This paper discusses predicative possessive constructions in the East Slavic languages, with a particular focus on the Old Novgorod Slavic dialect, in connection to the neighbouring Ural-Altaic languages. An areal-typological investigation shows that the East Slavic languages prefer the use of a locational possessive (*mihi est*), while the rest of Slavic and Europe’s Indo-European languages primarily use a *have*-possessive (*habeo*). Serving as primary data for this study, the dialect written in the Novgorod Birch Bark documents confirms a preference of the locational possessive over the *have*-possessive.

The current study also evaluates three hypotheses on the origin of the East Slavic locational possessive, proposed in earlier studies: 1) a Uralic substrate, 2) a Slavic archaism and 3) a Northern Eurasian areal pattern. Given the typological survey as well as the empirical and historical comparative investigation, the locational possessive can be considered a preferred areal pattern across Northern Eurasia. Being a part of the macro contact zone of Northern Eurasia, the choice of locational possessive in the East Slavic languages is reinforced by the areal diffusion, especially from the close neighbouring languages, Uralic and Turkic.

1. Introduction

This paper deals with 11th–15th-century Novgorod Birch Bark documents, the first of which were found on 26 June 1951 by Nina Fedorovna Akulova, a member of the Russian archaeology research group visiting the site (Nosov, Ribina & Janin 1993: 49; Schaeken 2012: 84). Since then, more documents have been continuously excavated, and the current number of birch bark documents found is ca. 900. The excavation sites are located not only in the territories of present-day Russia but also in Belarus and Ukraine as follows.

**Russia:** Staraja Russa, Smolensk, Pskov, Tver and Moscow

**Belarus:** Vicebsk and Mscislaŭ (Bel. Віцебск and Мсціслаў)

**Ukraine:** Zvenigorod Galic’kij (Ukr. Звенигород Галицький)

The birch bark documents are written in an ancient East Slavic dialect, which has been in intensive contacts with Uralic languages for a millennium. The focus of this paper is on hypotheses concerning the origin of the possessive construction *u mene estь hlěbъ* ‘I have bread’, which is the most common strategy for predicative possession in the modern Russian language. By the term predicative possession (= PredP), I
refer to a possessive construction expressed on the sentence level, i.e. ‘I have bread,’ which contrasts with adnominal possession expressed by a nominal phrase, i.e. ‘my bread’ (Stassen 2009: 26–28).

The goal of this study is to display all patterns of PredP that occur in the Novgorod Birch Bark documents available in Zaliznâk’s (2004) edition. Table 1 shows the number of birch barks that have been examined, in chronological order.

<table>
<thead>
<tr>
<th>Referring Code used by Zaliznâk (2004)</th>
<th>Period in years</th>
<th>Number of birch bark documents found</th>
</tr>
</thead>
<tbody>
<tr>
<td>А</td>
<td>1000–1125</td>
<td>61 pcs.</td>
</tr>
<tr>
<td>БI</td>
<td>1125–1160</td>
<td>119 pcs.</td>
</tr>
<tr>
<td>БII</td>
<td>1160–1220</td>
<td>238 pcs.</td>
</tr>
<tr>
<td>В</td>
<td>1220–1300</td>
<td>125 pcs.</td>
</tr>
<tr>
<td>ГI</td>
<td>1300–1360</td>
<td>96 pcs.</td>
</tr>
<tr>
<td>ГII</td>
<td>1360–1400</td>
<td>140 pcs.</td>
</tr>
<tr>
<td>Д</td>
<td>1400–1500</td>
<td>86 pcs.</td>
</tr>
</tbody>
</table>

Table 1. The number of Novgorod Birch Barks found in chronological order.

At a more general level, this paper attempts to supplement an understudied area of morphosyntax in the field of early language contacts between Slavic and Uralic languages. So far, relatively few works have been carried out by applying a comparative method in a satisfactory manner, for example a comparative study on *Nominative Object in Slavic, Baltic and West Finnic* by Timberlake (1974).

Attention is especially paid to the locational possessive with adessive possessor (*u* + genitive + verb ‘to be’), the origin of which has been proposed from several perspectives from an archaic origin and Uralic substratum to a contact-induced change in the linguistic area of Eurasia. The main hypotheses are:

1) Original Slavic construction (Isačenko 1974)
2) Uralic substratum (Veenker 1967 and Kiparsky 1969)
3) ‘Refrigerator Theory’, i.e. contact-induced change (Dingley 1995, McAnallen 2009, 2011 and Grković-Major 2011)

The first hypothesis claims that East Slavic languages have over the millennia preserved what is the original construction pattern in Proto-Slavic. The second hypothesis regards East Slavic PredP as a shift-induced language change after the speakers of Uralic languages shifted to speaking East Slavic. The third hypothesis is supported by the idea of the construction being an areal feature in the contact zone of Circum-Baltic and Eurasia (Koptjevskaja-Tamm & Wälchli 2001: 675–679; Skalička [1933] in...
Veenker 1967: 238). This brings into discussion a wide perspective of the Ural-Altaic areal typology, too.

A question to be solved is which of these arguments holds true and how it is reflected in the data of the ancient Novgorod Slavic language. The following are three main schemas of PredP to be investigated in this paper:

1) **Location**: adessive possessor \( (u + \text{GEN}) \)

2) **Goal**: dative possessor

3) **Action**: have-verb \( (\text{iměti} < \text{Proto-Slavic } *jьměti) \)

I make a short remark that the term ‘adessive’ for the prepositional phrase \( u + \text{GEN} \) has been introduced by Mrázek and Brym (1962). According to their morphosyntax and semantics, these constructions will be categorised, after which their frequency of occurrence in the data will be calculated. Using the information on frequencies of each structural pattern as a basis, an evaluation of the abovementioned hypotheses will be carried out.

A similar approach has been earlier taken in a few dissertations in Slavic linguistics, for instance, McAnallen in *The History of Predicative Possession in Slavic: Internal Development vs. Language Contact* (2011) and Mazzitelli in *The expression of predicative possession: A comparative study of Belarusian and Lithuanian* (2015). McAnallen conducts a thorough investigation on the predicative possession in most Slavic sources available, while Mazzitelli does the same thing with Belarusian and Lithuanian. Moreover, McAnallen also provides an explicit comparison between Russian and Finnic languages in the sense of contact influence within the Circum-Baltic area. These works are doubtlessly empirical-based researches of a high quality, which provide a good basis for further studies.

To take another step further, this Uralistics- and Altaistics-oriented will treats the locational possessive in East Slavic as an areal feature in a larger linguistic area of Northern Eurasia. Section 2 discusses, firstly, in more detail, the three genesis hypotheses proposed earlier. In addition to the Finnic languages that McAnallen and Mazzitelli have discussed, Section 3 in this paper will, for the sake of comparison, give examples of predicative possession in other Uralic branches, as well as the (typologically) Altaic and Paleo-Siberian languages. Then, Section 4 will display, describe and analyse the relevant data collected from Novgorod Birch Bark documents. Based on these data, Section 5 puts East Slavic to a theoretical discussion from the perspectives of internal reconstruction (Section 5.1), Uralic substratum in Russian (Section 5.2) and Ural-Altaic areal typology (Section 5.3). To summarise the whole study, Section 6 will give several conclusions on our present knowledge on the topic.

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2. This paper will not take any stance on the genealogical relationship between Uralic and Altaic languages, nor the Altaic-internal relationship between Turkic, Mongolic, Tungusic, Koreanic and Japonic languages. As a compromise, the terms ‘typologically Ural-Altaic’ and ‘typologically Altaic’ in this paper are to be interpreted as languages in Northern Eurasia that share similar typological parallelisms. For discussions and criticisms on the genealogical link between Ural-Altaic languages, see e.g. Róna-Tas (1983) and Janhunen (2007).
2. Hypotheses on the origin of predicative possession in East Slavic

Studies on Uralic substratum in Russian language have been ongoing for decades. Among the scholars involved, the most popular themes seem to be phonology and onomastics. Compared to these, interests in the field of morphology and syntax are smaller. In particular, the question of an ‘exotic’ locational possessive (= LocP) in Russian has not yet received any final conclusion, which means that further research with various data, especially from the Uralic side (and beyond), is absolutely needed.

In terms of migration history, after their arrival in Northeast Europe, Slavic people began to interact culturally with Uralic people who had already settled around the territory of Novgorod and the River Volga. As a consequence, speakers from two different language families, Indo-European and Uralic, began to interfere with the language use of one another.

The earliest evidence of this phenomenon consists only of the Novgorod Birch Bark documents dating back to the beginning of the 11th century. This ancient Novgorod Slavic language is in many respects exotic compared to other East Slavic variants. Scholars often explain these unusual features by applying the concept of substratum. By this term I refer to a situation of language shift wherein a speaker of one language gives up his own mother tongue and starts speaking a new language with interference from the features occurring in his former language (Veenker 1967: 13–14; Thomason & Kaufman 1988; Thomason 2004: Section 6). Next, I will present the three hypotheses on the origin of locational possessive only as such. Any further speculation and critics will follow in Section 5 after the data analysis.

Firstly, Isačenko (1974) considers the construction *u* + gen + be-verb (in 3rd person) to be an archaic Slavic PredP that has been inherited from Proto-Indo-European (= PIE) through Proto-Slavic. To support his argument, Isačenko (1974: 44) presents the etymology of a common Slavic have-verb *jьm-*, the semantics of which was not ‘to have’ but ‘to take, hold’. The meaning of possession, ‘to have’, was extended later when a derivational suffix element was attached to the root.

Secondly, Veenker (1967: 117–119) and Kiparsky (1969: 15–16), from the opposite stance, consider the construction to be an outcome of Uralic substrate influence. In other words, those Uralic-speaking people who had shifted to speaking Russian, or, chronologically more accurate, East Slavic variants, introduced a Finnish-like PredP (*minulla on leipä* ‘I have a loaf of bread’) to their new language (see also Saurio 2005: 85). Later, this structure supplanted the original have-verb *jьm-ěti* to the function of possessing an abstract object, similar to what we have in the Modern Russian language.

Differing from the previous hypotheses, Dingley (1995) applies to this question Gunnar Jacobsson’s ‘Refrigerator Theory’ (Germ. *Kühlschranktheorie*). This concept of contact-induced change means that certain language features have been preserved or literally ‘frozen’ in a safe cold place, that is, in neighbouring languages. According to Dingley (later also McAnallen 2009, 2011 and Grković-Major 2011), the original Proto-Slavic PredP looked similar to Modern Russian at least until the 6th century.
Then, East Slavs who encountered Uralic people took along with them the old construction, which happened to be similar to that in Uralic languages. On the eastern side of the Baltic Sea, the original construction was safely protected from the innovation of the multifunctional *have*-verb, which took place in the nuclear Europe, i.e. the ‘Standard Average European’ (SAE) *Sprachbund* (a concept introduced by Benjamin Whorf [1941: 77–78]; Sapir & Whorf 1956: 138) in which the other Slavic sister languages have participated. As a result, in those Slavic languages, the original LocP was replaced by the *have*-verb, which has become the primary choice today.

A similar hypothesis is also presented by Skalička ([1933] in Veenker 1967: 238) but in his presentation, the boundary of this isogloss is larger than the Baltic Sea region, namely the whole Eurasian belt. In this linguistic area, the use of LocP is very common in the typologically Ural-Altaic languages. The last hypothesis is the starting point for this paper, which pays a great attention to areal diffusion and tendency.

