

Relative clauses in spatial and narrative contexts in Estonian, Finnish, and Russian

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Abstract

In this article, the similarities and differences in the usage of relative clauses in Estonian, Finnish, and Russian in the overall framework of referential devices are studied. The data come from two experimental settings: “Houses” and “Narratives”. In “Houses”, the participants’ task was to describe and compare previously defined houses to the experimenter while looking out of a window. In “Narratives”, a picture-sequence-based narrative elicitation method was used to collect short and coherent spoken narratives. Collected data were coded for referential devices, including bare NPs, demonstratives, personal pronouns, zero reference, and relative clauses. In “Houses”, the Russian data had the largest amount of relative clauses and the smallest amount of demonstrative pronouns; Finnish had the smallest number of relative clauses and the largest number of demonstratives. In the Estonian data, the frequencies of

demonstratives and relative clauses were between those of Russian and Finnish. In “Narratives”, the frequency of relative clauses was approximately the same in Estonian, Finnish, and Russian. This suggests that these three languages differ in the usage of relative clauses only in a spatial context.

Keywords: relative clause, demonstratives, reference, intercultural pragmatics

1 Introduction

One of the main questions about interaction is: how do people achieve mutual understanding of what they are speaking about? For example, why do people use a particular referential device in a particular context? This study is attempting to answer this question by using spoken data from two quasi-experimental contexts – one spatial and one narrative – and comparing three languages spoken in the same geographical area – Estonian, Finnish, and Russian. In this article, we are concentrating on relative clauses (RelCl, 1). The corresponding English construction is NP + RelCl, e.g., *a house which has a red roof; the boy who has long hair*. Other referential devices used in these contexts (demonstrative pronouns and adverbs, third person pronouns and lexical NPs) are discussed in Reile et al. (in press) and Hint et al. (in preparation).

- (1) (see/too) *maja, milles me oleme*
 (tämä/se/tuo) *talo, jossa me olemme*
 (tot) *dom, v kotorom my nahodimsja*
 (the/this/that) ‘house in which we are’

Reference, one of the basic interactional phenomena, means creating connection between a linguistic expression and a referent. Reference can be conveyed by various referential devices, starting with lexical NPs for new referents and ending with pronouns or zero-reference for highly accessible referents (Gundel et al. 1993; 2010; Ariel 2001). Reference is successful when all interlocutors are able to identify the referent, which means that they have a mutually shared representation of the same entity. This does not necessarily mean that the representations are exactly the same for all interlocutors, but they have to be treated as the same for purposes of the ongoing interaction. This also shows that referents are dynamic and discursive by essence (Kibrik 2011).

Referential devices are usually divided into two groups: lexical or full and minimal or reduced, (Laury 2005; Kibrik 2011: 37). In addition, there

is a group of more complex referring devices: noun phrases, which are modified by another clause. Relative clauses, the main topic of this article, can be attached to both full NPs and (usually demonstrative) pronouns or adverbs.¹

Typologically, there are different kinds of relative clauses in the world's languages (Velupillai 2012: 323–331). The syntactic relative clause construction we are studying here, however, is rather similar in the three languages in our study. Nevertheless, this similarity of the grammatical construction does not mean that the usage of relative clauses has to be similar in these three languages. Instead, the situation can be different in that the referential practices (Hanks 1990) of languages may be quite diverse, depending on the overall system of referential devices and/or on different ways of “thinking for speaking” (Slobin 1996).

Relative clauses are traditionally divided into two groups: (i) restrictive or identifying relative clauses, and (ii) non-restrictive or descriptive relative clauses. A restrictive relative clause picks out the referent from the potential set of referents and is, therefore, important for identification of the referent. Non-restrictive relative clauses provide some new information about the referent, which is already identified (for discourse functions of non-restrictive relative clauses, see Loock 2007; Visapää 2012). It has also been said that the distinction between the two types may be irrelevant and difficult to make (e.g. Comrie 1989; Lindström 2004; Visapää 2012). However, we can accept the view that relative clauses can be used for different purposes including the identification of the referent of the head NP and describing or adding new information about an already identifiable referent. Moreover, sometimes these two functions are not separable and are both present. It has also been shown from interactional data that both types of relative clauses – restrictive or identifying and non-restrictive or descriptive – are present in everyday conversations. That is, speakers can accomplish referential repairs by relative clauses in reaction to the display of identification trouble, or they can use relative clauses to add predications about a given referent after the recipient has displayed recognition of that referent (Stoenica & Pekarek Dohler 2015).

Some studies have stated differences between discourse types regarding the usage of relative clauses. For Finnish, it has been said that the

¹ We leave open the question of whether a relative clause can or cannot be attached to a zero form or whether it is better to speak about free or bare relative clauses in the case when they do not have any head NPs.

general frequency of relative clauses is about 10% of all clauses, which shows that they are rather frequent, but not equally for all discourse types (Visapää 2012). For example, Finnish movie-reviews have about two times more relative clauses than blogs (Visapää 2012: 540). In addition, differences also occur in the types of relative clauses, as Finnish speakers tend to use restrictive relative clauses in personal ads and non-restrictive relative clauses in film reviews (Visapää 2012: 541). The use of relative clauses in Estonian is less studied, but for everyday conversations, it is found that restrictive relative clauses are somewhat more frequent than non-restrictive clauses (63% and 37% respectively, Lindström 2004: 422). However, the data used in this article are different from previously studied discourse types and cannot be compared one-to-one with these studies.

In this article, we study the similarities and differences in the usage of relative clauses in Estonian, Finnish, and Russian in the overall framework of referential devices.² We suggest that languages show different usage patterns for relative clauses, which are a comparatively complex, long, and “heavy” construction. In particular, we show that if a language uses demonstratives more frequently, the need for relative clauses is smaller. This is because the speaker is able to identify the referent using only demonstratives and does not need other referential means. Thus, differences in referential practices of a language (for example, everyday habitual ways of referring, or preferences for using one referential device over another) seem to have an impact on the use of relative clauses.

2 Relative clauses and demonstrative pronouns in Estonian, Finnish, and Russian

Estonian and Finnish are both Finnic languages and belong to the Uralic language family. Although they are closely related, Estonian and Finnish have remarkable differences in grammar and lexicon, the most important of which in the context of this study is the different amount and usage of demonstrative pronouns and adverbs. Russian is a Slavic language belonging to the Indo-European language family and as such, is different to Estonian and Finnish. However, due to extensive language contacts over a

² A more detailed study of other referential devices, especially demonstratives and personal pronouns, using the same data, can be found in Reile et al. (*in press*) and Hint et al. (*in preparation*). The Estonian and Russian data from the spatial experiment are also used in the BA Thesis of Tereza Špongolts (2017), who also helped carry out the Russian experiments.

long period of time, Estonian, Finnish, and Russian have many typological similarities and have been described as Circum-Baltic languages (e.g. Dahl & Koptevskaja-Tamm 2001).

