Person alignment in reported speech and thought: the distribution and typology of participant roles (based on six Finno-Ugric languages)

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Abstract

This paper investigates how person alignment is arranged in discourse reporting. I focus on participant roles appearing in narrated and speech events (Jakobson [1957] 1971) and how they are linguistically encoded in (re)presentations of speech and thought. Besides the (re)presentations of speech and thought attributed to other speakers, I include two other types of report: self-quotations (Reported Speaker = Reporter) and quotations with an unknown source (Reported Speaker = ?). For illustrative purposes, I use data from internet communications of six Finno-Ugric languages: Hungarian, Estonian, Finnish, Erzya, Udmurt, Komi. The results show that three types of reports exhibit idiosyncrasies regarding the participant distribution in the narrated event. These idiosyncrasies affect how the linguistic encoding of participants is arranged and how different perspectives are highlighted in reported speech and thought. In addition to two canonical perspectives, i.e. Reported Speaker's and Reporter's, there are some ambiguous cases where person marking does not index only one type of perspective. Such ambiguity is characterized by the overlap between different roles carried out by one participant or subsumption of participants from different events under one formal reference. Furthermore, ambiguous cases often contain a generic reference equally suitable for participants in the narrated and current speech event.

Keywords: reported speech; reported thought; reported evidence; person alignment; Finno-Ugric.

1. Introduction

Cross-linguistically, reported speech (RS) and reported thought (RT) (often abbreviated as RST 'reported speech and thought') exhibit many similarities on the level of construction. They are both formed by a binary structure: report and the unit introducing the report, i.e. *Matrix*,[1] cf. (1). In many languages, the same unit can introduce both speech and thought, making these types of report often indistinguishable without an appropriate context, as e.g. in (2) from Komi (Uralic; Russia) and (3) from Ungarinyin (Worrorran; Australia).

(1)   English (Indo-European; enTenTen20)[2]

a. ["Maybe tomorrow…"]$_{REPORT}$ **she said**$_{MATRIX}$.
b. ['Probably just a stupid mailing list again…']$_{REPORT}$ **she thought**$_{MATRIX}$.

(2)   Komi-Zyrian (Uralic; KoZSmC, komimy1)
       Medvoďź   jurö   voisny   koz   da   požöm.   Miśa,
       first   head:ILL come:PST:3PL fir   and pine   QUOT.SELF
       parmayd   mijan   pom   ńi   dor.
       taiga:2SG 1PL.GEN end   nor   edge
       'First, fir and pine came to my mind. **I said/thought**, our taiga is never-ending.'

(3)   Ungarinyin (Worrorran; Spronck 2015: 71, emphasis added)
       [[*ngurrba   nyungiminda*]   ***ama***   ***jirri***]
       [[*ngurrba   nyunga₂-iy-minda*]   *a₁-ma-ø*   *jirri*]
       [[hit.ITRV   3SG.F.O:1SG.S-FUT-take] 3SG.M-do-PRS   M.ANAPH]
       '**He says/thinks**: "I will hit her."'

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[1] Another term used vastly in the literature is *quotative index,* coined by Güldemann (2001; also see Güldemann 2008: 11 for an overview of different terms used). Güldemann's (2008) framework views the quotative index (alias Matrix) as an optional element in the reported discourse (alias RST) construction. In contrast, Spronck & Nikitina (2019) argue for a stable syntactic relation between Matrix and Report. They show that RST tends to preserve its syntax even in the Matrix-less RST constructions (cf. Spronck & Nikitina 2019: 126-129). In this study, I follow the latter consideration and adopt the terms Report and Matrix as they are used in Spronck & Nikitina (2019).

[2] See list of data sources at the end of the paper.

Despite the close connection between RS and RT, there is a semantic difference between them. Speech as a dialogic phenomenon and a tool for communication presupposes an interlocutor to whom it was/is/will be addressed. Even a monologue presupposes some addressee: either the speaker herself (e.g. thoughts uttered out loud in solitude) or an imaginary audience (e.g. in theatre) (cf. Clark 2016; also see Bakhtin 1981; Goffman 1981; Jakobson 1990). Thinking as an individual process does not require any interlocutor to be involved but has its addressee analogically to speech. Thought is always self-addressed or egocentric in its original manifestation (see Vygotsky [1934] 1986). In contrast, speech has another speaker as an addressee, although it can also be egocentric, e.g. *I said to myself.*[3]

Such differences in the dialogic nature of speech and thought shall be preserved and reflected in reports of these processes. This study explores how these differences are encoded linguistically. It aims to increase the understanding of speech and thought and how their formal representation is constructed in RS and RT and construed in the current speech. At the same time, differences in formal representation shall point to how RS can be distinguished from RT, especially when speech and thought can be introduced identically (see (2) and (3)).

The paper builds upon the previous observations on idiosyncrasies of RS and RT (Teptiuk forth.) and explores how differences in the dialogic nature of speech and thought affect person indexing. Other *shifters* (Jakobson [1957] 1971), i.e. temporal, modal and evidential categories changing in the report to match the current speech (see Section 2), may also index such differences. To limit the scope of this investigation, I will only concentrate on person indexing. By investigating this parameter, I aim to contribute to the typology of person alignment in reported speech (Nikitina 2012a). Since the typology in Nikitina (2012a) did not include RT, this study attempts to cover this gap and investigate RT in comparison to RS in a relatively small set of typologically similar languages.

This study pursues descriptive goals and does not provide any quantitative outcomes. Empirical data from six Finno-Ugric languages (Hungarian, Estonian, Finnish, Erzya, Udmurt, Komi) support theoretical discussion and illustrate tendencies common to these languages. The languages represent four branches (Ugric, Finnic, Mordvinic, and Permic) and three linguistic areas (Central and Northeastern Europe

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[3] Interestingly, constructions pointing out egocentricity of speech often introduce RT and may conventionalize as RT-introducers in self-quotations (see e.g. Teptiuk 2021a on Hungarian *mondom/mondok* 'I say').

and Russia) of the Uralic language family. The data are derived from social media corpora available online for all languages (for more details, see Section 3).

The selection of the languages is based merely on the author's familiarity with their structure and different aspects regarding RST therein. That said, they are not expected to reflect unique patterns in person alignment in RST, not found elsewhere among the world's languages. Conversely, I expect to find patterns shared by other languages, stemming from the foundational mechanisms of speech and thought reporting, and peculiarities of participant distribution therein. Having a relatively small sample of typologically similar languages shall allow comparability between them and stimulate generation of hypotheses beyond the selected sample. Furthermore, it shall be possible to point out language-specific patterns of organizing discourse participants in RST and check for possible alternative strategies among the selected sample.

The paper is organized as follows. Section 2 starts with a theoretical discussion on discourse reporting with the focus on discourse participants, perspectivization, and types of report according to their author. Method and data are introduced in Section 3. In Section 4, I illustrate the theoretical points outlined in Section 2 with the corpus data. I present a short summary of results and discuss the implications of this study in Section 5. A short conclusion closes the paper in Section 6.

2. Discourse reporting: typology and participant roles

Voloshinov's ([1931] 1973: 115) definition of reported speech states that it is "speech within speech, utterance within utterance, and at the same time speech about speech and utterance about utterance."[4] This definition highlights the relationship between two different discourse situations where one is embedded into another. Jakobson ([1957] 1971) further developed this idea in his concept of evidential meaning. According to Jakobson (1971: 135), reported speech, among other evidential strategies,[5] reflects the interaction between three events: Speech event (E_S), Narrated event (E_N), and Narrated Speech event (E_{NS}).[6] Figure 1 demonstrates this interaction

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[4] Note that Voloshinov's (1973) term 'reported speech' also includes reported thought, viewed as 'inner speech.'

[5] Cf. "[t]he speaker reports an event on the basis of someone's report (quotative, i.e. hearsay evidence), of a dream (relative evidence), of a guess (presumptive evidence), or of his own previous experience (memory evidence)" (Jakobson 1971: 135).

[6] I use capital letters and subscripts to define the event since they are more visible in the text than small letters and superscripts in Jakobson (1971).

and highlights the borders between three events with color. E_S highlighted with red corresponds to the current speech situation. In turn, E_N highlighted with blue is the situation during which reported speech (or thought) is assumed to occur,[7] embedded in E_S. Finally, E_{NS} highlighted with green is "the alleged source of information about the narrated event" (Jakobson 1971: 135).
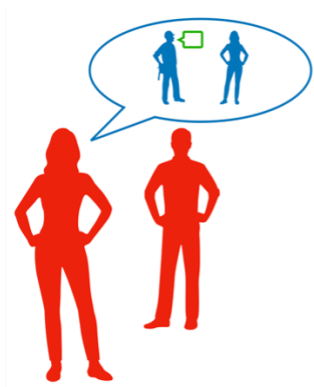

Figure 1: Visual interpretation of Jakobson's (1971) conceptualization of the evidential meaning and reported speech [E_S – speech event (red), E_N – narrated event (blue); E_{NS} – narrated speech event (green)]

According to Jakobson (1971: 136), personal and temporal deictics, as well as modal and evidential categories may change in E_N to refer to E_S or its participants. Jakobson (1971: 136) coined the term 'shifter' for such elements. To illustrate such shifters, consider two types of RS in (4). In (4a), temporal (*saw, yesterday*) and personal (*I*) deictics correspond to E_N. In (4b), they shift to match E_S. Temporal deictics align with E_S and highlight the sequence of events: *had seen (the previous day) > said.* Furthermore, the personal deictic *he* is coreferential with Reported Speaker, John.

(4) a. *John said: 'I saw Fred yesterday.'*
     b. *John$_i$ said (that) he$_i$ had seen Fred the previous day.*
     (adapted from Aikhenvald 2011: 238)

Shifters are not selected arbitrarily: their presence or absence highlight difference in perspectives. Perspective, or in other words, referential orientation, is a location of the anchor for deictic and expressive elements. In (4a), all referential elements

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[7] RS and RT do not always entail factuality of their content and can demonstrate the occurrence of speech or thought in hypothetical situations.

correspond to E_N and demonstrate the perspective of Speaker in E_N, i.e. Reported Speaker. In contrast, (4b) illustrates the perspective of Speaker in E_S, i.e. Reporter.

The two perspectives are traditionally discussed in connection with two formal manifestations labeled as 'direct' (shifters-) and 'indirect' (shifters+) speech. Recent studies in languages outside Europe have shown discrepancies between the marking of tense, modality, and evidentiality, personal pronouns, honorifics, and vocatives in RST (see Spronck 2012; Evans 2013; Spronck & Nikitina 2019 and references therein). They observe that the traditional opposition between direct and indirect report involves a range of intermediate types (see e.g. Aikhenvald 2008; Evans 2013; Nikitina & Bugaeva 2021). These findings bring forth problems of the dichotomy and indicate that it does not hold for many languages outside Western Europe (see e.g. ex. (5) below). That considered, I will not use the labels 'direct' and 'indirect'. Instead, I will explore the selection of shifting elements in the report as a manifestation of the two perspectives, Reporter's *vs*. Reported Speaker's.

Although the two perspectives are usually split in RST, some languages allow the combination thereof (see e.g. Aikhenvald 2008; Evans 2013; Knyazev 2022). Consider (5) from Golin (Chimbu-Wahgi; PNG) where the subject argument in RS corresponds to E_N, but the object shifts and corresponds to E_S, leading to a mixture of perspectives.[8]

(5)   Golin (Chimbu-Wahgi; Evans 2013: 85)

  I_x *[na_y si-ø_x-w-a]*   *di-n_x-g-e*
  you   1SG   hit-1SG.S-RPRT-DIST   say-2SG-ASS-PROX
  'You_x said you_x hit me_y.' [Lit. 'you_x "I_x hit me_y" you_x-said']

Languages, where such mixture is not that prominent, may still exhibit it in certain pragmatic environments.[9] For instance, in (6) from Colloquial British English Reporter presents the command initially addressed to her to Current Addressee (or Addressee in E_S).[10] Mood remains unchanged, while the personal deictic shifts.

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[8] Also, note that the participants in E_N acquire the opposite roles in E_S: Addressee in E_N > Speaker/Reporter in E_S; Speaker in E_N > Addressee in E_S.

[9] To a certain degree, genre can also be important. Consider cases of *free indirect speech* in European literature, reflecting the mixture of two perspectives (see e.g. Pascal 1977; Roncador 1988; Vandelanotte 2021).

[10] NB: Current Addressee ≠ Reported Speaker.