3. Predicative possession in Northern Eurasia

On the cognitive level, Heine (1997: 45–75) defines possession as a relatively abstract domain in human conceptualisation. Therefore, expressions for it originate from more concrete domains, such as basic experiences of human being: action, location, companion and existence. Based on this concept, Heine establishes schemas for describing PredP in different languages of the world, as shown in Table 2:

<table>
<thead>
<tr>
<th>Schema</th>
<th>Formula</th>
<th>Propositional structure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Possessor</td>
</tr>
<tr>
<td>Action</td>
<td>‘X takes Y’</td>
<td>agent</td>
</tr>
<tr>
<td>Location</td>
<td>‘Y is located at X’</td>
<td>locative compliment</td>
</tr>
<tr>
<td>Companion</td>
<td>‘X is with Y’</td>
<td>subject</td>
</tr>
<tr>
<td>Genitive</td>
<td>‘X’s Y exists’</td>
<td>genitival modifier</td>
</tr>
<tr>
<td>Goal</td>
<td>‘Y exists for/to X’</td>
<td>dative/benefactive</td>
</tr>
<tr>
<td>Topic</td>
<td>‘As for X, Y exists’</td>
<td>subject</td>
</tr>
<tr>
<td>Source</td>
<td>‘Y exists from X’</td>
<td>ablative</td>
</tr>
<tr>
<td>Equation</td>
<td>‘Y is X’s (property)’</td>
<td>genitival modifier</td>
</tr>
</tbody>
</table>

*Table 2. Schemas for possessive construction (X = possessor, Y = possessum).*
The data of Novgorod Birch Bark documents, accordingly, fit into three schemas: 1) action with have-verb *iměti*, 2) location with locative possessor and 3) goal with dative possessor.

Taking into account the geographical distribution, Stassen (2009) classifies PredP in the world’s languages into five types: 1) locational, 2) genitive, 3) topic, 4) conjunctural and 5) have-verb. The World Atlas of Language Structures (WALS) addresses geographical distribution of PredP in Map 1, which is, however, very deficient regarding Uralic and other languages in Northern Eurasia, as well as East Slavic languages.

Map 1 illustrates obvious areal patterns, among which Central Africa and Southeast Asia are the most evident cases. However, the relevant area for this study is Northern Eurasia, on which the data remain inadequate, as mentioned earlier. Nevertheless, the areal tendency shows that three types of PredP are primarily observed across Northern Eurasia: 1) locational, 2) genitive possessive and 3) have-verb.
Map 2. Predicative possession in Eurasia (Stassen 2013).

Map 2 also illustrates that among the Slavic languages, Russian is the only language to employ LocP as an unmarked construction. This fact is, thus, in favour of the Uralic substrate theory. At the same time, it also speaks in favour of an areal feature.

In his own edition, Stassen (2009) divides the different types of PredP into four groups, which correspond to the labels in WALS as follows:

1) **Locational possessive** → Locational + Genitive
2) **With-possessive** → Conjunctional
3) **Topic possessive** → Topic
4) **Have-possessive** → ‘Have’

A short remark must be made that Stassen himself includes what is called the ‘genitive possessive’ under the category of LocP. This four-ways classification serves as a basis on which the languages of Northern Eurasia will be presented in this section.

Section 3 consists of three subsections in which I will discuss various types of PredP in East Slavic languages (Section 3.1), Uralic languages (Section 3.2.1), typologically Altaic languages (Section 3.2.2) and Paleo-Siberian languages (3.3). This section will provide a picture of phylum-internal variations and areal patterns observed across Northern Eurasia.

### 3.1. East Slavic languages

In this section, the focus is mainly a description on a synchronic level. Any information from a diachronic perspective will be provided later in Section 5.1 *Internal reconstruction*. Map 3 illustrates the geographical distribution of PredP in the speaking areas of the Slavic languages and their neighbouring languages.
According to Map 3, Russian is the only modern Slavic language that WALS labels as ‘locational’. On the other hand, the missing Ukrainian and Belarusian are problematic because in these languages, both LocP and have-possession are equally common.

Chvany (1975) has published a comprehensive synchronic study on the Russian be-sentence, according to which there are three types of PredP used in Modern Russian. Amongst these types, the most frequent and neutral is LocP, which corresponds to the location schema in Heine’s classification. The construction consists of the possessor in the adessive case ($u + \text{gen}$), an omissible predicate ‘to be’ and the possessum in the nominative or genitive case. The formula for this construction and concrete examples are presented as follows:

\[
\begin{align*}
\text{Russian} & \quad (u + \text{gen})_{\text{ades}} & (\text{*}estb) & \quad \text{NOM/GEN} \\
\text{[possessor]} & \quad u \text{ menjå} & \quad \text{est’} & \quad h\text{leb} \\
\text{Belarusian} & \quad u \text{ mjanë} & \quad j\text{osć} & \quad h\text{leb} \\
\text{Ukrainian} & \quad u \text{ menë} & \quad j\text{e} & \quad h\text{lib} \\
\text{[at 1SG,GEN]_{\text{ades}}} & \quad \text{be,PRS} & \quad \text{bread,NOM}
\end{align*}
\]

The possessor is here expressed using a prepositional phrase ($u + \text{gen}$) or adessive with an animacy requirement, because in theory an inanimate noun, for example most referents encoded in neuter, cannot actively perform any action. In the case of an inanimate noun, the construction does not give the meaning of possession but rather that of location ‘(lean) on/by something’, for example, Russian $u \text{ oknå}$ ‘by the window’. By contrast, if we use a locative case (in Russian grammar termed a ‘prepositional case’) for an inanimate noun, it will give the meaning of existence to a possessum.

Despite this restriction for natural possessive interpretation, an animate noun can also be used in an existential sentence, but only as an adverbial in external possession
Predicative possession in the Novgorod ... documents in the Ural-Altaic context

(for the description of Russian external possession, see also Mrázek & Brym 1962; Garde 1985; Haspelmath 1999: 123–124), for example:

(1)  
\[ u \text{ Ivána} \quad v \quad \text{kvartière} \quad \text{est’} \quad \text{samovar} \]  
\[ \text{[at Ivan.gen]ades in apartment.loc be.3sg.prs samovar.nom} \]  
‘At Ivan’s (in) apartment there is a samovar.’

As for the predicate, the finite be-verb in the 3rd person (est’) can either be used or omitted. The difference between the two options is explained by Isačenko (1974: 56–58) and Pande (1981), in that the complete construction gives the meaning of mere possession (‘to have the whole of something’) while the elliptical construction indicates partial possession (‘to have a part of something’).

As an areal feature of negation in the Circum Baltic area, the possessum is marked in negative sentences with the genitive case, i.e. the ‘genitive-partitive’ used in Baltic and Slavic languages (except Czech and Balkan Slavic), which corresponds to the partitive case in Finnic languages (for further discussion on the partitive in the Circum-Baltic languages, see Koptjevskaja-Tamm 2001). As for the sentence predicate of a negative sentence, Russian uses the negative predicate net, which is a fused form consisting of negative particle ne and phonologically reduced be-verb (es’t). By contrast, Belarusian and Ukrainian do not have such a verb but instead use the negative predicates njamá and nemáje, the fused forms of the negative particle nja and ne, and the 3sg.prs form of have-verb ma and maje.

<table>
<thead>
<tr>
<th>Russian</th>
<th>u menjá</th>
<th>net</th>
<th>hléba</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belarusian</td>
<td>u mjané</td>
<td>njamá</td>
<td>hléba</td>
</tr>
<tr>
<td>Ukrainian</td>
<td>u mené</td>
<td>nemáje</td>
<td>hlíba</td>
</tr>
</tbody>
</table>

\[ \text{[at 1sg.gen]ades be.neg.prs bread.gen} \]  
‘I do not have any bread.’

Besides the LocP, Russian also has a transitive have-verb (imét’), which corresponds to the action schema in Heine’s classification. Its usage in the modern Russian language is strictly limited to the context in which the possessum is an abstract object, such as nouns with the abstractising suffixes -stvo or -ost’, for example disease, ideology or in an idiomatic phrase. However, according to Safarewiczowa (1964), this construction might also occur with a concrete referent. In that case, the difference from LocP lies in style: LocP represents vernacular language while a have-possessive with the have-verb imét’ exposes a higher literary language. In any case, the have-verb can be used interchangeably with LocP without a semantic difference in Belarusian and Ukrainian. The formula and examples for this have-possessive are presented as follows:
As for the negative sentence, the same principle of ‘genitive-partitive’ object is applicable, similar to the LocP example above. It must be noted that the have-verb in have-possessives agrees with the subject and still occurs with the negative particle not prefixed to the verbal stem.

There also exists a third type of possessive construction, in which the possessor is in the dative case. This would then correspond to goal schema in Heine’s classification. The formula of this construction is similar to the reconstructed PIE form, with a difference in the choice of verb.

Here the verb is something other than a be-verb, mostly stative verbs, for example ostáť’sja ‘to remain, stay’ and svjazáť’ ‘to bind’. It looks similar to the passive construction, as the finite verb agrees with the semantic object or possessum, while the agent or possessor falls into the position on which the action is concentrated. However, McAnallen (2009: 131) claims that this type of possessive construction is not primary in any modern Slavic language.

From a synchronic viewpoint, the modern Russian language differs greatly from other modern Slavic languages. Even in the closely related East Slavic languages, Ukrainian and Belarusian, which have been strongly influenced by Russian over the last centuries, the use of LocP seems to be equally preferred as have-possessive. In contrast, the more frequent, primary choice in connection to numerous idioms is the transitive have-verb (see also McAnallen 2009: 133). Especially in the negation of both possessive and existential sentences, the have-verb is the only choice of verb the
negative sentence, regardless of whether the possessor is in the nominative or adessive case, as seen from the examples above. According to Mrázek and Brym (1962: 99), this phenomenon is a superstrate influence from Polish (cf. the non-fused Polish verb form *nie ma* [NEG have.3SG.PRS] ‘(he/she/it) does not have; there is no’), which started from the 14th century when the territories of modern Ukraine and Belarus fell under the power of the Polish state. As for Rusyn, the situation is unclear because there are four different standardised varieties of Rusyn in each state where it is spoken (Kushko 2007: 124).

Further investigation on a diachronic level will follow in Section 5.1, where PredP is examined through internal reconstruction.

### 3.2. Typologically Ural-Altaic languages

In WALS, there are two primary strategies for constructing PredP in the typologically Ural-Altaic languages. The first pattern is a locational type that is common amongst the majority of languages. The second pattern is a genitival type, observed in Mordvin, Nenets and Even. As mentioned earlier, Stassen himself combines these two PredP types and subsumes them under the category termed locational possessive. In addition to these patterns, we also find the *have*-possessive, albeit exclusively in Ob-Ugric languages. However, WALS is deficient in this respect so we shall take a more fine-grained observation on all the Uralic and typologically Altaic languages in subsections 3.2.1 and 3.2.2, respectively. Any example provided in this section without reference is my own example.

#### 3.2.1. Uralic languages

In a comparative grammar of Uralic languages, Collinder (1960: 248) indicates that there is no *have*-verb in Uralic languages but a prototypical type of PredP in Uralic languages is clearly LocP with variation in the marking of possessor whether in locational cases or genitive case (also Ravila 1965: 62; Majtinskaja 1974: 268; Honti 2006). Agreeing with this generalisation, Stassen (2009: 296–297, 582) also notes that excluding Indo-European languages, the use of *have*-possessive is rare in Eurasia, with the only exceptions being Ubykh (North-West Caucasian), Ob-Ugric languages and Ket (Yeniseian). Table 3 shows how Collinder sketches morphosyntactic patterns for LocP in the Uralic languages.

<table>
<thead>
<tr>
<th>Construction type</th>
<th>Possessor</th>
<th>Predicate</th>
<th>Possessum</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>GEN</td>
<td>existential verb</td>
<td>NOM/PART-P&lt;sub&gt;x&lt;/sub&gt;</td>
</tr>
<tr>
<td>B</td>
<td>DAT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>other cases</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Table 3*. Prototypical patterns for predicative possession in Uralic languages.
Concrete examples of these construction types can be found later in this section as follows:

**Type A:** Examples 6–9 (Mordvin, Mari, Permic) and 11–12 (Samoyedic)

**Type B:** Examples 4 (Livonian) and 10 (Hungarian)

**Type C:** Examples 2–3 (Finnic) and 5 (Saami)

It is difficult to identify which of these types could be PredP in Proto-Uralic. Based on present-day Uralic languages, type A with the genitive possessor, which is morphosyntactically similar to adnominal possession, seems to be the most common strategy (see e.g. Jedygarova 2010: 252–253). This might speak in favour of reconstructing the genitive possessor for Proto-Uralic. In contrast, another attempt to reconstruct Proto-Uralic PredP by Honti (2008: 167–168) prefers the dative possessor. This question of the genitive and dative possessor probably concerns also the functional development of the Uralic ‘genitive-dative’ (for more discussion on diachrony, see Inaba 2015). However, Stassen (2009: 27–28) clarifies that the assumption of adnominal and predicative possession being constructed from a common structural base is not convincing. Therefore, the construction type of PredP that is morphosyntactically the most similar to adnominal possession might not necessarily be the original PredP.