In the following sections, we will give an overview of relative clauses in Estonian, Finnish, and Russian. In addition, the system of demonstratives and third person pronouns of the three languages will be introduced as, on one hand, demonstratives are an important part of the relative construction, and, on the other, they are frequent referential units and thus important for the overall picture of referential devices. In the overview, we concentrate on the standard varieties of these languages. However, for Finnish, in which colloquial usage of pronouns in the spoken language differs greatly from Standard Finnish, we try to specify some colloquial features, as well.

2.1 Relative clauses

Estonian, Finnish, and Russian share a rather similar construction for a prototypical relative clause. The relative clause can modify either a lexical NP which may occur with a determiner (usually a demonstrative) (2a), or a bare demonstrative pronoun (2b). The relative clause itself begins with a relative pronoun (relativizer). A relative clause is usually positioned after the head NP, but can also be used before the head. This construction has been listed as a feature of Standard Average European (Haspelmath 2001).

(2) Typical relative constructions in Estonian, Finnish, and Russian

a.	(Dem)	NP	RelPron	
Estonian	<i>(see/too)</i>	<i>maja,</i>	<i>millel</i>	<i>on kõrge katus</i>
Finnish	<i>(se/tämä/tuo)</i>	<i>talo,</i>	<i>jossa/missä</i>	<i>on korkea katto</i>
Russian	<i>(tot)</i>	<i>dom,</i>	<i>u kotorogo</i>	<i>vysokaja krysha</i>
	‘that/the	house	which	has a high roof’
b.	Dem	RelPron		
Estonian	<i>see/too,</i>	<i>millel</i>	<i>on kõrge katus</i>	
Finnish	<i>se/tämä/tuo,</i>	<i>jossa</i>	<i>on korkea katto</i>	
Russian	<i>etot/tot</i>	<i>u kotorogo</i>	<i>vysokaja krysha</i>	
	‘this/that (one)	which	has a high roof’	

In Estonian, the most common relative pronouns are *kes* ‘who, which’ for animate referents, *mis* ‘what, which’ for inanimate referents, and *kus* ‘where’ for spatial referents (for a more detailed description, see Erelt

2017: 738–739). In (Standard) Finnish, the most common relative pronouns are *joka* ‘which’ for all types of referents and *mikä* ‘what, which’ for certain abstract referents (for a more detailed description of choice between possible relative pronouns see Hakulinen et al. 2004: 722–724). For spatial referents, *jossa* ‘in which’ and *missä* ‘where’ are usually interchangeable in Finnish (Maamies 2011). In Russian, the most common relative pronoun is *kotoryi* ‘which’, which can occur in different grammatical genders depending on the gender of the head noun (Timberlake 2004: 209, for a more detailed approach, see Sheljakin 2002: 303–304; Timberlake 2004: 208–212). In all three languages, relative pronouns can be used in different case forms and with different pre- or postpositions according to the syntactic function of the relative pronoun in the relative clause.

2.2 Demonstratives and personal pronouns

In the three languages, the systems of demonstrative and personal pronouns are rather different. Estonian has two demonstratives: *see* ‘this’ refers to a proximal referent or is used distance-neutrally, *too* ‘that’ refers to a remote referent. Both can be used anaphorically but *too* ‘that’ is rather rare. Due to the rare use of *too* ‘that’, Estonian can be seen as an “almost one-demonstrative” language (Pajusalu 2009; Reile 2015, 2016).

Finnish has three demonstrative stems and many variants of demonstrative pronouns and adverbs. In short, we can say that the demonstrative pronoun *tämä* ‘this’ refers to the speaker’s sphere and is used for new referents, *tuo* ‘that’ places the referent outside both the speaker’s and the addressee’s spheres; and *se* ‘that, it’ refers spatially to the addressee’s sphere or anaphorically to highly activated referents (Laury 1997; Seppänen 1998; Etelämäki 2009; Priiki 2017). In spatial contexts (such as in the case of visible referents), Finnish demonstratives may be described as having the “traditional” proximal/distal distinction: *tämä* is proximal, *tuo* is distal, and *se* hearer-proximal (for this approach, see Larjavaara 1990).

Russian has also two demonstratives: *eto* ‘this’ refers to proximal, *to* ‘that’ to remote referents (Sheljakin 2002: 118; Timberlake 2004: 233). If a referent is a specific object or person, *eto* ‘this’ can be used only for identification and not for anaphoric reference (Shmelev 1996: 179). However, unlike in Finnish and Estonian, there are syntactic restrictions for using demonstratives in Russian. For example, relevant to our study, a head noun that is modified by a relative clause can typically have only *to* ‘that’

as a determiner, at least in a narrative context (Sheljakin 2002: 303; Timberlake 2004: 237–238), while in Estonian and Finnish all demonstratives are appropriate (see Examples 2a and 2b).

In addition to demonstrative pronouns, all three languages have demonstrative adverbs (for example, Estonian *siin* ‘here’, Finnish *täällä* ‘here’, and Russian *tut* ‘here’), the usage of which is even more determined by the spatial properties of the referents than the usage of demonstrative pronouns (Reile et al. *in press*).

Regarding their referential properties, the third person pronouns in the three languages also show important differences. The Estonian *tema/ta* refers mostly to an animate referent, but sometimes to an activated inanimate referent, as well. The Finnish *hän* refers typically to a person and belongs mostly to Standard Finnish (in colloquial speech, demonstratives, especially *se*, are much more common when referring to a person)³. The Russian personal pronoun *on/ona/ono* does not have any animacy restrictions and can refer to any kind of referent. The simplified overview of the Estonian, Finnish and Russian demonstratives and third person pronouns is given in Table 1.

Table 1: Demonstrative and third person pronouns in Estonian, (Standard) Finnish, and Russian according to their most prototypical (spatial) usages

	Demonstrative pronoun			Demonstrative adverb			Personal pronoun	
	prox- imal	distal	hearer- prox- imal	prox- imal	distal	hearer- prox- imal	person	other than person
Estonian	<i>see</i>	<i>too</i>	–	<i>siia,</i> <i>siin,</i> <i>siit</i>	<i>sinna,</i> <i>seal,</i> <i>sealt</i>	–	<i>tema, ta</i>	(<i>ta</i>)
Finnish	<i>tämä</i> <i>tää</i>	<i>tuo</i> <i>toi</i> ⁴	<i>se</i>	<i>tänne,</i> <i>täällä,</i> <i>täältä,</i> etc.	<i>tuonne,</i> <i>tuolla,</i> <i>tuolta,</i> etc.	<i>sinne,</i> <i>siellä,</i> <i>sieltä,</i>	<i>hän</i>	–
Russian	<i>eto,</i> <i>etot,</i> <i>eta</i>	<i>to, tot,</i> <i>ta</i>	–	<i>sjuda,</i> <i>tut,</i> <i>zdes’,</i> <i>otsjuda</i>	<i>tuda,</i> <i>tam,</i> <i>ottuda</i>	–	<i>on, ono, ona</i>	

³ The Finnish third person pronoun *hän* is also used logophorically in both Standard and Colloquial Finnish (see, for example, Priiki 2017).

