

Disclaiming epistemic access with 'know' and 'remember' in Finnish

Ritva Laury & Marja-Liisa Helasvuo

(Post-print, i.e. final draft post-refereeing)

Abstract

This article describes the denial of epistemic access through the use of the verbs *tietää* 'to know' and *muistaa* 'to remember' in Finnish conversation. The authors show that both verbs tend to occur in the first person negative form. Each verb is likely to occur in certain formulaic syntactic formats that are in turn associated with particular sequential and interactional contexts, in which they perform certain functions beyond simple denial of knowing and remembering, such as hedging and rejecting a compliment. We show that the negative-initial format for both verbs is likely to occur in responsive position and to occur without any complements, while the pronoun-initial format is less likely to occur in responsive position and more likely to be followed by complements. Both these tendencies are stronger for the verb *tietää* 'to know' than the verb *muistaa* 'to remember'. The verb *tietää* functions as an epistemic marker and as a projective fragment in our data. The clearest tendency for the verb *muistaa* emerging from our data is that it often occurs in contexts of reminiscing, involving several instances of use of the verb by different participants in close succession. The formats also manifest different degrees of phonetic reduction, at least partly due to differences in frequency of use. We suggest that the use of these verbs in Finnish conversation manifests the emergent and sequentially sensitive nature of grammar, as its design is motivated by its use in human interaction.

Keywords: epistemics, formulaicity, sequentiality, phonetic reduction

1. Introduction

This paper concerns the use of the Finnish verbs *tietää* 'to know' and *muistaa* 'to remember' in everyday Finnish conversation. The article shows that the use of these verbs is formulaic and often phonetically reduced, and that the use of particular formats is closely connected to the sequential contexts in which the verbs occur, and to the activities underway in the conversation. Besides disclaiming epistemic access, each expression emerges in the accomplishment of particular tasks in interaction; for example, the negative-initial format for the verb *tietää* 'to know', *en mä tiedä*, is most likely to occur as a response to something said just prior, such as in answers to questions, while the use of *muistaa* 'to remember' is connected with the activity of collective reminiscing. Therefore, they can be considered "social action

formats” (e.g. Kärkkäinen, 2012), “emergent discourse patterns” (Scheibman, 2002) or “prefabs” (Erman & Warren, 2000; Bybee, 2010).

Many prior studies have shown that cognition verbs crystallize into fixed units in a range of languages (e.g. Östman, 1981; Thompson and Mulac, 1991; Tao, 2003 and Kärkkäinen, 2003 on English; Keevallik, 2003a, 2008, 2011 on Estonian; Günthner & Imo, 2004 and Imo, 2011 on German; Karlsson, 2006 on Swedish; Laury & Okamoto, 2011 on English and Japanese; Endo, 2010, 2013 and Tao, 2013 on Mandarin; Maschler, 2012 on Hebrew; Helasvuo, 2014 on Finnish; Posio, 2014 on Peninsular Spanish and Portuguese). The study of expressions of lack of epistemic access have further shown that such claims of access are used by participants to accomplish a number of interactional tasks beyond simple denial of knowing or remembering something, as we also show for *tietää* and *muistaa* (e.g., Goodwin, 1987; Kärkkäinen, 2003; Tao, 2013; Weatherall, 2011; Keevallik, 2011; Pekarek Doehler, this issue).

In the literature on cognitive verbs and crystallization, there are several studies concerning the crystallization of patterns containing verbs of knowing (e.g. Östman, 1981 and Weatherall, 2011 on the English *know*; Keevallik, 2003, 2006, 2008, 2011 on the Estonian *teada*; Karlsson, 2006 on the Swedish *veta*; Maschler, 2012 on the Hebrew *yada*; Posio, 2015 on the Spanish *sé*). However, there is far less literature on verbs of remembering and their patterning in discourse (see, however, Tao 2003 on the English *remember* and Tao 2013 and this issue on the Mandarin *jìdé* and similar expressions, Helasvuo, 2014 on the Finnish *muistaa*).

While linguists have been interested in issues of knowledge and its reflection in language structure for a long time (e.g. Chafe, 1976), the topic of epistemics has been of interest to conversation analysts as well; for a useful summary of this research, see Heritage (2013). As Goodwin showed in his early work (1979), participants in conversation are attentive to the distribution of knowledge among their addressees, and tailor their utterances accordingly. A useful distinction developed by Heritage is the one between epistemic status, i.e. participants’ relative access to a particular domain of knowledge, including their rights and responsibilities to know something, and, on the other hand, epistemic stance, which concerns the expression of epistemic status in turns at talk through different linguistic formats. In this paper, we are concerned primarily with epistemic stances expressed in conversation, but also epistemic status.

Some basic background on Finnish grammar will be helpful to those readers who are unfamiliar with the language. The basic word order in Finnish is SVX; subjects are usually clause-initial and objects and other complements come after the verb (e.g. Helasvuo, 2001), although word order is also free in the

sense that other word orders also occur and are not ungrammatical (Vilkuna, 1989). Relevantly for this paper, clausal negation involves the use of a negation auxiliary which takes person markers but not tense or mood. In connection with the negative auxiliary, the main verb takes a special connegative form. The negation auxiliary has features of both a verb and a particle; it has been observed that Uralic languages manifest a drift involving the gradual change from verbal to particle negation (e.g. Miestamo, 2011: 90). Under certain semantic and pragmatic conditions, especially in spoken Finnish, the negative auxiliary can occur clause-initially. This occurs when the speaker is denying some claim or implication in prior talk rather than denying something upcoming in her own current turn (Hakulinen, 2012).

This article is structured as follows. We first discuss our data and methodology in section 2. Section 3 is the core of the paper in which we first present some initial, general and quantitative findings on Finnish verbs of cognition (section 3.1) and then analyze the use of *tietää* (3.2) and the use of *muistaa* (3.3) in our corpus of Finnish conversations. Section 4 summarizes our findings.