On the synchronic level, Honti (2006, 2008) identifies morphosyntactic patterns that are primary choices for each present-day Uralic language. Unlike WALS, Honti also pays attention to other possible patterns that co-occur with the primary choice of language speakers. Table 4 illustrates different type of PredP used in each Uralic branch. The marking in brackets (+) indicates that the construction type is not primary in any language of the branch but also observed more or less sporadically. For example, Honti (2008: 172–173) provides several examples of the sporadic use of have-verbs in Finnic, Saami, Mari, Hungarian and most Samoyedic languages. As have-possessive is not a primary choice for PredP and a secondary construction in all Uralic branches except Ob-Ugric, this construction will not be discussed in this paper.

<table>
<thead>
<tr>
<th>Uralic branches</th>
<th>LocP Case marking of possessor</th>
<th>Have-possessive</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NOM</td>
<td>GEN</td>
</tr>
<tr>
<td>Finnic</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Saami</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mordvin</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Mari</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Permic</td>
<td>(+)</td>
<td>+</td>
</tr>
<tr>
<td>Hungarian</td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>Ob-Ugric</td>
<td>(+)</td>
<td></td>
</tr>
<tr>
<td>Northern Samoyedic</td>
<td>(+)</td>
<td></td>
</tr>
<tr>
<td>Southern Samoyedic</td>
<td>(+)</td>
<td></td>
</tr>
</tbody>
</table>

*Table 4. Predicative possessions in the Uralic languages, adapted from Honti (2006, 2008).*
As is clear from the classification above, the majority of Uralic languages tends to prefer the strategy of LocP, with the exception of the Ob-Ugric languages. Stassen (2009: 296) even claims that ‘the Locational Possessive is the norm in Uralic.’ Amongst the languages in this canon, variety arises in the marking of possessor (cf. Table 4). Taking into account which construction pattern is a primary unmarked alternative, the possessor can be marked either in the genitive case (Mordvin, Mari and Samoyedic languages) with pronominal indexing on possessum, in the dative case (Livonian and Hungarian), or in the locational cases (most Finnic languages, Saami, Permic and Ob-Ugric languages). In the following, I provide some examples from various Uralic languages in order to clarify the description above.

The most common construction amongst the majority of Finnic languages is the adessive possessor. However, Livonian is the only Finnic language to employ the dative possessor.

**Finnish (Finnic)**

(2) *isä-*llä *on* *iso-sisko*

father-ades be.3SG.PRS big-sister

‘Father has an elder sister.’

**Estonian (Finnic)**

(3) *ema-* l *on* kümme *apelsin-i*

mother-ades be.3SG.PRS ten orange-PART

‘Mother has ten oranges.’

**Livonian (Finnic)**

(4) *ī’d* kēńga-n *ā’t* wannəd *k۵olm* p{oigə*

one king-dat be.3PL.PRET be.PTCP.PL three boy.PART

‘A king has had three boys.’ (Setälä 1953: 363)

**Saami languages**, on the other hand, use the locational cases based on -s-, which can be interpreted depending on the synchronic grammar of each Saami language as inessive or elative.

**North Saami (Saami)**

(5) *mu-s* *lea* láibi

1SG-ines be.3SG.PRS bread

‘I have bread.’

As for the languages in Central Russia (Mordvin, Mari and Permic), the genitive possessor with person indexing on the possessum is the most common strategy. This corresponds to what is called *izafet* in Turkic linguistics or ‘double marking’ in general. Some scholars propose that this construction type is structurally motivated by Turkic languages spoken in the areas adjacent to these Uralic languages (see e.g. Beke
1914; Bereczki 1983). However, another group of scholars (e.g. Hajdú 1987: 222–223; Benkő 1979, 1988) claims that the double marking in possessive constructions can be reconstructed to Proto-Uralic. Moreover, a third group of scholars (e.g. Fokos 1939: 16; Honti 2006) argues against these proposals and prefers the explanation that the double marking is not inherited from the Proto-Uralic period but it has later emerged as a language-internal development, independently from any contact influence. In any case, Komi is excluded from this pattern because there the person indexing is not obligatory. This exclusion could be explained by the fact that Komi has not acquired the double marking, which seems to be an areal pattern in the Uralic languages in Central Russia.

Erzya (Mordvin)

(6) 
\[
\text{učťel-ēń-t} \quad \text{ul-ńe-ś} \quad \text{vadźra} \quad \text{kudo-zo}
\]
\[\text{teacher-GEN-DEF be-FREQ-3SG.PRET beautiful house-3SG.px}\]

‘The teacher used to have a beautiful house.’ (Zaicz 1998: 210)

Mari

(7) 
\[
\text{joča-vlak-yn} \quad \text{mačy-št} \quad \text{ulo}
\]
\[\text{child-PL-GEN cat-3PL.px be-3SG.PRS}\]

‘The children have a cat.’

Udmurt (Permic)

(8) 
\[
\text{min-am} \quad \text{kik} \quad \text{pinal-e} \quad \text{van}
\]
\[\text{1SG-GEN two child-1SG.px exist.PRS}\]

‘I have two children.’ (Winkler 2001: 31)

Komi (Permic)

(9) 
\[
\text{maša-len} \quad \text{em} \quad \text{kerka}
\]
\[\text{Maša-GEN exist.PRS house}\]

‘Maša has a house.’ (Hamari 2015: 249)

Honti (2008: 166) claims that the Komi genitive suffix -le̮n was originally an adessive case with the same element -l as in Finnic languages.

Similar to Livonian, Hungarian also marks the possessor with the dative case. However, Honti (2006, 2008) synchronically reanalyses and names this ‘habitive dative’ as ‘genitive’ case. The problem in the interpretation of Hungarian dative case -nak/-nek seems to remain unsolved for the time being (see e.g. Korompay 1991: 301–302 vs. Kiefer 2000: 577–578).

Hungarian

(10) 
\[
\text{a} \quad \text{fěři-ak-nak} \quad \text{van} \quad \text{háza-uk}
\]
\[\text{ART.DEF man-PL-DAT be-3SG.PRS house-3PL.px}\]

‘The men have a house.’ (Biermann 1985: 29)
Similar to the Uralic languages in Central Russia, the majority of Samoyedic languages encode LocP with the genitive possessor and person indexing on the possessum. Despite this general pattern, Selkup in the south is reported to mark the possessor with a postpositional phrase but still similarly place person indexing on the possessum. As an explanation, Honti (2006: 46) claims that this possessor marking in Selkup might be motivated by the Russian adessive pattern *u menjá*.

Nenets (Northern Samoyedic)
(11) *nalgu*-n *porgo*-da *tana*  
woman-GEN dress-3SGPRS be.3SG.PRS  
‘The woman has a dress.’ (Hajdú 1963: 112)

Kamass (Southern Samoyedic)
(12) *büžo*-n *nāγur* *koʔboo*-t *t̪-bi*  
old_man-GEN three daughter-3SGPRS be-PRET.3SG  
‘An old man had three daughters.’ (Künnap 1999: 39)

Selkup (Southern Samoyedic)
(13) *tab* *na*-n *naagur* *nee*-t  
3SG BY-LOC three girl-3SGPRS  
‘He has three daughters.’ (Bajdak et al. 2010: 141)

Looking at the classification in Table 4, the *have*-possessive in Ob-Ugric languages does not follow the areal and family-internal tendency of LocP. The person indexing is then optional, depending much on whether it is a question of *alienable* or *inalienable* possession.

North Khanty (Ob-Ugric)
(14) *min* *taj*-lamen *čoram* *mis*  
1DU have.1DU.PRS fine cow  
‘We two have a fine cow.’ (Rédei 1965: 37)

North Mansi (Ob-Ugric)
(15) *am* *piɣ* *at* *oonš*-ee-yum  
1SG son NEG have-EP-1SG  
‘I do not have a son.’ (Skribnik & Afanas’eva 2004: 63)

East Mansi (Ob-Ugric)
(16) *om* *lyõx* *onsoy*-då*-m* *nāɡ-naan* *löätt-õx*  
1SG message have-EP-1SG 2SG-LAT tell-INF  
‘I have a message to tell you.’ (Kulonen 2007: 196)
South Mansi (Ob-Ugric)
(17) šålkhän-mä āńč-åst
   carrot-land have-3PL.PRS
   ‘They have a carrot bed.’ (Honti 2004: 8)

This is a secondary development that is competing with and replacing the older LocP (Wagner-Nagy 2009, 2014). The replacement seems to have already taken place because the have-possessive has become the primary choice for PredP (cf. Kulonen 2007: 196). Yet, the older LocP still co-exists with the newer have-possessive. In the case of LocP, Ob-Ugric languages mark the possessor either in the nominative, locative (Khanty) or dative-lative (Mansi), or with a postpositional phrase as in Example (20). The construction with the nominative possessor might remind us of topic possessive (discussed later in subsection 3.2.2). For instance, Filchenko (2014) labels the nominative possessor in Eastern Khanty as ‘theme’, which indirectly implies the interpretation of topic possessive. As for the possessum, person indexing is usually present.

East Khanty (Ob-Ugric)
(18) mä-∅ wəγ-am ēntim or mēn-na wāg ēntim
   1SG-NOM gold-1SGpx be.NEG 1SG-LOC gold be.NEG
   ‘I have no gold.’ (Honti 2004: 5)

South Mansi (Ob-Ugric)
(19) nājär-∅ pūw-ī āl-əs
   emperor-nom son-3SGpx be-3SG.PRET
   ‘The emperor has a son.’ (Fokos 1960: 106)

(20) jūkā pāl-t āwūl-īt āl-s
   woman on-LOC daughter be-3SG.PRET
   ‘The woman had a daughter.’ (Honti 2006: 44)

As mentioned, the possessor is not marked in these languages because the person indexing on the possessum, if available, should already make the interpretation unambiguous. In the event that the Ob-Ugric languages would retain LocP but no longer apply person indexing to the possessum in the future, such a change would yield a very interesting evolution. Namely, in a probabilistic sense, such a change could cause a side effect wherein the LocP could become the topic possessive, which would synchronically be a similar pattern to the languages in the Far East, to be discussed in the next subsection.
3.2.2. Typologically Altaic languages

Stassen (2009: 299–306) states that the typologically Altaic languages are similar to Uralic languages in many respects. Table 5 summarises different types of PredP used in Altaic languages with the same principle that (+) marks secondary alternative constructions observed besides the primary choice.

<table>
<thead>
<tr>
<th>Altaic languages</th>
<th>LocP Case marking of possessor</th>
<th>Topic possessive</th>
<th>With-possessive</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GEN</td>
<td>DAT</td>
<td>LOC</td>
</tr>
<tr>
<td>Oghur Turkic</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oghuz Turkic</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kipchak Turkic</td>
<td>+</td>
<td>(+)</td>
<td></td>
</tr>
<tr>
<td>Karluk Turkic</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Siberian Turkic</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Written Mongolian</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Mongolic</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>North Tungusic</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>South Tungusic</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Koreanic</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japonic</td>
<td>+</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5. Predicative possessions in the typologically Altaic languages.

First of all, LocP is a primary strategy where variation in the marking of the possessor is present between these languages. In the Altaic languages, with the exception of those spoken in the Far East, two options are available: 1) genitive and 2) dative or locative case. As a selection criterion, Stassen (2009: 300) suggests the distinction between permanent and temporary possession. In addition to what Stassen proposes, the distinction between inalienable and alienable possession is also another way of interpretation. Here, the former function is usually encoded in genitive, while the latter is in dative or locative.