⁴ *Tää* and *toi* were the most frequent colloquial variants of demonstratives *tämä* and *tuo* in the data.

3 Data

Our data come from two experimental settings, which we call “Houses” and “Narratives”. The motive for experimental data collection lies in the need to obtain a well-structured dataset that is applicable for comparing referential practices in different languages, since the context, referents, and the purpose of linguistic units remain similar throughout the dataset (see also Hint et al. 2017). As referential practices depend greatly on the context, we decided to take two very different experimental settings. “Houses” represents language use in a spatial context with large referents (as opposed to the so-called table-top setting, which is somewhat more studied, see, for example Meira & Terrill 2005). “Narratives” represents reference to persons and inanimate objects in a discursive context, which means that referents are not physically present and are usually referred to anaphorically. According to the activity the subjects are performing, the settings could also be called descriptive or narrative.⁵ Similar narratives have been an important method for studying referential devices since the Pear Stories (Chafe 1980, for Finnish Pear Stories, see Kalliokoski 1991), and have not lost their relevance in present-day linguistics (see, for example, Koster et al. 2011). Both experiments are, of course, just one possible setting for spatial reference and telling stories, and further research is needed to determine regularities in referential practices for other contexts.

In “Houses”, the participants were given a task to describe and compare previously defined houses that they saw from a window to the experimenter. The experiment had two parts. First, the participants were to describe and compare the houses that they saw while looking out of a window (two possible referents: House 1 and House 2). Second, they were to describe and compare the house that they were in with the two houses that they described previously (three possible referents: House 1, House 2, House 3). This experimental setting enabled us to manipulate (i) distance – House 1 was nearer than House 2 – and (ii) change in deictic field – three referents instead of two referents.

The procedure of the experiment was as follows. The participants were informed that the experiment has two parts. They were then given written instructions (Appendix A) to describe and compare the pre-defined houses. When the first part of the experiment was completed, the

⁵ We thank an anonymous reviewer for drawing our attention to this point.

participants were asked to turn the page of the instruction sheet and read through the second part of the instructions. A more detailed description of this experiment can be found in Reile et al. (*in press*).

The data were collected in Tartu, Estonia in the same place, and all the experimental trials were recorded with a video-camera. In total, 86 adults volunteered for participation in this experiment. There were 27 females and 6 males in the Estonian group (mean age 30), 18 females and 10 males in the Finnish group (mean age 51), and 22 females and 3 males in the Russian group (mean age 22). The material consists of 3 hours 58 minutes of Estonian, 2 hours 29 minutes of Finnish, and 2 hours 26 minutes of Russian video recordings. The length of one session was approximately 5 minutes.

Collected data were transcribed and manually coded for different referential devices that were used while referring to the houses. These referential devices included bare NPs (BareNP); demonstrative pronouns (in pronominal and adnominal use; DemPron); demonstrative adverbs (DemAdv), personal pronouns (PersPron); zero reference (Zero); and combinations between NPs, demonstrative pronouns, and demonstrative adverbs. As the participants were holding the instruction sheet in their hands and were standing with their backs or sides towards the camera, gestures and eye-gazes were not available for coding.

In the second setting, “Narratives”, we used a picture-sequence-based narrative elicitation method to collect short and coherent spoken narratives. During the experiment, each participant was shown three different picture books one by one (Appendix B) and was asked to tell a short story based on the book after having gone through all the pictures in this book. Each book contained six pictures, one picture per page. The structure of the internal events was similar in each book. We were interested in which referential devices the speakers used for referring to the two same-gender main characters and to the three sequence-specific inanimate referents. We audio-recorded each participant individually in a quiet room. The test sessions mostly took 10–15 minutes. A more detailed description of this experiment can be found in Hint et al. (2017) and Hint et al. (*in preparation*).

Altogether, 60 adults volunteered for participation in this experiment. That is, 20 native speakers of all three languages were included in our study. There were 13 females and 7 males in the Estonian group (mean age 32), 13 females and 7 males in the Finnish group (mean age 46), and 18 females and 2 males in the Russian group (mean age 40).

All audio-recorded narratives were transcribed and coded for several variables by native speakers. We had to exclude 1 Estonian narrative, 6 Finnish narratives, and 3 Russian narratives due to the failure of completing the task. Consequently, our final analysis is based on 59 Estonian, 54 Finnish, and 57 Russian narratives. In the coding process, only referential units referring to the two boys and three sequence-specific inanimate referents for every story were taken into account.

Table 2 gives a summary of the coded data used in the final analysis.

Table 2: Participants and material of the two experiments (“Houses” and “Narratives”)

		Participants	Referential units
Estonian	Houses	33 (27 female)	1647
	Narratives	20 (13 female)	1304
Finnish	Houses	28 (18 female)	1340
	Narratives	20 (13 female)	1460
Russian	Houses	25 (22 female)	1089
	Narratives	20 (18 female)	1171

4 Results

In the following subsections, we will analyze the usage of relative clauses as referring expressions in the two experimental settings. The first subsection focuses on “Houses”; the data from “Narratives” are discussed in the second subsection.

4.1 “Houses”

The overall amount of relative clauses (RelCl) that modify NPs referring to the houses is rather different in the “Houses” data in Estonian, Finnish, and Russian. There were 91 occurrences (5% of all referential units) of relative clauses in the Estonian data, only 26 (2%) in the Finnish data, and 150 (14%) in the Russian data. First, we compare referential relative clauses with other referential devices in the “Houses” experiment and then explain the usage contexts and functions of relative clauses in our data.

The overall frequency of different referring expressions in the data obtained from “Houses” is presented in Table 3. In the column titled “total”, the whole number of all different referential units is presented, that is, the sum of occurrences of (i) bare demonstratives, (ii) NPs with a demonstrative determiner, (iii) bare NPs, and (iv) personal or zero pronouns. As only the first three are modified by a relative clause in our

data, the last column shows how many NPs (excluding personal pronouns) are modified by a relative clause. Note that in the table, relative clauses are not considered as independent referring expressions, since they are used as modifiers in the data.

