühis kon ekääi ainult
and civil society neg go only
seadusetühe ja seadusesilma järgi marsitaktis ---
law.letter.gen and law.eye.gen according_to march.time.INE
'It is difficult for some people to understand that civil society does not solely go in march time according to the letter of the law ---'

The next NAs relate to semantic expressions of concrete or abstract means. The first three, täisvarustuses 'in panoply', paraadvormis 'in full dress uniform', and rahvarõivais 'in national costume' refer to an outfit, and similarly to the previous inessive NAs, collocate mainly with action verbs. The substantive vaimusilm 'the mind’s eye') has a prominent use of inessive case in different constructions: 1338 of 1675, 80%. Its collocate verbs reflect this perspective, belonging to the groups of (visual) perceptual and imagination verbs.
### Table 6. Combinations of manner + (state) + means

<table>
<thead>
<tr>
<th>Manner + State + Means</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>täisvarustuse-s</strong> [panoply-INE]</td>
<td><em>marssima</em> 'march', <em>suunduma</em> 'head', <em>minema</em> 'go'</td>
</tr>
<tr>
<td><strong>paraadvormi-s</strong> [full_dress_uniform-INE]</td>
<td><em>marssima</em> 'march', <em>kogunema</em> 'gather', <em>valvama</em> 'guard'</td>
</tr>
<tr>
<td><strong>rahvarõivai-s</strong> [national_costume-INE]</td>
<td><em>esinema</em> 'perform', <em>tantsima</em> 'dance'</td>
</tr>
<tr>
<td><strong>vaimusilma-s</strong> [mind's_eye-INE]</td>
<td><em>nõgema</em> 'see', <em>kujutama</em> 'depict', <em>kujutlema</em> 'imagine', <em>kangastuma</em> 'loom', <em>terendama</em> 'loom'</td>
</tr>
</tbody>
</table>

(15a) *Ilm oli meie seiklustele omane ja nii suunduti täisvarustuses märga metsa.*

The weather was appropriate for our adventures and off we headed in *panoply* into the wet forest.

(15c) *Vaimusilmas näeb ta end toreda pere* emana, kes joogatab ja kirjutab.

In her mind's eye, she sees herself as a mother to lovely family, who practices yoga and writes.

There is a semantically “true” manner expression group among the inessive NAs, sometimes interchangeable with the adverbs derived by the ending -lt. These words refer to the mental state of an experiencer and occur with quite a wide range of verbs – motion verbs, perception verbs, cognitive verbs, speech act verbs etc. An (incomplete) list of both negative and positive emotion NAs in inessive is presented in Table 7.

### Table 7. Combinations of manner + mental state

<table>
<thead>
<tr>
<th>Manner + State + Means</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>sõgeduse-s</strong> [folly-INE]</td>
<td><em>uhkeldama</em> 'vaunt', <em>pillama</em> 'waste'</td>
</tr>
<tr>
<td><strong>meeleheite-s</strong> [desperation-INE]</td>
<td><em>karjuma</em> 'shout', <em>hüüdma</em> 'shout', <em>paluma</em> 'beg'</td>
</tr>
<tr>
<td><strong>ahastuse-s</strong> [despair-INE]</td>
<td><em>nutma</em> 'cry', <em>karjuma</em> 'shout', <em>tormama</em> 'rush'</td>
</tr>
<tr>
<td><strong>kabuhirmu-s</strong> [panic-INE]</td>
<td><em>pögenema</em> 'flee', <em>pagema</em> 'fly', <em>jooksma</em> 'run', <em>taganema</em> 'retreat', <em>haarama</em> 'grasp'</td>
</tr>
<tr>
<td><strong>hämmeduse-s</strong> [confusion-INE]</td>
<td><em>vaatama</em> 'look', <em>pligutama</em> 'blink', <em>tarjuma</em> 'freeze'</td>
</tr>
<tr>
<td><strong>usaldushoo-s</strong> [confidence_fit-INE]</td>
<td><em>pihtima</em> 'confess'</td>
</tr>
<tr>
<td><strong>vaimustuse-s</strong> [enthusiasm-INE]</td>
<td><em>ütlema</em> 'say', <em>plaksutama</em> 'applaud'</td>
</tr>
</tbody>
</table>
The argument against a classification of this group as adverbs is that they all have frequently used nominative and genitive forms (although the inessive may prevail; kabuhirm has altogether 457 hits in Sketch Engine, from which 255 are inessive forms). Also, some of these NAs can modify nouns (hämmelduses laps 'a child in confusion', but *usaldus hoos laps 'a child in a rush of confidence'). A slight semantic difference between the two synonymous emotion expressions is that the inessive emotional state construction means basically 'be in a mental state' and the lt-adverbs emphasize a more active position in the event, meaning roughly 'act in the manner denoted by the root adjective'. A crucial distinction seems to lie in the semantic feature of control — the experiencer of the inessive NA construction does not have control over the emotion ((s)he is surrounded by it), but the experiencer of the lt-adverb is slightly more agentive. It is also important to note that some of the inessive mental state NAs have a counterpart lt-derivative, but not all: sögeduses 'in foolishness' / sögedalt 'mindlessly', hämmelduses 'in confusion' / hämmeldunult 'confusedly', but kabuhirmus 'in horror' / *kabuhirmunult 'panicky', usaldus hoos 'in a fit of confidence' / *usaldus hoogsalt 'confidently'\(^\text{11}\). Some examples of such pairs are presented in (16)–(18).