(6) I_{CS} *rang Paul$_i$, and Paul$_i$ said 'Come$_{CS}$ and see him$_i$'*

(Aikhenvald 2011: 354; $_{CS}$: current speaker)[11]

As becomes apparent from the illustration of different perspectives in RS, it is tightly connected to two participants: Reported Speaker (Speaker in E_N) and Reporter (Speaker in E_S). The choice between two perspectives affects how other participants are encoded linguistically but largely depends on their status in E_N and E_S.

Based on a few previous studies discussing perspectivization in RS (and less so in RT),[12] I propose the following typology of participants present in the RS situation (P_N):

1) *Reported Speaker,* i.e. Speaker in E_N whose utterance is reported;
2) *Reported Addressee,* i.e. Participant in E_N to whom the reported utterance is directed;
3) *Reported Interlocutor*, i.e. 'bystander'[13] in E_N;
4) *Reported Other,* i.e. Participant absent in E_N.

Since every speech situation presupposes speaker and addressee (see Section 1), only these two participants are necessary to establish a speech situation in E_N. Other participants are optional and therefore may be absent.

As discussed in Section 1, RT differs from RS in dialogic nature. These differences shall affect the distribution of participants and partial overlap thereof in RT. Reported Speaker in RT shall coincide with Reported Addressee due to egocentricity of thoughts. Interlocutor and Other are also relevant participants in the RT situation. Speaker may think of Interlocutor(s) surrounding her in E_N and bring thoughts about participants absent in E_N. However, thought can be directly accessible only to their author (see Section 1), and it does not require an interlocutor to be involved. That said, Interlocutor and Other shall be equally excluded from the Reported Speaker's mental space. Due to this characteristic, these participants can be viewed as indistinguishable in RT. Consequently, Interlocutor and Other shall be encoded identically as far as person indexing is concerned, unless they shift referring to participants in E_S. Otherwise, they can be distinguished when referred to with social roles ('daughter', 'mom') or proper nouns (John, Fred).

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[11] Another case discussed by Aikhenvald (2011: 356) *Mummy says: 'Sam$_{CS}$, wash$_{CS = ADDRESSEE}$ my$_{CS}$ hands'* reflects a toddler's (2; 9) speech.

[12] To name just a few inspirations, see Li (1986), Aikhenvald (2008, 2011), Nikitina (2012a, 2012b).

[13] For more details, see Goffman (1979, 1981).

The participants in E_S (P_S) can be easily derived from their counterparts in E_N:

1) *Current Speaker,* i.e. Reporter[14] in E_S;
2) *Current Addressee,* i.e. Participant in E_S to whom the report is presented;
3) *Current Interlocutor,* 'bystander' in E_S;
4) *Current Other*, i.e. Participant absent in E_S.

In practice, P_S may overlap with P_N, and thus one participant will fulfill different roles in both events. For instance, Current Speaker may report something said to her and hence also be Reported Addressee. In some cases, this condition is governed on the pragmatic level, i.e. dependent on the situation and presence of the participant with a distinct role in both events (e.g. Current Speaker reports speech addressed to her). In others, such an overlap of roles is realized due to characteristic features of report type (see below) and hence can be considered semantic.

Before discussing the method and data in the following section, one more issue concerning the author of report shall be touched upon. Since there is no linguistic restriction regarding to whom RS and RT can be attributed,[15] Reported Speaker can have many manifestations. Speech and thought can be attributed to other speakers specified in E_S or E_N, or to Reporter herself. Furthermore, the original author of report, as well as the time and circumstances of the utterance or thought, may remain covert.

I propose adding one more parameter to the investigation and classify RS and RT according to who Reported Speaker is. Similarly to the effect produced by the differences in the dialogic nature between RS and RT (see above), I expect this parameter to influence the distribution of participant roles and their linguistic encoding (see below). I distinguish three types of report: (i) *self-quotations* (i.e. Reported Speaker = Reporter), (ii) *quotations* (i.e. Reported Speaker ≠ Reporter), and (iii) *quotations with an unknown source* (i.e. Reported Speaker = ?).[16] Quotations

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[14] I neglect other roles that can be assigned for Speaker in E_S and focus only on the one relevant when the report is produced.

[15] Cultural restrictions are, of course, possible. For instance, some cultures disfavor or even prohibit attributing thoughts to other speakers or their reports even if they somehow became available to Reporter (see e.g. Besnier 1993; Michael 2015).

[16] I use the term *quotation,* typical for formal semantics (although see Clark & Gerrig 1990; Evans 2013, i.a.) to avoid unnecessary recycling of the term *reported speech/thought* or *report*. Despite using the term *quotation,* this study does not adopt formal approaches to reported speech and focuses on it from functional-typological perspective.

with an unknown source are usually discussed in linguistic literature under the label *reported evidentiality* restricted to the presentation of spoken material (and sometimes to grammatical means of expression, e.g. in Aikhenvald 2004).[17] However, one can assume that thoughts like utterances can be attributed to an unknown cognizant (e.g. generic 'people', universal 'all' and existential 'some').

What makes quotations with an unknown source different from other reports is that they usually do not contain reference to the author, time, and circumstances of the original utterance (or thought) (Holvoet 2018: 248; also see Aikhenvald 2004, i.a.). A quotation of this type is illustrated in (7) consisting of a proverb and introduced merely by the reported evidential marker *állítólag* 'allegedly'.

(7)　Hungarian (Uralic; MNSz)

    Bár　　　**állítólag**　*akit*　　　*utálnak*　　　*az*
    although　**allegedly**　who:ACC　　hate:PRS.3PL　DEM.DIST
    sokáig　　　*él.*
    much:TERM　live.PRS.3SG
    'Although **it is said** that those who are hated live long.'

The label *unknown* is far from ideal because sometimes these characteristics may be deliberately unspecified by Reporter. However, I stick to this label since it seems to be more accurate and covers more cases of reported evidence than the label *unspecified* does. The label *unknown* also backgrounds the possibility of deliberately leaving out the information about the author, which is often not the case. For instance, consider the impossibility of attributing proverbs to a specific speaker or time when such a folklore knowledge was initially used as a simple, witty remark, cf. (7).

The Reported Speaker-parameter is necessary for the following reason. I expect each type of report to reflect idiosyncrasies regarding the participants, which would affect their marking via person indexes. It can be assumed that Reported Speaker and Reporter coincide in self-quotations. Hence, they shall be marked identically, but as is demonstrated in Section 5, some non-Finno-Ugric languages may still employ

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[17] Aikhenvald (2004: 10) acknowledges the possibility of using lexical means to express evidentiality and even hypothesizes that lexical strategies are probably universal in the world's languages compared to grammatical (arguably often unfamiliar to European languages). However, the focus of her work remains on grammatical expression of evidentiality. In contrast, this study disregards grammatical expression of reported evidentiality and focuses on lexical strategies.

different pronouns for Reported Speaker and Reporter in self-quotations. RT in self-quotation, in turn, shall also subsume Reported Addressee due to egocentricity of thoughts. In quotations, Reported Speaker shall always be distinct from Reporter, but Reporter may fulfill other roles, i.e. Reported Addressee, Interlocutor, or Other. Note that Reporter can only occupy the role of Reported Addressee when RS is presented; in RT, only Reported Speaker can be Reported Addressee due to egocentricity of thoughts. In quotation with an unknown source, Reported Speaker, Reported Addressee, and Interlocutor(s) shall remain covert due to the basic semantic characteristics of this report type (see above). Therefore, neither these participants nor their perspectives shall be reflected in this type of report. Table 1 summarizes these idiosyncrasies and their expected effect on participants. Their realization will be illustrated with the corpus data and further discussed in Section 4.

	Participants	
Types of report	RS	RT
Self-quotation:	Rep. Sp. [= Reporter]	Rep. Sp. [= Rep. Addr. = Reporter]
	Rep. Addr.	Interlocutor
	Interlocutor	Other
	Other	
Quotation:	Rep. Sp. [≠ Reporter]	Rep. Sp. [= Rep. Addr. ≠ Reporter]
	Rep. Addr. (= Reporter)	Interlocutor (= Reporter)
	Interlocutor (= Reporter)	Other (= Reporter)
	Other (= Reporter)	
Quotation with an unknown source:	*Rep. Sp., Addr., Interlocutor	
	Other (= Reporter)	Other (= Reporter)

Table 1: Types of report and expected distribution of participants [square brackets stand for semantic and round for pragmatic features].

3. Method and data

To investigate how person alignment is arranged in quotations, self-quotations, and quotations with an unknown source, I have compiled a database of reported speech constructions in six Finno-Ugric languages: Hungarian, Estonian, Finnish, Erzya, Udmurt, and Komi. I used data from social network sites (SNS). Considering the principle "Yesterday's discourse is tomorrow's grammar" (see e.g. Du Bois 1985), SNS provide relevant material. It reflects the language use in dynamic synchrony and

contains features of colloquial speech and standard writing that often harmonically combine within one text (Tagliamonte & Denis 2008; Helasvuo et al. 2014). Even though such data contain some original features peculiar to a written modality in general and specific to online communications (e.g. emoticons, unstandardized shortenings, combinations of orthographic symbols), to a certain degree, language use on SNS is a written approximation of spoken language.

The data are derived from social media corpora available in open access online (see Table 2). The material used is only a data sample, meaning that the data represent a limited number of examples selected randomly from the corpora but queried with specific tactics in mind (see below). The number of strategies queried differs across languages, as the size of social media corpora does. Therefore, the number of collected examples varies from 400 to 1000 per language.

Language	Corpus	# exx.
Erzya	Erzya social media corpus (ESmC): 968k words	423
	Erzya Corpora, blogs (EC_blogs): 138k words	
Estonian	etTenTen19: 185 mil. words	620
Finnish	Internet communications corpus (IKA): 6,95 bil. words	1078
Hungarian	Hungarian National Corpus (MNSz), Personal subcorpus: 18,6 mil. words	570
Komi-Zyrian	Komi-Zyrian social media corpus (KoZSmC): 1,85 mil. words	466
Udmurt	Udmurt social media corpus (UdSmC): 2,66 mil. words	644
	Udmurt Corpora, blogs (UdC_blogs): 488k words	

Table 2: The corpora and amount of examples.

For the database, I used the typology of quotative constructions in these languages (Teptiuk 2019, 2020) to query quotations, self-quotations, and quotations with an unknown source. Table 3 presents glosses of the constructions used to introduce these types of report.[18] For each type of gloss in Table 3, at least 100 examples were extracted from the corpora, when available. The strategies corresponding to the glosses and used as a query are overviewed at the beginning of Section 4 and are listed in Appendix. I also briefly address limitations concerning the tense forms in the query in Section 4.1. Accidental repetitions and random collocations used in a

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[18] Slash (/) stands for a disjunction of values ('or') here and elsewhere in the tables.

function other than report-introducing were excluded. That said, the number of examples for each strategy differs across languages and within one language.

	Self-quotations	Quotations[19]	Quotations with unknown source
Speech:	'I said'	'(s)he/they said'	'they$_{\text{UNKNOWN}}$ said'
Thought:	'I thought'	'(s)he/they thought'	'they$_{\text{UNKNOWN}}$ thought'

Table 3: Types of RS and RT and constructions introducing them.

The collected examples were compiled in MS Excel database. Different reports were placed in separate sheets, additionally distinguishing RS from RT. This division resulted in 6 different sheets. The examples were manually annotated for different types of categories. As mentioned in Section 1, only person indexing is discussed in this paper; however, the database can be used in the future for other types of shifters. Attention was paid to the correspondence of person indexes to the reported (E_N) or current speech event (E_S), for which abbreviated labels 'en' and 'es' were used. The realization of this category was specified in a separate column, e.g. personal deixis: 'en', '2sg', which allowed further investigation on how such correspondence is encoded linguistically.

This is a pilot study with an overall goal to illustrate differences between types of report. The empirical data are demonstrated here to support the qualitative description and prepare a theoretical basis for further quantitative investigation. This means that any quantitative representation of the data will be postponed for the future, and some tendencies outlined here would need to be further tested with statistical methods.

The data in the paper are presented without any corrections of spelling or punctuation. Examples from Eastern Finno-Ugric languages are transcribed and illustrated without original in Cyrillic to save space. Occasional code-switches into Russian in these languages are presented in transliteration with non-italics in the example line. In the further presentation of data, where possible I will recycle the colors employed in Figure 1 and use blue color to designate P_N and red color for P_S in

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[19] For now, 2SG and 2PL forms are disregarded, representing a specific type of quotation where speech and thought are attributed to Current Addressee. This characteristic sets it apart from quotations attributed to Other (or more rarely Interlocutor) in E_S and would require a study of its own, where reports attributed to Current Addressee could be further explored.

glosses and occasionally in translation lines. Ambiguous cases and other highlights will be marked merely in bold. To save space, some more trivial examples will be illustrated in the text in English. These examples, however, are derived from free translations of actual examples in the database unless indicated otherwise.