Table 3: The overall frequencies of different referring expressions in “Houses”

	Estonian	Finnish	Russian	
BareDem	405 (25%)	764 (57%)	197 (18%)	
DemNP	466 (28%)	403 (30%)	147 (14%)	
BareNP	556 (34%)	149 (11%)	392 (36%)	
PersPron or Zero	220 (13%)	24 (2%)	353 (32%)	
Expressions referring to the houses (total)	1647 (100%)	1340 (100%)	1089 (100%)	
Relative clauses (RelCl)	Overall amount ⁶ BareDem, DemNP and BareNP with RelCl	91 (1678) 5.4%	26 (1340) 1.9%	150 (1094) 13.7%
		6 %	2 %	20 %

$\chi^2 = 990.13$, $df = 6$, *Cramér's V* = 0.35, $p < 0.001$

Table 3 reveals important differences in the spatial referring practice across speakers of Estonian, Finnish, and Russian. Finnish speakers very often used bare demonstratives (57% of all referring expressions). For Russian speakers, bare demonstratives were one of the least used devices (18%). Estonian speakers are in between Finnish and Russian speakers with respect to the usage frequency of bare demonstratives, but their percentage is closer to Russian than to Finnish. Finnish and Estonian speakers used NPs with a demonstrative determiner with approximately the same frequency (30% and 28%), and this is the only percentage in which the two languages look the same in our data. Russian speakers used demonstrative determiners considerably less often (14%). Personal pronouns and zeroes are the most frequent referential units of Russian speakers (32%), while Finnish speakers used them (that is, zeroes) only in 2% of referential acts.⁷ This means that Finnish referential practice is (at least in this context) very much biased towards demonstratives, and Russian referential practice is biased towards personal pronouns and zeroes. The prevalence of

⁶ There were ambiguous pronouns in Estonian (in the plural it is impossible to say whether *neid*, for example, is a demonstrative or third person pronoun) and some instances of bare relative clauses (that is, relative clauses without a head NP) in Russian, the overall amount of referential units is not exactly the same as the sum shown under “Total”.

⁷ Finnish personal pronoun *hän* can only be used for animate referents. This is why *hän* did not occur in the data from “Houses”.

demonstratives in Finnish is partly caused by the usage of *se* as an anaphoric pronoun. However, other demonstratives are also very frequent (in Finnish). Estonian is “in between” for all types of referential units.⁸

There were 150 occurrences of relative clauses in the Russian data, which means that almost 14% of all referential expressions were modified by a relative clause. Taking into account that personal pronouns and zeroes were not modified by a relative clause, we can say that in the Russian data, the percentage of the relative clauses modifying the expressions that can be modified by a relative clause is 20%. In the Finnish data, there were only 26 relative clauses (1.9% of all referential expressions and 2% of modifiable referential expressions) and in the Estonian data 91 relative clauses (5.4% of all referential expressions and 6% of modifiable referential expressions). Estonian is “in between” Finnish and Russian again (see Table 3).

For all three languages, relative clauses were mostly used for identification of the house the person was talking about. Within the group of identifying (restrictive) relative clauses, the most frequent characteristic was the location of the house in relation to other spatial objects or the speaker (3 a-e).

(3) a. Estonian

aga seevastu see teine maja mis seal
but on.the.contrary this second house REL there

raekoja platsi-s seisa-b selle-s ühtlase-s
town.hall.GEN square-INE stand-3SG this-INE homogeneous-INE

maja-de ansambli-s
house-PL.GEN block-INE

‘but on the contrary **this other house, which is standing there on Town Hall Square** in this block of houses’

⁸ For a more detailed discussion on these results, see Reile et al. (*in press*).

b. Estonian

et ee see on nüüd vähe roosaka-m
 that PRTCL this be.3SG now little pink-COMP

ilmselt kus me praegu ole-me,
 apparently where 1PL now be-1PL

teise-d on rohkem halli-ma-d
 other-PL be.3PL more grey-COMP-PL

‘that, uh, **this (house) we’re in now**, apparently is a bit more pink, while the others are more grey’

c. Finnish

ja sit taas toi mikä on tuola rae(.)koja platsi-lla
 and then again that REL be.3SG there town.hall.GEN square-ADE

niin. (.) se jotenki niinku (.) no se on uude-mpi
 so this somehow like PRTCL this be. 3SG new- COMP

‘and then again **that (house) that’s there on Town Hall Square**, somehow it’s, well, newer’

d. Finnish

mutta tämä talo jossa nyt ole-mme
 but this house REL now be-1PL

on tosiaan paljon (.) pide-mpi
 be.3SG indeed much long- COMP

‘but **this house in which we are now** is indeed much longer’

e. Russian

zdanije v kotoromy nahodimsja (.)ono universitetskoje zdanije
 building in REL 1PL be.located 3SG.F university.ADJ.F building
 ‘**the building we’re in**, it’s a university building’

Describing two or three houses at a time, Estonian and Russian speakers sometimes used relative clauses, which identified the house via belonging to the experiment (4).

(4) a. Estonian

kui nee-d mõlema-d maja-d, mis ee siin
 than this-PL both-PL house-PL REL PRTCL here

mei-l katse-s on
 1PL-ADE experiment-INE be-3PL

‘than **both of these houses we’ve got, uh, here in our experiment**’

b. Russian

my nahodimsja v ochen’ bol’shom zdanii po sravneniju
 1PL be.located.1PL in very big.LOC building.LOC by comparison.DAT

s drugimi, s pervym i vtorym,
 with other.PL.INSTR with first.INSTR and second.INSTR

kotoryje ja opisyva-l
 REL.PL 1SG describe-PST.M

‘we’re inside of a really large building compared to the **others**, the first and second ones, **I described**’

There were only a few examples of clearly non-restrictive relative clauses that did not identify the referent but rather provided new information about it. For example, in Estonian (5a), the speaker says that the house (which is already identified as it is the only two-floor house in the experiment) has a red roof and stove heating. The relative pronoun *millel* ‘on which’ (the first form *milles* ‘in which’ was not grammatically suitable for the rest of the clause and was self-repaired) is a connector which, from a strictly grammatical point of view, connects the clause *on punane katus* ‘has a red roof’ to the main NP (*see kahekorruseline maja* ‘this two-floor house’), but, from a pragmatic point of view, also connects the next clause *tundub olevat ka ahiküte* ‘seems to have stove heating’ to the same NP. In 5b, a very similar Finnish example is provided. The main NP is very long in this case *tällänen kaksikerroksinen vanhanaikaisen näköinen talo* ‘a kind of two-floor old-looking house’, and the relative pronoun *missä* connects it to a relative clause providing a new detail for the description. 5a and 5b resemble each other due to the emergent nature of the clause: the process of thinking is observable in pauses, self-repair, and pause fillers (*siis* ‘then’ in Estonian and *tota* ‘that.PART’ in Finnish). The Russian example of a non-restrictive relative clause (5c) does not contain hesitations or pauses, but its function is the same as in 5a and 5b: the relative clause describes the previously identified house.

