CHANGE-OF-STATE PREDICATES AND THEIR USE IN EXPRESSING THE FUTURE: THE CASE OF LIVONIAN

Miina Norvik
University of Tartu

Abstract. The present article considers change-of-state predicates in Livonian and their possible development into future copulas. The focus is on the verbs īedõ ‘remain, stay; become’, sōdõ ‘get; become’, and līdõ (synchronously a future copula), but also the verbs tūlda ‘come’ and lādõ ‘go’ are included for comparative purposes. The results show that all five verbs can be used for expressing change of state, but it depends on the particular verb and underlying construction, whether conveying the sense ‘become’ is a central or only a marginal function. This study shows that Courland Livonian fits well to the general picture of Northern Europe where the present tense form of a verb with meaning ‘become’ can be used for marking the future time reference, and at least one verb – līdõ – also appears as a future copula.

Keywords: change of state, copulas, future time reference, Courland Livonian

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1. Introduction

In several languages of Northern Europe (in Germanic languages, excl. English, and Finno-Ugric languages) a common strategy for expressing a state in the future is to use the present tense of verbs meaning ‘become’ (Dahl 2000b: 351, 357). In example (1), the Swedish bli ‘become’ (original meaning ‘remain’) is said to express ‘being’ rather than ‘becoming’; example (2), on the other hand, illustrates the case when ‘becoming’ and ‘being’ blur – this is to be expected as typically a situation involves both the state itself and the event that marks its beginning. (Dahl 2000b: 351, 355)

(1) Swedish (Dahl 2000b: 351)
Det bli kallt imorgon.
it become.3SG cold.NT tomorrow

‘It will be cold tomorrow.’

1 This study was supported by institutional research funding IUT2-37.
It has been attested that CHANGE-OF-STATE (‘become’) > FUTURE (‘will be’) is a possible development (see Heine and Kuteva 2002: 318). The German future time reference (FTR) device werden, which goes back to the root *wert- ‘turn’ (Kluge 1995), is sometimes presented as an example of the aforementioned grammaticalization path (e.g. Bybee et al. 1994: 262–263). There is some evidence that the Slavic FTR device bod- also follows the development ‘become’ > ‘will be’ (see Dahl 2000b: 360). In the Swiss dialect Züritüütsch, the inchoative and/or future copulas\(^2\) are claimed to etymologically derive from change expressions: change of orientation (wèèrden ‘become, get’; cognate of German werden), change of place (überchoo ‘get, receive’< über ‘over’ and choo ‘come’), change of possession (gèè ‘give’), and also change of position (choo ‘come’) (Bickel 1992: 7–8, 10).

This article concentrates on change-of-state predicates and their potential to develop into future copulas. Here, CHANGE-OF-STATE (used synonymously with INCHOATIVITY and the sense ‘become’) is associated with change in some property of the logical subject over time, an entry into a new state from an old state (Sweetser 1997: 117, Frawley 1992: 190, see also Pajusalu et al. 2004: 43). The main focus is on Courland Livonian, which together with the other variety of Livonian (Salaca Livonian) belongs to the southern Finnic group (comprised of Estonian, Votic, and Livonian). Finnic languages provide interesting data on this topic as there are no well-grammaticalized future auxiliaries or morphological future, and a verb in the present tense can also mark future time reference. It has been claimed that due to the perfectivity ascribed to change-of-state predicates, e.g. Estonian

\(^2\) Here, the term *copula* is used for linguistic elements that have little or no semantic content and occur with certain lexemes functioning as a predicate nucleus, e.g. the verb ‘be’. The instances considered in this article represent the case when the copula is a verb. (Pustet 2003: 5, Payne 1997: 115) Copulas can be distinguished from semi-copulas that add some meaning to the predicate phrases in which they occur, e.g. the verbs with the sense ‘become’, ‘remain’ etc. (see Pustet 2003: 5–6). Some researchers subsume both cases under the term *copula* (see e.g. Geist and Rothstein 2007: 1). Bickel uses *inchoative copula* in the same way as *semi-copula* can be used (inchoativity denotes change of state). This article distinguishes between inchoative copulas that are primarily connected with change and copulas that are static in meaning and have little semantic content.
saada ‘get, become’, tulla ‘come’, jääda ‘remain, stay’, and Finnish tulla ‘come, become’ and jääda ‘remain, stay’, such predicates typically place a situation into the future when used in the present tense, see (3) (Metslang 1994: 175). In addition, they function as phrasal verbs; Estonian saada and Finnish tulla are also used as future auxiliaries (n.d.).

(3) Estonian

\begin{align*}
\text{Temast} & \quad \text{saab} & \text{ajakirjanik.} \\
\text{s/he.ELA} & \quad \text{get.3SG} & \text{journalist} \\
\end{align*}

‘S/he will become a journalist.’

Whereas change-of-state predicates in Estonian and Finnish have received quite some attention (e.g. Pajusalu and Tragel 2007, Pajusalu 1994, Metslang 1994, Huumo 2007, Tommola 2010, Pajunen 2001), there are no in-depth studies of such predicates in Livonian. The present article attempts to fill this gap. Regarding this, the aims are to analyse the verbs that appear as change-of-state predicates in Livonian – sõdõ ‘get, become’, iedõ ‘remain, stay; become’, lîdõ (synchronously a future copula), tûlda ‘come’, and lâdõ ‘go’, and to observe what their functions are in connection with FTR. The main research questions are (i) to what extent is expressing change central to these verbs, and (ii) to what extent can they be regarded as future copulas. When discussing this, special attention is paid to analytic constructions\(^3\) into which these verbs enter.

Estonian is said to be rich in change-of-state predicates (see Pajusalu et al. 2004: 44). The same seems to apply to Livonian: in addition to the aforementioned five verbs that deserve a closer look, there are other verbs that have developed the sense ‘become’, e.g. eitõ ‘throw’, rabbõ ‘hit’, suggõ ‘emerge’, see (4). However, despite the possible use in the sense ‘become’, the verbs eitõ, rabbõ, and suggõ are not dealt with in this article. The reason is that one of the aims of this study is to consider the possible path CHANGE-OF-STATE > FUTURE, but lexical items with such specificity do not usually develop into FTR devices, whereas the verbs expressing ‘come’, ‘go’, ‘be, become’

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\(3\) In the Finnic languages, change can also be expressed by synthetic means. In Estonian, an analytic change-construction often has a synthetic counterpart, e.g. haigeks jääma ‘lit. remain ill’ vs. haige/stu/ma ‘fall ill’; paksuks muutuma, lit. ‘change fat’ vs. pakse/ne/ma ‘become fatter’ (Pajusalu and Tragel 2007: 292). In Livonian, however, analytic constructions seem to be more common. Furthermore, differently from other Finnic languages, there is no productive ne- suffix in Livonian that would combine with adjectives to express change in some property (Laakso 1990: 115, Pajunen 2001: 105).
and related meanings, are commonly attested sources for FUTURE (Bybee et al. 1994: 5, 253; see also Heine and Kuteva 2002: 331)

(4) Livonian (Viitso and Ernštreits 2012)

\[
A'ژ kuоt sugūb ouklizðks,
\]

\[
if bag become.3SG holey.TRA
\]

\[
si'ژ tānda vōib paikō vi'zzō,
\]

\[
them.3SG can.3SG mend.tINF together
\]

‘If the bag gets holes in it, one can mend it.’

It will be shown that regardless of the multiple options of expressing change, ĭedō and sōdō are the most common change-of-state predicates; the further development into a future copula characterises only the verb līdō.

The article proceeds as follows: section 2 introduces the material and methods; section 3 considers the explicit and implicit expressions of change; section 4 discusses the path CHANGE-OF STATE > FUTURE; and section 5 presents the conclusions.