4. Person alignment in different types of report according to Reported Speaker

Before discussing person alignment patterns in Section 4.2, I will briefly introduce the strategies used to query different types of report in Section 4.1. A list of these strategies can be found in Appendix.

4.1. Quotative strategies in Finno-Ugric languages and their use with different types of report

Person indexing in Finno-Ugric languages considered in this study is flagged via verbal personal endings, free pronouns, and possessive suffixes (except Estonian). Personal endings and free pronouns shall be coreferential, but the latter are not obligatory and can often be omitted. This condition mainly stems from the fact that the highest-ranking argument of the clause is usually obligatorily marked on the verb (e.g. Fin. *syö-n joka päivä* 'eat.PRS-1SG every day'), excluding non-canonical realizations (e.g. experiencer, possessor: Fin. **minu-lla** *on pallo* '**1SG-ADE** be:PRS.3SG ball' pro 'I have a ball'). Possessive suffixes typically appear on nominal categories, nonfinite verb forms and some adpositions. In contrast to other languages with possessive suffixes, colloquial Finnish is quite relaxed about their use and more often highlights the possessor with free pronouns in the genitive case (8a) instead of using the possessive suffix with or without the pronoun in the genitive case (8b).

(8)   Finnish (Uralic; IKA)

a. …*mun   äiti   ei   tiedä   siitä*
   1SG:GEN   mother NEG:3SG know.PRS.CN DEM.DIST:ELA
   vieläkään.
   still
   '…my mom still doesn't know about it.'

b. ... *niin* (*minun*)   *äiti-ni*   *teki*   *kun*   *olin*

    so   **1SG:GEN**   mother-**1SG**   do:PST.3SG   when   be:PST:1SG

pieni.

little

'...my mom did so when I was little.'

Each language investigated here has in its inventory at least one generic speech verb 'say' and mental verb 'think' (see Appendix). These verbs used in the past tense can introduce speech and thought attributed to different speakers. Finno-Ugric languages also exhibit cases of historical present tense. The majority also possess more than one past tense. For this study, only basic past tense forms were investigated unless the form is conventionally used in the present tense (e.g. Hung. *mondok* 'I say' pro 'I said/thought', cf. Teptiuk 2021a). Differences between tenses in quotative constructions (see e.g. Sakita 2002 for English) are beyond the scope of this study and shall be confronted in the future.

Where possible, I gave preference to a more colloquial variant, e.g. the contracted variant *ütsin* in colloquial Estonian instead of standard *ütlesin* (pro 'I said'), or the contracted variant *aszonta* in Hungarian instead of standard *azt mondta* (pro '(s)he said'). This choice was mainly motivated by descriptive goals since only a few studies (if any) focus on these colloquial variants. By investigating these strategies, I also attempted to see if the contraction and change in the marker's form impact its use.

For self-quotations, 1SG forms were checked; for quotations, 3SG forms were preferred over other possible manifestations (see fn. 19); for quotations with an unknown source, 3PL forms were investigated. In some cases, 3PL Reported Speakers can be identified from the context; in others, Reported Addressee can be identified. When either of these two conditions was realized, such types of report were labeled as quotations. Note that although quotations and quotations with an unknown source can be introduced formally identically, the differences regarding their participants are expected to remain. This will be one of the topics picked up in Section 4.2.

The distribution of speech and mental verbs across different report types can be uneven. For instance, Komi possesses three different mental verbs that can be roughly translated as 'think': *ćajtny, mövpavny*, and *dumajtny* (< Russian *dumat'* 'think'). I have checked all these verbs, but as is shown in Appendix, only *ćajtny* is used across all report types, while *dumajtny* appears only in self-quotations and *mövpany* in

quotations only. The reason behind such uneven distribution of verbs is unclear for now and would require a separate investigation in the future.

Besides strategies with speech and mental verbs, Finnish and Estonian possess 'new quotatives' (see Buchstaller & Van Alphen 2012), consisting of the equational verb 'be' and etymologically non-reportative elements, e.g. Fin. *se oli niinku* 'she was like', Est. *ma olin mingi et* 'I was like' (lit. 'I was something that') (see Appendix; for more details on the strategies see e.g. Teptiuk 2019: Ch. 4). By default, these strategies can be used with both RS and RT, although they are attracted more to RT in self-quotations than other report types (cf. Teptiuk forth.). The current corpus investigation shows that these strategies are not used for quotations with an unknown source, and in Estonian are limited to quotations of speech while in self-quoting contexts can also introduce thought.

In addition, all languages have non-clausal units introducing RS (and more rarely also RT). For instance, self-quotative particles in Permic languages (Komi *miśa* and Udmurt *pöj*) were included for the glosses 'I said' and 'I thought' in Table 3. These particles are restricted in their use to contexts where Reporter introduces her own speech or thought (see Appendix; for more details on the particles, see Teptiuk 2021a). The same holds for quotative particles introducing speech and thought belonging to both known and unknown speakers. Thus, besides lexical evidential constructions with the verb 'say', grammaticalized quotative/reported evidential particles available in each language were also used as a query. There are several such particles in some languages, e.g. Est. *kuuldavasti, väidetavalt,* both 'allegedly'. In addition to the use of autochthonous particles, Komi, Udmurt and Erzya borrow quotative particles *mol* and *tipa* from the contact Russian language (see e.g. overviews in Teptiuk 2020, 2021b). However, the number of the borrowed particles in the corpora is limited with usually less than 100 examples in the entire corpus. They are also limited to colloquial speech and are used by the speakers who are more relaxed about borrowing functional and lexical elements from Russian and eventual code-mixing with Russian. A similar situation is observed in the distribution of new quotative constructions with the equational verb 'be' in Finnish and Estonian, where some strategies are more numerous than others and are typical for colloquial speech only.

To limit the scope of this investigation, I have excluded some strategies and did not use them as a query for different types of report for now. One type not included in the current investigation is turn-taking strategies highlighting the reported speaker

(e.g. Hungarian *erre ő* 'upon this (s)he', see Teptiuk 2019: 211-218). Another such strategy is the quotative construction consisting of non-reportative verbs, e.g. Hungarian *azzal jött/em* 'I/she said', lit. 'I/she came with that'.

Search results could be extremely numerous if only the verbs are queried. To make them more effective, I added complementizers to some strategies. Unlike many European languages, Finno-Ugric are less sensitive in perspectivization when complementizers are present in Matrix. Strategies with complementizers can introduce both Reporter's and Reported Speaker's perspectives in colloquial speech. Thus, adding one to Matrix would not necessarily lead to over-representation one perspective over the other in the database.[20] As for the query, adding the complementizer increases the chances that the quotative construction would be followed by an independent sentential unit forming the report. Thus, accidental collocations[21] were excluded to a certain extent by the query itself. Already grammaticalized quotative particles were queried on their own, although cases, where they occur as a part of more complex construction with speech or mental verbs, were also considered.

Although the queries were designed to search for different types of report, some types were more numerous than others (see Table 4). The most numerous in the database is the quotation of speech, which included besides quotations attributed to specified 3SG speakers also examples with 3PL Reported Speakers. The least numerous is the quotation of thoughts attributed to an unknown source. Interestingly, my database also contains more examples of RT in self-quotations than in quotations. The same holds for the difference between RT and RS in self-quotations. Even though it is too early to make any robust generalizations, the data hint that speakers report their own thoughts more than the thoughts of others, and the least so when the other is unknown. Although the data for the latter are limited, they still reflect some tendencies across languages (for more details, see Section 4.2.3).

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[20] As an anonymous reviewer has pointed out, adding a complementizer could still introduce a non-categorical bias or a preference regarding the perspective. I find this point valid and acknowledge that a better tactic shall be developed to limit the number of examples in the corpora. However, the focus of this study is not on the quantitative representation of different perspectives in RST. It merely explores the person alignment in highlighting different perspectives. Therefore, I find the query tactics implemented here tolerable for collecting a more significant number of valid examples that still demonstrate different perspectives, regardless of the presence of a complementizer.

[21] For instance, Fin. **sanoin** *vaan mielipiteeni* 'I told my opinion', **mä olin niinku** *se jätka* 'I was like this dude' (IKA).

	RS	RT
Self-quotations	684	727
Quotations	1598	387
Quotations with an unknown source	378	32

Table 4: Types of report in the database.

4.2. Person alignment in Finno-Ugric languages

Person indexing in RS and RT exhibits the following systemic tendency. The behavior of person indexes can be summarized in the view of their correspondence with E_N, E_S or lead to ambiguity. The latter means that the reference does not lead to interpretation favoring only one perspective. This characteristic mainly stems from the interaction between pragmatic conditions and the reference to concrete participant roles. The reference to concrete participants depends on the idiosyncrasies theorized for different report types in Section 2.

The possibility of mixing perspectives within one report, as in (9), has been previously discussed for Udmurt in Winkler (2011: 170). However, in my database, examples like (9) have occurred neither in Udmurt nor in other languages. The database's only cases with mixed perspectives contain multipart RST, as in (10). In such RST, each perspective is demonstrated separately and does not lead to the mixture of forms in one clause, as in (9).

(9)   Udmurt (Uralic; Winkler 2011: 170; glossing and translation are modified)
    Vlaďimir syče kuraśky-sa as-s-e   uli   kari-śko   šuysa
    PN   such beg-CV   self-**3SG**-ACC under do-PRS.**1SG**   COMP
    malpa-m.
    think-PRF.3SG
    'Vladimir_I apparently thought that he_i humbles himself_i (lit. **I** humble **himself**) by begging in such a manner.'

(10)   Erzya (Uralic; ESmC)
    Ťevem,   keĺa,   veĺese   lamot,   eŕavi
    work:**1SG** QUOT   village:INE   many:PL have.to:PRS.3SG
    kardajse-piŕese   Ĺezdams   avanstenze-ťeťanstenze...
    yard:INE-garden:INE help:INF   mother:DAT.**3SG**-father:DAT.**3SG**

'He says, **I** have a lot of work, **he** needs to help **his** parents with the yard and the garden.'

Even though technically the parts in (10) belong to one stretch of the report, when approached analytically, they shall not be considered cases of mixed perspective in the strict sense, as examples like (9) would typically be. Thus, in the further presentation of data, I will not pay special attention to such cases, and they will be discussed together with other cases where person indexes demonstrate only one perspective in a stretch of RST.

This subsection is split into three smaller subsections dedicated to each report type. In what follows, I review how these idiosyncrasies reflect on the indexing of participants and what pragmatic conditions influence the choice of one perspective over another or lead to the ambiguity.

4.2.1. Person alignment in self-quotations

In this section, I first turn to the discussion of self-quotations of speech and illustrate the peculiarities of person alignment therein with examples. Second, I discuss self-quotations of thought and illustrate the differences between the two types of report.

1SG forms in self-quotation of speech reflect ambiguity in Finno-Ugric languages. These forms simultaneously refer to Reporter as P_S and Reported Speaker as P_N. Thus, it is impossible to point out if Reporter presents the report from the standpoint of E_S or E_N solely from the linguistic encoding of this participant, cf. (11).

(11) Estonian (Uralic; etTenTen19)

… *küsis*   *une*   *kohta*   *ja*   *ütsin,*   *et*
   ask:PST.3SG   sleep:GEN   about   and   say:PST:1SG   COMP
vahepeal   *kõnnin*   *unes*   *a*   *seda*   *lapsest*
sometimes   walk:PRS.**1SG**   sleep:INE   but   DEM:PRTV   child:ELA
saati.
from
'…she asked about sleep, and I said that **I** sometimes walk in sleep, but (I do) it starting from childhood.'

At first glance, this observation might seem a bit trivial. However, theoretically one could expect to find a language reflecting the differentiation between two sources of consciousness, flagged with personal markers. As was pointed out by Güldemann (2008: 7), "[e]ven in self-quoting, […] two centers of consciousness differing from each other at least on the time dimension must be recognized." However, as becomes apparent from this investigation, such differentiation appears as a contextual implicature and, at least in Finno-Ugric languages, is not marked via personal markers.

In contrast, 1PL forms in my data can be considered primarily indicative of Reported Speaker's perspective since they typically subsume Reported Speaker and Reported Addressee(s), as in (12a). However, certain ambiguity is observed when the 1PL form allow an inclusive generic interpretation. When such is pragmatically possible, 1PL forms may subsume Reported or Current Addressee or even simultaneously refer to both, and none of these interpretations excludes the others, as in (12b).