In certain cases, information structure also has a crucial role in the case selection of the possessor because an inalienable referent can also occur with locational possessor, e.g. ‘two daughters’ in (34), ‘fidelity’ in (38), ‘child’ in (44) and ‘three sisters’ in (45). In this respect, Poppe (1963: 35–36, 114–115) uses a distinction between definite and indefinite possessive, which can correspond to the distinction between given and new information, respectively (see also Stassen 2009: 28–30). Turkic and Mongolic languages, for instance, express the definite possession with genitive possessor but mark indefinite possession with dative or locative possessor.
Concerning LocP with the genitive possessor, the Altaic languages can be classified into two groups according to the marking of the possessum. On one hand, Turkic and Tungusic languages may mark the possessum with person indexing if the possession in question is permanent, inalienable and/or definite (Examples 22–26). Otherwise, the person indexing on the possessum is omissible (Example 21).

Chuvash (Oghur Turkic)
(21) *ivan-ān avtomat-ručka pur*

Ivan-gen automatic-pen exist

‘Ivan has a fountain pen.’ (Krueger 1961: 186)

Turkish (Oghuz Turkic)
(22) *hakan-in para-st yok*

Hakan-gen money-3px not_exist

‘Mehmed has no money.’

Tatar (Kipchak Turkic)
(23) *bez-nej güzäl kïz-ibïz bar*

1pl-gen beautiful girl-1px exist

‘We have a beautiful daughter.’

Uzbek (Karluk Turkic)
(24) *sen-ing aka-ng bor-mi?*

Mehmed-gen elder_brother-2sgpx exist-q

‘Do you have an elder brother?’

Tuvan (Siberian Turkic)
(25) *meeŋ beš ad-ïm čok*

1sg-gen five horse-1sgpx not_exist

‘I do not have five horses.’ (Anderson & Harrison 1999: 24)

Even (North Tungusic)
(26) *min zu-w bi-sni*

1sg-gen house-1sgpx exist-3sgprs

‘I have a house.’ (Benzing 1955: 81)

On the other hand, the Mongolic languages never apply person indexing to the possessum.

Khalkha Mongolian (Mongolic)
(27) *min-i xiixed-∅ gurwa bol-wo*

1sg-gen children-∅ three become-term

‘I have three children.’ (Poppe 1951: 102)
Predicative possession in the Novgorod ... documents in the Ural-Altaic context

Written Mongolian (Mongolic)

(28) qagan-u yurban köbegün-∅ bül-üge
king-gen three children-∅ be-prsm

‘The king had three sons.’ (Grønbech & Krueger 1955: 21)

Mangghuer (Mongolic)

(29) dao-du-ni han mula nughuai-∅ yi-ge ba-ng
younger_sibling-dat-gen also small dog-∅ one-cls be-prs

‘His younger brother also had a small dog.’ (Slater 2003: 149)

As discussed earlier, the construction with a dative or locative possessor expresses temporary, alienable and/or indefinite possession. Particularly, Turkic languages do not put person indexing after the possessum, despite the fact that they are relatively strict regarding izafet or double marking. Firstly, the dative possessor is observed in Turkic (particularly Siberian Turkic), Mongolic, Tungusic and Japonic languages.

Yakut (Siberian Turkic)

(30) mijä-čä taba baar
1sg-dat reindeer exist

‘I have reindeer.’ (Böhtlingk 1964: 128)

Tuvan (Siberian Turkic)

(31) bis-ke tarilga şöl-ü ċok turgan
1pl-dat sowing field-3_neg aux.pret

‘We did not have any sowing fields.’ (Anderson & Harrison 1999: 20)

Khalkha Mongolian (Mongolic)

(32) na-d olon mori bai-na
1sg-dat many horse be-prs

‘I have a horse.’ (Street 1963: 163)

Dagur (Mongolic)

(33) nada-du doloyan qoni bayi-na
1sg-dat seven sheep be-prs

‘I have seven sheeps.’ (Ujiyediin 1999: 114)

Mangghuer (Mongolic)

(34) yi-ge laohan-du aguer lian-ge ba-ng
one-cls old_man-dat daughter two-cls be-prs

‘An old man had two daughters.’ (Slater 2003: 105)
(35) *bejumimni-ду tamuura pekt’yereevun bi-cho-n*

'The hunter had an expensive gun.' (Nedjalkov 1997: 124)

(36) *mafasa-ду čalisi ińai bi-si-ni*

'The old man had a white dog.' (Girfanova 2002: 50)

(37) *min-ду ilaа ulaa bii-ni*

'I have three reindeers.' (Tsumagari 2009: 13)

(38) *irgen de akdun ako o-ci*

'If the people have no fidelity.' (Adam 1873: 69)

(39) *otō-to-ni naihu-ga aru*

'Younger brother has a knife.' (Martin 1975: 649)

It is interesting that Siberian Turkic languages, where the use of dative possessor is more common than in other Turkic branches, might share the areal tendency of dative possessor with the neighbouring Mongolic and Tungusic languages.

At the same time, other languages may encode the possessor in the locative case. Similarly to the dative possessor, this is a common strategy for temporary, alienable and/or indefinite possession in most Turkic languages as well as Mongolic and Koreanic languages.

(40) *un-ra šiklen-u çuk*

'He has no fear.' (Skvorcov 1982, example from the lexical entry šiklenu 'crpax')

(41) *ben-de para var*

'I have money (with me)' (Swift 1963: 139)
Kazakh (Kipchak Turkic)
(42) *biz-de*  žeti  gül  bar
   1PL-LOC seven   flower  exist
   ‘We have seven flowers.’

Uzbek (Karluk Turkic)
(43) *siz-da*  sigareta  bor-mi?
   2PL-LOC   cigarette  exist-Q
   ‘Do you have a cigarette?’

Altai (Siberian Turkic)
(44) *sler-de*  bal-dar  bar  ba?
   2PL-LOC child-2PLpx exist Q
   ‘Do you have a child?’ (Sabaškin 1990: 49)

Tuvan (Siberian Turkic)
(45) *men-de*  üş  ugba-lar-îm  bar
   1SG-LOC three   sister-PL-1SGpx exist
   ‘I have three sisters’ (Anderson & Harrison 1999: 31)

Written Mongolian (Mongolic)
(46) *na-dur*  morin  bui
   1SG-LOC   horse  be-PRS
   ‘I have a horse’ (Poppe 1954: 149)

Korean (Koreanic)
(47) *na-ekey*  ilen  chinkwu-ka  iss-ta
   1SG-LOC like_this friend-NOM be-CIT
   ‘I have friend(s) like this.’

However, many micro-areas within the Altaic sphere are also developing other strategies for PredP that are co-occurring and competing with the prototypical LocP. This is likely to be a contact-induced influence in different micro-areas. For instance, the topic possessive in the Far Eastern languages (Korean, Japanese and Manchu), where the topical possessor marked using a morphosyntactic (topic-case marking) or syntactic strategy (sentence initial position), could have been influenced by the pattern of isolating Sinitic languages.

Korean (Koreanic)
(48) *wuri-ka/nun*  kongthong-cem-i  iss-e
   1PL-NOM/TOR common-point-NOM be-INF
   ‘We have something in common.’
Japanese (Japonic)

(49) \textit{shachō-wa kane-ga takusan aru}
\begin{tabular}{llll}
  & director-NOM & money-NOM & exist.PRS \\
\end{tabular}
\begin{tabular}{c}
‘That director has a lot of money.’
\end{tabular}

Manchu (South Tungusic)

(50) \textit{singgeri funcetele jeku bi mouse plenty goods be.PRS}
\begin{tabular}{llll}
  & exist & three & child \\
\end{tabular}
\begin{tabular}{c}
‘The mouse has plenty of food.’ (Adam 1873: 69)
\end{tabular}

Mandarin (North Sinitic)

(51) \textit{tā yōu sān ge háizi}
\begin{tabular}{lllll}
 3SG & exist & three & cls & child \\
\end{tabular}
\begin{tabular}{c}
‘(S)he has three children.’ (Li & Thompson 1981: 513)
\end{tabular}

Cantonese (Yue Sinitic)

(52) \textit{néih yáuh móuh taaitáai a?}
\begin{tabular}{llllll}
 2SG & exist & not_exist & wife & q \\
\end{tabular}
\begin{tabular}{c}
‘Are you married? (lit. Do you have or not have a wife?)’
\end{tabular}

At the same time, the \textit{with}-possessive could be an areal feature shared amongst the languages of Northeast Eurasia (Siberian Turkic, Mongolic and North Tungusic), including also Yukaghir and Chukchi (see Examples 67–70 in Section 3.3). These languages encode the possessor in nominative and the possessum in the so-called ‘propriative’ (= \textit{prop}) case (for further investigation of \textit{with}-possession in Northeast Eurasia, see e.g. Ebata 2014).

Tuvan (Siberian Turkic)

(53) \textit{bis mašĩna-lïg bis}
\begin{tabular}{llll}
 1PL & car-PROP & 1PL \\
\end{tabular}
\begin{tabular}{c}
‘We have a car.’ (Anderson & Harrison 1999: 32)
\end{tabular}

Yakut (Siberian Turkic)

(54) \textit{kihi ogo-loočh man child-PROP}
\begin{tabular}{llll}
  & exist & not_exist & wife \\
\end{tabular}
\begin{tabular}{c}
‘The man has children.’ (Krueger 1962: 113)
\end{tabular}

Written Mongolian (Mongolic)

(55) \textit{debel jaqa-tai}
\begin{tabular}{llll}
  & coat & collar-PROP \\
\end{tabular}
\begin{tabular}{c}
‘A coat has a collar.’ (Poppe 1954: 15)
\end{tabular}
Khalkha Mongolian (Mongolic)

(56) \text{bi} \text{ düü-tej} \text{ bai-na}

\begin{array}{ll}
1\text{sg} & \text{younger\_brother-\textit{prop}} \\
& \text{be-\textit{prs}}
\end{array}

‘I have a younger brother.’

Evenki (North Tungusic)

(57) \text{tar} \text{ bey} \text{ jüü-ikan}

\begin{array}{ll}
\text{this} & \text{man\_house-\textit{prop}}
\end{array}

‘This man has a house.’ (Stassen 2009: 358, example from Andrej Malchukov)

Even (North Tungusic)

(58) \text{tarak} \text{ bej} \text{ zu-ikan}

\begin{array}{ll}
\text{this} & \text{man\_house-\textit{prop}}
\end{array}

‘This man has a house.’ (Benzing 1955: 30)

3.3. Paleo-Siberian languages

As for the rest of the Northern Eurasian languages that are left out of the Ural-Altaic realm, Stassen (2009: 306–311) sees the similar pattern as the Ural-Altaic languages in these Paleo-Siberian languages. Namely, all these languages today follow the general Eurasian pattern of LocP, as is evident from Table 6. Applicable here is the same principle that (+) marks secondary alternative constructions observed besides the primary choice.

<table>
<thead>
<tr>
<th>Paleo-Siberian languages</th>
<th>LocP</th>
<th>With-possessive</th>
<th>Have-possessive</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GEN</td>
<td>DAT</td>
<td>ADES</td>
</tr>
<tr>
<td>Yaniseian</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yukaghir</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chukotko-Kamchatkan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Koryak</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Itelmen</td>
<td>(+)</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Chukchi</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nivkh</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ainu</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 6. Predicative possession in Paleo-Siberian languages.