\begin{align*}
(16a) & \text{Ta } \textit{karjub} \textit{meeleheites}: \textit{"Inimesed, tulge mõistusele!"} \\
& \text{(s)he shouts desperation.INE people come.IMP.2PL sense.ALL} \\
& \text{\textquoteleft(S)he shouts \textit{in desperation}: \textit{"People, come to your senses!"}}
\end{align*}

\begin{align*}
(16b) & \text{Ta [---] \textit{karjub meeleehitlikult}: \textit{"Inimesed, tulge mõistusele!"} \\
& \text{(s)he shouts desperate-lt people come.IMP.2PL sense.ALL} \\
& \text{\textquoteleft(S)he shouts \textit{desperately}: \textit{"People, come to your senses!"}}
\end{align*}

\begin{align*}
(17a) & \text{Mõtlesin } \textit{ahastuses}, \text{ kust ma } \textit{selle} \\
& \text{think.PST.1SG despair.INE where.from I this.GEN} \\
& \text{õmblusmasina võtan.} \\
& \text{sewing_machine.GEN take.1SG} \\
& \text{\textquoteleft I thought \textit{in despair}, where should I get the sewing-machine from.'}
\end{align*}

\begin{align*}
(17b) & \text{\textquoteleft Mõtlesin } \textit{ahastavalt}, \text{ kust ma } \textit{selle} \\
& \text{think.PST.1SG despair-lt where.from I this.GEN} \\
& \text{õmblusmasina võtan.} \\
& \text{sewing_machine.GEN take.1SG} \\
& \text{\textquoteleft I thought \textit{despairingly}, where should I get the sewing-machine from.'}
\end{align*}

\begin{align*}
(18a) & \text{Rahvas } \textit{plaksutas} \textit{vaimustuses}. \\
& \text{people applaud.PST.3SG enthusiasm.INE} \\
& \text{\textquoteleft People applauded \textit{with enthusiasm}.'}
\end{align*}

\begin{align*}
(18b) & \text{Rahvas } \textit{plaksutas} \textit{vaimustunult}. \\
& \text{people applaud.PST.3SG enthusiasm-lt} \\
& \text{\textquoteleft People applauded \textit{enthusiastically}.'}
\end{align*}

\textsuperscript{11} The lack of the corresponding lt-form could be seen as an argument for including the inessive form into e.g. bilingual dictionaries.

\textsuperscript{12} The form ahastuses (‘in despair’) could here be replaced with the comitative form ahastusega (‘with despair’) — the comitative case can be used to form similar constructions overlapping with both inessive emotion constructions and lt-adverbs. An analysis of this group and its relationship with the corresponding inessive forms remains a topic for future research.
4.4. Elative

The elative case expresses movement from the exterior – from within (or from close contact with) something. The separative state adverbial is less frequently used than the lative and locative adverbials, and adverbs are the main expressions of this type (e.g. _haagist_ ‘off the hook’, _riidest_ ‘off the clothes’ – _Tü vōtab riidest lahti_ ‘S(he) takes off her clothes’) (Tiits 1982, Veismann et al. 2017: 363, 367). The forms in Table 8 complement the list of separative adverbs, consisting of NAs encoding a path and concrete or abstract motion. Note that _hanerida_ ‘single line’, _saba_ ‘tail’, _esirida_ ‘forefront’ and _kamp_ ‘gang’, discussed in connection with illative and inessive NAs, do not have significant adverbial uses in elative, while _rivi_ ‘line’ occurs in all three inner local case groups.