(12)

a. Estonian (Uralic; etTenTen19)

   siis   ma   iitsin,   ee   Liigume [sic!]   *äki?*

   then 1SG say:PST:1SG   INTERJ move:NPST.**1PL** PTCL

   'then I said, ee should **we** move?'

b. Erzya (Uralic; ESmC)

   (*Vesś źardo-buťi moń kevksťimiź, meks, keĺa ton śormadat Pazońť langa?*)

   Meŕiń: mińek   od   śormadićanok   uĺiť.

   say:PST:1SG   **1PL**.GEN   new writer:**1PL**   be:PRS.3PL

   (*Kijak ejsteḋest śormadi Pazdońť?...*)

   '(Once I was asked: why do you write about God?) I said: **we** have new/young writers. (Does anyone of them write about God?...)'

2SG and 2PL forms typically refer to addressees in E_N and E_S, as in (13).

(13) English (Indo-European)

a. *I said: "Don,* **you** *should quit smoking."*
b. *I said to Bill earlier today that* **you** *should quit smoking.*

The ambiguity in using these forms can also be observed when Reported Addressee is also Current Addressee or vice versa, as in (14a). Even though the cases when 2SG and 2PL refer to Current Addresses are few in my database, interestingly, all of them exhibit such ambiguity. Thus, examples like (13b) where Current Addressee is absent in E_N and thus fulfills the role of Reported Other are lacking in my database. I will return to this type of reference once again below. In addition to Addressees, 2SG forms can be used for generic reference, as in (14b). Similarly, they lead to ambiguity since they refer to P_N and P_S equally.

(14)

a. Finnish (Uralic; IKA)

(sää sanoit et sää oot siellä.. ja pysyt etkö sanonuki)

... mut	*mähän*	*sanoin*	*et*	*mää*	*voin*	*lentää*
but	1SG:PTCL	say:PST:1SG	COMP	1SG	can:PRS.1SG	fly:INF

sun	*luo...*
2SG:GEN	to(wards)

'(you said that you are there... and you will stay, didn't you?) ...but I said that I can fly to **you**...'

b. Komi (Uralic; KoZSmC)

Me	*na*	*kyvlyśli,*	*miśa,*	*on*	*kö*
1SG	PCTL	respond:PST.1SG	QUOT.SELF	NEG.PRS:**2SG**	COND

udžav,	*olan*	*prösta –*	*byd*	*lun*	*kažitćö*	*kuźön*
work.CN	live:PRS.**2SG**	empty:ADV	whole	day	seem:PRS.3SG	long:INSTR

da	*ydžydön.*
and	hard:INSTR

'I even replied, if **you** don't work, **you** live emptily – the whole day seems long and hard.'

3SG and 3PL forms can also lead to similar ambiguity when used for generic reference (15a). In addition, ambiguity is also observed when 3SG and 3PL forms refer to Reported Other/s who are also absent in E_S (15b).

(15)

a. Finnish (Uralic; IKA)

En	*sanonut*	*et*	*pitää*	*olla*	*tiedossa,*
NEG:1SG	say:PST.CN	COMP	have.to:PRS.3SG	be:INF	knowledge:INE

sanoin	*et*	*MONET*	*ketkä*	*menee*	
say:PST:1SG	COMP	many:PL	who:PL	go:PRS.**3SG**	
kihloihin		*niin*	*niillä*	*on*	*jo*
engagement:PL:ILL	so	**3PL**:ADE		be:PRS.3SG	already
hääpäivä		*tiedossa...*			
wedding:day		knowledge:INE			

'I didn't say that it should be known, I said that many who get engaged, **they** know already the day of the wedding…'

b. Erzya (Uralic; ESmC)

Śekskak	*mon meŕiń:*		*sonze*	*ojmeze*	*kavtov*	*javś.*
therefore	1SG say:PST:1SG	**3SG**.GEN	soul:3SG	two:LAT	divide:PST.3SG	

'Therefore, I said: **his** soul has divided into two [parts].'

Even though circumstantially Reported Other and Current Other often coincide, this should not always be the case. There are examples where these two participants fulfill different roles in E_N and E_S, respectively. For instance, there are situations where Current Other is Reported Addressee in E_N (17). Although an example of the opposite where Reported Other is Current Addressee is lacking in the database, it appears to be theoretically possible, cf. (13b). Thus, the lack of such examples in my data might be merely accidental.

The ambiguity in perspective also appears among the honorific uses of 3SG and 3PL in Hungarian when the pronoun is not explicitly expressed.[22] Consider (16a) where the pronoun drop leads to two possible interpretations of the 3SG imperative form in the report, which can equally refer to Reported Addressee from the perspective of E_N or E_S. Note that the pronoun drop may cause problems in interpretation in similar contexts beyond RST. (16b) taken from the translation of the novel *Good men* (Hung. *Jó emberek*) by Arturo Pérez-Reverte demonstrates such ambiguity in a regular conversation between two characters.

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[22] The Hungarian honorific pronouns *Ön/Önök* are formally different from the regular pronouns *ő/ők*, but both honorific and non-honorific pronouns use 3SG/3PL morphology elsewhere.

(16) Hungarian (Uralic)

a. (MNSz)

Aszontam   neki,   hogy   nézzen   rám.
DEF.say:PST:1SG DAT:3SG COMP   look:IMP.**HON**/**3SG** DAT:1SG
'I said to her: look at me.' or 'I said to her to look at me.'

b. (Pérez-Reverte 2017: 390; glossing and translation added)

– *Az   erénye…* –   *kezd   bele, de   aztán   elakad.*
   DEF   honor:**HON**/**3SG** start.PRS.3SG PRE   but   then   freeze.PRS.3SG
– *Mi van az erényemmel?*
– **Nem az önéről beszélek,** *uram.* **Hanem a lányoméről.**
'– **Her/Your** honor… – he starts but then freezes.
– What's with my honor?
– **I don't speak about Your honor**, my lord. **But about my daughter's**.'

In other situations, 3SG and 3PL forms are used as shifters and refer to Reported Addressee absent in E_S, similarly to the second interpretation in (16a).

(17) Udmurt (Uralic; UdSmC)

Vaśaly   šuiśko,   soly,   pöj,   instagram
PN:DAT   say:PRS.1SG **3SG**:DAT   QUOT.SELF PN
ťeĺefonaz   puktono.
phone:ILL.**3SG**   install:PTCP.NEC
'I said to Vasya that Instagram shall be installed on **his** telephone.'

Person alignment in self-quotations of speech is summarized in Table 5. As in Table 1, I use square brackets to mark semantic and round brackets for pragmatic relations between the participants.

Now let us turn to self-quotations of thought. This type of report exhibits different behavior of person indexing when compared to RS. First, the 1SG forms subsume not only Reported Speaker and Reporter but also Reported Addressee. This is the most apparent in the situations when unverbalized egocentric speech is introduced with a speech verb and a reflexive pronoun indicating Reported Addressee in M, as in (18).

Person indexing	Perspective	Participant role
1SG	ambiguous	Reported Speaker [= Reporter]
1PL	E_N	Reported Speaker [= Reporter] [+ Reported Addressee]
	ambiguous	Reported Speaker [= Reporter] [+ Reported/Current Addressee]
2SG	ambiguous	Generic
2SG/PL	E_N	Reported Addressee/s
	E_S	Current Addressee/s (= Reported Other/s)
	ambiguous	Reported Addressee/s [= Current Addressee/s]
3SG/PL	E_S	Reported Addressee/s [= Current Other/s]
	ambiguous	Reported Other/s [= Current Other/s]
		Generic
3SG/PL.HON	E_N	Reported Addressee/s
3SG.(+/-HON)	ambiguous	Reported Addressee [= Current Other]

Table 5: Person alignment and their relation to different perspectives in self-quotation of speech.

(18) Udmurt (Uralic; UdSmC)

Mon soleś kinoze ućkysa vdoxnovilsja,
1SG 3SG:ABL movie:ACC.3SG watch:CV inspire:PST.M:REFL

*kužym baśti no **aslym** šui:* "ved'
power get:PST.1SG and self:DAT:1SG say:PST.1SG PTCL.ENIM

mon no bygato ta užyn asleśtym
1SG and be.able:FUT.1SG DEM work:INSTR own:ABL.1SG

bygatonlykme voźmatyny."
ability:ACC.1SG show:INF

'After watching his movie, I got inspired, gathered my forces and **said to myself**: "I can show my abilities with this work after all."'

Even though the egocentricity of thoughts/unverbalized speech might not always be overtly marked in M, the situation is not different therein, and the speaker's thoughts shall be viewed as originally egocentric (cf. Vygotsky 1986; Teptiuk forth.). Also, note that only Reported Addressee is identical with Reported Speaker and Reporter, but Current Addressee/s differ from these participants. Thus, when 2SG and 2PL forms are used as shifters, they refer to Current Addressee/s, e.g. *I thought, **you** were Erzya*. On other occasions, they refer to Reported Interlocutor/s, which is discussed below.

1PL forms subsume Reported Interlocutor or Current Addressee in addition to Reporter and her other roles in E_N. In a handful of examples in my database from all languages except Estonian, it was impossible to tease apart if the form subsumes P_N or P_S.[23] On the one hand, 1PL forms always involve Reporter as a part of self-reference. Thus, Reporter may refer to P_N and P_S with the same form without explicitly distinguishing them. On the other hand, RT is always egocentric and does not require other participants to be immediately present in E_N. Reporter can adapt her thoughts to E_S and involve P_S where necessary. Furthermore, some context hint at an immediate representation of thoughts in E_S. Thus, the difference between E_N and E_S can be quite insignificant. For instance, consider (19), where Reporter apparently almost instantly quotes her thoughts after they had occurred to her. The passive form often used in Finnish instead of 1PL may be interpreted as involving (i) Current Addressee and consequently demonstrating Reporter's perspective (we = 'I + you' in E_S) or (ii) Reported Other and consequently demonstrating Reported Speaker's perspective (we = 'I + s/he' in E_N).

(19) Finnish (Uralic; IKA)

(Onx sul e-mailii?)

Mä   *vaan* *ajattelin*   *et*   *voitais*   *keskustella*

1SG   just   think:PST:1SG   COMP   can:**PASS**:COND   talk:INF

tästä   *samasta*   *aiheesta...*

DEM.PROX:ELA   same:ELA   topic:ELA

'(Do you have an e-mail?) I just thought that **we** could talk about the same topic…'

Note that among Finno-Ugric languages investigated here, only Udmurt marks inclusivity or exclusivity of addressees/interlocutors by using either reflexive pronoun

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[23] Examples of 1PL lack among Estonian self-quotations of thought in the database. However, few examples in etTenTen19, searched with the query *mõtlesin et me* 'I thought that we', show that they lead to the same ambiguity. Consider the following example where 1PL refers to Reported Interlocutor who is Current Other: *Einar tegi mulle plaanikuga sellist lendu et mul siiamaani irvitus näol ma juba vahepeal mõtlesin et **me** lendame yakiga mitte plaaneriga* 'Einar organized such a flight with the aeroplane that I have the grimace on the face till now, I already thought that **we** (i.e. I + P_N [Einar]) fly with Yak and not with aeroplane.' One more case among queried shows the same, while one more indicates the ambiguity described for the second case in Table 6: 1PL refers to Reported Other who is Current Addressee.

aśmeos 'we ourselves (+ addressee)' or *mi* '1PL (-addressee)' (cf. Winkler 2011: 69, 71; also see Norvik et al. 2022). However, in Udmurt, such forms do not occur in RT, even outside the new media genre. As for RS, they are found in the few examples in Udmurt Corpus and Udmurt social media corpus in self-quotations but are more typical for quotations. (20) illustrates the use of the inclusive form that subsumes Reported Addressee in self-quotation of speech. The same holds for other examples in (self-)quotations. It is possible to assume that on the condition of being used in (self-)quotations of thought, such a feature could have possibly hinted at whether the form involves Current Addressee or not. However, for now, this condition is only theoretically possible and is yet to be empirically proven.

(20) Udmurt (Uralic; UdC)

*Šui   soosly: **aśmeos**   ke   öm,*
say:PST.1SG   3PL:DAT ourselves   PTCL.COND NEG.PST:**1PL**

kin udmurt   kuĺturajez   konkursyn   voźmatoz.
who Udmurt   culture:ACC   competition:INE demonstrate:FUT:3SG

'I_SP said to them_ADDR: if **we**_(SP + ADDR) didn't (do it), who would represent Udmurt culture on the competition.'