The majority of Paleo-Siberian languages mark the possessor of LocP with locational cases, either with adessive (Yeniseian languages), locative (Nivkh, Yukaghir languages and Koryak), or dative case (Itelmen).
Ket (Yeniseian)

(59) \textit{ab-ajt iŋus’ us’ay} \\
1SG-DES house exist.PRS

‘I have a house.’ (Werner 1997: 103)

Nivkh (isolate)

(60) \textit{oγla-gu-\textit{in} ċuz pityy jiv-ny-\textit{d-ra}} \\
child-PL-LOC new book be-FUT-FIN-PRED

‘The children will have new books.’ (Gruzdeva 1998: 19)

Kolyma Yukaghir (Yukaghir)

(61) \textit{tude-ge irk-\textit{in} towke-\textit{ñe-j} tay pulut-\textit{ke}} \\
he-LOC one-ATTR dog-PROP-3SG.INTR that old_man-LOC

‘He had a dog, that old man.’ (Maslova 2003a: 449)

Tundra Yukaghir (Yukaghir)

(62) \textit{tit-\textit{qa} wolme el-\textit{le-j}} \\
2PL-LOC shaman NEG-be-3SG.INTR

‘Do you not have a shaman?’ (Maslova 2003b: 69)

Koryak (Chukotko-Kamchatskan)

(63) \textit{aʕal tuyə-k va-yk\textit{on}} \\
axe 2PL-LOC be-CONT

‘You have an axe.’ (Stassen 2009: 307, example from Alla Maltseva)

Itelmen (Chukotko-Kamchatskan)

(64) \textit{trum-la-ʔn-\textit{k} çi-s-kipne\textit{ʔn} teŋ-laha-\textit{ʔn} \textit{qsha-ʔn}} \\
south_person-PL-LOC be-PRS-3PL.DAT good-PTCP-PL dog-PL

‘The southerners have good dogs.’ (Georg & Volodin 1999: 95)

Nevertheless, there are also other optional strategies for marking the possessor. For instance, Nivkh also employs the ablative possessor, while the genitive possessor without person indexing on the possessum is observed in Itelmen.

Nivkh (isolate)

(65) \textit{petr-\textit{ux} pityan-∅ tøki-∅ iv-d} \\
Petr-LOC/ABL book-NOM five-NOM be-FIN

‘Petr has five books.’ (Gruzdeva 1998: 24)

Itelmen (Chukotko-Kamchatskan)

(66) \textit{kni-\textit{n} qitkine\textit{ŋ} çi-z-en} \\
2SG-GEN brother be-PRS-3SG.SUBJ

‘You have a brother.’ (Georg & Volodin 1999: 214)
According to Maslova (2003a: 590), the dominance of LocP in certain linguistic areas inside Russian Federation is likely to be a Russian superstrate influence that recently started to replace the prototypical *with*-possessive. This is the case for the Yukaghir languages, for instance, where LocP has replaced the more original *with*-possessive (Examples 67–68).

Kolyma Yukaghir (Yukaghir)
(67) *pulun-die jowje-ń-i*

> old_man-DIM net-PROP-3SG.INTR

‘The old man had a net.’ (Maslova 2003a: 444)

Tundra Yukaghir (Yukaghir)
(68) *mārqa-n lāme-ń-ηi*

> one-ATTR dog-PROP-3PL.INTR

‘They had one dog.’ (Maslova 2003b: 70)

On the other hand, Chukchi is the only language amongst two other Chukotko-Kamchatkan languages to employ the *with*-possessive as its only option.

Chukchi (Chukotko-Kamchatkan)
(69) *ga-qaa-igum*

> with-reindeer-1SG

‘I have reindeer.’ (Bogoras 1922: 712)

(70) *ge-keli-jgyt*

> with-book-2SG

‘You have a book.’ (Stassen 2009: 359, example from V. P. Nedjalkov)

Given that the *with*-possessive is a prototypical feature of languages in the Northern Far East, this areal tendency might also explain why the modern Altaic languages in the adjacent areas (Siberian Turkic, Mongolic and North Tungusic) have a similar *with*-possessive (cf. Section 3.2.2).

As mentioned earlier in Section 3.2.1, Ket is one of the rare languages in Eurasia that have an alternative *have*-possessive, exclusively observed also in Ubykh and the Ob-Ugric languages.

Ket (Yeniseian)
(71) *don-it-il-bet*

> knife-3FEM.SUBJ-PRET-have

‘She had a knife.’ (Vajda 2004: 50)

Unlike the Altaic and Paleo-Siberian neighbouring languages, Ainu is the only language in the Far East that predominantly uses *have*-possessive.
Ainu (isolate)

(72) acapo sake kor
uncle liquor have

‘Uncle has liquor.’ (Tamura 2000: 87)

3.4. Summary

In Section 3, we have seen that across Northern Eurasia, LocP is overwhelmingly dominant in the majority of languages in Eurasia. Although LocP might not be a primary choice for PredP amongst the speakers of some languages, there is still evidence for the existence of LocP as an alternative or secondary pattern for PredP. The only exception in this respect concerns Chukchi (Chukotko-Kamchatkan) and Ainu, the languages that completely lack the use of LocP with no trace or evidence it.

In addition to LocP as a macro-areal tendency, we have noticed other micro-areal features shared in particular contact areas. In western Siberia, we find the Ob-Ugric languages (secondarily also Ket, and Ainu in the Far East), which use a have-possessive. In Northeast Eurasia, the with-possessive is a widespread areal pattern shared between Siberian Turkic, Mongolic, Yukaghir languages and Chukchi. In the Far East, several typologically Altaic languages, that is, Manchu, Koreanic and Japonic languages, have adopted topic possessive from Sinitic languages. In Section 5.3, I will apply this areal perspective to the discussion of the origin of East Slavic LocP.

4. Predicative possession in the Novgorod Birch Bark documents

In this section, three construction types from the data will be presented with their sentence structures, semantic functions and frequencies of occurrence. Table 7 roughly shows the numbers of birch barks in which the constructions to be investigated occur: 1) construction with adessive phrases 216/865 (ca. 25%), 2) construction with dative and intransitive verb 36/865 (ca. 4.2%) and 3) have-verb 4/865 (ca. 0.5%).

<table>
<thead>
<tr>
<th>Construction</th>
<th>Period 1000-1125</th>
<th>1125-1160</th>
<th>1160-1220</th>
<th>1220-1300</th>
<th>1300-1360</th>
<th>1360-1400</th>
<th>1400-1500</th>
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<tr>
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<td>33</td>
<td>44</td>
<td>30</td>
<td>22</td>
<td>41</td>
<td>27</td>
<td>216</td>
</tr>
<tr>
<td>DAT + INTR.V</td>
<td>3</td>
<td>6</td>
<td>11</td>
<td>3</td>
<td>1</td>
<td>8</td>
<td>4</td>
<td>36</td>
</tr>
<tr>
<td>have-verb</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
</tbody>
</table>

Table 7. The frequency of possessive constructions in the Novgorod Birch Bark documents.
Unlike the investigation of only 26 tokens by McAnallen (2011: 64–68), this paper initially gives priority to form over meaning. It clearly takes into consideration more examples that might be relevant for the study, regardless of their real semantics. For instance, instead of looking at only sentences that clearly show the reading of predicative possession, all constructions containing adessive phrases, dative with an intransitive verb and verbs of *jьm-* stem have been collected. Then, the further analysis will specify the cases of real predicative possession, which will obviously reduce the number of study cases (Section 4.4) and come closer to the results of McAnallen.

There are some remarks to be made on the orthography used in the Novgorod Birch Bark documents. Originally the texts were written without spaces between words. However, Zaliznâk (2004) has kindly separated the words in his inscription, which remarkably facilitates their reading. In the case of damages to the texts, he marks the missing or incomplete parts in parentheses, but in this paper all the phrases will be written without any unnecessary extra marks.

The alphabet used in the texts is of the old Cyrillic system, which contains several signs unavailable in modern Slavic languages. These possibly problematic signs are transliterated into a modified Latin alphabet, as indicated in Table 8.

<table>
<thead>
<tr>
<th>Old Cyrillic</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>і</td>
<td>ѭ</td>
</tr>
<tr>
<td>ѳ</td>
<td>Ѵ</td>
</tr>
<tr>
<td>ѳ</td>
<td>ѵ</td>
</tr>
<tr>
<td>ѳ</td>
<td>Ѵ</td>
</tr>
<tr>
<td>ѳ</td>
<td>ѵ</td>
</tr>
<tr>
<td>ѳ</td>
<td>Ѵ</td>
</tr>
<tr>
<td>ѳ</td>
<td>ѵ</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Modified Latin</th>
<th>І</th>
<th>ᴨ</th>
<th>ѳ</th>
<th>ѳ</th>
<th>ѳ</th>
<th>ѳ</th>
<th>ѳ</th>
</tr>
</thead>
</table>

Table 8. Transliteration from old Cyrillic to modified Latin.

4.1. Adessive (*u* + GEN)

The overall frequency in the data is 216/865 birch barks (ca. 25%). Table 9 illustrates the frequency of occurrence for different sentence predicates and semantic functions.

<table>
<thead>
<tr>
<th>Sentence predicate</th>
<th>Semantics</th>
<th>1000-1125</th>
<th>1125-1160</th>
<th>1160-1220</th>
<th>1220-1300</th>
<th>1300-1360</th>
<th>1360-1400</th>
<th>1400-1500</th>
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</thead>
<tbody>
<tr>
<td>be-verb</td>
<td>PredP</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>2</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Location</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>TRANS.V</td>
<td>ExP</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>[ + movement ]</td>
<td>Source</td>
<td>7</td>
<td>11</td>
<td>16</td>
<td>9</td>
<td>7</td>
<td>15</td>
<td>7</td>
<td>72</td>
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<td>20</td>
<td>21</td>
<td>18</td>
<td>12</td>
<td>17</td>
<td>10</td>
<td>106</td>
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<td>Other verb</td>
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<td>Damaged text unable to interpret</td>
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<td>8</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>19</td>
<td>33</td>
<td>44</td>
<td>30</td>
<td>22</td>
<td>41</td>
<td>27</td>
<td>216</td>
</tr>
</tbody>
</table>

Table 9. Frequency of possessive constructions with an adessive possessor.
Be-verb – Predicative possession: 10/216 pcs. (ca. 4.6%)

For example

(73) a sudъno jestь u mene a hlěbē
   conj boat be.3sg prep 1sg.gen conj bread.pl
   suhēi su
dry.pl be.3pl

‘(And) I have a boat and dry breads.’ (Д1 № 19: 644)

In this example, the possessor is in the adessive case (u mene ‘at me’). The finite be-
verbs jestь ‘is’ and su ‘are’ agree with the possessums sudъno ‘boat’ and hlěbē suhēi
‘dry breads’. This is a complete, prototypical example of the type of locational strat-
egy that I am mainly focusing on in this paper.

Be-verb – Location: 4/216 pcs. (ca. 1.9%)

For example

(74) a ja vьde ožь u vasъ este
cnj 1sg ptcl ptcl prep 2pl.gen be.3sg
tъvarъ olskъy
goods Oleska.poss

‘I know that Oleska’s goods are at your place.’ (Б92 № 548: 402)

In this example, the interpretation is more likely to be locality rather than possession.
The possessum tъvarъ ‘goods’ already indicates its primary possessor olskъy ‘of
Oleska,’ even though it is also possible to interpret the locational phrase u vasъ ‘at
your place’ as a secondary possessor, the outcome of which would be the meaning
‘the stuff belonging to Oleska is at your place.’

Transitive verb – External possession: 2/216 pcs. (ca. 0.9%)

For example

(75) a na mene se šli na toмъ
cnj prep 1sg.loc refl go.ptcp.pl prep dem.loc
csto esi konъ poznałъ u němcina
rel be.2sg horse recognise.ptcp.masc prep German.gen

‘(And) mention me in case you recognised the German’s horse...’ (Д10 № 25: 658)
The meaning of this external possessive construction with the adessive possessor "u němcina 'at the German' and possessum konь 'horse' reminds us of adnominal possession:

**External possession:** konь u němcina 'the German's horse'

**Genitive attributive:** konь němcina 'the German's horse'

**Possessive adjective:** konь jego 'his horse'

Interestingly, this phenomenon is also broadly found in heavily russified Veps and Karelian, with some traces in Estonian and its southern dialects (see also Pyöli 1996: 265–270). In addition, this can also be related to the evolution of the synchronically genitive case (Komi -län, Udmurt -len) from the etymologically adessive case with -l- element in Permic languages (cf. Honti 2008: 166, discussed in Section 3.2.1).