2. Materials and method

The study is based on more than seven hours of everyday conversation from corpora housed at the Universities of Helsinki and Turku. The data contained in all 278 occurrences of *tietää* ‘to know’ and 111 occurrences of *muistaa* ‘to remember’. These data are referred to as the “larger dataset” below. The data show that the majority of occurrences of both *tietää* ‘to know’ and *muistaa* ‘to remember’ are in the negative, and that both verbs also show a preference for first person singular (see Helasvuo, 2014). On the basis of these overall preference patterns, we examined the data further, now focusing on first person singular instances of the two verbs. We noticed that there were several recurring patterns in the data, especially in constructions used for disclaiming epistemic access, that is, for claiming not to know or not to remember something. We will focus on these recurrent patterns, or formats, in this paper.

The data in the larger dataset have been analyzed and coded for several morphosyntactic variables, of which the most relevant here are the following: polarity, form of subject (pronoun vs. zero), word order, complementation, and tense. In order to carry out detailed sequential and prosodic analysis, we extracted smaller subsets for closer scrutiny.

We chose 70 uses of *tietää* and 67 uses of *muistaa* for closer syntactic, sequential and prosodic analysis. These datasets are what we call the “smaller subsets”. The instances in the smaller subsets are all in the first person singular. The subset for *tietää* only includes negative instances, while

the data for *muistaa* includes both negative and positive instances (following the distribution of negative vs. positive in the larger dataset, 58% of the instances of *muistaa* in the smaller subset show negative polarity, and 42% are affirmative). We analyzed these subsets for their syntactic properties, sequential position and function. In addition, a prosodic analysis was performed using auditory judgment assisted with acoustic analysis in Praat (Boersma & Weenink, 2015).¹ In the prosodic analysis, all the cases in the data were assessed for the number of prosodic words. By prosodic words we mean segments that form a tonal unit with one stressed syllable accompanied by unstressed syllable uttered under one tonal rhythmic pattern. These are the strong criteria for prosodic words. As weak criteria we used change in F0-curve, pause, change in the waveform. (See Bruce, 1998; Aho, 2010.) Weak criteria were used in the analysis in addition to strong criteria, but we report our findings in terms of strong criteria only. To give an example, the format *en mä ti(ed)ä* 'I don't know' may consist of one prosodic word only, *emmätiä*, or of two prosodic words, *emmä* and *tiä*. Furthermore, the data were assessed with regard to phonetic reduction. Similar to the analysis of prosodic words, the assessment was based on auditory and acoustic analysis. For example, the connegative form of the verb *tietää*, *tiedä*, commonly occurred in phonetically reduced form, such as *tiä*.

The methodology used combines the study of grammatical formatting with the study of the sequential structure of conversation, with an emphasis on the temporal emergence of grammar in interaction. This approach has come to be called Interactional Linguistics (e.g. Selting & Couper-Kuhlen, 2001; Ochs, Schegloff and Thompson, 1996).

3. The emergence of *tietää* and *muistaa* in denials of epistemic access in Finnish conversation

3.1. Frequency and general patterns

The two verbs in focus in this study are among the most frequently occurring cognitive verbs in Finnish conversation. Table 1 illustrates the distribution of cognitive verbs across person forms in our data (the table is modified from Helasvuo, 2014, who uses the same data). The table shows that Finnish cognitive verbs show significant skewing with respect to person, number and polarity.

¹ We gratefully acknowledge the help of our research assistants in the data analysis: Jenny Niemelä was responsible for the data extracts and sound and text clips, and Mari Nikonen for the prosodic analysis.

In our data, *tietää* 'to know' is the most frequent cognitive verb (N = 278), and *muistaa* 'to remember' the third most frequent (N = 111). These two verbs were chosen for closer analysis for this article because, first, unlike 'think', 'want' and 'guess', these two verbs, 'know' and 'remember', directly code epistemic access, and secondly, they are the two verbs which are the most likely to occur in negated form in the first person, that is, to code denial of epistemic access.

As regards person marking, the cognitive verbs in Table 1 show a strong preference for 1st and 2nd person forms compared to other person forms. Like other cognitive verbs, both *tietää* and *muistaa* are likely to occur with first and second person subjects: of the 111 occurrences of *muistaa*, 105 (95%) were either in the 1st or 2nd person, and of the 278 occurrences of *tietää*, 212 (76%).

As mentioned earlier, and as can be seen in Table 1, in the case of *tietää* 'know', there is a clear preference for negative polarity (188 instances of 278 or 68% showed negative polarity), while *muistaa* is slightly more likely to be in the negative than in the positive (61/111 or 55%). Furthermore, these two verbs show a clear preference regarding tense, as over 87% of the instances of *tietää* 'know' and of *muistaa* 'remember', 93% were in present tense.² Thus Finnish speakers tend to talk more about what they themselves now don't know and remember than about what they do or did.

² For *muistaa* 'remember', 103 out of 111 instances were in the present tense, i.e., 93%, but only 7/111 (6%) were in the past tense. For *tietää* 'know', 243 out of 278 or 87% were in the present, and 33/278 or 12% were in the past tense. Both verbs had one instance of present perfect.

Verb lexeme		SG1		SG2		Other		Total
		affirm	neg	affirm	neg	affirm	neg	
<i>tietää</i> 'know'	N	32	145	29	6	29	37	278
	%	11,5	52,2	10,4	2,2	10,4	13,3	100
<i>muistaa</i> 'remember'	N	34	57	12	2	4	2	111
	%	30,6	51,4	10,8	1,8	3,6	1,8	100
<i>ajatella</i> 'think'	N	86	4	17	1	22	2	132
	%	65,2	3,0	12,9	0,7	16,7	1,5	100
<i>haluta</i> 'want'	N	30	11	12	1	24	4	82
	%	36,6	13,4	14,6	1,2	29,3	4,9	100
<i>luulla</i> 'think, guess'	N	32	0	4	1	12	0	49
	%	65,3	0	8,2	2,0	24,5	0	100
Total	N	215	217	74	11	91	45	652

Table 1. The five most frequent cognitive verbs across person forms. Larger dataset.