2. Material and methods

The present study focuses on Courland Livonian, more precisely on the East dialect of Courland Livonian. This was once the most widely spread (associated with 9 Courland Livonian villages out of 12: Mustānum, Kūolka, Vaid, Sānag, Pitrōg, Kuostrōg, Irē, Sīkro, and Īžkila), and, as a result, the most widely documented; the literary language is also based on the East Livonian dialect.

The linguistic material of Livonian originates from the following sources:

- Text collections compiled by Kettunen (1925), Māgiste (1964), and Setālā (1953). These collections include transcriptions of narratives told by various informants from various villages of Courland Livonia.
- Selection of recordings made during 1972 through 2010. The recordings are preserved in the Archives of Estonian Dialects and Kindred Languages of the University of Tartu (AEDKL).
- Parts of Bible translations – Gospel of Mark (ŪT 1942) and Gospel of Matthew (1880).
Language data collected by Sjögren, later on edited and supplemented by Wiedemann (Sjögren 1861). It contains both authentic texts (edited to a different extent) as well as translated texts; Courland Livonian as well as Salaca Livonian dialects are included.

For a more precise overview of the source material of this study, see Table 1.

**Table 1. Overview of the source materials of Courland Livonian**

<table>
<thead>
<tr>
<th>Source materials</th>
<th>Date of collection/compiling</th>
<th>Dialect (subdialect) represented in the source materials</th>
<th>Text types included in the present study</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Oral texts</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Text collections</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mägiste (1964)</td>
<td>1943</td>
<td>East, West</td>
<td>Mainly narratives collected from different informants</td>
</tr>
<tr>
<td>Kettunen (1925)</td>
<td>1917–1925</td>
<td>East, West, Central</td>
<td></td>
</tr>
<tr>
<td>Setälä (1953)</td>
<td>1888, 1912</td>
<td>East, West, Central</td>
<td></td>
</tr>
<tr>
<td><strong>Recordings</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral texts</td>
<td>1968–2010</td>
<td>East</td>
<td>Interviews about past events, but also about everyday life</td>
</tr>
<tr>
<td>recorded from various informants (AEDKL)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Written texts</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Translations</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gospel of Mark</td>
<td>1931–1936</td>
<td>East (Irē)</td>
<td>Translational texts</td>
</tr>
<tr>
<td>(ŪT 1942)</td>
<td>before 1880</td>
<td>East</td>
<td></td>
</tr>
<tr>
<td>Gospel of Matthew</td>
<td>(1880)</td>
<td>East</td>
<td></td>
</tr>
<tr>
<td><strong>Edited texts</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stalte (2011)</td>
<td>mid 1930s</td>
<td>East (Irē)</td>
<td>Stories compiled and edited by one individual</td>
</tr>
<tr>
<td>Sjögren (1861)</td>
<td>1846, 1852</td>
<td>East, West, Central</td>
<td>Sentence examples without context</td>
</tr>
</tbody>
</table>

As can be seen, the source materials cover various text types as well as periods and thus are a good subject for a comparative study. The majority of examples in the data set represent the Kūolka and Irē
subdialects. Still, the final data set contains examples from all the nine villages mentioned above. Occasionally, parallels will be drawn with the Salaca Livonian variety and other Finnic languages.

The verbs discussed in the present study are sōdō, ēdō, līdō, tūlda, and lādō. They can all occur in the sense ‘become’ and thus were regarded as subjects for closer inspection, concerning also the grammaticalization path change-of-state > future (cf. section 1). Their source meanings imply that originally we are dealing with verbs of motion or at least with verbs dynamic in meaning: tūlda ‘come’, lādō ‘go’, sōdō ‘get, become’ < originally a motion verb with the sense ‘come, arrive’ (SSA III), ēdō ‘remain, stay’; līdō < possibly a motion verb (Budenz 1966: 698; see also 4.3). The verbs līdō, sōdō, tūlda, and lādō are old native verbs traced back to Proto-Finno-Ugric; they have counterparts in both genealogically closely related languages as well as more distantly related languages. The verb ēdō only has counterparts in the Finnic languages and is usually considered a loan from Proto-Indo-Aryan (see e.g. SSA II).

The main focus, however, is on the verbs sōdō, līdō, and ēdō. As the vast majority of instances of tūlda and lādō convey motion and the sense ‘become’ is only marginal, they are included for comparative purposes. Considering this, I collected all the simple predicates containing sōdō, līdō, and ēdō (with context) from the East Livonian texts represented in Mägiste (1964), Kettunen (1925), Setälä (1953), Gospel of Mark (ŪT 1942), and Stalte (2011). In the case of Sjögren (1861), these verbs were extracted only from the example sentences representing East Livonian (Kūolka subdialect). In the case of the Gospel of Matthew (1880), the verbs were extracted from 16 out of 28 chapters (the chapters were randomly chosen).

After collecting the examples with sōdō, līdō, and ēdō from the sources listed above, the data set contained 870 instances: 372 example sentences of sōdō, 261 of līdō, and 237 of ēdō. Next, phrasal verbs were removed, and finally, in the case of each verb, 150 occurrences were randomly chosen to be coded and analysed for the purposes of the present study. The examples were coded for the following predicate semantics: (i) equation, proper inclusion, and attribution (they involve the cases of change viewed here as explicit or implicit, see below), (ii) locative relations, (iii) possessive relations, (iv) existential(-like) relations by concurrently taking into account the underlying constructions. The verbs were coded for voice, mood, tense, polarity, and person. The broader context was necessary in determining the time reference, especially when distinguishing between present and future time reference.
Section 3 discusses the five verbs expressing explicit or implicit change in some property of the logical subject and section 4 focuses on their possible development into a future copula. Constructions that have locative, possessive, and existential functions are not in focus when considering the change of state, but they get some attention when discussing the development into a future copula (see section 4).

3. Explicit and implicit change constructions in Livonian

In Livonian, *sōdõ*, *ēdõ*, *līdõ*, *tūlda*, and *lādõ* can all express CHANGE, as in (5)–(9). In regard, the question arises as to what the difference is in their use as change-of-state predicates.

(5) Courland Livonian, Sīkròg (Kettunen 1925: 50)

```
sis tāˈm sie jālga saj tejš tērrāks
then s/he.DAT this leg get.PST.3SG again well.TRA
```

‘then his/her leg got well again’

(6) Courland Livonian, Sīkròg (Kettunen 1925: 44)

```
saj rek pālō, āpga
get.PST.3SG road.GEN on.ALL ox
eji pa rīštīŋgōks
remain.PST.3SG PTCL human.TRA
```

‘reached the road, the ox turned into a human being’

(7) Courland Livonian, Kūolka (Setälä 1953: 106)

```
um siz pāla sˈedā kēŋigt,
and then beg.IMP.2SG this.PART king.PART
ku sinā līd sāˈl povārōks
that you LEE.2SG there chef.TRA
```

‘and then beg this king so that you would become a chef there’

(8) Courland Livonian (Stalte 2011: 55)

```
“Āb ūeda, kas sinstō tulāb ūği
NEG know.CNG whether you.ELA come.3SG real
kūoršīnˈpāstīji, ku kazād sūrōks,” kītiz jemā.
chimney_sweep when grow.2SG big.TRA say.PST.3SG mother
```

‘I don’t know whether you’ll become a real chimney sweep, when you grow up’, mother said.’
Courland Livonian (Stalte 2011: 69)

Pető tőb sie suormõks jarā püstõ.

Peter want.3SG this.GEN finger.INS away clean.tINF

agā se lāb vel sūćimõks

but this go.3SG more big.COMP.TRA

‘Peter wants to clean it up with his finger but it gets even bigger.’