Transitive verb – Source: 72/216 pcs. (ca. 33%)

In examples of this type, the construction occurs with verbs expressing movement (e.g. vzjati ‘to take’ and kupiti ‘to buy’) the source of which is the noun in ades.

(76) vzjati u gospodyni tri na desjate rezaně
    take.IMPR PREP mister.GEN three PREP ten rezana.LOC

'Take from the mister thirteen rezana (monetary value).' (B2 № 84: 285)

Ellipsis: 106/216 pcs. (ca. 49%)

For example

(77) u rьtъkě gr(iv)ni, u hvalisa gr(iv)ni,
    PREP Retka.GEN grivna.PL PREP Hvalic.GEN grivna.PL

u těšadě 5
    PREP Tešata.GEN five

'At Retka (one) grivna. At Hvalic (one) grivna. At Tešata five grivna.' (A10 № 905: 248)

This is a problematic construction whose interpretation is unclear. Firstly, if we apply the concept of mere and partial possession introduced by Isačenko (1974: 56–58) and Pande (1981: 293), the omitted verb ∅ can be considered a variant of the be-verb in mere possession. Nevertheless, in theory there is still a possibility that the omitted verb is something other than ‘to be’. For example, if it happens to be a verb expressing movement, as in Example (76), then the adessive phrase must be interpreted as a source and not a possessor. Due to its high frequency, this could be a crucial factor for the evaluation. However, with only the present evidence we cannot convincingly conclude that it is an authentic possessor, and it is indeed appropriate to keep it separated from a ‘pure’ PredP, as in Example (73).
Nonetheless, there exists one more birch bark document which has a mostly
similar construction to Example (77) but with the preposition \( \ot \) (= ablative ‘from’).

\[(78) \begin{array}{cccccccc}
\ot & \text{popa} & \text{polosca} & \text{kozija} & \text{puha} & \ot \\
\text{priest.gen} & \text{three} & \text{measure_unit} & \text{goat.gen} & \text{wool.gen} & \text{prepp}
\end{array} \]

\( \text{jakunovui} \text{ot} \text{fomine} \text{snoby} \text{ot} \)
\( \text{jakun.dat} \text{prepp} \text{Holy_Thomas.gen} \text{daughter_in_law.gen} \text{three} \)

‘From the priest 3 (dishes), (measure unit) goat’s wool. From Jakun’s
wife, Holy Thomas’ daughter-in-law, 3 (dishes).’ (Г59 № 263: 609)

If we consider the ablative phrase \( (\ot + \text{GEN}) \) in this example to be a source of move-
ment expressed by an omitted verb \( \emptyset \), then it is possible to draw a parallel for the
adessive construction \( (\text{ADES} + \emptyset) \) in the function of ‘to remain (in a place)’, above all
with the verbs ‘to be’ or ‘to remain, stay.’

What is interesting is that the double function of the Russian adessive phrase
(source and location) actually corresponds to Eastern Finnic adessive construction,
which has both Proto-Finnic adessive and ablative functions. On the use of adessive
in Finnic, Grünthal (2003: 136–139) has noted that due to the merge of the adessive
and ablative forms in Veps (and also in Karelian) we often find the adessive case
marking a source of movement where we would expect the ablative case in the other
Finnic languages, for example in Veps:

\[(79) \begin{array}{cccccc}
tat & \text{hän-ësa-z} & \text{papil’} & \ot & \text{koume} & \text{sadad}
\end{array} \]

father \text{3sg-ines-3sg} priest.ades take.pret.3sg three hundred.part

‘Father took for him three hundred from the priest.’ (Grünthal 2003: 138)

This is a middle stage of the merge of ablative and adessive, when the secondary abla-
tive suffix \(-l-päi\) (lit. external location + direction) has not yet been introduced to the
morphological system of the language. Hence, the adessive of these languages carries
the functions of both Proto-Finnic adessive and ablative.

It is very challenging to discuss from which language this correlation was origi-
nally borrowed or whether it is an outcome of contact-induced language change. At
least in most Finnic and Slavic languages this phenomenon is not so common, because
usually the functions of separation and locality are clearly distinguished by the dif-
ferent grammatical cases (on comparison of adessive in Russian and Finnic, see also
McAnallen 2011: Section 4). Despite this argument, the double function of the Slavic
adessive construction is also observed in other old Slavic languages (see Section 5.1).

As a side remark related to the issue above, Permic languages also have an
alternation of possessor case marking in transitive sentence. Namely, the transitive
sentence requires that when a noun phrase with the genitive possessor (Komi \(-lön,\)
Udmurt \(-len\)) refers to an object in the sentence, it should be instead encoded, instead,
as the ablative possessor (Komi \(-lyš,\) Udmurt \(-leś\)), as in the following Komi example:
Predicative possession in the Novgorod ... documents in the Ural-Altaic context  213

(80) addz-a čoj-łyś pał'lo-s-ö
  see-1SG.PRS sister-ABL coat-3SG-ACC
  ‘I see my sister’s coat.’ (Bubrih 1949: 44)

Based on all the arguments presented above, we may now categorise all of the adessive constructions with ellipsis of predicate ades + ∅, as in Example (77), as possessive constructions and not constructions indicating source of movement.

Other verb – Location: 6/216 pcs. (ca. 2.8%)

This is a construction in which the adessive case is used with an inanimate noun, for example in the phrases u ladogu ‘to Ladoga’ (Д11 № 359: 659) and u dvoro ‘to the yard’ (Г22 № 490: 547). This construction is a combination of an unexpected preposition u used with ACC. This mixed form can be understood in the way that the Russian preposition u is used in the same way as the Finnic external cases with the suffixes -llA [adessive] / -lle [allative] even though in standard Russian it should be v + ACC, as in the following examples, v Ládogu and vo dvor (see also Veenker 1967: 139–142). To the case we can apply Thomason’s (2004: 144–146) concept of corresponding rule in contact situation, according to which the writer of this text might have used the Russian preposition u also in other places where the Finnic external cases with -llA [adessive] / -lle [allative] would occur. On the other hand, the altering prepositions u and v might actually be of the same origin v, given that the original form *vъ [wə] becomes u in front of consonant after the elimination of the weak *ъ, as is the case of modern Belarusian and Ukrainian.

Other verb – Adverbial: 8/216 pcs. (ca. 3.7%)

For example with verbs slyšati ‘to listen’ and otimati ‘to occupy’:

(81) ja u tebe slyšu ceto ty moloviše
  1SG PREP 2SG.GEN listen.ISG REL 2SG speak.2SG
  ‘I listen to what you are saying’ (Б100 № 705: 422)

(82) octina naša i diděna otimana
  father POSS.ADJ.ISG and ancestor seize.PTCP
  u vymolčovъ gospodъ
  PREP of_Vymolki.GEN mister.GEN
  ‘The property of our fathers and ancestors is seized by a gentleman from Vymolki’ (Γ70 № 248: 623)

Example (82) shows an interesting yet very rare case in which the adessive phrase u vymolčovъ gospodъ represents the agent role. Jung (2009: 90), too, has come to the
same conclusion that the agentive reading is applicable here. She further deciphers and identifies the construction as an agreeing passive where the adessive phrase is syntactically adjunctive.

In addition to the constructions presented above, there are another 8/216 birch bark documents (ca. 3.7%) in which the parts containing the adessive case are damaged and illegible. In any case, they represent a small amount of texts which will not radically influence the results of this work. On the other hand, there is no damage to any birch bark containing a dative construction or a have-verb.

4.2. Dative + intransitive verb

In this paper, the prototypical dative construction with a ditransitive verb (e.g. ‘to give’, ‘to buy’) will not be dealt because the pure ditransitive structure ‘to give something to someone’ is irrelevant to the research question of PredP. The same exclusion concerns dative in a determining function, for example  ne sestra ja vamo, lit. ‘not sister to you’ (A20 №644: 267).

Accordingly, the only dative constructions to be investigated here are 1) DAT + ‘to be’, 2) DAT + intr.v, 3) DAT in elliptical sentences and 4) DAT + nadobě ‘need’. Table 7 shows the frequency of occurrence of the above-mentioned constructions with dative, the appearance of which is found in a total of 36/865 birch bark documents (ca 4.2%).

<table>
<thead>
<tr>
<th>Sentence predicate</th>
<th>Semantics</th>
<th>1000-1125</th>
<th>1125-1160</th>
<th>1160-1220</th>
<th>1220-1300</th>
<th>1300-1360</th>
<th>1360-1400</th>
<th>1400-1500</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>be-verb</td>
<td>Possessor</td>
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<td>0</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>6</td>
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<td></td>
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<td></td>
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<td>0</td>
<td>3</td>
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<tr>
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<td>1</td>
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<td>0</td>
<td>7</td>
</tr>
</tbody>
</table>

Table 10. Frequency of possessive constructions with dative possessor.

Besides the necessive construction with nadobě, the data also include a more prototypical necessive construction, DAT + inf ‘someone has to do something’. Nevertheless, this is not dealt with in this paper either due to its high frequency and irrelevance to the topic of PredP.
**Predicative possession in the Novgorod documents in the Ural-Altaic context**

**Be-verb – Possessor: 6/36 pcs. (ca. 17%)**

For example

(83) ćьja  **ti**  **estь**  korova  da  molovi  emu
   whose:FEM  2SG.DAT  be.3SG  cow  and  say.IMPR  3SG.DAT
   ‘Say to the one whose cow you have: ...’  (Б112 № 8: 434)

**Be-verb – Recipient: 2/36 pcs. (ca. 5.6%)**

The construction is identical to the ‘possessor’ construction discussed above, for example:

(84) ... mьзда  **ti**  **otь**  boga  **budеть** ...
   reward  2SG.DAT  prep  god:GEN  be.FUT.3SG
   ‘..., the reward for you is from God.’  (Б112 № 8: 434)

However, I interpret the animate dative phrase in this kind of sentence as recipient, not as possessor.

**Be-verb – Experiencer: 2/36 pcs. (ca. 5.6%)**

For example

(85) da  že  **ti**  **mi**  budete  dъbro ...
   and  PTCL  PTCL  1SG.DAT  be.FUT.3SG  good
   ‘(And) if everything shall be fine for me, ...’  (Б41 Смол. 12: 434)

**Intransitive verb – Possessor: 6/36 pcs. (ca. 17%)**

For example

(86)  **a**  ceto  **ti**  sja  **ostalo**
   conj  what  2SG.DAT  refl.DAT  remain:PTCP:NEU
   sušča  to  ostavi  esti
   suščik:GEN  conj  leave:IMP.2SG  eat:INF
   ‘(And) what is remaining from suščik pastry, leave it for eating (later).’  (Б126 Ст. П. 30: 448)
Ellipsis – Possessor: 10/36 pcs. (ca. 28%)

For example

(87) a  kodь ti  mnё  hльby  tu  i  tobь
CONJ where  DEM  1SG.DAT  bread  there  also  2SG.DAT

‘And where is the bread for me, there will also be (the bread) for you.’ (Б83 №731: 392)

Ellipsis – Experiencer: 3/36 pcs. (ca. 8.3%)

For example

(88) liho  li  vamo  dobro  li
badly  Q  2PL.DAT  well  Q

‘Do you think it is bad or good that …’ (Г51 №622: 579)

Nadobё – Necessity: 7/36 pcs. (ca. 19%)

Constructions with sentence predicate nadobё ‘to be needed, necessary’, for example:

(89) a  ci  ceto  to  tovara  nadobe  a
CONJ  2SG.DAT  what  DEM  goods.GEN  need  CONJ
to  vosolju
CONJ  send.1SG

‘And if you have any need for some of the goods, I will send it (to you).’ (Б19 №624: 306)

It is interesting to compare this construction to the following Bulgarian Example (90), which is semantically equivalent.