(5) a. Estonian

see kahe-korruse-line maja mille-s siis on mille-l
 this two-floor-ADJ house REL-INE then be.3SG REL-ADE

on punane katus (.) tundu-b ole-va-t ka ahju-kiite
 be.3SG red roof seem-3SG be-PTCP-PART too stove-heating

‘this two-story house, **which, then, which has a red roof** (.) seems to have central heating’

b. Finnish

ensimmäise-nä on tollanen (.) lähempä-nä
 first-ESS be.3SG that.kind closer-ESS

tällänen kaks-kerroksi-nen (.) vanhan-aikai-sen näkönen talo
 this.kind two-floor-ADJ old-time-ADJ.GEN looking house

mi-ssä on (.) aika korkea tota (.) öö (.) puna-tiili-katto
 REL-INE be.3SG rather high PRTCL PRTCL red-brick-roof

‘the first one is a kind of (.) the closer one (is) a kind of two-story old-looking house **that’s got a rather high red-brick roof**’

c. Russian

my konkretno nahodimsja v zdanii kotoroje gorazdo
 1PL concretely be.place.1PL in building.LOC REL.NEUT much

bol’she etih dvuh zdanii
 bigger this.PL.GEN two.GEN building.PL.GEN

‘we’re inside of the building **that’s much bigger than these two buildings**’

Relative clauses in the three languages can modify NPs which have a demonstrative determiner, but also NPs which do not have a determiner (2a). However, the usage frequency of such demonstrative determiners in our data differs between the languages. That is, in Estonian and Finnish, almost all house-referring NPs with a relative clause have a demonstrative determiner. In Russian, this is the case for only 1/3 of relative clauses in the data (Table 4). This can also be seen in examples 3–5 where there are demonstrative determiners in the Estonian and Finnish examples, but not in the Russian ones.

Table 4: Demonstrative determiners in the head NP modified by a relative clause

	Estonian	Finnish	Russian
Relative clauses (RelCl) in total	90	26	150
Head NPs without a demonstrative (BareNP)	11 (12%)	2 (8%)	103 (69%)
Head NPs with a demonstrative determiner (DetNP)	60 (67%, 59 <i>see</i> + 1 <i>too</i>)	19 (73%, 4 <i>tuo</i> + 15 <i>tämä</i>)	27 (18%, 11 <i>to</i> + 16 <i>eto</i>)
Bare demonstrative (BareDem) as a head of RelCl	19 (21%, <i>see</i>)	5 (19%, 3 <i>tuo</i> + 2 <i>tämä</i>)	20 (13%, 3 <i>eto</i> + 17 <i>to</i>)

$$\chi^2 = 93.218, df = 4, \text{Cramér's } V = 0.42, \cdot p < 0.001$$

Furthermore, the three languages in our study differ in the variation of relativizers they use in “Houses”. In our Estonian data, the most frequent relativizer was *kus* ‘where’, which was used in 77% of relative clauses. This is a result of the fact that there were many relative clauses that refer to House 3 (*see*) *maja*, *kus me oleme* ‘(the) house, in which we are’ (see example 3b and, for frequencies, Table 5). Locative case forms of *mis* ‘what’ (*milles*) would be equally grammatical in this context, but just did not appear. Different case forms of the relativizer *mis* ‘what’ were used only in non-locative cases where *kus* ‘where’ would be ungrammatical. This means that in Estonian, there is a special relativizer for spatial referents used in locative cases. In the Finnish data, variation appears in all case forms. There were 11 usages of the relativizer *joka* ‘which’ and 15 of *mikä* ‘what’ (see examples 3c and 3d). Both were used in different case forms, which means that neither *joka* ‘which’ nor *mikä* ‘what’ is specialized for spatial referents. In the Russian data, only the relativizer *kotoryi/kotoroje* ‘which’ was used.

It has been stated for Finnish and Estonian relative clauses in interaction that they usually modify detached (dislocated) NPs⁹ (Amon 2015; Laury & Helasvuo 2016). This can be seen in the data from “Houses” as well. For all three languages, the most usual pattern for a relative clause modifying a detached NP starts with a detached NP (in Estonian and Finnish usually a bare demonstrative or a lexical NP with a

⁹ We define initial detachment very much like Chafe (1976) defines topic construction. It is a construction in which a referent is first mentioned in a syntactically free NP, and then in one of the following clauses there is a predication about it containing an anaphoric pronoun that refers to the free NP (cf. also Helasvuo 2001: 126). In our data, the predication is typically added after a relative clause.

demonstrative determiner), which is followed by an identifying relative clause. After that, a speaker starts a new sentence with a pronoun or demonstrative adverb. The main difference between the languages in our sample regarding this construction lies in the usage of demonstratives. In particular, Finnish speakers tend to use *tämä* ‘this’ (6b) or *tuo* ‘that’ (6c) in the detached NP and *se* ‘it’ in the main clause. This, once more, stresses the functioning as anaphoric (or, depending on definition, even personal) pronoun of Finnish *se*. Estonian speakers use *see* ‘this’ in both the detached NP and main clause (6a). Russian speakers use demonstrative *to* ‘that’ as a determiner (6d) or bare NP (6e) in the detached NP and have personal pronoun in the main clause. Detachments are overwhelmingly left dislocations in the three languages, which means that the detached NP precedes the main clause in which the same referent (one of the houses) is represented by an anaphoric pronoun or adverb.

(6) a. Estonian

siis see kus on see draakoni restoran
 then this REL.LOC be.3SG this dragon.GEN (name) restaurant

baar (.) see on eraldiseisev üksik siuke hoone (.)
 bar this be.3SG detached separate this.kind building

‘(and) then, **this one where this Dragon restaurant and bar is, this** is a detached separate kind of building’

b. Finnish

tä-ssä meidän rakennukse-s mis me nyt ollaan
 this-INE 1PL-GEN building-INE REL.LOC 1PL now be-PASS

nii (.) se on huomattavasti iso-mpi rakennus
 PRCL this be.3SG remarkably big-COMP building

‘**in our building, the one in which we’re in right now, well, it’s** a much bigger building’

c. Finnish

tuonurkkatalo. mikä on tuolla au- (.) raatihuonee-n
 that corner-house REL be.3SG there FALSE START town.hall-GEN

aukio-lla näi se on (.) nuor-in (.)
 square-ALL PRCL this be.3SG young-SUPER

‘that building on the corner, which is there on Town Hall Square, so, this is the newest one’

d. Russian

tot dom, kotoryi ko mne blizhe, on
 that house REL PREP 1SG.DAT closer 3SG.M

men'she vtorogo doma (.)
 smaller second.GEN house.GEN

‘that house that’s closer to me, it’s smaller than the second house’

e. Russian

zdanije, kotoroje s krasnoi kryshei, ono bolee staroje.
 building REL PREP red.INSTR roof.INSTR 3SG.NEUTR more old

‘the building that’s got the red roof, it’s older’