The following sections will show that depending on the verb and the underlying construction, the sense ‘become’ can be central, in the background, or only marginal. The analysis in subsections 3.1 through 3.3 mainly draws on Table 3, which represents the distribution of the verbs sŏdõ, ĭedõ, and lîdõ between the goal-marking, source-marking, and predicate nominal and adjective constructions. Percentages in brackets show the overall distribution of these constructions in the data set (for other constructions, see 4.1 and 4.2). Semantically, these constructions can be associated with expressing inclusion, equation, and attribution.

Table 3. sŏdõ, ĭedõ, and lîdõ in explicit and implicit change-constructions

<table>
<thead>
<tr>
<th>Construction</th>
<th>Verb</th>
<th>sŏdõ</th>
<th>ĭedõ</th>
<th>lîdõ</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n=53/150</td>
<td>n=101/150</td>
<td>n=51/150</td>
<td></td>
</tr>
<tr>
<td>Goal-marking constr.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NP nom V AdjP_3G/NP_3G</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>38 (25.3%)</td>
<td>89 (59.3%)</td>
<td>3 (2%)</td>
<td></td>
</tr>
<tr>
<td>Source-marking constr.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NP_ela V NP nom</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4 (2.7%)</td>
<td>–</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>Predicate nominal and adjective constr.-s</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NP nom V AdjP_nom/NP nom</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 (1.3%)</td>
<td>–</td>
<td>41 (27.3%)</td>
<td></td>
</tr>
<tr>
<td>NP V AdvP/NP loc/PP</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>9 (6%)</td>
<td>12 (8%)</td>
<td>7 (4.7%)</td>
<td></td>
</tr>
<tr>
<td>Total:</td>
<td>53 (35.3%)</td>
<td>101 (67.3%)</td>
<td>51 (34%)</td>
<td></td>
</tr>
</tbody>
</table>
3.1. Goal-marking (GM) construction

\[ \text{NP}_{\text{nom}} \text{ V NP}_{\text{tra}} / \text{AdjP}_{\text{tra}} \]

This construction can be primarily associated with expressing \textsc{change}; the change experiencer is marked by the nominative case and the resulting state by the translative case (Pajusalu and Tragel 2007: 293; see also Erelt 2005).

Although all three verbs in the data set appear in the GM construction, \textit{īedō} is the most frequent (cf. Table 3). In the GM construction, \textit{sōdō} and \textit{īedō} convey change from one state into another, e.g. ill \textgreater{} well, see (5), ox \textgreater{} human being, see (6). The majority of examples in the data set represent the construction \text{NP}_{\text{nom}} \text{ V AdjP}_{\text{tra}}. Table 4 contains the most frequent combinations of \textit{sōdō} and \textit{īedō} + \text{AdjP}_{\text{tra}} or \text{NP}_{\text{tra}}. It includes the instances that occurred two or more times in the case of \textit{sōdō}, and three or more times in the case of \textit{īedō}.

Table 4. Most frequent combinations of \textit{sōdō} and \textit{īedō} + \text{AdjP}_{\text{tra}} / \text{NP}_{\text{tra}} in the data set

<table>
<thead>
<tr>
<th>\textit{sōdō} + \text{AdjP}_{\text{tra}}</th>
<th>No. of inst.-s</th>
<th>\textit{īedō} + \text{AdjP}<em>{\text{tra}}/\text{NP}</em>{\text{tra}}</th>
<th>No. of inst.-s</th>
</tr>
</thead>
<tbody>
<tr>
<td>\textit{tierrōks} ‘well’</td>
<td>6</td>
<td>\textit{rujāks} ‘ill’</td>
<td>7</td>
</tr>
<tr>
<td>\textit{sūrōks} ‘big’</td>
<td>4</td>
<td>\textit{rištūngōks} ‘human’</td>
<td>5</td>
</tr>
<tr>
<td>\textit{kō’žūkōks} ‘mad’</td>
<td>4</td>
<td>\textit{vanāks} ‘old’</td>
<td>4</td>
</tr>
<tr>
<td>\textit{rujāks} ‘ill’</td>
<td>2</td>
<td>\textit{kō’žūkōks} ‘mad’</td>
<td>4</td>
</tr>
<tr>
<td>\textit{nukkōrōks} ‘annoyed’</td>
<td>2</td>
<td>\textit{pi’mōkōs} ‘dark’</td>
<td>3</td>
</tr>
<tr>
<td>\textit{tundtōks} ‘famous’</td>
<td>2</td>
<td>\textit{kivīkks / ki’vkōkōs} ‘stone’</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>\textit{tierrōks} ‘well’</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>\textit{vagāks} ‘silent’</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>\textit{mī’erōks / mī’erkōks} ‘calm’</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>\textit{punīkōks} ‘red’</td>
<td>3</td>
</tr>
</tbody>
</table>

In addition to the \textit{ks}- forms that represent the translative case, Table 4 also contains a few \textit{kōks}- forms. \textit{kōks}- is a marker of the instrumental case that goes back to the older comitative form (see Viitso 2008: 326). All in all, the data set contains 8 \textit{kōks}- forms (\textit{sōdō} – 1/37; \textit{īedō} – 5/89; \textit{līdō} – 2/3), but instead of showing traces of the old comitative functions, in the above cases it functions as a translative marker: 7 out of 8 examples clearly express change and
one expresses a temporary state (see below). As the present-day instrumental case builds on both the translative case and the former comitative case (see Viitso 2008: 326), the data set reveals examples where -kõks has taken over the translative functions. For comparison, the Salaca Livonian case paradigm makes a clear distinction between the translative and the comitative case; there is no instrumental case.

It has been shown that Estonian jääda (cognate of Livonian ţedõ) typically expresses negative/passive change or continuation4 (see Pajusalu and Tragel 2007). Although without context, the instances in Table 4 could suggest that the same applies to Livonian, such a generalization cannot be made for Livonian ţedõ: there are many examples in the data set that convey positive change, e.g. fool > smart (10), dirty > clean and clear (11) (cf. also the cases tierrõks, kõ’ızõks, rujāks that combine with both verbs; see also subsections 3.3 and 4.2). In addition, among 89 examples of ţedõ in the GM construction there do not seem to be any cases of ţedõ expressing continuation.

(10) Courland Livonian, Kūolka (Setälä 1953: 135)

\[
\begin{align*}
  ni & \text{ now} \\
  muł’ki & \text{ fool} \\
  nai & \text{ women} \\
  iend & \text{ remained PTCP} \\
  pa & \text{ PTCL} \\
  kovālbs & \text{ smart TRA}
\end{align*}
\]

‘now the fool woman became smart’

(11) Courland Livonian, (Mägiste 1964: 32)

\[
\begin{align*}
  na’ggõrd & \text{ turnip PL} \\
  iebōt & \text{ remained 3PL} \\
  pū’dõks & \text{ clean TRA} \\
  un & \text{ and} \\
  s’ēlõdõks & \text{ clear TRA}
\end{align*}
\]

‘turnips will become clean and clear’

In example (10), the sense ‘become’ is supported by the preposition pa, which is a loan from Latvian; it is typically used together with the Livonian translative marker to express change (see Wiemer et al. 2012: 38). All in all, the data set contains 30 instances of ţedõ (out of 89) in the GM construction supported by the preposition pa. The usage of pa seems to depend on the speaker and possibly on their knowledge of Latvian: some informants always couple the translative case marker with pa, some do it only occasionally, and some in-

\[\text{\footnote{Pajusalu and Tragel (2007: 306) discuss change-of-state predicates in Estonian in terms of positivity and negativity, associating them with three domains: (i) quantity\hspace{1cm} (increase-decrease), (ii) purposefulness, activity (active-passive), (iii) evaluation of the state of the human being from the experiencer’s point of view (improve-deteriorate). The first member of the pair can be connected with positivity and the other member with negativity; there are also interrelations between the domains. This goes back to metaphor theory by Lakoff and Johnson (1980).}}\]
formants use only the translativ case marker. In addition to ūedō, there are a few instances of pa combining with sūdō and lūdō (cf. also subsection 3.3).