(90) i  akь  imaё  nёzда  ot  nёsto
CONJ  if  have.2SG  need  from  something

ot  stёka-ta,  ¿te  go  izprёstam.
from  goods-DEF.FEM  3SG.PRON.NEU  send.1SG

Here, the difference between Isačenko’s (1974) be- and have-languages is visible. Russian as a be-language choses an intransitive construction: DAT (ti, tobé ‘to you’) + PRED (nadobё, nёzno ‘to be needed, necessary’), while Bulgarian as a have-language enables another alternative for using a transitive construction which contains the have-verb (da imam ‘I have’) and nominal object (nёzda ‘need’). This evidence even supports and reinforces the status of Russian as a be-language.
4.3. Have

In the data, there are two look-alike verbs, one of which is the have-verb iměti and the other is imati, with the meaning ‘to take’. Originally, these two look-alike verbs iměti and imati have a common root derived from PIE *h₁m- ‘to take’ (cf. Lat. emere ‘to take; to buy’, Lith. iminti ‘to take’ and Hitt. yemijami ‘I find’). Etymologically the former has developed from Proto-Slavic form *jьměti (1sg *jьmami) ‘to keep, possess, own (IPFV)’, while the latter comes from *jimati (1sg *jemlju) ‘to seize, take (IPFV).’ (Snoj 1997: 182–183, 200–202; Derksen 2008: 158, 211; Danylenko 2009: 5–6.) Table 11 shows the frequency of these two verbs in the data.

<table>
<thead>
<tr>
<th>Verb</th>
<th>Semantic Function</th>
<th>Period</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>iměti</td>
<td>to have</td>
<td>1000-1125</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1125-1160</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1160-1220</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1220-1300</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1300-1360</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1360-1400</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1400-1500</td>
<td>3</td>
</tr>
<tr>
<td>imati</td>
<td>to take</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>FUT</td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

Table 11. Frequency of have-verb.

In this subsection, I will also make a comparison between the languages of the Novgorod Birch Bark documents and of the Kievan Rus’ in order to illustrate the varying tendencies and different literary styles in different East Slavic dialects.

Iměti – to have: 3/865 pcs. (ca. 0.35%)

For example

(91) a  vъ sju nedělju  cьtъ do mьnь zъla
      conj  prep  dem.acc Sunday.acc what  prep 1sg.gen bad.gen

imeeši ože esi kъ mъně nь prihodilъ
have.2sg that  be.2sg  prep 1sg.dat neg come.ptcp masc

‘(And) what have I (wrongly) done to you so that you did not even come to my place this Sunday/week?’ (A11 № 752: 249)

(92) a  jazъ tja esměla aky
      conj  1sg  2sg.acc have.ptcp 1sg.fem like

braty sobě
brother.dat self.dat

‘(And) it is me who had/treated you like my own brother!’ (A11 № 752: 249)
We shall also compare this low frequency to the frequent use of the have-verb in an ‘official’ East Slavic literary language in 11th–15th century, namely Kievan Rus’ East Slavic, for the sake of dialectological overview. The data are taken from the text *Izbornik Svjatoslavovъ* from 1073, available in Babyč’s (1993: 10–29) edition. Example (93) illustrates the use of the have-verb in Kievan Rus’ Slavic.

(93) « Brate, hočju  sъ   toboju ljubъvь iměti, ... 
brother,voc want.1sg prep 2sg.instr love have.inf 
‘Oh brother! I want to have love towards you.’ (Babyč 1993: 26)

On the other hand, the adessive construction in the function of either possession or locality (‘at someone’s place’) occurs in one sentence. However, its finite verb is not the be-verb *estь* ‘to be’ but *stati* ‘to remain, stay.’

(94) i jako  že  plěnьnikomъ umъ   stoitъ 
conj so ptcl imprisoned.instr mind stand.3sg 
`u   roditelъ	 	 svoihъ, ... 
prep parent.gen.pl own.gen.pl 
‘And so the mind is all the time tied to his/her own parents, …’ (Babyč 1993: 25)

The other adessives found represent either source of movement or external possession. By applying Isačenko’s (1974) be- and have-language classification to these data, it is possible to claim that an ‘official’ East Slavic literary language of the 11th–15th century turns out to be a have-language, while the ancient Novgorod Slavic be-language must have been relatively exotic at the same period of history.

*Iměti* – Future: 1/865 pcs. (ca. 0.12%)

Here the have-verb is used as an auxiliary verb. This phenomenon is also found in Old Church Slavonic, modern Ukrainian and Belarusian (cf. constructions OCS *iměti* / Bel. *mjecь* / Ukr. *máty* + inf ‘will do something; have to do something’), for example:

(95) kakъ       imešь   prodavatь   i   ty   dai 
how       have.2sg sell and 2sg give.impr 
`namъ   rži   na   poltinu 
1pl.dat rye prep half.acc 
‘When you will sell, give me rye for a half price – ’ (Г57 № 364: 606)
Imati – to take: 11/865 pcs. (ca. 1.3%)

For example

\[(96)\] a ne smijemь imать rži
\[
\text{conj} \quad \text{lpl} \quad \text{neg} \quad \text{be\_allowed.lpl} \quad \text{take.inf} \quad \text{rye}
\]

\[bezь tvojego slova\]
\[\text{without} \quad \text{poss\_adj.2sg\_gen} \quad \text{word\_gen}\]

‘..., but we are not allowed to take that rye without your permission’ (Д2 № 17: 650)

4.4. Results

Looking at the data from the Novgorod Birch Bark documents, the LocP with the adessive possessor is the most frequent strategy for PredP in the corpus. After excluding examples that do not have a reading of PredP, the number of relevant cases decreases as shown in Table 12. According to this alternative interpretation, the occurrence of PredP in different construction types differs slightly from McAnallen (2011: 64).

<table>
<thead>
<tr>
<th>Construction types</th>
<th>Number of cases</th>
<th>McAnallen (2011)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADES</td>
<td>ADES + be-verb</td>
<td>10 (7.09%)</td>
</tr>
<tr>
<td></td>
<td>ADES + Ø</td>
<td>106 (75.18%)</td>
</tr>
<tr>
<td>DAT</td>
<td>DAT + be-verb</td>
<td>6 (4.26%)</td>
</tr>
<tr>
<td></td>
<td>DAT + intransitive verb</td>
<td>6 (4.26%)</td>
</tr>
<tr>
<td></td>
<td>DAT + Ø</td>
<td>10 (7.09%)</td>
</tr>
<tr>
<td>have-verb</td>
<td></td>
<td>3 (2.13%)</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>141</td>
</tr>
</tbody>
</table>

Table 12. Predicative possession in the Novgorod Birch Bark documents.

The elliptical construction type adessive + Ø strikingly has the highest frequency amongst all types of PredP contructions, the reason being that in this paper I interpret the omitted predicates of sentence as stative verb ‘to be, remain’, as discussed earlier in Section 4.1. In any case, the ratios of these three construction types in this paper and in McAnallen’s work correlate with one another. Thus, both analyses and interpretations give similar results, which speak in favour of the locational type (with the adessive and dative possessors) being the most common strategy for PredP in the Novgorod Birch Bark documents.
5. Discussions

This section will put together information that has been presented in Section 3 on the variations and areal patterns in the languages across Northern Eurasia and Section 4 on the data of the Novgorod Birch Bark documents. Here, the discussions focus on three main perspectives. Firstly, I discuss how the possessive construction has developed diachronically in the Indo-European languages in general, with the focus on the Slavic languages. Secondly, I use the information from the typological description of Slavic and Uralic languages and the Novgorod Birch Bark document data to evaluate the hypothesis of Uralic substratum. Lastly, I introduce a wider areal perspective to this research question of East Slavic PredP by applying the areal-linguistic explanation model of structural similarities and mutual motivation.

5.1. Internal reconstruction

Many scholars have reconstructed the PIE PredP, traditionally known as the *mihi est* construction, as follows (see Benveniste 1966: 196–197; Saarikivi 2000: 401; Grković-Major 2011: 36–39):

<table>
<thead>
<tr>
<th>DAT</th>
<th>*esti</th>
<th>NOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>[possessor]</td>
<td>[be.3sg]</td>
<td>[possessum]</td>
</tr>
</tbody>
</table>

However, Stassen (2009: 9, 560–561) is sceptical towards such a reconstruction as he raises questions about the early existence and relatively common use of the *hare*-verb *har(k)-zi* in Hittite, an Indo-European language which was already attested in the 2nd millennium B.C.

Regarding the PIE reconstruction above, the difference from East Slavic in this respect lies with the possessor. In PIE, the possessor is expressed using the genitive case when referring to the possession of one’s own belongings, while the dative expresses unmarked possession, comparable with a single choice of adessive (*u* + *gen*) in East Slavic. Similar evidence for the archaic origin is found not only in East Slavic but also in Old Church Slavonic, Middle Bulgarian, Old Czech and (Old) Serbian (see Mirčev 1971: 81–82, Vasilev 1973, Vostrikov 1990: 49–50; Pavlović 2005: 65; Halla-aho 2006: 109 and McAnallen 2009: 133). Today, we also find some traces of the adessive construction in West and South Slavic languages, too (Vasilev 1973: 365).

McAnallen (2009: 131) summarises that in Late Proto-Slavic there were three types of PredP: 1) LocP with the adessive possessor, 2) LocP with the dative possessor and 3) have-possessive. However, it is extremely difficult (if possible at all) to define which of these is truly original. At the very least, this assumption provides a strong support for the argument that the adessive construction was already in use in the Common Slavic period (McAnallen 2011: 156, Clancy 2010: 130).

In earlier days, Benveniste (1966) has stated that from a historical and typological standpoint, the locational type of PredP as a universal tendency is older than a
secondarily developed have-verb. According to him, the transitive have-verb has, in most cases, been extended from the meaning of ‘to take’ or ‘to hold’. Dealing with the same concept, Meillet (1923) considers the have-verb to be a grammaticalised and abstracted form of the verb ‘to take’ or ‘to hold’. Isačenko (1974: 44–45), too, claims there was not originally any possessive function for the Old Church Slavonic verb jěti (pfv) / jiměti (ipfv) ‘to take, hold’. Isačenko also adds that in the Indo-European family, the have-verb began to be used in the possessive function for the first time in Ancient Greek. This might also support the idea that Greek speakers or the knowledge of Greek amongst literate people introduced the use of the have-possessive to their Slavic-speaking neighbours.

McAnallen (2009: 131, 140; 2011: 114) states that from the perspective of language contact, all Slavic languages have patterns for PredP that are similar to their non-Slavic neighbouring languages. The parallel forms are, above all, the have-possessive in the pairs of Old Church Slavonic (imeti) and Ancient Greek (ἔχειν) or Czech (mit) and German (haben), and the LocP (ades + verb to be) in the pair of the Russian and Finnic languages.

By applying Whorf’s concept of Standard Average European Sprachbund (SAE), Russian, together with a strongly russified Eastern Ukrainian, is the only Slavic language that is purely a be-language. Compared to the Slavic languages in nuclear Europe, the use of the Russian have-verb (imět’i) is much more limited in terms of frequency and function (see also Koptjevskaja-Tamm & Wälchli 2001; Danylenko 2009: 11).

Although there is free variation between LocP and the have-possessive in the ordinary unmarked possessive sentence of Modern Russian, Isačenko (1974: 51–52) explains that this phenomenon recently arose in the 18th century as a result of interference from have-languages German and French, which were spoken by the elite at that time in Russia. In the same principle as a statement by Fox (1995: 192–193) that language contact is one of the most crucial factors to possibly change the morphosyntactic models in a language, in this case German and French were trend-setters that were shifting the development of Russian towards becoming a have-language for a certain period of time.

The Novgorod Birch Bark document data clearly show that the use of have-verb is rare while the frequency of the constructions with adessive and dative possessor is overwhelmingly high. At the same time, the have-possessive is a primary choice in Kievan Rus’ Slavie, which was the literary language of the administration and had a higher prestige during the beginning of the 2nd millennium. Style is a crucial factor, so the Ancient Novgorod Slavic dialect, as a vernacular language is more reliable evidence of how people really spoke back then. Therefore, this dialect speaks in favour of LocP being a primary construction in Northern East Slavic.