The use of relative clauses is also sensitive to the number and distance of the competing referents. Our results show that relative clauses are mostly used in our data to refer to House 3, as is presented in Table 5. This tendency is expected as the context with House 3 (Situation 2) involves all three houses and thus the speakers need more referring constructions to identify them. In addition, it is harder to refer unambiguously to a house you are in using other means (for example, using only demonstratives) in all three languages and this is why the relative construction (*house in which we are*) was mentioned already in the instructions for the experiment. However, we can see that in the Finnish data, there are only 13 relative clauses referring to House 3, while in Estonian and Russian there are 64 and 66. This clearly shows that Finnish speakers can manage to refer to House 3 without a relative clause much more frequently than Estonian and Russian speakers, probably due to a strong connection of *tämä* and the speakers sphere and proximity, which in the case of Estonian and Russian proximal demonstratives is weaker. In the Estonian data, most of the relative clauses refer to House 3, while in other languages relative clauses were spread much more equally. In addition, the Estonian data show

preference for the relative clause to refer to House 1 in comparison with House 2, while in Finnish the opposite is the true, and in Russian the preference is equal.

Table 5: Relative clauses in the data according to the house to which they refer

	Estonian	Finnish	Russian	Total
Situation 1 (House 1 and 2)				
H1	8 (67%)	2 (25%)	18 (60%)	28 (56%)
H2	4 (33%)	6 (75%)	12 (40%)	22 (44%)
Total	12 (100%)	8 (100%)	30 (100%)	50 (100%)
$\chi^2 = 3.869, df = 2, \cdot$ Cramér's $V = 0.28, p = 0.145$				
Situation 2 (House 1, 2, and 3)				
H1	8 (10%)	2 (11%)	18 (15%)	56 (26%)
H2	2 (3%)	3 (17%)	24 (20%)	51 (24%)
H3	64 (82%)	13 (72%)	66 (55%)	143 (66%)
H1+2	4 (5%)	–	12(10%)	16 (7%)
Total	78 (100%)	18 (100%)	120 (100%)	216 (100%)
$\chi^2 = 20.032, df = 6, \cdot$ Cramér's $V = 0.22, p = 0.003$				

4.2 “Narratives”

The overall frequency of different referring expressions in the data obtained from “Narratives” is presented in Table 6. In the column titled “Total”, the total number of all the different referential units is presented, i.e., the sum of occurrences of (i) bare demonstratives (BareDem), (ii) NPs with a demonstrative or indefinite determiner (DetNP), (iii) bare NPs (BareNP), and (iv) personal or zero pronouns (PersPron, Zero). Note that in the data, relative clauses modify demonstratives and full NPs which, in turn, can occur with or without a determiner. This means that in the table, they are not considered independent referring expressions.

Table 6: The overall frequencies of different referring expressions in the “Narratives” data

	Estonian	Finnish	Russian
BareDem	51 (4%)	131 (9%)	10 (1%)
DetNP	226 (17%)	211 (14%)	93 (8%)
BareNP	574 (44%)	785 (54%)	548 (47%)
PersPron OR Zero	453 (35%)	333 (23%)	520 (44%)
Total	1304 (100%)	1460 (100%)	1171 (100%)
Relative clauses	81 (6.2%)	54 (3.7%)	44 (3.8%)
BareDem, DetNP and BareNP with RelCl	9.5%	4.8%	6.8%

Tentatively comparing it to the data from “Houses” (Table 3), “Narratives” (Table 6) reveal smaller differences between the languages. In “Narratives”, Finnish speakers used demonstratives more than Estonian or Russian speakers. Russian speakers used more personal pronouns and zeroes, and Estonian is in between Russian and Finnish again. The bigger proportion of DetNPs in Estonian is not caused by the more frequent usage of demonstratives, but by more frequent usage of the indefinite determiner *üks* ‘one’ than in the other languages (in “Houses” there were no indefinite determiners due to the definiteness of all the referents).

The frequency of grammatical characteristics of relative constructions in the narrative data are presented in Table 7. For Estonian and Finnish, the narrative data contain much more head NPs without a determiner than in “Houses” (respectively, 61% and 56% in “Narratives”, 8% and 12% in “Houses”). The same is true for the Russian data (84% in “Narratives” and 69% in “Houses”), but the difference is smaller and heads without determiners are more prevalent in both Russian datasets, which means that this feature is not a very important difference between the two Russian datasets. The percentage of NPs with a determiner is rather similar for the Estonian and Finnish data, but the type of determiners differs. That is, the determiners used in the Finnish data are mostly demonstratives (with one exception, which is the indefinite *eräs* ‘one’), whereas in the Estonian data the determiners are mostly indefinite (*üks* ‘one’ and *keegi* ‘(some)one’)¹⁰. In the narrative data there are only a few examples of bare demonstratives functioning as the head of a relative clause (one in Estonian and three in Russian).

¹⁰ The bias of Estonian data towards the indefinite determiner *üks* ‘one’ in comparison with Finnish data has been discussed already in Hint et al. 2017.

Table 7: Types of head NPs modified by a relative clause in the narratives

	RelCI	Head NP without a determiner	Head NPs with a determiner	Bare demonstrative as a head of a RelCI
Estonian	81	45 (56%)	35 (43%; 19 <i>üks</i> ‘one’, 13 <i>see</i> ‘this’, 2 <i>oma</i> ‘own’, 1 <i>keegi</i> ‘some’)	1 (<i>see</i> ‘this’)
Finnish	54	33 (61%)	21 (39%; 12 <i>tämä</i> ‘this’, 1 <i>tuo</i> ‘that’, 3 <i>se</i> ‘the’, 3 <i>semmonen</i> ‘that kind of’, 1 <i>tämmönen</i> ‘this kind of’, 1 <i>eräs</i> ‘some’)	0
Russian	44	37 (84%)	4 (9%; 1 <i>eto</i> ‘this’, 1 <i>kakoi-to</i> ‘some kind of’, 2 <i>odin</i> ‘one’)	3 (7%; 3 <i>to</i> ‘that’)

$\chi^2 = 20.005$, $df = 4$, *Cramér's V* = 0.24, $p < 0.001$

Relative clauses in “Narratives” modify detached NPs very rarely, and differ in this respect from the relative clauses in “Houses”. Sentences with relative clauses in the narratives look very much like standard relative clauses in written language (examples in 7 and 8).

In the data coding process, we took into account only referring expressions that referred to the two boys or three sequence-specific inanimate referents in every story. As expected, there are considerably more relative clauses referring to the boys than referring to the inanimate referents in all three languages (see Table 8), as the boys are competing referents in all three stories and need more linguistic effort to be identified. In addition, as the boys are agents and therefore are what is mostly talked about, they have more non-identifying relative clauses, as well.