A comparison of sources reveals that the use of sūdō and ūedō differs with respect to the text types: sūdō is commonly used as a change-of-state predicate in the Gospels of Matthew and Mark (20 instances out of 38 originate from Bible translations), while ūedō appears only rarely (5 instances out of 89 come from Bible translations). The situation is the opposite in the case of (transcribed) oral texts (sūdō – 8, ūedō – 67). Sjögren (1861) also sides with the (transcribed) oral texts as the data set contains only one example of sūdō but seven examples of ūedō. Furthermore, sūdō appears in the example, which states that either sūdō or ūedō is possible: vanāks iend od. sūnd ‘has become old’ (see Sjögren 1861: 314). The ABC book contains an equal amount of instances of sūdō and ūedō in the GM construction – both have 9 occurrences. All the 18 instances in the ABC book are examples of NP nom V AdjP tra, but as 13 different adjectives appear it is hard to make generalizations about possible collocations.

The texts also contain a few examples of lūdō and tūlda expressing CHANGE in the GM construction, e.g. (12). Again, there is a difference between sources: the instances that clearly express the sense ‘become’ originate from the Gospel of Matthew (1880), the Gospel of Mark (ŪT 1942), and the ABC book. As in the vast majority of cases lūdō and tūlda express motion, the function of conveying change of state remains only marginal. By comparison, the Salaca Livonian examples recorded by Sjögren (1861) seem to indicate a greater extent of grammaticalization of the cognate tulla already in the 19th century: in addition to two instances expressing change, e.g. (13), the Salaca Livonian material also contains four examples that can be associated with progressivity and immediate future⁵ (see more in Norvik 2012a: 35–37).

(12) Courland Livonian (ŪT, Mark 13:24)

\[
\begin{array}{cccc}
\text{Aga} & \text{nēši} & \text{pāviš} & \text{lāb} & \text{pāva} & \text{pimdōks} \\
\text{but} & \text{those.PL.INE} & \text{day.PL.INE} & \text{go.3SG} & \text{sun} & \text{dark.TRA} \\
\end{array}
\]

⁵ The marker -ms (also found in the form -mis, -mes) that combines with tulla in example (13) is an instance of an M-infinitive inessive (Norvik 2012a: 36). Originally, such forms have functioned as locative adverbials, but a further development into progressivity and immediate future has also been attested (see Serebrennikov 1963: 502–503, Metslang 1994: 120–136). In example (13), -ms seems to give an additional meaning of gradual change.
But in those days … the sun will be darkened, and the moon will not give its light.’ (KJV)

The data set includes 3 instances of līdõ in the GM construction. Unlike sōdõ, īedõ, tūlda, and lādõ, which clearly express change, in the examples with līdõ, the sense ‘become’ can remain in the background, as in (14a). The same applies to Estonian sentence (14b), which is a translational equivalent of sentence (14a), but it uses the present copula olla ‘be’ instead (cf. also Estonian tulla ‘come’ and Livonian līdõ in the existential clause). In the other two examples containing līdõ, e.g. (15), ‘becoming’ and ‘being’ seem to blur, and also the case of a temporary state may come into question (see below). While examples (14a–b) do not necessarily imply any subject referent that would change (i.e. become a star), in example (15), on the other hand, the subject referent sinā ‘you’ will go through a change (i.e. become a chef) before being a chef.

(14) Courland Livonian (Švāt). Mark 13:04
a. Kīt māddõn, kuna se līb ja mis
tell.IMP we.DAT when this LEE.3SG and what

b. Ütle meile, millal see kōik tuleb ja mis
tell.IMP we.ALL when this all come.3SG and what

‘Tell us, when will these things happen? And what will be the sign that they are all about to be fulfilled?” (KJV)
Instances like (14) and (15) are also regarded as extensions of the translative into copular clauses. Instead of conveying change they are said to mark a temporary state or a non-essential character of the subject. Such extension is claimed to have taken place in Livonian and Estonian, but only in the case of predicate nominals; in the other Finnic languages, the essive case can be used instead. (Kont 1963: 168, Erelt & Metslang 2003: 167–168, see also Pajunen 2001: 106–109, Viitso 2008: 342)

3.2. Source-marking (SM) construction \( \text{NP}_{\text{ela}} \text{ V} \text{NP}_{\text{nom}} \)

In the case of the SM construction, the change experiencer is expressed by the elative case and the resulting state remains unmarked (i.e. in the nominative case) (Pajusalu and Tragel 2007: 294, Erelt 2005: 20).

The data set contains all in all 4 instances of \( \text{sōdō} \) (see Table 3). Three of them originate from the ABC book, e.g. (16); one example comes from Sjögren (1861), see (17). Whereas the examples in the ABC book contain a noun (that expresses the resulting state) in the nominative case, in Sjögren (1861) the partitive case is used, cf. (16) and (17). It seems possible to claim that example (17) represents a borderline case between POSSESSION and BECOME (see more in subsection 4.2) as \( \text{sōdō} \) could also be associated with the sense ‘get’ and \( \text{meidi} \) analysed as object.

(16) Courland Livonian (Stalte 2011: 63)

\[
\text{Vanātōti kētīz, ku pōiūstō sōb vist miermīez.}
\]

old_man say.PST.3SG that boy.ELA get.3SG probably seaman

‘The old man said that the boy will probably become a seaman.’

---

6 As can be seen, there are instances of the extension of the instrumental case as well. For comparison, whereas the Gospel of Mark (ÜT 1942) contains the instrumental form \( \text{tād/kōks} \) (15), in the Gospel of Matthew (1880), in a similar context the translative form \( \text{pa tāhd/ōks} \) is used.
(17) Courland Livonian, Kūolka (Sjögren 1861: 300)

Neišti sōb ā́perr seda meidi.
they.ELA get.3SG after this.PART man.PL.PART

‘Out of them will come men.’

In fact, the verbs līdō and tūlda are also possible in the SM construction. A few examples with tūlda can be found in the ABC book and Bible translations, e.g. (18), see also (8). Example (19) has been noted down by Viitso, who maintains that līdō is rare in the SM construction (Viitso 2008: 344). This is evidenced by the fact that the first data set, which consisted of 870 examples, did not contain any examples of līdō in the SM construction. However, there was one example involving an elative constituent, see (20), but it could represent a borderline case as the elative constituent conveys cause: it can be paraphrased as ‘this does not cause any problems’ (see Erelt 2005: 21). The source materials also revealed a similar sentence containing tūlda.

(18) Courland Livonian (Matthew 2:6)

jo sinstō se wā́likschiji tuluhb
for you.ELA this ruler come.3SG

‘for out of you will come a ruler’ (KJV)

(19) Courland Livonian (Viitso 2008: 344)

Pūogast līb kalāmi̱ez.
son.ELA LEE.3SG fisherman

‘Son will become a fisherman.’