The highly skewed distribution of the verbs with respect to person, number and polarity raises questions regarding the idea of the verbal paradigm. Note that even though it is possible to inflect the verb *muistaa* in all persons in both singular and plural, it is in fact extremely infrequently used in any other person except for the first and second person singular, and for all the verbs studied, it is even uncommon with negative polarity in the second person singular, as can be seen in Table 1. Thus, even though we would not want to deny the existence of the paradigm of person forms for these verbs, in actual usage, only certain forms appear with any frequency, indicating that the verbs are perhaps more associated with certain formats than with paradigmatic sets of forms.

Next, we will first discuss the patterns of use for *tietää* in our database, and then we will discuss the patterns of use for *muistaa*.

it the other way, in our collection of *tietää*, there were 31 first person singular, negatively formatted responsive turns, and 22 of them were done using this format⁴. In other words, first-person negatively formatted responsive uses of *tietää* tended to be negative-initial, showing that responsive turns tend to be done with the negative-initial format. This is, in fact, a general tendency for Finnish, as we have noted above. The negative-initial uses also tended strongly to be turn initial.

In terms of syntactic environment, although *tietää* is a transitive verb, only a fourth of the uses of this format in the smaller subset had complements. In the larger dataset, the percentage of complements with the negative-initial format was somewhat larger (29%, 25/86).⁵ Moreover, in six of the uses, the *en mä tiedä* expression formed a complete turn, with nothing following or preceding it. In terms of prosody, approximately half of the negative-initial uses (19/39) were assessed as phonetically reduced.

Excerpt (1) below is an example of the use of *tietää* in a responsive position, and manifests pattern (a), the negative-initial format. The example is taken from a conversation among several women who all work in a pharmacy and are here engaged in a somewhat extended discussion (of which only a part is shown) about the identity of a client who had come in to purchase veterinary medicine.

(1) C134

1 JS: *olik se: se etu:ni-*
 be-PST-Q DEM DEM first.na-
 Was that the first na--

2 *Ainola siin [oli *(ta)kaa*.]*
 LN DEM.INE be-PST.3SG behind
 Ainola was there behind

⁴ The total number of responsive uses can be verified from Tables 2, 3 and 4.

⁵ The proportion of complements with *tietää* can be compared with the use of *sanoa* 'say', the most common speech act verb in the larger dataset and the most common complement taking predicate other than cognitive verbs. Of the occurrences of *sanoa* in the larger dataset, 80% (204/255) have complements. Thus, we can see that *tietää* differs drastically from *sanoa* in that it is much less likely to have complements. Pekarek Doehler (this issue), in her study of the French *je sais pas*, also found that the expression is unlikely to have complements; in her data, 69% of the uses of this expression occurred without complements. In our data, out of a total of 73 uses of the Finnish expression, 49 came without complements, a similar proportion, approximately 67%.

- 3 EK: *[Ainola oli] ainaki sukunimi. #e:#*
 LN be-PST.3SG at.least last.name
 Ainola was the/a last name at least.
- 4 *nii se sai hevoselle, #e:# ni mä aattelin että*
 PTC DEM get-PST.3SG horse-ALL PTC 1SG think-PST-1SG COMP
 So she got (medication) for a horse, so I thought if
- 5 *jos se olis ollu (0.3) mt ton lääkärin tyttö kato*
 if DEM be-COND.3SG be-PTCP DEM-GEN doctor-GEN girl PTC
 if it had been that doctor's daughter you see,
- 6 *niilhän: silhän voi olla (0.3) oma hevone.=*
 DEM.PL-ADE-CLT DEM-ADE-CLT may.3SG be-INF own horse
 they: she might have a horse of (her) own
- 7 IW: *=onk se veli ku on siel se pappi.*
 be.3SG-Q DEM brother REL be.3SG DEM.LOC-ADE DEM minister
 Is it (his) brother who is the minister over there.
- 8 (0.4)
- 9 IW: *tääl Turu:s.*
 DEM.LOC-ADE PN-INE
 Here in Turku
- 10EK: **em mää tiä'ä*.*
 NEG-1SG 1SG know-CONNEG
 I don't know
 (0.8)
- 11 EK: **míte maailmas*.*
 how world-INE
 How in the world.
 (9.0)
- 12 JS: *mitä:s kolestroli näist tykkää,*
 WH-CLT cholesterol DEM.PL-ELA like-3SG
 How does cholesterol react to these,

The participants are managing a delicate balance of epistemic stance and status. On the basis of the last name of the client, and of the type of medication purchased (l. 3-4), EK (l. 4-6) makes a guess about the identity of the client's father, who she suggests might be a local physician, and based on this, suggests that the client may have her own horse. She prefaces her suggestion with the expression *mä aattelin että* 'I thought that', which in Finnish, similarly to English (Kärkkäinen, 2012), is associated with expressing epistemic stance (Helasvuo, Laury and Nikonen, 2015). Here, it may serve to mitigate EK's stance (cf. Endo, 2013), since she has, in just prior talk, presented herself as somewhat of an authority on the physician in question, for example with respect to his hair color.