Among the similarities between RS and RT, we can observe that 2SG and 3SG forms can be used to mark generic referents. Similarly, in the environment when Reported Other/s are also absent in E_S, it is impossible to distinguish if 3SG and 3PL forms refer to Reported Other(s) or Current Other(s), or if they simply overlap. Interestingly, even though RT is always egocentric and thus could be expected to use 2SG and 2PL only for Current Addressee(s), there are cases where these forms can also refer to Reported Interlocutor(s). Such cases represent what can be labeled as 'unverbalized speech'. Unverbalized speech is formally identical to RS but pragmatically denotes RT and can be considered an intermediate category reflecting properties of both types of report. (21) from Udmurt demonstrates such type of report.

(21) Udmurt (Uralic; UdC_blogs)

(Ĺukaśkem dyšetišjos šory ućki, ućki no, kylziśki, kylziśki no,)

malpaj,   eee,   nylaška, myn   bert.   Myn
think:PST.1SG   INTERJ girl:DIM go.IMP.**2SG** back go.IMP.**2SG**

aj   dyšetsky   no   dyšetsky   na.
PTCL study.IMP.**2SG**   and   study.IMP.**2SG**   still
'(I looked at the students gathered, looked and listened and) I thought, eee, girl, **go** back. **Go** and **study** more.'

Note that Reported Speaker still conceptually subsumes the role of Reported Addressee, and the 2SG forms in (21) are used to refer to Reported Interlocutor.

More canonically, Reported Interlocutors in RT are referred to with 3SG and 3PL forms that indicate that thinking happens outside of their reach, and other P_N cannot access the Reported Speaker's thoughts. Such a reference to P_N indicates no referential shift and can be contrasted with the 2SG and 2PL forms used in RS to refer to Reported Addressees and signal the same lack of referential shift. This leads to the conclusion that certain person indexes behave oppositely in RS and RT among self-quotations. Compare the two examples in (22) where pronouns correspond to E_N.

(22) Estonian (Uralic; etTenTen19)

a. RT
(…iitles üks tüdruk, et ta "leidis hullult mugava voodi kuhu minna" ja kutsus mind katsuma-testima seda. Olin täis ja)
mõtsin   mis   sitta   ta   ajab,   mis   voodi,
think:PST:1SG what   shit:PRTV   **3SG** drive:PRS.**3SG**   what   bed
mis   katsumine   ja   läksin   pitse   lammutama.
what   try.out:AN   and go:PST:1SG   shot.glass:PL.PRTV   take.down:INF
'(…one girl$_i$ said that she$_i$ "found crazily comfortable bed where to go" and invited me to test it. I was smashed and) I thought: what the hell is **she**$_i$ talking about, what bed, what testing and went to take shots.'

b. RS
Siis tuli   ja   küsis,   ja   ma   ütsin   et
then come:PST.3SG   and ask:PST.3SG   and 1SG say:PST:1SG   COMP
sinu   asi   vä?
2SG:GEN   thing   Q
'Then she came and asked, and I said: is it **your** business?'

Now notice how they shift to match E$_S$ in (23), reflecting the opposite use of pronouns as above.

(23) Estonian (Uralic; etTenTen19)

a. RT

Mõtsin,   *et*   *pommitan*   *sind*   *ka*   *selle*
think:PST:1SG   COMP   bomb:PRS.1SG   **2SG**:PRTV   also   DEM:GEN
küsimusega.
question:COM
'I thought that I would bomb **you** too with this question.'

b. RS

…jah   *ma*   *ütsin*   *talle,*   *et*   *ma*   *armastan*   *teda…*
   yes   1SG   say:PST:1SG   3SG:ALL   COMP   1SG   love:PRS.1SG   **3SG**:PRTV
'…yes, I said to him that I love **him**…'

Of course, the opposite use of personal markers mainly stems from the change of participant roles with the change of perspective. However, it is interesting that opposite forms signal (the lack of) the perspective shift in RS and RT. Such differences in person alignment can distinguish RT from RS where Matrix does not point explicitly at one type of report, as in (24). Obviously, when attempting such a distinction, one must consider the surrounding context and pragmatics of the situation in addition to the person indexing.

(24) Finnish (Uralic; IKA)

a. RT

(…Toni juoksi meidän perään ja alkoi kyseleen et mihkä ollaan menos.)
Silloin **olin**   **ihan**   **et**   *"Hyi*   *kuka toiki*   *on?!"*
then   be:PST:1SG totally   COMP INTERJ   who DEM.PROX:ADD   be:PRS.**3SG**
(no sit vastattiin että kävelyllehän me…)
'(…Toni ran after us and started asking where we were going.) Then **I was like** "Oh, who**'s** that?!" (but then answered that we [went] for a walk…)'

b. RS

(Ja se niinku höpis jostain rehtorisista [sic!] kysymyksistä)

ja	**mää olin**	*ihan*	*et*	*"näytänks*		*mää susta*
and	1SG be:PST:1SG	totally	COMP	appear:PRS.1SG:Q	1SG	**2SG**:ELA

koululaiselta"

school.kid:ABL

(ja sit se ei vastannu.)

'(And he kinda blabbered something about rhetorical questions) and **I was like** "according to **you**, do I look like a school kid?" (and then he didn't answer.)'

The forms used in self-quotations of thought are summarized in Table 6.

Person indexing	Perspective	Participant role
1SG	ambiguous	Reported Speaker [=Rep. Addressee = Reporter]
1PL	ambiguous	Rep. Speaker [=Rep. Addr. = Reporter] [+ Rep. Interloc. = Cur. Other]
		Rep. Speaker [= Rep. Addr. = Reporter] [+ Rep. Other = Cur. Addr.]
2SG	ambiguous	Generic
2SG/PL	E_N	Reported Interlocutor/s
	E_S	Current Addressee/s (= Reported Other/s)
3SG/PL	E_N	Reported Interlocutor/s
	ambiguous	Reported Other/s [= Current Other/s]
		Generic

Table 6: Person alignment and their relation to different perspectives in self-quotation of thought.

4.2.2. Person alignment in quotations

Person alignment in quotations shows the expected difference compared to self-quotations. Even though some roles are realized differently in quotations, there are also some similarities with self-quotations in terms of reference to the participants in E_N and E_S, and ambiguity in perspectivization.

The 1SG and 1PL forms do not subsume Reporter in E_N; however, they do refer to Reporter when these forms shift and refer to P_S, e.g. *They said that **I** live in a dream world.* When speech is attributed to multiple speakers, the 1PL forms mark Reported Speakers, e.g.: *They said, **we** understand only some words.* In contrast, when it is

attributed to one speaker, the 1PL form can also subsume Reported Addressee(s), Interlocutor(s), or Others, as in (25).

(25) English (Indo-European; invented)

a. *She said: let's go.*
b. *She said: thanks for advice, but Gary and I, we should go now.*
c. *She$_i$ said: I will call my husband$_z$ and tell him that we$_{i + z}$ should go there tomorrow.*

When 1SG and 1PL forms are used as shifters, Reporter often fulfills the role of Reported Addressee in E$_N$. The same holds for the 2SG and 2PL forms canonically used to mark Reported Addressees in E$_N$, as in (26).

(26) Finnish (Uralic; IKA)

(mutta hermostuin sitten kun pentuja ei voinut mennä kattomaan,)

ja	*nämä*	*ihmiset*	*oli*	*tyyliin*	*ota*	*tai*
and	DEM.PROX.PL	person:PL	be:PST.3SG	like	take.IMP.2SG	or

jätä	*älä*	*jahkaile...*
take.IMP.2SG	NEG.IMP.2SG	stall.PRS.CN

'(but I got nervous when it was not possible to go and check puppies,) and these people were like take [it] or leave [it], don't stall…'

Based on these observations, an interesting tendency can be drawn from the database, showing that Reporters often present speech originally addressed to them. Even though the statistical significance of this tendency shall be confronted in a separate study, to my knowledge, a similar tendency has not been previously discussed in the studies focusing on RST. It could be an interesting topic to explore further in the future if it holds for this and other colloquial genres.

1PL used as shifters typically subsume Reporter and another participant present in E$_N$. The two participants usually fulfill the role of Reported Addressees, but this condition appears pragmatic rather than semantic. For instance, the Reported Addressee condition is fulfilled in (27a), while (27b) demonstrates the situation when the 1PL form involves Reporter but the speech is unlikely to be addressed directly at Reporter. Instead, the 1PL form subsumes Reporter and Current Addressee/s, marked with the addressee-inclusive form *aśme* 'our own'. Note that unlike in (20) where the

lexical cognate *aśmeos* 'we ourselves' is used to subsume Reported Speaker and Reported Addressees, *aśme* in (27b) is used as a shifter. Thus, contextual variation can be observed in RS when the addressee-inclusive form is used, showing that it can pragmatically subsume either Reported or Current Addressee(s).

(27)

a. Finnish (Uralic; IKA)

Poliisit	*saapuivat*	*paikalle*	*ja*	*sanoivat*	*et*	*jos*
police:PL	arrive:PST:3PL	place:ALL	and	say:PST:3PL	COMP	if

meil	*ois*	*ollu*	*vyöt*	*ni* *oltais*	*kuoltu*
1PL:ADE	be:COND.3SG	be:PP	belt:PL	so be:**PASS**:COND	die:PASS.PP

kaikki!
all

'The police arrived and said that if **we** had had belts on, **we** all would have died!'

b. Udmurt (Uralic; UdSmC)

Juneskoyś	*ekspertjos*	*šuizy,*	*aśme*	*d́eputatjos*	*dory*
PN:ELA	expert:PL	say:PST.3PL	**our**	deputy:PL	to:ILL

kule	*važiśkyny*	*no*	*soosen*	*veraśkyny.*
have.to:PRS.3SG	turn.to:INF	and	3PL:INSTR	speak:INF

'The UNESCO experts said that one has to turn to **our** deputies and speak with them.'

Furthermore, in specific contexts, 1PL forms may subsume both Reported Speaker and Reporter. Such subsumption of P_N and P_S leads to ambiguity in perspective (28). Note that (28) also reflects the tendency where reported information was initially addressed to Reporter. Nonetheless, the difference between the two perspectives is not highlighted in the person marking of participants.

(28) Udmurt (Uralic; UdSmC)

Lyktysa	*todi,*	*ćto*	*Buranovoje,*	*pe,*	*myniśkom.*
come:CV	know:PST.1SG	COMP	PN:ILL	QUOT	go:PRS:**1PL**

'When we were arriving, I got to know that **we** are going to Buranovo, as they said.'

The 2SG forms can be used for generic reference, similarly to self-quotations. More typically, they mark Current or Reported Addressee, depending on whether they shift or not, e.g. *She asked who are* **you***? / who* **you** *were* (invented). The same holds for 2PL forms, referring to multiple addressees, Reported or Current. As for 3SG and 3PL forms, they are used as shifters and refer to multiple Reported Speakers when speech is attributed to such, e.g. *They*_i *said they*_i *would come* (invented). Alternatively, when it is attributed to a single speaker, 3PL forms may subsume Reported Speaker and Reported Other, as in (29).

(29) Estonian (Uralic; etTenTen19)

> *…sugulane   töötab   toyotas   ja   ütles,   et*
>   relative   work:PRS.3SG   PN:INE   and say:PST.3SG COMP
>
> *neil   neli kasutatud volvot   ka   sees   kasutatud*
> **3PL**:ADE four used   PN:PRTV   also inside   used
>
> *autodes.*
> car:PL:INE
>
> '…[my] relative works in Toyota and said that **they** have 4 used Volvos among the used cars.'

3SG and 3PL forms can also be used for generic reference (e.g. *he said, one* **has** *to paint it fast*) or refer to Reported Other(s) (e.g. *The commentator said (that) she's Erzya*). When such a reference happens, they do not pertain to one perspective and can be considered ambiguous. The honorific forms in Hungarian exhibit the same tendencies as in self-quotations when free pronouns are elliptic (see e.g. ex. (16)). Otherwise, they refer to Reported Addressees in E_N, similarly to non-honorific 2SG and 2PL forms, or honorific 2PL forms in other languages. Table 7 provides a summary of person alignment in quotation of speech.