Table 8: Relative clauses according to the referent

Language	Boys	Other	Total
Estonian	64 (79%)	17 (21%)	81 (100%)
Finnish	39 (72%)	15 (28%)	54 (100%)
Russian	31 (70%)	13 (30%)	44 (100%)
Total	134 (75%)	45 (25%)	179 (100%)

$\chi^2 = 1.396$, $df = 2$, *Cramér's V* = 0.09, $p = 0.498$

In the narratives experiment, the use of relative clauses differs a great deal from relative clauses in “Houses”. Relative clauses in the narratives are mostly non-restrictive, that is, they are not used for identification of the referent but rather for telling something new about him/it (7, in our data, they mostly belong to appositive relative clauses according to Loock 2007). However, as there are two same-gender animate referents (boys) present at

the same time in the narratives, there are some instances of relative clauses used for identifying which boy the speaker is talking about (8). Furthermore, even when the relative clause is used for identification of the referent (one of two boys), the basis for identification cannot be spatial as in the case of “Houses”.

(7) Non-identifying RelCl

a. Estonian

ilmu-b üks teine poiss. (.)kes= aka-b mõtlema= mida teha.
 appear-3SG one other boy REL start-3SG think what do
 ‘**another boy** appears, **who starts thinking** about what to do’

b. Finnish

no onne-ksi häne-llä on sellainen hyvä (.) ja
 PRCL luck-TRANS 3SG-ADE be.3SG this.kind good and

neuvokas ystävä Keijo joka sitten tuli (.) paika-lle
 inventive friend Keijo REL then come.PST.3SG place-ALL

‘well luckily he’s got a friend as **good and inventive as Keijo**
who went there then’

c. Russian

poetomu on pozval na pomoshtch starshego brata
 because 3SG.M call.PST.M PREP help elder.ACC.M brother.ACC

kotoryi byl vyshe ego rostom
 REL be.PST.3SG.M taller 3SG.GEN.M stature.INSTR

‘because of that he called **his elder brother over, who was taller than him,**
 to help’

(8) Identifying RelCl

a. Estonian

jaa (.) noormees kes kivi- vastu kivi sõitis (.) nutab. (...)
 and young.man REL stone against stone.GEN drive.PST.3SG cry.3SG
 ‘**and the young man, who bump against the stone,** is crying’

b. Finnish

(.) *sitten* *tämä poika* *joka ei* *kastele tätä* *puuta*
 then this boy REL NEG.3SG water this.PART tree.PART

antaa *tä-lle,* *tai* *ottaa* (.) *omenapuu-sta* *omenan?*
 give.3SG this-ALL or take.3SG apple.tree-ELAT apple.GEN

‘then **this boy who isn’t watering the tree** gives (an apple) to this one, or takes an apple from the apple tree’

c. Russian

dalee *tot* *kotoryi nabljudal* *sryvajet* *s* *dereva*
 further that.M REL observe.PST.3SG.M tear.3SG PREP tree.ACC

jabloko
 apple

‘then, **this (boy) who was watching**, rips an apple from the tree’

The usage of relativizers in “Narratives” differs from “Houses” in some respects. The referents we coded in “Narratives” were persons or smaller objects. Consequently, the relativizers used in relative clauses were mostly non-spatial. In the Estonian data, *mis* ‘what’ and *kes* ‘who’ were used according to the animacy of the referent. *Kus* ‘where’ was used only twice, in combination with an NP referring to the apple tree. In the Finnish data, only *joka* ‘which’ was used. In the Russian data, *kotoryi/kotoroje/kotoraja* ‘which’ was used overwhelmingly, *kto* ‘who’ was used once (in combination with the bare demonstrative *tot, kto....* ‘this (one), who...’).

In conclusion, the overall proportion of relative clauses in the data of “Narratives” was much smaller than in the case of “Houses” (Table 9). In particular, Russian speakers used relative clauses for only 3.8% of all referential units, and Finnish speakers for 3.7%. In the Estonian data, the percentage of relative clauses is somewhat higher (6.2%).

Table 9: The amount of RelCl in “Houses” and “Narratives”

	“Houses”	“Narratives”
Estonian	91 (1678) 5.4%	81 (1304) 6.2%
Finnish	26 (1340) 1.9%	54 (1460) 3.7%
Russian	150 (1096) 13.7%	44 (1171) 3.8%

$\chi^2 = 52.999$, $\cdot df = 2$, $\cdot Cramér's V = 0.34$, $\cdot p < 0.001$

5 Discussion and conclusion

In this article, we have discussed the occurrence and function of relative clauses in Estonian, Finnish, and Russian experimentally elicited data. These three languages use a similar grammatical construction for a relative clause (at least in our spoken quasi-experimental spatial descriptions and picture-elicited narratives data) and show other similarities. Nevertheless, there are also significant differences in the usage of this construction, particularly in a spatial context.

That is, the overall picture of functional types of relative clauses in the two experiments looks rather similar for Estonian, Finnish, and Russian. In the spatial context (“Houses”), where the main task of the participants was to describe three houses, relative clauses were mostly used in all three languages for identification of the referents. In “Narratives”, relative clauses were used much more for providing some new information about the referents. In other words, in the spatial descriptive context, relative clauses were mostly restrictive and in the narratives mostly non-restrictive (appositive) for all three languages.

However, there are some important differences between the languages regarding the spatial data in “Houses”. The Russian data had the largest amount of relative clauses. At the same time, it had the smallest amount of demonstrative pronouns, both across the entire dataset as well as in the heads of relative clauses. Finnish had the smallest number of relative clauses, but also the largest number of demonstratives. In the Estonian data, the frequencies of demonstratives and relative clauses were between those of Russian and Finnish. Thus, the frequency of usage of demonstratives is inversely proportional to the frequency of relative clauses (see also Figure 1).

The great difference between Finnish and Russian may be caused by the fact that Finnish has three demonstratives, while Russian has two. It might be easier to manage without relative clauses when the speaker has more demonstratives in his/her language. However, the amount of relative clauses in the Estonian data is smaller than in the Russian data and larger than in the Finnish data. Estonian has two demonstrative pronouns just as Russian does; however, one of these is used very rarely, while the other is used frequently (in the Estonian data *see* ‘this’ is used more frequently than both Russian demonstrative pronouns are used in the Russian data). Furthermore, Estonian speakers, despite having a relatively poor inventory of demonstratives available in their language, use them more frequently

than Russian speakers use their demonstratives. This, in turn, may result in a referring practice that results in fewer relative clauses than in Russian. In summary, according to our spatial data, there could be a connection between the frequency of usage of demonstratives and the frequency of usage of relative clauses, namely, a language with more frequent use of demonstratives (like Finnish in our case) does not rely as much on relative clauses as a language with less frequent use of demonstratives (like Russian in comparison with Finnish).



Figure 1: Demonstratives and relative clauses in a spatial context.