(20) Courland Livonian (ŪT, Mark 16:18)

až ne jūobōd mingist kūoltijist
if they drink.3PL something.PART deadly.PART

ainō, sīest nāntōn āb lī viggō
substance.PART this.ELA they.DAT NEG LEE.CNG fault.PART

‘and when they drink deadly poison, it will not hurt them at all’ (KJV)

In comparison with the neighbouring Finnic languages, the SM construction is clearly the least common in Courland Livonian (at least in the case of sōdō, tūlda, and līdō). This suggests a later development. In fact, in the case of Estonian, the SM construction is also claimed to be of a more recent development than the GM construction: the first instances of the SM construction are attested in Old Written Estonian only in the 19th century (see Tragel and Habicht
2012: 1386). Nowadays, Estonian *tulla* and *saada* enter into both constructions, e.g. (21a–b), while *tulla* is the most typical change-of-state predicate in Finnish, see (22a–b); in addition, it has developed into an FTR device (Pajusalu and Tragel 2007: 300, 303; Metslang 1994: 175).

(21) Estonian
   a. Temast *tuleb* maailmameister. >
      s/he come.3SG world_champion
   b. Tema *tuleb* maailmameistriks.
      s/he come.3SG world_champion

      ‘S/he will become a world champion.’

(22) Finnish
   a. Hän *tulee* lääkäriksi. >
      s/he come.3SG doctor.TRA
   b. Hänestä *tulee* lääkäri.
      s/he.ELA come.3SG doctor

      ‘S/he’ll become a doctor.’

3.3. Predicate nominal and adjective constructions
   \((\text{NP}_{\text{nom}} \ V \ \text{NP}_{\text{nom}}/\text{AdjP}_{\text{nom}})\)

The predicate nominal construction \(\text{NP}_{\text{nom}} \ V \ \text{NP}_{\text{nom}}\) is used to convey equation and proper inclusion, see (23); the predicate adjective construction \(\text{NP}_{\text{nom}} \ V \ \text{AdjP}_{\text{nom}}\) expresses attribution, e.g. (24) (see Payne 1997: 114, 120) Here, cases of encoding a property of the subject by means of AdvP (usually a state adverbial), NP\(_{\text{loc}}\) (NP in the locative case), or PP, e.g. (25), are also subsumed under predicate adjectives (see EKG II: 56; Erelt and Metslang 2003). Unlike GM constructions, which mark change explicitly, \(\text{NP}_{\text{nom}} \ V \ \text{NP}_{\text{nom}} / \text{AdjP}_{\text{nom}}\) are not explicit change constructions: occasionally they mark change, but the sense ‘become’ typically remains in the background (see below).

---

7 At the same time it is the only change-of-state verb in Estonian for which the SM construction and GM construction can be transformationally unrelated, cf. *Temast tuleb arst.* > b. *Tema tuleb arstiks* ‘S/he will become a doctor.’ (Erelt 2005: 24).

8 In the case of equation, the subject of the clause and the predicate nominal are identical and can be reversed (‘X is Y’, e.g. *He is my father*); in the case of proper inclusion, the subject indicates a specific referent and the predicate nominal is non-specific (‘X is a Y’, e.g. *Mary is a teacher*) (Payne 1997: 114).
(23) Courland Livonian, Irē (Setälä 1953: 207)  
un sien vanā sańtn /.../ līb piški puoga
and this.DAT old.GEN cripple.DAT LEE.3SG small son
un siz se līb tām’ tidār miez
and then it LEE.3SG s/he.GEN dauther.GEN husband

‘And then this old cripple will have a son and this will be his daughter’s husband.’

(24) (Matthew 24:13)  
kis lopahndõkst sānist pihlõb se sõb võndzi
who end until stand.3SG this get.3SG happy

‘but the one who stands firm to the end will be saved’ (KJV)

(25) Courland Livonian, Kuoštrõg (Mägiste 1964: 25)  
ke’ž um iend bāš jeįktō
hand be.3SG remain.PTCP without soul.PART

‘hand has remained without a soul’

NP_{nom} V NP_{nom}/AdjP_{nom} can be primarily associated with līdō – all in all there are 41 instances: NP_{nom} V NP_{nom} appears 14 times, e.g. (23), NP_{nom} V AdjP_{nom} is used 27 times. There are only two examples of sōdō in the construction NP_{nom} V NP_{nom}/AdjP_{nom}, e.g. (24); other verbs do not occur.

The analysis reveals that in the corresponding predicate nominal and predicate adjective constructions, the sense ‘become’ usually remains in the background or comes from background knowledge – the future situation is not present yet and therefore certain change is necessary for something to be the state of affairs in the future (Norvik 2013: 141). In addition to cases that receive FTR, there are also instances that express epistemic meaning and get present time reference, e.g. (26) (see more in 4.4).

(26) Courland Livonian, Sīkrõg (Kettunen 1925: 62)  
no, sin piogad umāntḙ Petrogradās, ne well you.GEN son.PL be.3PL St.Petersburg,INE they

lībāt sūrd bolšēviķkāD, ne lībāt sūrt pu’nnist LEE.3PL big.PL bolshevik.PL they LEE.3PL big.PL red.PL

‘well, your sons are in St. Petersburg, they are supposedly big Bolsheviks, big Red’
The constructions NP$_{\text{nom}}$ V AdvP / NP$_{\text{loc}}$ / PP are found with līdõ, sōdõ, as well as īedõ, see (25), (27), and (28). The verb sōdõ is used only in two word combinations: sōdõ virgõ (7 out of 9 instances) ‘become awake’ and sōdõ je’llõ (2/9) ‘become alive’. As appears, īedõ enters into the same word combination: īedõ virgõ (1/13) and īedõ je’llõ (3/13). This again shows overlap between sōdõ and īedõ. The constructions NP$_{\text{nom}}$ V AdvP / NP$_{\text{loc}}$ / PP involving īedõ are the only cases that mainly seem to express negative/passive change or continuation, e.g. become silent /alone / without a soul, and continue to be alive etc. (cf. GM constructions to which this does not apply, but see also 4.2). However, īedõ je’llõ is used once in the sense ‘stay alive’; in the other two occasions it means ‘become alive’.

(27) Courland Livonian, Vaid (Setälä 1953: 160)

\[
\begin{array}{llllll}
ku & se & kēv & kōlmiz & kird & pierslāb,\\
\end{array}
\]

when this mare third time fart.3SG

\[
\begin{array}{llll}
sis & sa & līd & pa & galām\\
\end{array}
\]

then you LEE.3SG PTCL finished

‘when this mare farts for the third time, you’ll be finished’

(28) Courland Livonian, Ķūolka (Setälä 1953: 99)

\[
\begin{array}{lllll}
ku & āb & lik, & siz & āb & lik\\
\end{array}
\]

when NEG move.CNG then NEG move.CNG

\[
\begin{array}{llllll}
un & mit-ikš & āb & uo & sānd & jel’lā\\
\end{array}
\]

and noone NEG be.CNG get.PTCP life.ILL

‘but if one does not move, one does not move and no one has come to life’

The instances of NP$_{\text{nom}}$ V AdvP / NP$_{\text{loc}}$ / PP convey change to a different extent. The sense ‘become’ can be associated primarily with sōdõ and īedõ; in addition, sōdõ evokes the co-meaning SUCCEED, as in (28). For comparison, Tragel and Habicht (2012: 1376) claim that Estonian saada carries the co-meaning SUCCEED in almost any construction as this is an early meaning development (see also 4.2). In the case of līdõ, the sense ‘become’ is commonly implicit and the senses ‘become’ and ‘be’ seem to blur with reference to the future. However, the data set also includes examples of līdõ coupled with pa, but it remains unclear whether pa stresses transformation from one state into another (cf. subsection 3.1) or is bleached.

The source materials contain a few examples of lādõ + AdvP / NP$_{\text{loc}}$ as well, e.g. (29); however, there do not seem to be any
instances of tūlda in the corresponding constructions. Furthermore, whereas Estonian minna (stem variants mine-, lähe-, läks--; cognate of Livonian lādō) and tulla can also take a noun in the illative or allative case, e.g. (30) (Muischnek and Sahkai 2010, Pajusalu and Tragel 2007: 299, 303), this is rare in Livonian – the outer locative cases (allative, adessive, ablative) in Livonian have generally faded out of use (Viitso 2008: 326).