Person indexing	Perspective	Participant role
1SG	E_N	Reported Speaker
	E_S	Reporter (= Reported Addressee)
1PL	E_N	Rep. Speakers
		Rep. Speaker + Rep. Other/Interlocutor/Addressee (= Reporter)
	E_S	Reporter + Rep. Interlocutor (= Rep. Addressees)
		Reporter + Current Addressee/s
	ambiguous	Generic

		Reported Speaker + Reporter
2SG	E_N	Reported Addressee (= Reporter)
	E_S	Current Addressee (= Reported Other)
	ambiguous	Generic
2PL	E_N	Reported Addressees (+ Reporter)
	E_S	Current Addressees (= Reported Others)
3SG	E_S	Reported Speaker [= Current Other]
	ambiguous	Reported Other [= Current Other]
		Generic
3PL	E_S	Reported Speakers [= Current Others]
		Reported Speaker + Rep. Other
	ambiguous	Reported Others [= Current Others]
		Generic
3SG/PL.HON	E_N	Reported Addressee/s
3SG/PL(.+/-HON)	ambiguous	Reported Addressee/s [= Current Other/s]

Table 7: Person alignment and their relation to different perspectives in quotation of speech.

Now let us turn to person alignment in quotations of thought. In general, one may notice quite a few similarities with person alignment between RS and RT. Since we are dealing with RT, obviously, we find some differences in the distribution of roles. For instance, Reported Speaker automatically becomes Reported Addressee of her own thoughts, even though practically such thoughts are always produced by Reporter and are only attributed to Reported Speaker (cf. Teptiuk forth.).

When 1SG and 1PL pronouns shift they refer to Reporter, and Reporter plus Current Addressee, respectively. Interestingly, 1PL forms referring to P_N do not subsume Reporter in my data, although it could have been practically possible if Reporter had carried the role of Reported Interlocutor in E_N. Occasionally, 1PL is used to refer to both Reported Speaker and Reporter. Such reference leads to ambiguity in perspective, and it is impossible to distinguish if Reporter presents E_N from Reported Speaker's or her own perspective. Consider (30), where the passive form is again used instead of 1PL in colloquial Finnish and subsumes both Reported Speaker and Reporter.

(30) Finnish (Uralic; IKA)

(Tavallaan olin jo jättämässä mun nykyisen ja uus jätkä "odotti" mua, oli jo odottanut yli vuoden ja totta kai oli nyt hiton onnellinen)

kun	*ajatteli*	*et*	*viimein*	*oltais*	*yhessä…*
when	think:PST.3SG	COMP	finally	be:**PASS**:COND	together

'(In a way I$_i$ was already about to leave my current [boyfriend] and a new guy$_z$ "waited" for me, he$_z$ was already waiting for more than a year and of course he$_z$ was damn happy) since he$_z$ thought that finally **we**$_{i + z}$ could be together…'

Similarly to self-quotations, there is a small number of RT-constructions in quotations consisting of unverbalized speech. They can be distinguished from other cases of RT by the 2SG forms referring to Reported Interlocutor, as in (31).

(31) Estonian (Uralic; etTenTen19)

(– Kurat, sul ju põrand verd täis!)

"Ahhh,	***mine***	***persse,***	*tead!"* –	*mõtles*	*Ene*	*omaette…*
INTERJ	go.IMP.**2SG**	ass:ILL	know:PRS.2SG	think:PST.3SG	PN	in.privacy

'(– Goddammit, your floor is full of blood!) "Ahhh, **go to hell**, you know!" – silently thought Ene…'

In other cases, 2SG forms are used as shifters and refer to Current Addressee (e.g. *she probably thought that* **you** *are too young*) or reflect ambiguity when used for the generic reference (e.g. **you** *won't step into the same river twice, the guy thought*).

Interestingly, 2PL forms are few in my database for quotations of thought and are used only as shifters subsuming Reported Speaker and Current Addressee, e.g. *or he*$_i$ *thought (that) what if someone among* **your** *common friends had seen him*$_i$ *there.* Furthermore, one formal reference missing in my database for RT in quotations is the use of honorific 3SG and 3PL forms in Hungarian. The same is true for self-quotations of thought (see Table 6). In general, it is not that surprising. In practice, such reference can be expected only in situations when unverbalized speech is presented. However, since thoughts remain silent to the interlocutors, the use of honorifics in such cases can be considered redundant. Furthermore, there might be a reason why such speech remained unverbalized. In my database, this subtype of RT often conveys a negative attitude that Reported Speaker expresses towards Reported Interlocutor, as e.g. in (31). Such an attitude conflicts with the meaning honorific forms tend to convey, e.g. respect, courtesy, esteem. Therefore, it goes without surprise that what remains

unverbalized hardly ever contains an honorific attitude towards Reported Interlocutor and consequently explains the lack of honorific forms.[24]

   3SG and 3PL forms used as shifters correspond to their use in quotations of speech and refer to Reported Speaker, e.g. *she_i thought that **she_i** would wait a bit*. Also, cases of ambiguity can be observed when 3SG and 3PL refer to Reported Others (e.g. *he thought that **these cops** won't catch (him on) a new Mercedes*), or they are used for a generic reference (*the rascal thought that **no-one of landlords** pays taxes as a rule*). As noted for quotations of speech, 3PL forms can subsume several Reported Speakers (e.g. *$they_i$ thought that **$they_i$** could get a dog themselves)* or refer to Reported Speaker and Reported Other (e.g. *he_i thought that **$they_{i+z}$** had once again established $themselves_{i+z}$ permanently in power*). In addition to these uses, 3SG forms may also refer to Reported Interlocutor. Such use was already described for self-quotations of thought (cf. exx. (22a), (24a)). (32) demonstrates a similar use in quotations.

(32) Finnish (Uralic; IKA)

   (– vitsit sä oot kyllä laihtunu! se sano ja katto ku ihaillen.)

varmaan	*ajatteli*	*et*	*kerranki*	*se*	*läski*
surely	think:PST.3SG	COMP	for.once	DEM.DIST	fatso

on	*saanu*	*jotain*	*aikaseks.*
be:PRS.3SG	get:PP	something.PRTV	early:TRANSL

   '(– are you kidding, you have slimmed very much! he said and looked as if surprised.) surely he thought (that) finally **this fatso has** accomplished something.'

Note that E_N in (32) demonstrates the dialogue between Reported Speaker and Reporter, the latter of which fulfills the role of Reported Interlocutor in E_N. Thus, in addition to Reported Interlocutor, the 3SG forms in quotations can be used by Reporter for self-reference, creating an extra distancing and impartial effect on the presentation of someone else's thought (or speech). A hypothetical assumption about other people's thoughts, especially portraying them in a negative light as in (32), may put extra pressure on Reporter. Hence, an additional requirement may arise to create extra

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[24] Counterexamples to this tendency can sometimes occur. See e.g. ex. (15b) from Komi in Teptiuk (2021a: 223-224), containing an honorific reference in the report of unverbalized speech: 'My tongue was very itching to answer that **You** yourself appointed and we announced. But I didn't manage (to answer).'

distancing on such occasions, leading to such an atypical self-reference. These and other types of person alignment discussed above for quotations of thought are summarized in Table 8.

Person indexing	Perspective	Participant role
1SG	E_N	Reported Speaker [= Reported Addressee]
	E_s	Reporter
1PL	E_N	Rep. Speakers
		Rep. Speaker + Rep. Other/Interlocutor ($\neq$ Reporter)
	E_s	Reporter + Current Interlocutor
	ambiguous	Reported Speaker + Reporter
2SG	E_N	Reported Interlocutor
	E_s	Current Addressee (= Reported Interlocutor/Other)
	ambiguous	Generic
2PL	E_s	Current Addressee (= Reported Other) + Reported Speaker
3SG	E_N	Reported Interlocutor (= Reporter)
	E_s	Reported Speaker [= Current Other]
	ambiguous	Reported Other [= Current Other]
		Generic
3PL	E_s	Reported Speakers [= Current Others]
		Reported Speaker [= Current Other] + Rep. Other
	ambiguous	Reported Others [= Current Others]
		Generic

Table 8: Person alignment and their relation to different perspectives in quotation of thought.

4.2.3. Person alignment in quotations with an unknown source

Compared to quotations and self-quotations, quotations with an unknown source exhibit noticeable systemic differences in person alignment. Although one may still find similar relation between the person marking and participant roles as in quotations and self-quotations, some types of perspective are not reflected in quotations with an unknown source.

None of the forms refers to the participants in E_N. As was expected in Section 2, this happens because the whole situation behind the report and its original participants remain unspecified by Reporter if not totally unknown. As follows, Reporter cannot tie the report to the perspective of P_N. In contrast, it is possible to

adapt the report to E_S, and therefore 1SG and 1PL, as well as 2SG and 2PL forms can be used as shifters. (33) and (34) demonstrate such uses.

(33) Udmurt (Uralic; UdC_blogs)

A,	*valamon,*	*šuizy*	*val,*	*odig*	*nylkyšno*	*mi*
INTERJ	understand:PTCP	say:PST.3PL	PST.AUX	one	woman	**1PL**

pölyn	*śekyten*	*šuysa.*
among	pregnant	COMP

'Ah, understood, it was said that one woman among **us** is pregnant.'

(34) Finnish (Uralic; IKA)

Te	*ette*	*kuulemma*	*osaa*	*käyttää*	*kytkintä…*
2PL	NEG:**2PL**	QUOT	know:PRS.CN	use:INF	clutch:PRTV

'Allegedly, **you** don't know how to use the clutch…'

Similarly to quotations and self-quotations, 1PL, 2SG, 3SG, and 3PL forms are also used for generic reference. Technically, they exhibit ambiguity in terms of perspective, even though there is no possibility to tie them to any P_N, e.g. *it is said that **one shouldn't** plant potatoes in the same spot for a couple of years.* The system of person marking in quotations of speech with an unknown source is summarized in Table 9.

Person indexing	Perspective	Participant role
1SG	E_S	Reporter
1PL	E_S	Reporter + Reported Other
		Reporter + Current Addressee(s)
	ambiguous	Generic
2SG	E_S	Current Addressee [= Reported Other]
	ambiguous	Generic
2PL	E_S	Current Addressees [= Reported Others]
3SG/PL	ambiguous	Reported Other/s [= Current Other/s]
		Generic

Table 9: Person alignment and their relation to different perspectives in quotations of speech with an unknown source.

Now let's turn to RT in quotations with an unknown source. As briefly mentioned at the beginning of this section, such cases are few in the database. Therefore, I can discuss only some participant roles and their linguistic coding. All possibilities summarized below in Table 10 correspond to the options observed for RS in quotations with an unknown source. Interestingly, my database does not contain cases where quotations of thought with an unknown source involve or relate to Current Addressee/s, e.g. *some/people thought that **you** were a snob* (invented). This lack of data might be merely accidental; another possibility suggests a cross-linguistic tendency where Reporters tend to report thoughts about themselves, as in (35), but, for some reason, prefer not to do so regarding P_S if thoughts are not attributed to a concrete source. However, a further investigation of this tendency is beyond the scope of the current study.

(35) Hungarian (Uralic; MNSz)

Tudom,		*sokan*	*gondolták,*	*hogy*	*én*	*a*
know:PRS.1SG.DEF		many	think:PST:3PL.DEF	COMP	**1SG**	DEF

MIÉP	*fizetett*	*alkalmazottja*	*vagyok…*
PN	pay:PP	employ:PP:3SG	be.PRS:**1SG**

'I know that a great many people thought that **I am** a paid employee of MIÉP[25]…'

The lack of reference to P_N is explained with the same considerations as for quotations of speech with an unknown source. Namely, the situation when the report has occurred originally, and its original author and addressees are unknown (see Section 2). Consequently, the reference to P_N remains irrelevant if not impossible when this report is produced. Table 10 summarizes the observed possibilities for person alignment in quotations of thought with an unknown source.

Person indexing	Perspective	Participant role
1SG	E_S	Reporter
1PL	ambiguous	Generic
3SG/PL	ambiguous	Reported Other/s [= Current Other/s] Generic

Table 10: Person alignment and their relation to different perspectives in quotations of thought with an unknown source.

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[25] *Magyar Igazság és Élet Pártja* 'The Hungarian Justice and Life Party' or *MIÉP* was a right-wing political party in Hungary.

5. Summary and discussion

This section summarizes results for Finno-Ugric languages discussed here and put them into a broader context without keeping strict boundaries between summary and discussion. I will focus on the effect of the reference to participants on perspectivization in discourse reporting.

Based on the empirical data illustrated in Section 4.2, one can conclude that the situation appears to be more complex than theorized in Section 2. Among Finno-Ugric languages, any (re)presentation of speech and thought is indeed connected to the two perspectives, i.e. Reported Speaker's and Reporter's. However, we also find many ambiguous cases in addition to the two perspectives. Even though these results are drawn based on only a handful of Finno-Ugric languages, they could be extended to other languages keeping the two perspectives canonically distinct in RST and not exhibiting specific cultural restrictions on reports of speech and thought.