In lines 7-9, IW then asks whether the physician EK has referred to is the brother of a local minister, and receives a negative-initial *em mää ti'ä* 'I don't know' response from EK. Keevallik (2011) suggests that in the case of the so-called Type-2 knowables, "which the recipients are assumed to have access to by virtue of being occasioned: things that the recipient may have been told, figured out, seen, and so on (Pomerantz, 1980: 187)", a denial of knowledge response may not be treated as disaligning, in contrast to no-knowledge responses seeking information about matters the recipient has a responsibility to know. Whether EK has the responsibility to know the answer after the display of knowledge just prior is debatable; in any case, IW does address the question to her, and since answering questions is a moral duty for the question recipient, a stand-alone "no knowledge" response, such as the one in l. 10, fails to promote the agenda of the question, and can in that sense be considered disaligning (Keevallik, 2011: 206). Indeed, EK's no-knowledge response brings the sequence to a close. After EK's turn in line 11, which is uninterpretable in this context, there is a 0.9 second gap, after which JS starts a new topic about the food the participants are eating.

Here, as is typical for the uses of this format in our data, the no knowledge expression occurs without a complement, and forms a complete turn. We take the lack of complement to be related to the sequential position in which this expression occurs; since the expression responds to something that has just been said, it is not repeated in the responding turn (see also Hakulinen, 2012, and below).

Although it is rare for "no knowledge" responses in our data to have complements (only 5 of the total of 31 in responsive positions had complements), the turn may continue after it. Such is the case in the next excerpt, taken from the same conversation as excerpt (1). Here, the participants are discussing a bicycle ride LP had taken. Like the majority of the "no knowledge" responses in our data, this one is negative-initial.

(2) C134

1 LP: *en mä muista.h >o'ink' mahtan'<*
NEG-1SG 1SG remember-CONNNEG be-COND-1SG-Q may-PTCP
I can't remember I may have

2 *tunnin verran ajaa sitä*
hour-GEN worth-GEN drive DEM-PAR
(spent) about one hour riding it

3 *vai kui se ois ollu.*
or how DEM be-COND.3SG be-PTCP
or how would it have been.

4 MK: *k'l [se sit o valtava hyvi aj(h)ettu.h*
PTC DEM then be+3SG huge.ADV well drive-PTCP
That was then terribly well ridden

5 JS: *[jaa<*
PTC
Oh really

6 (): *hm< m[h:::*

7 LP: *[em mä tiädä voi olla*
NEG-1SG 1SG know-CONNNEG may.3SG be-INF
I don't know (it) may be

et meni (e) enemmänki.
COMP go-PST.3SG more-CLT
that (it) took longer too.

(0.5)

8 MK: *nii:::*
PTC
Yeah:::

9 (1.2)

In the beginning of this excerpt, LP, in response to a question, suggests that it might have taken her about an hour to drive the distance. The response is hedged in various ways: LP first claims she does not remember, then uses a modal expression, *o'ink' mahtan'* 'I wonder if I might have' in question form, to frame her estimate of the time taken to drive the distance, also expressed

with the approximator *verran* ‘about’ and then adds a *vai* ‘or’ interrogative clause to further mitigate her guess (see Koivisto, to appear). In third position, MK issues a turn that at first glance might be seen as a compliment, and is structurally built as one⁶, with two other participants adding more noncommittal responses in line 5 (to LP’s turn in lines 1-3) and in line 6 (to both MK’s and LP’s turns).

Unlike in example (1), in this case, LP’s “no knowledge” response in line 7 is not a response to a question, but rather it is used to receipt a prior turn that is a potential compliment. The most common response to compliments in Finnish is acceptance (Etelämäki, Haakana and Halonen, 2013: 4). However, the responses of two other participants in lines 5 and 6 are noncommittal rather than complimentary, and even MK’s turn could be interpreted as an expression of disbelief rather than a compliment. LP now backs down from her earlier claim, however hedged it was even to begin with. *Emmä tiedä* here could be said to both reject the potential compliment and to avoid self-praise (Pomerantz, 1978), and in doing so, to back down from the earlier claim in lines 1–3, and the rest of the turn ‘it may be that it took longer too’ does so even more explicitly.

Here *emmä tiedä* functions more like an epistemic marker (Scheibman, 2001; Kärkkäinen, 2003; Weatherall, 2011) in the service of another action, rejecting a compliment, rather than functioning as a complete action by itself, as in the ‘no knowledge’ response to a question, as in (1) above: here, it looks back to and responds to the prior, but projects more to come prosodically (cf. Weatherall, 2011) and also expresses uncertainty, functioning as a hedge, rather than expressing denial of epistemic access as such. Although the no knowledge response is initial in the turn, and the turn continues after it, as is typical for the negation-initial format, the continuation is not syntactically fitted to *emmä tiedä*; the clause that follows cannot be analyzed as its complement.

Both uses of the “no knowledge” expression, the one in example (1) and in example (2) are phonetically reduced. In both, the pronoun is cliticized to the negative auxiliary, a common pattern in spoken Finnish when the negation comes before the subject pronoun, and in the first example, the middle consonant of the verb ‘to know’ is elided. However, only half of the negative-initial expressions of not knowing were phonetically reduced, while with the pronoun-initial ones (type b), phonetic reduction was more common (18 out of the 23 pronoun-initial ones showed phonetic reduction, see Table 3). This difference in the rate of phonetic reduction is likely to reflect the further

⁶ In fact, Etelämäki et al. (2013: 465-466) give MK’s turn in line 4 as an example of a compliment.

development of the pronoun-initial format to a projective epistemic frame, so that the expression no longer functions as a proper main clause (see below)⁷.

We will now move on to a discussion of format (b). Table 3 summarizes the characteristics of the pronoun-initial instances of *tietää*.

Pronoun-initial format (pro + NEG + <i>tietää</i>)	N = 23 (out of 70)
- over half of the uses had complements	14
- not as often in responsive position as NEG-initial format	7
- usually not turn initial	6
- often produced in phonetically reduced form	18

Table 3. Overview of the pronoun-initial format of *tietää*. (Smaller subset.)