Table 8. Combinations of manner + path + (motion) + (causation) + (result)

<table>
<thead>
<tr>
<th>Noun</th>
<th>Adjective</th>
<th>Verb</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>paigast</em> [place-ELA] ‘from place’</td>
<td><em>nihkuma</em> ‘shift’, <em>minema</em> ‘go’; <em>nihutama</em> ‘shift’ (c), <em>lōma</em> ‘hit’ (c)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The NAs in Table 8 express that the subject argument is separated from its “normal” state. The collocate verbs illustrate the way of the transition, varying from _nihkuma_ ‘shift’ to _langema_ ‘fall’. The NAs _paigast_ ‘from place’ and _riivist_ ‘from line/row’ imply both concrete motion and abstract variations of going out of balance; _riivist_ is specialized on breakdowns of technical aggregates (19a), (19b).

(19a) Kui lähisuhed _paigast_ nihkub, hakkab
when close_relationship place.ELA shifts starts
peag ka tööl viltu vedama.
soon as_well work.ADE wrong pull.MINF
’When the close relationship goes **out of balance**, the work life starts to go wrong as well.’

(19b) Juhul kui üks _riivist_ ketastest väljub
in_case if one physical.PL.ELA disc.PL.ELA goes_out
rivi, sis lähevad andmed kaduma.
tow.ELA then go.3PL data lose.MINF
’In case one of the physical disks goes **out of action**, the data gets lost’

The next group of NAs in elative are body part words, specifying the perceptual or/cognitive means of the activity. The first of them, _silmanurjast_ ‘out of the corner of one’s eye’ has altogether 1843 results in the Sketch Engine database, 1226 of them (66.5%) elative constructions. The collocate verbs involve a wide range of visual perception verbs that in combination with the NA form a general meaning of ‘being aware of something’ (as in example 20a). The NA _peast_ ‘from memory, by heart’ collocates with different types of cognition verbs and some speech act verbs (_lugema_ ‘read aloud’, _tsiteerima_ ‘cite’), see the example (20b). In both cases, the meaning centres around the notion of ‘awareness’.
Table 9. Combinations of manner + body + awareness + means


(20a) Nägin silmanurgast miskit liikumas.

‘I saw something move out of the corner of my eye.’

(20b) Poiss teab pea-st iga bussi sõidugraafikut.

‘The boy knows by heart the timetable of every single bus.’

5. Discussion and conclusions

This study addresses two fundamentally fuzzy categories – adverb and manner – from the point of view of collocational adverb-verb patterns. A sample of nominal adverbs marked with the inner local cases (illative, inessive and elative) is analysed according to manner and its blends with other semantic categories. The results reveal that most of the analysed NAs are in fact semantic blends, except for the mental state expressions in inessive, which are the closest to the “core manner”. Interestingly, these “pure” manner expressions are perhaps the most transparent and least adverb-like nouns among the selected NAs – hence, the most prototypical manner expressions do not necessarily yield clear adverbs. In addition to the main eventive frames (state vs activity, path and place properties), the blends involve the categories of shape, motion, speed, recurrence, result, causation, means, mental state, and awareness. Some NAs have clearly dominating use in certain inner local cases (silmanurgast ‘out of the corner of one’s eye’, marsitaktis ‘peremptorily’, valsitaktis ‘lightly’), pointing to a quite established adverbial use. One NA, rivi ‘line, row’, has the representation of the whole local paradigm; saba ‘tail’ and hanerida ‘single file’ have bipartite paradigms of illative and inessive forms.

Examining the NAs in their collocational context allows us to capture their nature and also sheds light on the characteristics of the surrounding context. The range of verbs varies regarding both their amount and their semantic-syntactic properties. A causative collocate verb alters the NA from an agent-oriented type into a patient-oriented type (cf. Lapsed võtavad haneritta ‘The kids gather into single file’ vs Õpetaja koondab lapsed haneritta ‘The teacher assembles the kids into single file’). Remarkably, the inner local NAs in the directional cases illative and elative collocate with both non-causative and causative verbs, while the studied inessive NAs do not collocate with causative verbs. On the other hand, inessive forms are clearly the most productive group of NAs of the three cases.