(29) Courland Livonian, Irē (Setälä 1953: 188)
\[ \text{sin } \text{pā } tā’b } \text{lā’igi, ku ma } \text{õr̩ob} \]
you.GEN head go.3SG into_pieces when I scream

‘your head will fall into pieces when I scream’

(30) Estonian (Pajusalu and Tragel 2007: 303)
\[ \text{Häige } \text{tulī } } \text{teadvusele.} \]
sick come.PST.3SG consciousness.ALL

‘The sick person came to consciousness.’

4. Development into the change of state and into the future

Although the verbs līdō, sōdō, īedō, tūlda, and lādō originate from different sources, they all show further developments. Moreover, a sense that connects them is ‘become’. However, there are differences between verbs in to what extent they appear in the sense ‘become’, what additional meanings they express, and in which constructions they primarily occur (cf. section 3).

Another question is to what extent they can be regarded as future copulas. As maintained already, the grammaticalization path CHANGE-OF-STATE > FUTURE is a possible one; furthermore, Livonian falls into the area of Northern Europe, where a state in the future is marked by the present tense forms of verbs with the sense ‘become’ (cf. subsection 1). In order to see what līdō, sōdō, īedō, tūlda, and lādō denote when used in the present tense, the following subsections focus on the present tense forms.

Table 5 shows the distribution of present tense forms (Pr) and past tense forms (Pst), subsuming imperfect, perfect, and pluperfect forms. Whereas section 3 concentrated on GM constructions, SM constructions, predicate nominal and adjective constructions that can be primarily associated with conveying equation, inclusion, and attribution, this section also includes the rest of the cases, i.e. when the verbs are
used in locative, possessive, and existential(-like)\(^9\) constructions to express the corresponding relations. Thus, all predicate types (equation, inclusion, attribution, location, existence, and possession) that are the most likely to lack a semantically rich verb are included (see Payne 1997: 113).

Again, the focus is on the verbs līdō, sōdō, and īedō; the verbs tūlda and lādō are used for comparative purposes.

**Table 5.** Past vs. present tense forms in the data set

<table>
<thead>
<tr>
<th>Construction</th>
<th>Verb</th>
<th>sōdō n=150</th>
<th>īedō n=150</th>
<th>līdō n = 150</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pst (%)</td>
<td>Pst (%)</td>
<td>Pst (%)</td>
<td>Pst (%)</td>
</tr>
<tr>
<td>Goal-marking c.</td>
<td>26 (25.3%)</td>
<td>12 (8%)</td>
<td>59 (39.3%)</td>
<td>30 (20%)</td>
</tr>
<tr>
<td>Source-marking c.</td>
<td>1 (2.7%)</td>
<td>3 (2%)</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Nom. and adj. pred. constr.-s</td>
<td>–</td>
<td>2 (1.3%)</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>(NP V AdjP/NP)</td>
<td>9 (6%)</td>
<td>–</td>
<td>9 (6%)</td>
<td>3 (2%)</td>
</tr>
<tr>
<td>Locative c.-s</td>
<td>25 (16.7%)</td>
<td>17 (11.3%)</td>
<td>21 (14%)</td>
<td>21 (14%)</td>
</tr>
<tr>
<td>Possessive c.-s</td>
<td>34 (22.7%)</td>
<td>21 (14%)</td>
<td>2 (1.3%)</td>
<td>1 (0.7%)</td>
</tr>
<tr>
<td>Existential (-like) c.-s</td>
<td>–</td>
<td>–</td>
<td>1 (0.7%)</td>
<td>3 (2%)</td>
</tr>
<tr>
<td>Total:</td>
<td>95 (63.3%)</td>
<td>55 (36.7%)</td>
<td>92 (61.3%)</td>
<td>58 (38.7%)</td>
</tr>
</tbody>
</table>

\(^9\) Existential(-like) constructions subsume the typical cases that introduce new participants to the discourse; the theme position is usually filled with a locational or a temporal adjunct, but it can also be missing, e.g. if the circumstances are clear from the context (see Payne 1997: 123; EKG II: 15). Here, existential(-like) constructions also include the state-of-affairs constructions that typically describe environmental conditions but also mental states; they do not involve a subject (cf. Turunen 2010: 38).
4.1. Inclusion, equation, attribution: ‘be’ vs. ‘become’ with reference to the future

Considering only the present tense forms, the amount of examples including īedõ or sōdõ drops significantly (see Table 5). At the same time, there is hardly any drop in the case of līdõ as typically it is used only in the present tense (cf. 4.3).

The analysis reveals that regardless of the time reference, īedõ and sōdõ in the GM construction and SM construction convey the sense ‘become’. For instance, example (31) expresses ‘becoming a seaman’ rather than ‘being a seaman’ in the future. The verb līdõ is rare in both constructions (see Table 5), but in the few cases that occur in the data set, the senses ‘become’ and ‘be’ either blur with reference to the future or the sense ‘become’ remains in the background, as in (32).

(31) = Courland Livonian (Stalte 2012: 63)
(16) Vanātōţī kītiz, ku poīsōst sōb vist miermīez.
    old_man say.PST.3SG that boy.ELA get.3SG probably seaman

‘The old man said that the boy will probably become a seaman.’

(32) = Courland Livonian (Mark 13:04)
(14a) Kīt māddõn, kuna se līb ja mis
tell.IMP we.DAT when this LEE.3SG and what

līb tādkõks, ku se ama sāb tāutõt?
LEE.3SG sign.INS when this all get.3SG fulfil.PTCP

‘Tell us, when will these things happen? And what will be the sign that they are all about to be fulfilled?’ (KJV)

The constructions NP_{nom} V NP_{nom} / AdjP_{nom} mainly include līdõ, e.g. (33), but the data set also contains two instances of sōdõ, e.g. (34). Whereas the present tense forms express FTR and tend to leave the sense ‘become’ in the background, the only perfect tense form of līdõ conveys change (see more in 4.3). When a property of the subject is coded by an adverbial, a noun in the locative case, or a prepositional phrase (NP_{nom} V AdvP / NP_{loc} / PP), both senses are possible, but directional cases tend to support the sense ‘become’ (primarily associated with sōdõ and īedõ), whereas local cases tend to evoke the sense ‘be’ (primarily associated with līdõ).
(33) = Courland Livonian, Irē (Setälä 1953: 207)
(23) un sien vanā saītān ... ġib piški puoga
and this.DAT old.GEN cripple.DAT LEE.3SG small son

un siz se ġib tām’ tidār miez
and then it LEE.3SG s/he.GEN daughter.GEN husband

‘And then this old cripple will have a son and this will be his daughter’s husband.’

(34) = (Matthew 24:13)
(24) kis lopahndōkst sānist pihlōb se sōb vōndzi
who end until stand.3SG this get.3SG happy

‘but the one who stands firm to the end will be saved’ (KJV)

4.2. Locative, possessive, and existential(-like) relations

Irrespective of time reference, īedō in the locative, possessive, and existential-like relations tends to occur in its original meaning – ‘remain, stay’, e.g. (35). Still, the data set includes a few instances that convey the sense opposite to ‘remain, stay’, namely ‘get somewhere, emerge’. For instance, example (36) expresses the fact that a hidden treasure ‘gets to ground’ (becomes visible / can be brought into the ground again), cf. sōdō in (38).

(35) Courland Livonian, Īžkilā (Kettunen 1925: 72)
ma āb iē kuodāj
I NEG remain.CNG home.ILL

‘I won’t stay at home.’