Besides having differences in phonetic reduction, the two formats (a) and (b) also differ syntactically. The pronoun-initial format tends more strongly than the negative-initial format to have complements (over half the uses in both the smaller and the larger dataset had complements). They also tended not to occur in responsive position, but rather projected forward to frame something in the speaker's own turn as uncertain⁸. That is, the negative-initial format marks the "no knowledge" utterance as a response to something said in a prior utterance, as we have seen in examples (1) and (2), while the pronoun-initial format is projective to something upcoming in its speaker's own turn. This is reflected in their syntactic characteristics: the negative-initial format lacks complements, since what the expression targets is something expressed in a prior turn, and thus remains intersubjectively available to the participants (cf. Auer, 2014), while the pronoun-initial format relates to something upcoming, which is quite likely to be expressed as syntactically embedded in the "no knowledge" claim as its complement. This finding is consistent with Hakulinen (2012), who suggests that pronoun-initial negated

⁷ Pekarek Doehler (this issue) also found some reduction in the *je sais pas* expressions which occurred with complements, but in her data, those which occurred without complements had even more reduction. This result may be in contrast with our findings, since we found the most reduction in the format which tends to have complements. The results are not directly comparable, since we discuss reduction with respect to particular formats and do not directly compare reduction in the uses with and without complements, as Pekarek Doehler does.

⁸ Interestingly, Helmer et al. (this issue) present results concerning the German expression *ich weiß nicht* that indicate that the pattern which includes the (pronoun) complement tends to be backward projecting, while the one without the pronoun complement may also be forward projecting. The complementation pattern and the direction of projection is thus the reverse of what we found with *tietää*. It is likely that this has to do with the anaphoric nature of the pronoun complement vs. clausal complementation, the latter of which was at issue in this paper.

utterances frame an independent claim, in contrast to negative-initial utterances, which are responsive to a prior claim.

The next excerpt is an example of the pronoun-initial format, pattern (b) above. It comes from a conversation between two women. In the excerpt, Tarja is in the middle of a complaint about a rash on her arm.

(3) SG398 Kuohuviini

50 Tarja: *siis mul on (.) mä ##o rannekellon*
PTC 1SG-ADE be.3SG 1SG be.1SG wrist-watch-ACC
So I have I have (thrown away) (my) wristwatch

51 *heittäny po:is =kun (0.2) >mmul< (.)*
throw-PTCP away PTC 1SG-ADE
thrown away because I

52 *m tiedä mistä, mä en tiedä mistä*
1SG know WH-ELA 1SG NEG-1SG know-CONNEG WH-ELA
I (don't) know where, I don't know where

53 *tää taas on tullu tämmös[t*
DEM again be.3SG come-PTCP DEM-ADJ-PAR
this has come this kind of

54 *ihme (°pahaa°).*
strange bad-PAR
odd bad (stuff).

In this excerpt, the pronoun-initial *mä en tiedä* in line 52 occurs in the middle of Tarja's turn. It is not responsive, but rather projects forward both prosodically and semantically to the complement clause, an indirect question which expresses what Tarja claims not to know, and which is syntactically as well as prosodically embedded in it.

Thompson (2002) has argued that formulaic Complement Taking Predicates (CTPs) do not function as proper main clauses, and that the complement is not pragmatically subordinate to the matter in the CTP either, since participants attend to the matter in the complement that the CTP frames, and not to the expression in the formulaic CTP. However, in subsequent interaction after excerpt (3), besides attending to the rash, Tarja is complaining about, the participants also could be said to attend to the expression of not knowing, since two turns later, the other participant, Kati, suggests that Tarja show the rash to a doctor (see ex. 6 below). Tarja then explains that she has gone to see a doctor, who also did not know the cause. In that sense, the matter of knowing is taken up in the conversation. The main

focus, however, besides Tarja’s frustrated efforts in finding out the cause for the rash, is her complaint about it, an activity that Kati aligns with. In general, in our data, the pronoun-initial format can be said to function as a projective epistemic frame (cf. Pekarek Doehler, 2011). Consistently with this characteristic, this format is more likely at least in our data to be phonetically reduced than the negative-initial format, and, as noted above, we might even call it an epistemic fragment.

The two formats discussed so far differ in the order of the negative verb and the subject pronoun. The third format lacks a pronoun (although, as in the other formats, the negative verb is inflected for first person). Table 4 summarizes the characteristics of the third format.

Pronounless format (NEG + <i>tietää</i>)	N = 7 (out of 70)
- not likely to have complements	0
- usually not responsive	2
- usually turn initial	5
- less than half were produced in phonetically reduced form	3

Table 4. Overview of the pronounless format of *tietää*. (Smaller subset.)

In contrast to the pronoun-initial format, phonetic reduction was less common (see Table 4). However, since there were only 7 cases of this format in our data, not much can be said about its phonetic, syntactic or sequential nature. However, it is striking that none of the 7 cases in the data had complements. We also checked the larger dataset for the pronounless format, and only some 14% (3/21) of the instances of this format had clausal complements. Overall, this format seemed to be the most syntactically free of the three formats. That is, while the other formats occur either initially in a turn, or before a clausal or other complement, the pronounless format can occur in the middle of a construction, and also turn-finally, as in the following excerpt, taken from the same conversation as examples (1) and (2). In this excerpt, MK is discussing the arrangement of buildings at a summer cottage.

(4) C134

1MK: *mää e oike muista mut sen mä tiedä*
 1SG NEG.1SG really remember but DEM-ACC 1SG know.1SG
 I can't really remember but I do know

2 *et niill on ollu sii rannas*
 COMP DEM.PL-ADE be.3SG be-PTCP DEM-INE shore-INE
 that they have had by the shore

3 *joku: joskus joku: (0.2) jo- vuokralainenki kesällä 't=*
 some sometime some so- renter-CLT summer-ADE

some sometimes some so -reiter in the summer

4 JS: =*aha*.
PTC
I see.

5 MK: *.hh oisko se sit se saunarakennus*
be-COND.3SG-Q DEM then DEM sauna-building
It might be the sauna building

6 **en tiiä**.
NEG-1SG know-CONN
I don't know.