As seen in Novgorod Slavic example (82), LocP in East Slavic also has some other dimensions of grammaticalisation, that is, the PredP construction also serves as a base for the passive construction and what is called the ‘be-perfect’ in North Russian dialects. Veenker (1967: 137–139) also mentions and proposes this construction as
another candidate for a Uralic substrate feature in Russian dialects. This aspect concerning the grammaticalisation of PredP is very interesting and has already been studied in the Slavistics-oriented tradition by Jung (2008, 2009) and in the Circum-Baltic areal perspective by Seržant (2012). It would be fruitful to contribute additional information also from the Ural-Altaic perspective in order to confirm or to falsify the substrate explanation by Veenker. Unfortunately, the main focus of this paper is restricted to the primary function of PredP, so it will leave the issue of this secondary development for further research.

5.2. Uralic substratum

As a tool, Saarikivi (2000: 398–399) establishes a parameter that indicates how probable it is that a certain language feature is substrate and not language-internal motivated. This parameter grounds itself on several aspects:

1) How common is a language feature in terms of its typology?
2) How probable a language feature is an outcome of language-internal development?
3) How common is a language feature amongst the cognate languages?

The parameter shows that a good candidate for substrate feature should be 1) typologically rare, 2) not an outcome of language-internal development and 3) rare amongst the cognate languages but common amongst the cognate languages of the substrate language. Of course, the scenario of Russian PredP is far from easy to apply to this model, as can be observed from Table 13.

<table>
<thead>
<tr>
<th>More probable</th>
<th>a typologically rare feature</th>
<th>an uncommon outcome of language-internal development</th>
<th>common amongst Uralic substrate languages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less probable</td>
<td>a typologically common feature</td>
<td>a common outcome of language-internal development</td>
<td>common amongst Slavic languages</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>More probable</th>
<th>a typologically rare feature</th>
<th>an uncommon outcome of language-internal development</th>
<th>common amongst Uralic substrate languages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less probable</td>
<td>a typologically common feature</td>
<td>a common outcome of language-internal development</td>
<td>common amongst Slavic languages</td>
</tr>
</tbody>
</table>

Table 13. Indicators for Uralic substrate features in Slavic.

In the context of Russian contact with the typologically Ural-Altaic languages, the probability of East Slavic LocP being a substrate feature is low in the sense of 1) its typological commonness and 2) its tendency of being an outcome of language-internal development. At the same time, this construction is rare among modern Slavic languages but common among the majority of the Ural-Altaic languages, as shown in Section 3.2.1. However, we know from the assumption discussed earlier in Sections 3.1 and 5.1 that a synchronically common have-possession in the West and South Slavic languages is a secondary development under the SAE Sprachbund. Therefore, criterion 3 becomes unproblematic in this sense. As conclusion of applying this parameter, LocP in East Slavic languages is, with a high probability, not of Uralic substrate origin.
Supporting this assumption, McAnallen (2009: 140) states that after the stage of Late Proto-Slavic, the contacts from outside the Slavic affinity could hardly give birth to any entirely new constructions in the Slavic daughter languages. The contacts rather help to preserve pre-existing constructions which are also found in other non-Slavic contact languages. This argument corresponds to Jakobson’s (1938: 241) philosophy that language speakers would never borrow from their neighbours anything which they themselves did not already have in their own language, be it a variant or a secondary choice. As far as there is no concrete evidence for PredP in Proto-Slavic prior to 9th century, the explanation model of structural borrowing and replication presented by Weinreich (1974) as well as Heine and Kuteva (2005) would not be fully applicable to this context.

In a similar vein, Dingley (1995: 81–82), who supports the ‘Refrigerator Theory’, answers to the question on the origin of LocP in Russian that it has been preserved by the help of areal force from neighbouring Uralic languages. This invalidates the substrate hypothesis and takes the discussion to another level where we would have to look at the whole contact situation as being part of a larger Northern Eurasian contact zone.

5.3. Ural-Altaic areal typology

Nichols (1998: 230) states that the peripheral speaking areas of a certain language family tend to illustrate divergence from the cognate languages in the core area. The motivation of divergence is a language contact, which becomes even more obvious in the scenario where both of the languages in contact belong to different typological groups. In this case, East Slavic as a flectional Indo-European language enters into contact with agglutinative Ural-Altaic languages. Consequently, East Slavic has typologically drifted away from the SAE Sprachbund towards its neighbouring Ural-Altaic languages.

To treat Northern Eurasia as Sprachbund, the contacts between East Slavic and the Ural-Altaic languages can fit well into the basic criteria proposed by Muysken (2008: 3–9). Firstly, the Northern Eurasian contact zone clearly forms a geographical unity with smaller micro zones. As for the quantity, Muysken does not give a restricted number but this contact zone consists mass of languages, far more than a minimal three languages. In terms of convergence, rather than just similarities in lexicon, the contact languages expose a great enough number of common structural patterns that are probably not coincidence but mutually motivated. Lastly, there is no need to identify the source language of a certain pattern because an areal feature might not provide any clue as to its source language. In an areal-linguistic sense, it is sufficient to be able to identify a common tendency within the Sprachbund (see also Lindstedt 2000), as in this case that LocP is the most common type of PredP amongst the Ural-Altaic and other languages in Northern Eurasia. Map 4 roughly sketches the isoglosses for areal patterns that are observed both on the level of the macro-area and different micro-areas across Eurasia.
Map 4: Areal patterns of predicative possession in Eurasia.
As is clear from Map 4, the areal pattern of LocP is present in the whole Northern Eurasian macro contact zone, the only exceptions being Chukchi and Ainu, as discussed in Section 3. Within this macro-area, there are several areal variants in the case marking of the possessor in LocP. The genitive possessor is considered a prototypical construction in the Ural-Altaic languages, with the exception of South Tungusic, Koreanic and Japonic languages under the Sinosphere in the Far East (see Section 3.2). At the same time, we find four different isoglosses in four micro-areas:

A) **LocP with the adessive possessor**: Finnic and Permic

B1) **Have-possessive**: SAE Sprachbund and North Africa

B2) **Have-possessive**: Ob-Ugric languages

C) **With-possessive**: Northeast Eurasia

D) **Topic possessive**: Far East

Geographically, we see that the East Slavic languages are spoken in the area overlapping isoglosses A (LocP with the adessive possessor in Finnic and diachronically also in Permic) and B1 (have-possessive in SAE Sprachbund and North Africa). The speaking areas of Belarusian and Ukrainian are clearly in touch with isogloss B1 in the west, while Russian is a part of isogloss A in the east. Especially the speaking area of North Russian dialects, which are the primary data for this paper, falls entirely into isogloss A. This speaks neatly in favour of the ‘Refrigerator theory’ that the areal force helps in preserving the Slavic LocP in the Russian language.

Concerning the structural parallel in the languages of the Ural-Altaic realm, Janhunen (2014: 318) presents four degrees of similarity, which can indicate the intense of contact situation.

1) **Accidental similarity**

*Scenario*: random resemblance without any particular historical reason

*Applicability*: language elements attested in remotely located languages with no genealogical relationship or contact

2) **Secondary similarity**

*Scenario*: accidental resemblance secondarily emerged as internal processes in one or more languages

*Applicability*: language elements verifiable by the internal reconstruction or comparative evidence within the languages or families concerned

3) **Shared drift**

*Scenario*: secondary similarity emerged in a contact situation without actual borrowing

*Applicability*: language elements in similar material form and function, which the genealogically unrelated languages participating in the same Sprachbund can develop secondarily out of their own language resources

4) **Suffixal borrowing**

*Scenario*: copying of suffixes in an actual contact situation

*Applicability*: language elements similar in both form and function (whole-sale borrowing)
Regarding the question of East Slavic LocP in the Ural-Altaic context, the contact situation corresponds to the scenario of secondary similarity. Namely, we know by the help of internal reconstruction and comparative evidence with other Slavic languages that this construction with the same language materials already exists earlier in the Late-Proto-Slavic period. Thus, its emergence is unlikely to be motivated by the neighbouring Ural-Altaic contact languages. In contrast to what would have happened in the scenario of shared drift, the East Slavic languages have not developed a completely new pattern for PredP. Instead, the areal-typological pressure from the Ural-Altaic languages gives a preference to LocP over have-possessive. Vice versa, the areal pressure from the SAE Sprachbund in the rest of Slavic family helps in promoting the have-possessive over LocP.

6. Conclusions

This paper attempts to evaluate the reliability of the hypotheses concerning the origin of LocP in the East Slavic languages (Section 2), particularly the Russian language by using the Novgorod Birch Bark documents as the main data. The results (Section 4) speak in favour of the ‘Refrigerator Theory’ introduced by Dingley (1995). By also applying the arguments presented by McAnallen (2009, 2011) and Grković-Major (2011), we may agree with the Slavic-internal explanation (Section 3.1 and 5.1) that LocP already existed in the earlier Slavic languages alongside the secondary have-possessive. Later the Slavs that migrated towards the northeast, together with their non-Slavic language neighbours who shifted to Russian monolingualism via the intermediate bilingualism, started preferring the selection of LocP under the areal pressure from the neighbouring Ural-Altaic languages that did not originally have any kind of have-verb (Section 3.2).

Present-day languages with have-possessives in Northern Eurasia, above all Ob-Ugric languages, have developed the secondary have-possessive that has already replaced the primary LocP. According to the same principle, the other Slavic groups, which have remained in nuclear Europe, gave up the use of LocP and started following the trend of their mighty neighbours, the speakers of Indo-European have-languages (e.g. Germanic, Romance and Greek) in multifunctionalising the have-verb.

The information obtained from this study also overthrows the validity of the substratum hypothesis presented by Veenker (1967) and Kiparsky (1969), who claim that LocP is of Uralic origin. To argue against the substrate hypothesis, applying the parameter by Saarikivi (2000) indicates that the probability of LocP being a substrate feature is low (Section 5.2). Firstly, this language feature is typologically not rare because LocP is actually the most common strategy for PredP amongst the world’s languages (Section 3). Secondly, the development of this construction is not restricted to contact-induced scenario as we have seen the examples from Ob-Ugric languages that independently shifted their preference from LocP to have-possessive (Section 3.2.1). Lastly, LocP is common amongst the Ural-Altaic languages and it was not
exclusively a new contact-induced innovation in East Slavic because it had already existed at the earliest in Late Proto-Slavic and still later survived in some other Slavic languages (Old Church Slavonic, Middle Bulgarian, Old Czech, Old Serbian, for instance) for some period of time (Section 5.1).

As a new approach to this research question, the areal-linguistic perspective provides a wider insight that contrasts with the traditional opinion of Uralic substratum. Even though East Slavic LocP is unique amongst the Slavic languages, in a wider geographical context it does follow a general areal pattern across Northern Eurasia (Section 3 and 5.3). This broad areal pattern contaminates with the have-possessive isogloss of SAE Sprachbund precisely in the spoken areas of the East Slavic languages. Therefore, two parallel constructions, LocP and have-possessive, can be used interchangeably in the borderline languages, Ukrainian and Belarusian. Unexceptionally, there exist several micro-areas in the peripheries within Northern Eurasia that illustrate different areal patterns, such as with-possessive in Northeast Eurasia and topic possession in East Asia, as well as sporadic occurrence of have-possessive in Western Siberia (Ob-Ugric languages and Ket) and in Ainu. Taking into account the contact situation and structural change, LocP in East Slavic can be identified as a secondary similarity amongst the languages of Northern Eurasia (Section 5.3), to be more precise, the contact zone with Finnic (as well as Komi) where LocP with the adessive possessor is common.

### Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bel.</td>
<td>Belarusian</td>
</tr>
<tr>
<td>PIE</td>
<td>Proto-Indo-European</td>
</tr>
<tr>
<td>Ukr.</td>
<td>Ukrainian</td>
</tr>
<tr>
<td>Exp</td>
<td>external possession</td>
</tr>
<tr>
<td>LocP</td>
<td>locational possessive</td>
</tr>
<tr>
<td>PredP</td>
<td>predicative possession</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th>Symbol</th>
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<tr>
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<tr>
<td>ADJ</td>
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<td>GEN</td>
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