(36) Courland Livonian, Kūolka (Mägiste 1964: 40)
si’z rō ieb mōp pālā siś
then money remain.3SG ground on.ALL then

sōp tānda kā’ddō
get.3SG it.PART hand.ILL

‘then money gets to the ground, then one can get it’

Instances like (36) reveal further developments out of the original meaning, but preceding the sense ‘become’. They are not yet true change-of-state constructions as the leap necessary for counting as a change-of-state construction requires a shift from a two-participant
construction into a one-participant construction (see Petré 2012: 41). The GM constructions involving īedõ (cf. 3.1) represent such participant constructions; in these constructions, īedõ functions as a general change-of-state predicate. Thus, the grammaticalization path in (37) can be presented for Livonian īedõ. Relying on Huumo (2007: 91), who argues that Finnish jäädä (cognate of Livonian īedõ) is a punctual change-of-state verb even in the reading ‘remain’\(^{10}\), the development presented in (37) is by all means expected. No further development into a future copula can be attested (cf. Swedish bli ‘remain, stay’ in section 1 that shows such development); in combination with the M-infinitive, however, īedõ expresses a phasal sense.

\(37\) REMAIN > BECOME

The verb sōdõ, in turn, appears in the sense ‘reach somewhere’, SUCCEED, when expressing locative relations, e.g. (38); in the possessive relations, it conveys the senses ‘get, receive’. These senses can be considered as consequent stages of the original meaning ‘come’\(^{11}\), cf. the grammaticalization path in (39), which is proposed for the Estonian cognate saada (see Tragel and Habicht 2012: 1404).

\(38\) Courland Livonian, Kūolka (Sjögren 1861: 295)

\[Kui \ sōm \ mēg \ sīn?\]

how \ get.1PL \ we \ there

‘How do we get there?’

\(39\) COME > SUCCEED > POSSESS > BECOME > POSSIBILITY > NECESSITY > PROBABILITY > PASSIVE > > FUTURE (Tragel and Habicht 2012: 1404)

The grammaticalization path in (39) contains FUTURE at the end of the chain. In the corresponding case, however, saada does not occur as a sole copula, but combines with an infinitive; a combination of saada + an infinitive or a participle is also used to express the semantic domains between BECOME and FUTURE (Tragel and Habicht 2012: 1405–1406). The linguistic data on Livonian indicates that this is

\(^{10}\) ‘Not leaving’ can be regarded as “a punctual change with respect to the projected course of events, and the directional case marking of the locative modifier is understood as reflecting a fictive change from this projected course of events into the current state of continuity” (Huumo 2007: 95).

\(^{11}\) The source materials reveal a few examples that can be analyzed as metonymic shifts from the original motion reading, e.g. the Gospel of Matthew (1880) contains ōhdõg sai ‘evening came’ (Matthew 8:16). In the New Testament published 60 years later (ŪT 1942), sōdõ is replaced by tūlda: ūdõg tul ‘evening came’ (Matthew 8:16). This indicates that tūlda has pushed the verb sōdõ out from this meaning.
generally the case also in Livonian, but such auxiliary-like usages are not in focus here as they deserve a separate treatment. As a simple predicate, $\text{sõdõ}$ has developed the furthest into a change-of-state predicate like $\text{iõdõ}$ (for the difference in their use, see subsection 3.1).

When expressing possessive, locative, and existential(-like) relations, $\text{lõdõ}$ is more likely to appear in static relations (see also Norvik 2013: 153–154): usually it combines with local cases and the senses ‘being’ and ‘becoming’ blur with a reference to the future, or the sense ‘being’ is in the foreground and the sense ‘become’ comes from the context (for further comments, see 4.3).

4.3. CHANGE $>$ FUTURE

As can be seen, the verbs $\text{iõdõ}$ and $\text{sõdõ}$ can be at best regarded as inchoative copulas. Irrespective of time reference, they primarily convey change of state, and when used as simple predicates no further development from CHANGE-OF-STATE $>$ FUTURE can be attested. The sense ‘become’ is supported by the GM and SM constructions (sometimes accompanied by the preposition $\text{pa}$); in the constructions $\text{NP}_{\text{nom}} \text{ V AdvP} / \text{NP}_{\text{loc}} / \text{PP}$, the sense ‘become’ is commonly evoked by the use of directional cases.

The verb $\text{lõdõ}$, in turn, has developed further: in the case of all predicate types, the senses ‘become’ and ‘be’ can be shown to intertwine (to a different extent) with reference to the future. Usually $\text{lõdõ}$ appears in constructions that are not change constructions and favours static relations (local cases). Furthermore, $\text{lõdõ}$ is obligatory when a copula with no primary inchoative meaning is needed, i.e. it is not interchangeable with the present copula $\text{võlda}$ ‘be’ (Norvik 2013: 153). Thus, in spite of the fact that $\text{lõdõ}$ is not entirely devoid of semantic content (cf. also 4.4), there is reason to regard $\text{lõdõ}$ as a future copula, especially if regarding $\text{iõdõ}$ and $\text{sõdõ}$ as inchoative copulas.

Although there are researchers, e.g. Györke (1936), who claim that Finnic LEE(NE)- verbs$^{12}$ (including Livonian $\text{lõdõ}$) go back to the meaning ‘be’, there seems to be more arguments in favour of a dynamic source meaning, possibly connected with motion, e.g. Saukkonen (1965: 174) considers the sense ‘come’ an early meaning element of LEE(NE)- verbs (see Norvik 2013: 132–134; cf. section 1). The source materials also reveal some examples that evoke such a

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$^{12}$ Livonian $\text{lõdõ}$ and its cognates in the Finnic languages go back to the Proto-Finnic root $\text{*lõ(n)e-}$; $\text{-ne}$ is a potential suffix (Saukkonen 1965: 174). Regarding this, the cognate verbs in the Finnic languages are here referred to as LEE(NE)- verbs.
reading or express abstract motion, see (40). Regarding this, it seems to be possible to claim that at least in general terms the grammaticalization path in (41) holds for līdō.

(40) Courland Livonian, Ire (Setälä 1953: 213)

\[ mi̞i̞tiz \ ku \ vanā \ kurē \ tulūb, \]
\[ \text{otherwise when old devil come.3SG} \]

\[ un \ ta \ tūlīn \ li̞b, \ ta \ sin \ kīskəb \ lā’igi \]
\[ \text{and he soon LEE.3SG he you.GEN tear.3SG into_pieces} \]

‘Otherwise when the old devil comes and he soon will, he will tear you into pieces’

(41) MOTION > BECOME > FUTURE

The sense ‘become’ tends to be retained the best in past forms. Although in Livonian simple past forms have never been attested\(^1\) and the data set contains only one example of līdō in the perfect tense form, it clearly conveys the sense ‘become’, see (42). For comparison, in Karelian, the cognate lie(nõy) is common in past forms and first and foremost conveys change (Majtinskaja 1973: 88–89).