7 JS: **njaha**.=
PTC
I see.

8 EK: **mm**
PTC
Yeah.

9 (1.2)

This use can be considered an epistemic marker, as it comes at the end of MK's turn, in line 6, where it functions as a hedge, or a marker of uncertainty: note that even the clause occurring before the no knowledge expression is hedged, as the verb is in the conditional and includes the question particle. Since main clauses occur before their complements in Finnish, this use is syntactically free, while pragmatically modifying the prior clause. This type of usage can be called 'subjectified' (Scheibman, 2001; Kärkkäinen, 2003; Keevallik, 2008), as it relates to something in the speaker's own turn.

In this section, we have discussed the three formats of the first person negative form of the verb *tietää* in our data. We have shown that the negative-initial format (a) is mostly found in responsive position and rarely occurs with complements, since its most common use is to deny something in the just prior turn, while the pronoun-initial format (b) is less likely to occur as a response, and is more likely to project forward to something in its speaker's own turn. The pronounless format (c) is syntactically free, and functions as an epistemic marker. Format (b) is most likely to be phonetically reduced, and may be considered an epistemic fragment or a projective construction rather

than a proper main clause. Next we will discuss the use of the verb *muistaa* 'remember'.

3.3. The use of *muistaa* 'remember' in denials of epistemic access

Compared to *tietää*, *muistaa* 'to remember' is not as frequent in conversational data. As Table 1 shows, *muistaa* is the third most frequent verb of cognition in the data (111 cases of *muistaa* among the 992 cognitive verbs). *Muistaa* is even more likely than *tietää* to be used in first person form, and it does not have quite as many uses with negative polarity as *tietää*. Similar to the English verb *remember*, *muistaa* is almost always in the present tense. These findings can be compared to Tao's 2001 and 2003 studies on the English *remember*: in his data, 55% of the occurrences of *remember* were in the first person singular (Tao, 2003: 81). Thus, the Finnish *muistaa* shows a much stronger tendency for co-occurrence with first person subjects than the English *remember* (82% vs. 55%). Similar to *muistaa*, the English *remember* shows a strong preference for present tense (93% for *muistaa* vs. 99% for *remember*, see Tao, 2003: 84).

Two patterns emerge from our collection of negated forms of *muistaa* in the first person singular.

- (a) *e-n mä muista* NEG + pro + *muistaa*
NEG-1SG 1SG remember-CONN
'I don't remember'
- (b) *mä e-n muista* pro + NEG + *muistaa*
1SG NEG-1SG remember-CONN
'I don't remember'

In pattern (a), there is first the negative verb, which is marked for person (*-n*), followed by a pronominal subject and the verb *muistaa* (12 instances). Pattern (b) is pronoun-initial (22 instances). In principle, it would be possible to leave out the pronominal subject similarly to pattern (c) for *tietää*, but it is not common in the data (3 instances). Thus, of the patterns formed with *muistaa* the pronoun-initial one is the most common one.

In the data, there were 12 clauses exhibiting the negative-initial pattern (a) for *muistaa* (*em mä muista*).

Negative-initial format (NEG + pro + <i>muistaa</i>)	N = 12 (out of 67)
- around half of the uses had complements	5
- almost half of the cases were in responsive position	5
- not often produced in phonetically reduced form	3
- most often consist of two prosodic words	9

Table 5. Overview of the negative-initial format of *muistaa*. (Smaller subset.)

The negative-initial format may occur in responsive position, but not as commonly as the negative-initial format for *tietää* (compare to Table 2). This format may occur with complements: almost half of the negative-initial format of *muistaa* had either clausal or nominal complements (in the larger dataset, a little over half, or 12/23, had complements), while only a fourth (10/39) of negative-initial uses of *tietää* came with complements). Prosodically, they most often consist of two prosodic words (typically *emmä* and *muista*) and are not likely to be phonetically reduced. Thus, for *muistaa*, the association of the negative-initial format with responsive position and lack of complements is not as strong as it was for *tietää*.

Example (5) illustrates a simple denial of remembering in response to a question. Before the excerpt shown in (5), Sanna has been telling about taking an entrance exam at the same school where several of the other participants already are students.

(5) SG151

1 Anni: *mitä teit oli pääsykokeissa.*
 WH-PAR 2PL-PAR be-PST-3SG entrance.exam-PL-INE
 How many of you were there in the entrance exam.

2 Sanna: *em mie muista.=*
 NEG-1SG 1SG remember
 I don't remember.

3 Jusu: *meit oli [seit]tämänkymmentä.*
 1PL-PAR be-PST-3SG seventy
 There were seventy of us.

4 Sanna: *[mee-]*

5 Sanna: *meit oli vähemmän pa:ljo vähemmän.*
 1PL-PAR be-PST-3SG fewer much fewer
 We were fewer, much fewer.

6 *oisko ollu muutama kymme-*
 be-COND-3SG-Q be-PTCP some ten
 Maybe some twenty.

In example (5), Anni poses a question to Sanna asking for information which only Sanna has. Sanna does not respond to the question directly but instead, claims that she does not remember (l. 2). Later on (l. 5–6) it turns out that in fact she does remember. Tainio (2000: 194) recognizes this pattern in turns containing the verb *muistaa* ‘remember’ and identifies it as an example of what Schegloff (1980: 105) calls a “pragmatic paradox”: according to Tainio (2000: 194) it is typical of turns with *muistaa* that the speaker first states that s/he does not remember something but in subsequent talk it is revealed that s/he does in fact remember. Thus, claiming forgetfulness can be used as an interactional resource (cf. Goodwin, 1987; see also Tao, 2013 and this issue). Here, it allows Sanna to pass the turn to respond to Jusu, and only respond after, in comparison to Jusu’s answer. She is now able to respond without providing an actual number.