The examples discussed in this article seem to display a development based on the analogy in the form of existing adverbs in local cases, a process of semantic change and departure of the productive rules, characteristic of lexicalization (Anttila 1989 [1972], Habicht 2001). The occurrence of the semantic blends at least
in the case of manner + phenomena seems to be a clue that the NA in question
displays adverb-like behaviour – after all, fuzziness is a characteristic feature of
adverbs. The lexicographer has to make the decisions about class membership of
an NA on a case-by-case basis, and in the absence of research on actual NAs, base
the judgements on the materials found in the databases. The collocation dictionary
should consider idiosyncratic phenomena and recognize the recycling of units as
part of the description of the language. It could be expedient to make a distinction
between theoretical and applied word class criteria, the first being an “idealization”
of the criteria and the second a “practical” approach to the ideal representative\(^3\),
weighing the parameters in light of language usage. The word sketches of Sketch
Engine are an immense aid in analysing a word’s semantic and syntactic behaviour
in each case. The particular criteria for manner NAs should be frequency of a cer-
tain (semantic) case in a certain (manner + possibly other semantic components)
function in addition to the traditional parameters for adverbs (uninflected words
occurring in adverbial functions and modifying the meaning of an adjective, verb,
or other adverb). A question for future lexicographic applications is whether the
corpus analysis tools could be developed further to assess a word’s “adverbial
degree”, to ease and hasten the lexicographic decision-making process.

Abbreviations

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; &gt;</td>
<td>optional</td>
</tr>
<tr>
<td>1, 2, 3</td>
<td>1st, 2nd, 3rd person</td>
</tr>
<tr>
<td>ABL</td>
<td>ablative</td>
</tr>
<tr>
<td>ADE</td>
<td>adessive</td>
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<tr>
<td>ALL</td>
<td>allative</td>
</tr>
<tr>
<td>CAUS</td>
<td>causative verb</td>
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<tr>
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<td>convertor</td>
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<tr>
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<td>dative-infinitive</td>
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<td>SG</td>
<td>singular</td>
</tr>
</tbody>
</table>

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\(^3\) I thank the anonymous reviewer for pointing out this important distinction.


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Geda Paulsen is a senior lexicographer at the Institute of the Estonian language, currently engaged with the compilation of the Estonian Collocations Dictionary. Her research interests are lexicography, lexical semantics, morphology, word formation, contrastive linguistics, language acquisition.
Roosikrantsi 6, 10119 Tallinn, Estonia
geda.paulsen@eki.ee
VIIS JA ADVERB: HÄGUSAD LIIGIPIIRID KOLLOKATSIOONIDES

Geda Paulsen
Eesti Keele Instituut

Üks eesti keele kollokatsioonisõnaraamatu koostamise probleeme on seotud nn avatud klassidega. Näiteks määrsonad ongi tüüpiliselt tekkinud noomeni mingi käändevormi kivinemise ning tähenduse abstraheerumise tulemusel (kõrval – kõrv). Kuna see protsess on dünaamiline ja jääkuv, on ka tänapäeva eesti keele olemas nn üleminekustaadiumis sõnu, mis esinevad nii tajastähenduslike nimisõnade kui ka mingis kasutuses kinnistunud muutumatute ehk suhtesõnadena. Üks selline dünaamiline rühm sõnu on viisimäärsoonad. Kässeoleva artikli eesmärk on vaadata lähemalt leksikograafilise tarkvara Sketch Engine'i mõnede nimisõnade analüüsitud sõnu. Vaadeldavad sõnad on

rivvi • rivis • rivist, haneritta • hanereas, sappa • sabas, lendu, esireas, kambas, marsitaktis, vastsaktis, täisvarustuses, paraadvormis, rahvaröiavais, vaimusilmus, sõgeduses, meeleheites, ahastuses, kahvimurdus, kämmelduses, usaldus- hoos, vaimustuses, paigast, silmanurgast, peast. Neid sõnu käsitletakse artiklis verbi kollokatsioonide kombinatsioonides, lähtudes Virtaneni (2008) esitatud viisi ja teiste lähedaste tähenduselementide koosesinemistest.


Kollokatsioonisõnaraamatu peamist sihtrühma, keeleõppijat silmas pidades tuleks püüda keele omapärade esitamise suunas võimalikut selgel ja arusaadavalt. Nimisõnalisi mitmes kategoorias esinevaid viisiadverbide senantlise sündmusega ilmselt kõige kasulikum esitada adverbirihmast, mitte noomenite seas, kuhu kuuluvad paljud erinevaid käändetähendusi väljendavad vormid. Iga juhtum nõuab möistagi eraldi läheniemist.

Võtmesõnad: leksikograafia, sõnaliigid, eesti keel