(42) Courland Livonian (Setälä 1953: 166)

\[ tāmā \ um’ \ kītōn, \ koks \ ta \ līnd \ i̞’oks \]
\[ \text{s/he be.3SG say.PTCP when_be.CND s/he LEE.PTCP nine} \]

\[ kīrdə \ jo \ knas̱ \ āb \ ku \ se \ tsā’rəm \]
\[ \text{time.PART as beautiful NEG like this fly} \]

‘s/he said, that s/he would become nine times as beautiful as this fly’

The claim about a dynamic source finds support from the contact languages: German werden and Slavic bōd- are shown to go back to a dynamic source meaning (cf. section 1). Another piece of evidence comes from Aunus Karelian and Ludic: both Finnic languages have grammaticalized the verbs rotie(kseh) and rodizetta respectively, which are traced back to Russian rodit’sja ‘be born’ (no such development has taken place in Russian). Although rotie(kseh) and rodizetta occur in the sense ‘be born’ as well, there are examples of all the predicate types included in Table 5 that show that prove the development indicated in (44), e.g. (43). Furthermore, it seems that rotie(kseh)

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\(^1\) If līdō had simple past forms, they were probably līs-. (Tiit-Rein Viitso, personal communication).
and *rodizetta* have actually replaced the former uses of LEE(NE)-forms (Norvik 2013: 151). As with *līdõ* and Karelian *lie(nõy)*, Ludic *rodizetta* and Aunus Karelian *rotie(kseh)* also express change when used in the past forms (Norvik 2013: 149–150).

(43) Ludic (Norvik 2012b)

\[ \text{Huomei minä rodimmos kod´is.} \]

\text{tomorrow I be\_born.REFL home.INE}

‘Tomorrow I’ll be at home.’

(44) ‘be born’ > \text{BECOME} > \text{FUTURE}

The discussion above indicates that \text{CHANGE-OF-STATE} > \text{FUTURE} is indeed characteristic to the languages of Northern Europe, including the Finnic languages: there is usually at least one change-of-state predicate that has developed into a future copula a (or future auxiliary) at least to some extent.

4.4. \text{FUTURE} > \text{EPISTEMIC MODALITY}

As can be seen, *līdõ* in Courland Livonian is primarily associated with FTR. A different question is to what extent it expresses temporal meaning and to what extent modal meanings are present. It has been shown that in FTR devices, temporal meaning elements intertwine with modal meaning elements (often also aspectual meaning elements are involved) (e.g. Dahl 2000a: 313); furthermore, regarding the nature of future, a sentence that gets FTR almost always differs modally from non-futurate cases (Dahl 1985: 103, Lyons 1977: 677, 816). This viewpoint has been accepted here as well. However, there is clearly a difference between the cases in which the temporal and modal meanings intertwine with reference to the future, as in (45), and the cases that are primarily modal and get present time reference, e.g. (46).

(45) = Courland Livonian, Irē (Setälä 1953: 207)

\[ \text{un sien vanā sańton /.../ lib piški puoga} \]

\text{and this.DAT old.GEN cripple.DAT LEE.3SG small son}

\[ \text{un siz se lib tām´ tidār miez} \]

\text{and then it LEE.3SG s/he.GEN daughter.GEN husband}

‘And then this old cripple will have a son and this will be his daughter’s husband.’
Typically, the epistemic meaning of LEE(NE)- verbs in the Finnic languages has been connected with the *lēne- root. Example (46), however, proves that this is not necessarily the case: it uses the LEE-form but still gives rise to the epistemic meaning. In fact, LEENE-forms do not occur in Livonian. Although modal and temporal meaning elements intertwine in līdõ, and in addition to the sense ‘be’ also ‘become’ is present, līdõ is primarily still used for future time reference and is typically not interchangeable with the present copula vōlda ‘be’. For further comments on the intertwining of modal and temporal meanings in the case of LEE(NE)- verbs, see Norvik (2013).

5. Conclusion

The present article considered five verbs – līdõ, sōdõ, īedõ, tūlda, and lādõ – expressing the domain CHANGE and their possible further development into FUTURE. The concept CHANGE was associated here with change in some property of the logical subject; in the case of FUTURE, the discussion concentrated on the grammaticalization of change-of-state predicates into future copulas. Although the main focus was on the verbs līdõ, sōdõ, and īedõ; the verbs tūlda and lādõ were included for comparative purposes. The data set consisted of 450 examples of līdõ, sōdõ, and īedõ (each verb was represented in 150 examples). They were coded for the following predicate semantics: equation, inclusion, attribution, location, possession, and existence (-like) instances; concurrently, their underlying constructions were taken into account. The linguistic data was collected from oral (transcribed) texts (various text collections, recordings) and written texts (Bible translations, an ABC book).

When considering the five verbs as change-of-state predicates, the study concentrated on the cases of attribution, equation, and inclusion, and their underlying constructions: goal-marking (GM) constructions, source-marking (SM) constructions, nominal and adjective predicate constructions. As the GM and SM constructions explicitly mark the
resulting state or the change experiencer and primarily evoke the sense ‘become’, they were called explicit change constructions. The nominal and adjective predicate constructions, in turn, can be regarded as implicit change constructions as the change experiencer as well as the resulting state remain unmarked. For instance, in the case of future time reference, the sense ‘become’ in such cases tends to come from background knowledge.

The study has revealed that īedõ ‘remain, stay’ is the most general change-of-state predicate: the data set contained all in all 89 examples (out of 150) of īedõ in the GM construction. Although the verb sōdō ‘get; become’ is also frequently used as a change-of-state predicate (38 examples in the GM construction, 4 examples in the SM construction), it tends to be used as one mainly in Bible translations and edited texts. For comparison, in Bible translations, īedõ only rarely appears as a change-of-state predicate (the data set contains only 5 instances). Nominal and adjectival constructions and thus also implicit change can be associated mainly with īldõ: the data set contains 41 instances of īldõ in the nominal and adjective constructions expressing attribution, equation, and proper inclusion with reference to the future; sōdō occurs twice, and the other verbs do not occur at all. Although there are 3 examples of īldõ in the GM construction, the senses ‘be’ and ‘become’ seem to blur and in addition the sense of temporary state tends to emerge. It was shown that the verbs tūlda ‘come’ and lādõ ‘go’ in the majority of cases convey motion, and it is only rarely that they function as change-of-state predicates.

The investigation of CHANGE-OF-STATE > FUTURE has shown that only īldõ can be considered a future copula. Firstly, although modal and temporal meaning elements intertwine in īldõ, it is primarily used to express the future. Secondly, it has only little semantic content: usually īldõ evokes the sense ‘be’, sometimes also ‘become’, although ‘become’ tends to remain in the background. Thirdly, īldõ is typically not interchangeable with the present copula vōlda ‘be’. The verbs sōdō and īedõ, in turn, can be at best considered as inchoative copulas as they primarily express the process of change and do not show any further development into future copulas.

Taken together, the evidence from this study shows that Livonian is rich in change-of-state predicates, but the following development into a future copula has taken place only in the case of īldõ. Viewing the results against the broader background, it becomes clear that although closely related languages may have a similar set of possible inchoative / future copulas, the final outcomes may differ considerably. For example, in Livonian the verb īedõ is the most general change-of-state verb, the Estonian cognate jääda is used mainly for
expressing negative/passive change, but the Finnish cognate only infrequently conveys the sense ‘become’.

Address:
Miina Norvik
Institute of Estonian and General Linguistics
University of Tartu Ülikool
Jakobi 2
51014 Tartu, Estonia
E-mail: miina.norvik@ut.ee

Abbreviations

References
EKG II = Erelt, Mati, Reet Kasik, Helle Metslang, Henno Rajandi, Kristiina Ross, Henn Saari, Kaja Tael and Silvi Vare (1993) Eesti keele grammatika II: Süntaks. 


Laakso, Johanna (1990) Translatiivinen verbinjohdin NE itämerensuomalaisissa kielissä. (Suomalais-Ugrilaisen Seuran Toimituksia, 204.) Helsinki: Suomalais-Ugrilainen Seura.


Metslang, Helle (1994) Temporal relations in the predicate and the grammatical system of Estonian and Finnish. (Oulun yliopiston suomen ja saamen kielen laitoksen tutkimusraportteja, 39.) Oulu: Oulun yliopisto.


Võtmesõnad: seisundimuutus, koopulad, tuleviku väljendamine, Kuramaa liivi keel