Syntactically, the disclaimer of remembering in ex. (5) is negative-initial, and it does not have any complement. In terms of sequential organization, however, example (5) is somewhat atypical: in contrast to *tietää*, in our data, *muistaa* rarely occurs in responses to a question.

There were 22 clauses exhibiting the pronoun-initial pattern (b) for *muistaa* (*mä em muista*). Thus, the pronoun-initial pattern is more common than the negative-initial one. Table 6 gives a summary of the pronoun-initial format of *muistaa*.

Pronoun-initial format (pro + NEG + <i>muistaa</i>)	N = 22 (out of 67)
- around half of the uses had complements	13
- not often in responsive position	6
- over half of the uses were produced in phonetically reduced form	12
- most often consists of two prosodic words	14

Table 6. Overview of the pronoun-initial format of *muistaa*. (Smaller subset.)

As Table 6 shows, less than one third of the cases with the pronoun-initial pattern occur in responsive position. They may have either clausal, infinitival or nominal complements. In the smaller subset, over half of the instances had complements, but in the larger dataset the proportion of complements was lower (43%, 13/30). Prosodically, the pronoun-initial cases of *muistaa* most often consist of two prosodic words (14/22 had two prosodic words; complements have not been taken into account here), typically *mäen* and *muista*. They are quite likely to be phonetically reduced.

Example (6) exhibits the pronoun-initial pattern. The participants have been discussing a terrible rash Tarja has on her hands (cf. ex. 3).

(6) SG 398

1 Kati: *käy* *lääkäris* *näy[ttäm]äs,*°

go-IMP.2SG doctor-INE show-INF-INE
Go show it to a doctor.

- 2 Tarja: [mä oon käyny
1SG be-1SGgo-PTCP
I have
- 3 eikä se osan[nu sanoo mitään
NEG-CLT DEM be.able-PTCP say-INFanything-PAR
and s/he wasn't able to say anything.
- 4 Kati: [eikä tiedä.
NEG-CLT know-CONNEG
and doesn't know.
- 5 Tarja: =tai se (v-) otti verikokeet >mut
or 3SG take-PST-3SG blood.test-PL but
Or s/he took blood tests but
- 6 mä en o muistanu⁹ soittaa
1SG NEG-1SG be.CONNEG remember-PTCP call-INF
I haven't remembered (I forgot) to call
- 7 niit tuloksii
DEM.PL-PAR result-PL-PAR
about the results.

In this excerpt, Kati first gives Tarja a piece of advice (l. 1). Tarja responds to this by explaining that she has already done what Kati is suggesting but that was not of any help. On l. 5 Tarja makes a self-repair, prefaced with *tai* 'or'. According to Laakso & Sorjonen (2010), *tai* as a repair-initiator projects that the speaker is going to replace something just said, yet the element replaced may still remain as an alternative. In ex. (6), Tarja first makes a complaint: the doctor was not able to “say anything”, i.e. to give a diagnosis. With the repairing segment, Tarja admits that the doctor did do some tests but Tarja forgot to call about the results (l. 6–7).

Interactionally, claims of not remembering commonly occur in contexts where an expectation is created that participants should remember (or should have remembered) something. In ex. (6), the impression that Tarja should have remembered is created by Tarja herself, in her reported failure to remember¹⁰

⁹ Ex. 6 contains the only instance of *muistaa* in the present perfect in the whole dataset (both smaller and larger datasets). The present perfect is formed with the auxiliary *olla* 'be' and the past participle of the main verb (here *muistanu*). Although the target construction is composed of several words, it was analyzed as consisting of two prosodic words: *mäeno* and *muistanu*.

¹⁰ The translation 'I forgot' does not fully correspond to the Finnish *mä en o muistanu*, which is not past tense, and does not report on a past event, which *I forgot*

– otherwise she would not have reported it. We also found that in our data, the pronoun-initial forms are more likely to be used to deny remembering something in the speaker’s own turn, as in ex. (6).

Furthermore, *muistaa* typically occurs in contexts of reminiscing, often with collective memories or collective remembering, with several participants using *muistaa* in succession. In our collection of negative instances with *muistaa*, 46 uses occurred in sequences where other uses of *muistaa* also occurred (cf. Tao, 2013, on the Mandarin ‘remember’). Example (7) illustrates this. Prior to the sequence given here, the participants have been discussing a certain Finnish rock band and its music. L notes that the band represented Finland in the Eurovision song contest, and this remark elicits this sequence where the participants are discussing the lyrics of the particular song the band performed in the contest.

(7) Sapu119

1 M: *mite se menee?(.) lehmät, (.) laitumilla.*
how DEM go-3SG cow-PL pasture-ADE
‘How does it go? “Cows in the pasture”.’

2 L: *Missä miehet ratsastaa.*
WH-INE man-PL ride
‘Where the men ride’.

3 M: *ni hehehe ↑Missä miehet ratsas- hehe*
PTC WH-INE man-PL ride
‘Yeah he he he Where the men ride he he.’

4 J: *kyl määki sem piisi nime sentän tiäsi.*
PTC 1SG-CLT DEM-ACC song.GEN name.ACC even know-PST.1SG
‘Even I knew the name of that song.’

5 *>mä ajatteli et ko,<*
1SG think-PST.1SG COMP when
‘I thought that when’

6 *Marina rupee laula-a si-tä piisi-i*
FN start-3SG sing-INF DEM-PAR song-PAR
‘Marina starts singing that song’

seems to do. The expression corresponds grammatically to the English present perfect ‘I have not remembered’, but the English expression is not, to our knowledge, used in the same meaning of failing to remember something that one should have remembered, which the Finnish expression does.