The Reported Speaker's perspective brings forth P_N. Such perspectivization is available only for quotations and self-quotations and excludes the third type of report, i.e. quotations where the source (i.e. Reported Speaker) remains at best unspecified if not completely unknown. What characterizes such type of perspective is that although P_N *may* fulfill some role in E_S, Reporter chooses to neglect them. This also holds for the cases when such a participant is Reporter. Thus, Reporter becomes impartial in speech and thought (re)presentation. This is also true for the marking of other participants in self-quotations. Thus, when other participants are displayed from the perspective of E_N in self-quotations, Reporter basically neglects her role in E_S and reports it from the Reported Speaker's perspective, i.e. the earlier/different self.

The Reporter's impartiality in self-quotations can indicate the differentiation of two sources of consciousness in this type of report, briefly touched upon by Güldemann (2008: 7). Namely, Güldemann (2008: 7) indicates that even in self-quotations, one can still differentiate two speakers/cognizants at least on the time dimension, i.e. 'I-now' (Reporter) and 'I-then' (Reported Speaker). Although such differentiation has not been found in the marking of Reporter/Reported Speaker in self-quotations throughout this investigation (see below), self-quotations can still indicate differences in two perspectives by highlighting the roles that other participants occupy in E_N.

In contrast, the Reporter's perspective is highlighted when she chooses to neglect the perspective of Reported Speaker. This type can be observed not only in quotations and self-quotations, but also in quotations with an unknown source. As a matter of

fact, only this type of perspective remains for quotations with an unknown source; otherwise, the perspective is ambiguous or rather unassigned.

Different reasons stand behind the selection of Reporter's perspective over the Reported Speaker's. In some cases, the Reporter's perspective is motivated by the absence of P_N in E_S. For instance, when this condition holds, the Reporter's perspective can be observed in the marking of Reported Speaker in quotations or Reported Addressee in self-quotations. In other cases, it is motivated by the information in the report. An important characteristic leading to the choice of this perspective over the possibility of staying impartial is the report containing information about Reporter. This is crucial for quotations with an unknown source, allowing only this type of perspectivization. As is mentioned above, in quotations and self-quotations Reporter may also choose to be impartial. Impartiality in the presentation of the report also interacts with other characteristics discussed for so-called 'direct' modes of presentation, e.g. vividness, dramatization, involvement (cf. Wierzbicka 1974; Li 1986). Therefore, the report containing information about Reporter is not always presented from the Reporter's perspective.

However, when the report contains information about Current Addressee, Reporter always selects her own perspective. On the one hand, this selection is motivated by discourse conditions in E_S: Reporter delivers her own or someone else's speech or thought to no one else but Current Addressee. On the other hand, this might also be influenced by Current Addressee's role in E_N. In all instances among quotations of speech, Current Addressee is absent in E_N, and only in a few examples of quotations of thought, she is Reported Interlocutor in E_N. Regarding the latter, even the direct involvement of Current Addressee in E_N does not seem to override the requirement for Reporter to stick to her own perspective instead of turning to the Reported Speaker's. Thus, Current Addressee's role in E_N might have little involvement in the choice of perspective after all. Nonetheless, the frequent absence of Current Addressee in E_N is interesting and somewhat characterizes reports about this participant.

Among ambiguous cases, four different scenarios can be pointed out. The first scenario is characterized by the presence of the participant with distinct roles in E_N and E_S. These roles appear to be technically the same but realized in different events. This characteristic can directly affect the core participants like Reporter and Reported Speaker. For instance, this realization can be observed on the semantic level in self-quotations since Reporter is also Reported Speaker. I have not found any differences in marking these participants in self-quotations, which would highlight differences

between the two sources of consciousness briefly mentioned above. Outside the core participants, the first scenario is observed when Reported Addressee is also Current Addressee. Since these roles are identically marked in E_N and E_S, it is impossible to distinguish the two perspectives that blend in one report, at least on the level of person marking. Finally, the same ambiguity arises when Other/s in E_N is/are equally absent in E_S. No matter who Reporter or Reported Speaker is, the absence of such participants in both events leads to identical person marking across different report types.

In contrast to the first scenario, the second scenario involves two distinct participants, P_N and P_S, referred to with the same forms. Only one such case was observed in quotations when 1PL forms refer to Reporter and Reported Speaker. Since two core participants are subsumed under one form, such personal reference blends the two perspectives in one report. However, it does not mean that other shifters cannot interact with perspectivization. Thus, other markers may still be used to highlight one perspective over another.

The third scenario involves the use of person marking for a generic reference. Dahl (2000) has observed that the Swedish generic pronoun *man* behaves similarly to other egophoric pronouns used to encode speech act participants, i.e. P_S in RST-constructions. The use of generic reference in different report types shows that they may involve P_S and P_N equally. Outside RST, generic 2SG is quite typical for Estonian (Lindström et al. 2020, 2022) and Finnish (Suomalainen 2020), 3SG marked on the verb with null arguments are occurring in Finnish (Kaiser 2015), Estonian (Lindström et al. 2022) and Hungarian, the latter of which also uses 3PL (Dalmi 2022). Similarly to Hungarian, Eastern Finno-Ugric languages seem to use 3SG and 3PL forms (Gulyás 2019) in addition to 2SG typical for Russian (Leinonen 1983), dominant in the region. In addition to those markers, I have observed a certain amount of 1PL forms used for a generic reference in my data. For instance, 1PL forms may be contextually vague in self-quotations of speech and include besides Reported Speaker [= Reporter] also Reported or Current Addressees, since the form subsumes a more generic group of people like ethnos or humanity in general. The question of which interpretation is more accurate remains open since reported information with generic reference equally applies to P_N and P_S. The same holds for 3SG forms creating generic meaning in necessity constructions (e.g. 'one cannot do so') or 3PL arguments referring to a non-specific inclusive group of people (e.g. 'the Erzya people', 'everyone').

The fourth scenario is quite close to the 1PL examples discussed in the previous paragraph since it reflects a contextually caused ambiguity when formal reference appears to be somewhat incomplete to achieve a specific interpretation. One such case involves honorific forms in Hungarian when Reported Addressee is absent in E_S, and the pronoun is elided from the report. Since formally such interpretation allows viewing the report as containing shifters or lacking them, the assignment of one perspective is problematic. Another such case is when 1PL forms are used in self-quotations of thought. Besides Reporter who automatically fulfills the role of Reported Speaker/Addressee, such forms may subsume two types of participants. Notably, these participants fulfill different roles in E_N and E_S. The first type involves Reported Interlocutor absent in E_S; the second type – Current Addressee absent in E_N. Even though these participants fulfill distinct roles in two events, it is impossible to say if Reporter refers to P_N or P_S when she uses 1PL forms.

The lack of differentiation in marking Reporter and Reported Speaker in self-quotations discussed for the first scenario is not restricted to Finno-Ugric languages investigated here and reflects a cross-linguistic tendency. I have conducted a short investigation of the available literature on discourse reporting and raised a query in the LINGTYP mailing list (21.01.2022). According to what I have managed to find out, we do not (yet) know about languages that would pinpoint the following difference in self-quotations: 'I-now' as Reporter *vs*. 'I-then' as Reported Speaker, unless sociopragmatic conditions require it. Such a sociopragmatic requirement can be seen in (36) from Pontianak Malay, an example kindly provided to me by David Gil via the list (21.01.2022):

(36) Pontianak Malay (Austronesian; MPIEVA Jakarta Field Station Corpus)[26]

> ***aku*** *tanyaʔ kalɔʔ pakɛʔ bəs **saya** maɔʔ sɛwə mɔbil kamu tu.*
> 1SG ask   TOP use   bus 1SG want rent car   2SG   DEM.DIST
> '**I** (*aku*) asked whether, instead of taking a bus, **I** (*saya*) could rent your car.'

According to David Gil's comment, "the speaker uses *aku* in the main clause when talking to a friend, but *saya* in the embedded clause, in which the reported situation is a more impersonal one involving a commercial transaction" (Gil p.c.). David Gil's explanation, however, states that "the relevant factor governing the choice of 1SG pronoun is not reported speech per se, but rather the different politeness conditions

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[26] Glossing and translation by David Gil, emphasis added.

associated respectively with the main and embedded clauses [here: Matrix and Report, DT].” Quite a few (South)east Asian languages may exhibit similar cases. However, those cases would not be restricted to discourse reporting and would largely depend on similar sociopragmatic conditions.[27]

Theoretically, one could also think of a language that oppositely to the scenario 'I-now' *vs.* 'I-then' would systematically encode co-referentiality between Reporter and Reported Speaker in self-quotations by using dedicated logophoric markers. Many studies focusing on the phenomenon of logophoricity specify that it almost never concerns first-person referents; less rarely but still it can be applied to the second person (see e.g. Comrie & Hyman 1981; Roncador 1992; Nikitina 2012b). After browsing the literature, I have found only two African languages using dedicated logophoric forms in self-quotation: Ngbaka-Ma'bo (Ubangi; CAR, DRC) and Gokana (Ogoni; Nigeria). As discussed in Roncador (1988: 166), Ngbaka-Ma'bo remains an open case since the data in Thomas (1963), illustrating such use, allows various interpretations. For Gokana, Comrie & Hyman (1981: 23) specify that the logophoric suffix on the main verb in self-quotations is "superfluous and dispreferred", since "it is *not possible* to get the two first-person singular pronouns to be non-coreferential" (Comrie & Hyman 1981: 23, emphasis added).

A case where the logophoric pronoun is used in self-quotations is also illustrated in Nikitina (2020: 90) for another African language Wan (Mande; Ivory Coast). However, it would rather qualify as an example where (socio)pragmatic factors affect the appearance of logophoric pronoun in self-quotation. In that example, the reporter uses 2SG pronoun for self-reference, which creates extra distancing. Hence, the logophoric pronoun is used to signal co-referentiality between the 2SG argument in Matrix and the participant in Report.

Different possibilities for logophoric modes of organizing discourse reporting in Finno-Ugric languages are yet to be extensively studied, especially for self-quotations. Nevertheless, I have noticed an interesting tendency while compiling a database. All languages investigated here to a different degree may signal such co-referentiality in

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[27] In response to my query, I was also suggested to check different strategies of gender indexing. Although social roles and sociopragmatic conditions do influence gender indexing in some languages (cf. Rose 2013), such languages do not use two 1st person pronouns that would differ depending on the gender of the addressee. Although it remains a theoretical possibility, an updated database of genderlects so far shows a lack of a similar system (Rose p.c.). Otherwise, a language containing such a system could show the use of two different pronouns in self-quotations, similarly to (36).

quotations by eliding free pronouns from the report, e.g. '(s)he$_i$ said, $\emptyset_i$ comes'. However, such 'logophoric strategies' are not used systematically. Furthermore, all languages also exhibit opposite cases where co-referentiality is marked by the presence of pronouns, e.g. '(s)he$_i$ said, (s)he$_i$ comes'. Thus, some other factors may affect the presence or absence of free pronouns co-referential with the main argument in Matrix. A similar situation is observed in self-quotations. Thus, until there is evidence to the contrary, Reported Speaker and Reporter two participants acquire identical marking in self-quotation cross-linguistically, at least as far as person indexing of these two participants is concerned.[28]

Although there are several ambiguous scenarios in Finno-Ugric languages, they do not seem to create any discursive problems. Even if various interpretations are possible, they do not seem to be crucial for the success of the narrative or communicative act involving different types of reports. The distribution of participants may also appear to be mostly theoretically complex but would not create practical complications for the successful construal of their formal marking in the context. However, this issue shall be separately studied using experimental methods.

There is also a system behind the complexity. The reasons behind the selection of different perspectives in RST are numerous, but they have a limited number of realizations. Person alignment interacts with the distribution of participants and leads to assigning different roles to forms used in them. When scrutinized, idiosyncrasies observed among different report types stem from the semantics of these types and the limited set of possible participants.

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[28] Note that this remark is mainly relevant for pronominal marking. Different verbal indexing in self-quotations and clauses introducing them was mainly beyond this short investigation's scope and would require a separate study. Another point requiring a separate check is the use of other reference types for such a differentiation. For instance, in some East Asian languages, it is common to refer to speech act participants by the person's social role. Beyond this region, proper names can also be used. I owe the knowledge about the former to Pavel Ozerov (p.c.), and I am grateful to him for the latter remark about proper names. Also see Haiman (1995) discussing English where third-person construals are sometimes used in viewing the first person. Such cases shall be further investigated if they are used to differentiate two sources of consciousness and if some language has already established a system based on these distinctions in self-quotations.