However, the difference in the frequency of relative clauses can be observed only in the spatial (descriptive) data. In the narratives, the frequency of relative clauses was approximately the same in Estonian, Finnish, and Russian. This suggests that these three languages differ in the usage of relative clauses only in a spatial context, where the speaker has to identify objects that belong to the same class and are located at different distances from the speaker. In other words, the three languages differ mostly in the usage of spatially identifying relative clauses, and do not have large frequency differences for relative clauses that give new information about the referent.

Moreover, there are differences in the structure of the head NPs of relative clauses across the three languages. In the spatial context (“Houses”), Estonian and Finnish relative clauses mostly modified NPs with a demonstrative determiner and Russian relative clauses mostly modified bare NPs. Usually the NPs modified by a relative clause were initially detached (left dislocations) in the spatial context in all three languages. This finding is in accord with studies of Finnish where it has been found that in natural everyday conversations detachments more frequently are right dislocations (Priiki 2015: 54). Indeed, in our spatial context, detachments with relative clauses are overwhelmingly left (initial) dislocations. This is probably due to the functions of relative clauses in this context. That is, in our spatial experiment, the identification of the house is so important that it has to be done at the very beginning of the description. This result is also in line with Laury & Helasvuo (2016) who found that in Finnish everyday conversations, relative clauses which modify initial detachments are usually restrictive; and with Marri Amon’s (2015:

100–114) finding using data from Estonian conversations, that initial detachments combine rather frequently with relative clauses and usually function as an introduction for contrastive elements.

In the narrative context (“Narratives”), bare NPs prevail as the heads of relative clauses in all three languages. Furthermore, relative clauses are regular syntactic units and not detached, as they are frequently in “Houses”. In a spatial context, Finnish and Estonian are equally demonstrative-biased (for example, they frequently use demonstratives nominally and adnominally). This is not the case in our narrative context, where DemNPs are not very frequent as the heads of relative clauses (see also Hint et al. 2017). In addition, “Narratives” almost lacks detachments and the relative clause constructions were rather standard-like. This latter finding is contrary to Amon (2015) and Priiki (2015) who have found that the occurrence of demonstratives in Estonian and Finnish detached NPs in everyday conversations is rather frequent. This may also indicate that picture-elicited narratives are a discourse genre, which is characterized by different features than spontaneous conversation.

The use and types of relative clauses are clearly sensitive to the context and the structures and/or referential practices present in a language. The finding that there are differences in the use of relative clauses in spatial and narrative contexts provides evidence suggesting that future studies should carefully take into account genre-specific factors. In spatial descriptions, the experimenter was listening carefully and therefore we can expect subjects to register minimal feedback, namely that the experimenter understands which house is referred to. In this particular context the relative clauses are frequently left detachments and their function is identification of the object (restrictive usage). The narratives, however, were told in a quite standard-like mode in all three languages. This is probably due to the nature of the task. The subjects were asked to tell the story to someone who is not present, therefore, depriving them of feedback. The subjects presumably relied on the standard way of narrating a story. In narrations, the events are more in focus than the identification of the referents. Consequently, subjects used non-restrictive relative clauses to add new information about the referents rather than restrictive relative clauses to identify the character. From this difference in the use of relative clauses in different genres, it is evident that further studies comparing experimental data to both natural conversations and written standard language are needed. In addition, we have shown that referential practices are highly complex. In this complexity, the use of relative clauses depends

on usage preferences and, to some extent, on the elaborateness of the demonstrative system in a language. As such, this study suggests that Finnish and Russian are comparatively different in their referential practice regarding demonstratives and relative clauses, and particularly so in a spatial context. Estonian, probably due to its shared origin with Finnish and extensive contacts with Russian, is in between these two languages with respect to its referential practice.

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Abbreviations

ADE	adessive case
ADJ	adjective marker
Adv	adverb
BareDem	bare demonstrative
BareNP	bare noun phrase
COMP	comparative
Dem	demonstrative
DemAdv	demonstrative adverb
DemNP	noun phrase with a demonstrative
DemPron	demonstrative pronoun
Det	determiner
ELAT	elative case
ESS	essive case
H1	House 1
H2	House 2
H3	House 3
INE	inessive case
INSTR	instrumental case
NEUT	neutral gender
NP	noun phrase
PART	partitive case
PersPron	personal pronoun
PREP	preposition
Pron	pronoun

PRTCL	particle
REL	relativizer
RelCl	relative clause
RelPron	relative pronoun
SUPER	superlative
TRANS	translative case
Zero	zero reference

Appendix A



Instructions for “Houses”

Situation 1

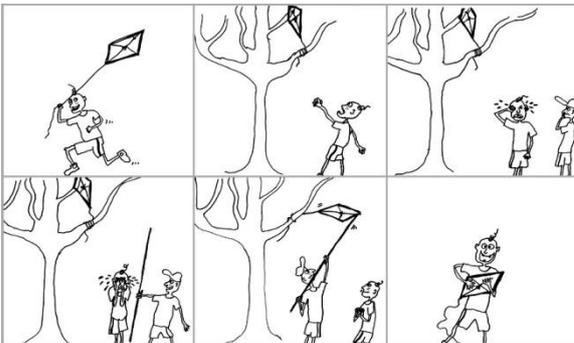
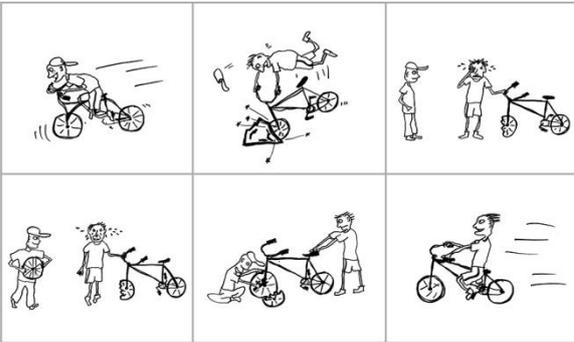
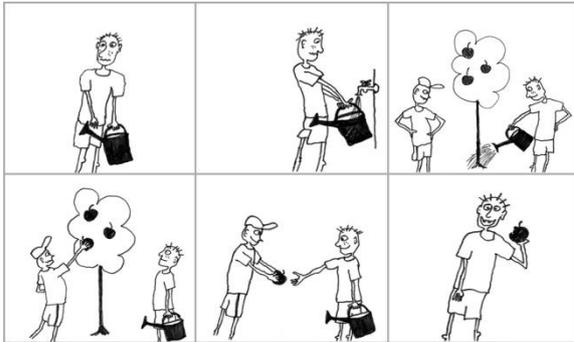
There are two houses in the picture. Look out the window and describe and compare the houses that have circles around them with each other.

Situation 2

Now describe the house we are in and compare it one-by-one with the houses that have circles around them.

Appendix B

The pictures used in the narrative elicitation task



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