6. Conclusion

This paper dealt with the person alignment in different types of reports. Data from internet communications of six Finno-Ugric languages were used to illustrate person alignment in six report types. In contrast to previous studies mainly focusing on representations of speech belonging to a speaker different from Reporter, I have included three types of speech and thought reports according to Reported Speaker: self-quotations, quotations, and quotations with an unknown source. I have shown that person alignment largely depends on the distribution of participant roles, and the report types behave differently in marking core participants. Among other participant types, they often show similarities, but again largely depend on the distribution of participant roles in the narrated and current speech event. The overlap of participants in E_N and E_S, as well as common reference to P_N and P_S with one form often cause ambiguity in perspectivization, which is otherwise connected to the perspective of Reporter as P_S and Reported Speaker as P_N.

Some results and ideas provided here need to be further explored, as well as the statistical significance of some observations need to be confirmed in the future. Although theoretical implications made here are meant to be extended to other languages beyond the six Finno-Ugric, the phenomenon of discourse reporting shall be further studied in individual languages to confirm or disclaim their universality. However, I hope I managed to convince the reader in need to further investigate discourse reporting in its complexity and look at the phenomenon of discourse reporting beyond a mere (re)presentation of speech attributed to other speakers.

original draft. I am enormously obliged to the two anonymous reviewers for their fruitful comments and suggestions. The responsibility for all remaining shortcomings is entirely mine.

Abbreviations

1 = 1st person
2 = 2nd person
3 = 3rd person
ABL = ablative
ACC = accusative
ADD = additive
ADE = adessive
ADV = adverbial
ALL = allative
AN = action noun
ANAPH = anaphoric
ASS = assertion
AUX = auxiliary verb
CN = connegative
COMP = complementizer
COND = conditional
CV = converb
DAT = dative
DEF = definite
DEM = demonstrative
DIM = diminutive
DIST = distal
ELA = elative
E_N = narrated event

ENIM = enimitive
E_{NS} = narrated speech event
E_S = speech event
F = feminine
FUT = future
GEN = genitive
HON = honorific
ILL = illative
IMP = imperative
INE = inessive
INF = infinitive
INSTR = instrumental
INTERJ = interjection
ITRV = iterative aspect
LAT = lative
M = masculine
NEC = necessitative
NEG = negative
NPST = non-past
O = object prefix
PASS = passive
PL = plural
P_N = participant in the narrated event
PN = proper noun

PP = past participle
PRE = preverb
PRF = perfect
PROX = proximate
PRS = present
PRTV = partitive
P_S = participant in speech event
PST = past
PTCL = particle
PTCP = participle
Q = question particle
QUOT = quotative particle
QUOT.SELF = self-quotative particle
REFL = reflexive
RPRT = reportative
RS = reported speech
RST = reported speech and thought
RT = reported thought
S = subject prefix
SNS = social network sites
SG = singular
TERM = terminative
TOP = topic
TRANSL = translative

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Corpora

Erzya Corpora, blogs (EC_blogs)
    http://erzya.web-corpora.net/erzya_corpus/search

Erzya Corpora, Social Media Corpus (ESmC)
    http://erzya.web-corpora.net/erzya_social_media/search

English Web 2020 (enTenTen20)

https://app.sketchengine.eu/#dashboard?corpname = preloaded%2Fententen20_t
t31_1&corp_info = 1

English Web 2019 (enTenTen19)

https://app.sketchengine.eu/#dashboard?corpname = preloaded%2Fettenten19_fi
l2

Estonian Web 2019 (etTenTen19)

https://app.sketchengine.eu/#dashboard?corpname = preloaded%2Fettenten19_fi
l2

Internet-keskusteluaineistoja (IKA)

https://korp.csc.fi/korp-
old/#?stats_reduce = word&cqp = %5B%5D&corpus = s24_2001,s24_2002,s24_200
3,s24_2004,s24_2005,s24_2006,s24_2007,s24_2008,s24_2009,s24_2010,s24_2011,s
24_2012,s24_2013,s24_2014,s24_2015,s24_2016,s24_2017,s24_2018,s24_2019,s24
_2020,s24_001,s24_002,s24_003,s24_004,s24_005,s24_006,s24_007,s24_008,s24_0
09,s24_010,s24,ylilauta

Komi-Zyrian Corpora, Social Media Corpus (KoZSmC)

http://komi-zyrian.web-corpora.net/index_en.html

Magyar Nemzeti Szövegtár, személyes alkorpusz (MNSz)

http://mnsz.nytud.hu

Udmurt Corpora (UdC)

http://udmurt.web-corpora.net/udmurt_corpus/search

Udmurt Corpora, blogs (UdC_blogs)

http://udmurt.web-corpora.net/udmurt_corpus/search

Udmurt Corpora, Social Media Corpus (UdSmC)

http://udmurt.web-corpora.net/index_en.html

Appendix

Below I present the list of quotative strategies used to query different types of reports, arranged language-wise. Next to the strategy, separated by semi-colons I present the gloss and approximate translation to show the range of use for a concrete strategy in the database. Even though the strategies are ordered with the following principle: 'speech verbs > mental verbs > other clausal units > non-clausal units', the letters

next to strategies are not indicative and shall not be used to compare the strategies between the languages.

1. Erzya:
1a. *meŕiń*; 'say:PST:1SG'; 'I said', 'I thought';
1b. *meŕś*; 'say:PST.3SG'; '(s)he said', '(s)he thought';
1c. *meŕśť* 'say:PST.3PL'; 'they said', 'they_{UNKNOWN} said';
1d. *aŕśiń*; 'think:PST:1SG'; 'I thought';
1e. *aŕśeś* 'think:PST.3SG'; '(s)he thought';
1f. *aŕśeśť* 'think:PST.3PL'; 'they thought'; 'they_{UNKNOWN} thought';
1g. *keĺa*; 'QUOT'; 'I said', 'I thought', '(s)he said', '(s)he thought', 'they_{UNKNOWN.} said', 'they_{UNKNOWN} thought';
1h. *mol*; 'QUOT'; '(s)he said', 'they_{UNKNOWN} said'.
2. Estonian:
2a. *ütsin*; gloss: 'say:PST:1SG'; approximate translation: 'I said', 'I thought';
2b. *ütles*; 'say:PST.3SG'; '(s)he said';
2c. *üt(le)sid*; 'say:PST.3PL'; 'they said', 'they_{UNKNOWN} said';
2d. *mõtsin*; 'think:PST:1SG'; 'I thought';
2e. *mõtles*; 'think:PST.3SG'; '(s)he thought';
2f. *mõt(le)sid*; 'think:PST.3PL'; 'they thought', 'they_{UNKNOWN} thought';
2g. *olin nagu*; 'be:PST:1SG like'; 'I said', 'I thought';
2h. *olin mingi*; 'be:PST:1SG something'; 'I said', 'I thought';
2i. *mul oli (nii) et*; '1SG:ADE be:PST.3SG (so) COMP'; 'I said', 'I thought';
2j. *mul oli nagu (et)* '1SG:ADE be:PST.3SG like (COMP)'; 'I thought';
2k. *oli (nii) et*; 'be:PST.3SG (so) COMP'; '(s)he said';
2l. *olid et*; 'be:PST.3PL COMP'; 'they said';
2l. *oli nagu (et)* 'be:PST.3SG like (COMP)'; '(s)he said';
2m. *oli lihtsalt* 'be:PST.3SG simply'; '(s)he said';
2n. *väidetavalt*; 'allegedly'; 'they_{UNKNOWN} said';
2o. *kuuldavasti*; 'allegedly'; 'they_{UNKNOWN} said';
2p. *kuulukse*; 'QUOT'; 'they_{UNKNOWN} said'.
3. Finnish:
3a. *sanoin et*; gloss: 'say:PST:1SG COMP'; approximate translation: 'I said';
3b. *sanoi et*; 'say:PST.3SG COMP'; '(s)he said';
3c. *sanoivat et*; 'say:PST:3PL COMP'; 'they said';
3d. *ajattelin et*; 'think:PST:1SG COMP'; 'I thought';
3e. *ajatteli et*; 'think:PST.3SG COMP'; '(s)he thought';
3f. *ajattelivat et*; 'think:PST.3PL COMP'; 'they think', 'they_{UNKNOWN} thought';
3g. *olin (ihan) et*; 'be:PST:1SG completely COMP'; 'I said', 'I thought';
3h. *olin tyyliin (et)*; 'be:PST:1SG like (COMP)'; 'I said';
3i. *olin niinku (et)*; 'be:PST:1SG like (COMP)'; 'I thought';

3j. *olin silleen et*; 'be:PST:1SG so COMP'; 'I said', 'I thought';

3k. *olin vaan et*; 'be:PST:1SG just COMP'; 'I said', 'I thought';

3l. *oli et*; 'be:PST.3SG COMP'; '(s)he said';

3m. *oli ihan et*; 'be:PST.3SG completely COMP'; '(s)he said', '(s)he thought';

3n. *oli niinku et*; 'be:PST.3SG like COMP'; '(s)he said';

3o. *oli tyyliin*; 'be:PST.3SG like'; '(s)he said';

3p. *oli silleen et*; 'be:PST.3SG so COMP'; '(s)he said', '(s)he thought';

3q. *oli vaan et*; 'be:PST.3SG just COMP'; '(s)he said', '(s)he thought';

3r. *kuulemma*; 'QUOT'; 'they_UNKNOWN said'.

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4. Hungarian:

4a. *mondok / mondom*; gloss: 'say:PRS.1SG/.DEF'; approximate translation: 'I said', 'I thought';

4b. *aszontam*; 'DEF.say:PST:1SG'; 'I said', 'I thought';

4c. *aszongya*; 'DEF.say:PRS.3SG.DEF'; '(s)he says';

4d. *aszonta*; 'DEF.say:PST:3SG.DEF'; '(s)he said';

4e. *aszongyák*; 'DEF.say:PRS:3PL.DEF'; 'they said', 'they_UNKNOWN said';

4f. *aszonták*; 'DEF.say:PST:3PL.DEF'; 'they said', 'they_UNKNOWN said';

4g. *gondoltam*; 'think:PST:1SG'; 'I thought';

4h. *gondolta*; 'think:PST:3SG.DEF'; '(s)he thought';

4i. *gondolták*; 'think:PST:3PL.DEF'; 'they thought'; 'they_UNKNOWN thought';

4j. *állítólag*; 'allegedly'; 'they_UNKNOWN said', '(s)he said'.

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5. Komi:

5a. *šui*; gloss: 'say:PST.1SG'; approximate translation: 'I said';

5b. *šuis*; 'say:PST.3SG'; '(s)he said';

5c. *šuisny*; 'say:PST.3PL'; 'they said', 'they_UNKNOWN said';

5d. *ćajti*; 'think:PST.1SG'; 'I thought';

5e. *dumajti*; 'think:PST.1SG'; 'I thought';

5f. *ćajtis*; 'think:PST.3SG'; '(s)he thought';

5g. *mövpalis*; 'think:PST.3SG'; '(s)he thought';

5h. *ćajtisny*; 'think:PST.3PL'; 'they thought', 'they_UNKNOWN thought';

5i. *miśa*; 'QUOT.SELF'; 'I said', 'I thought';

5j. *pö*; 'QUOT'; '(s)he said', '(s)he thought', 'they said', 'they_UNKNOWN said';

5k. *mol*; 'QUOT'; '(s)he said';

5l. *típa*; 'like'; 'I said', '(s)he said', 'they said', 'they_UNKNOWN said'.

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6. Udmurt:

6a. *šui*; gloss: 'say:PST.1SG'; approximate translation: 'I said', 'I thought';

6b. *šuiz*; 'say:PST.3SG'; '(s)he said';

6c. *šuizy*; 'say:PST.3PL'; 'they said', 'they_UNKNOWN said';

6d. *malpaj*; 'think:PST.1SG'; 'I thought';

6e. *malpaz*; 'think:PST.3SG'; '(s)he thought';

6f. *malpazy*; 'think:PST.3PL'; 'they thought', 'they_UNKNOWN thought';

6g. *pöj*; 'QUOT.SELF'; 'I said', 'I thought';

6h. *pe*; 'QUOT'; '(s)he said', 'they said', 'they_UNKNOWN said';

6i. *mol*; 'QUOT'; 'I said', 'I thought', '(s)he said', 'they said';

6j. *típa*; 'like'; 'I said', '(s)he said', 'they said'.

Table 11: Quotative strategies used as a query of different report types.

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