- 7 *ku mä e-m muist ite mite se mene-e,*
 as 1SG NEG-1SG remember.CONNEG myself how DEM go-3SG
 'because I don't remember myself how it goes'
- 8 *et siäl oj jokku lehmät laitumella,*
 COMP therebe.3SG some.PL cow-PL pasture-ADE
 'that there are some cows on the pasture'
- 9 *siin piisi sanois.*
 there song.GEN word-PL-INE
 'there in the lyrics for that song.'
- 10M: *siis e-m mä muist ite,*
 so NEG.1SG1SG remember.CONNEG myself
 'So I don't remember myself'
- 11 *vieläkää sitä piisi melodiaa,*
 still-CLT DEM-PAR song.GEN melody-PAR
 'even now the melody of that song'
- 12J: *em määkää muistak kyl.*
 NEG-1SG 1SG-CLT remember.CONNEG either
 'I don't remember either.'
- 13 *Joonal o se soittoäänenäki*
 NAME-ADE be.3SG DEM ring.tone-ESS-CLT
 'Joonal even has it as his ring tone.'
- 14 *mut em mä silti muista,*
 but NEG-1SG 1SG nevertheless remember.CONNEG
 'but still I don't remember'
- 15I: *kuka on Joonal,*
 who be.3SG FN
 'Who is Joonal,'

In line 1, M offers a line of the lyrics of the song presented by the band in the contest. She imitates the beat of the song but not the actual melody. In line 2, L comes up with the name of the song. This causes laughter (line 3), probably caused by the fact that in the lyrics there is no mention of cows, but horses, wolves and sheep. In line 4 J states that she does know the name of the song even though she cannot recall the song itself. In line 7 she uses the verb

muistaa with a clausal complement. She uses the demonstrative *se* 'it', which can be understood as referring either to the melody or to the lyrics, but lines 8–9 focus explicitly on the lyrics. In her responsive turn (line 10–11), M first says that she does not remember but then adds that it is the melody she does not remember. This explains why she has only imitated the beat in line 1. M's turn is thus responsive to J's line 6: she cannot sing the song. In line 12 J joins the group of those "not remembering". Here, *muistaa* is used without an object complement; thus it is not specified whether it is the lyrics or the melody she does not remember. Even though someone called Joonas uses "it" as his ring tone, she still does not remember (line 14). Presumably the ring tone has just the melody, not the lyrics, which may explain why M was completely off with her first suggestion of the lyrics (l. 1). Example (7) illustrates a case of collective remembering: the participants are each contributing to the effort. The interactive process of collective remembering is made explicit through metacognitive formulations (Middleton & Edwards, 1990: 26) involving the verb *muistaa*. Thus, not only can forgetfulness be used as an interactional resource for pro-social talk (cf. Goodwin, 1987) but also, remembering.

Tao (2001, 2003) identifies two discourse-pragmatic functions of the English *remember*: it may function as an epistemic marker indexing the speaker's epistemic stance or it may be used as a metalinguistic device which functions to regulate interaction (Tao, 2003: 86). Similar to the English *remember*, there are some fixed formats with *muistaa* which convey epistemic stance. If we look at the behavior of *muistaa* as a verb, it has a clear tendency to co-occur with 1st person subjects, but it does sometimes appear with other subjects. It has a clear preference for present tense. It quite often has complements (in the larger dataset, 52% of the occurrences of *muistaa* had complements). We did not find any examples of *muistaa* used as a metalinguistic device similar to the functions of the English *remember* (Tao, 2003: 86).

To summarize, we have discussed two formats that emerge from our data with the negated 1st person form of the verb *muistaa* 'remember', namely the negative-initial and the pronoun-initial ones. We have shown that the usage patterns of *muistaa* do exhibit a degree of routinization, but unlike *tietää*, it is still used as a verb, not an epistemic marker. While the negated form of *tietää* 'know' is predominantly used in responsive turns, responsive uses are not as common with *muistaa*. While we found a clear tendency of the negative-initial pattern to occur in responsive turns and without complements for first-person denials of knowledge with *tietää*, the pattern is not as clear for denials of not remembering with *muistaa* in our Finnish data. The verb *muistaa* is also not as frequent overall in our data as *tietää*, and in addition, it is not as skewed toward negation as the verb *tietää* (see Table 1). These two factors may contribute to the lower degree of formulaicity and routinization *muistaa*

exhibits and, conversely, to the higher degree of formulaicity and routinization *tietää* exhibits. Numerous studies have shown that it is high frequency items which tend to undergo semantic and pragmatic change (in addition to work already cited for cognitive verbs, see also e.g. Bybee, 2010). Instead of clear preference for each format to occur in certain kinds of sequential position and in certain types of syntactic environments, what we found for denials of not remembering is the tendency to occur in contexts of collective reminiscing, where clusters of the verb *muistaa* were found. The usage patterns of *muistaa* reflect remembering as an intersubjective social activity.

4. Conclusion

We have discussed uses of two Finnish cognitive verbs, *tietää* 'to know' and *muistaa* 'to remember' in ordinary everyday conversations. Our data show that both of these verbs are likely to occur in the first person singular negated form, with *tietää* showing a strong preference for negative polarity and *muistaa* showing a strong preference for first person use. Both verbs occur overwhelmingly in the present tense (94–95% are in the present tense). Thus Finnish speakers tend to talk mostly about what they themselves now do not know and what they themselves do and do not now remember.

We suggest that the frequently occurring formats associated with these verbs are emergent social action formats, as they are used in particular sequential positions to carry out particular social actions beyond simple denial of knowledge. We found these verbs functioning as an epistemic marker in contexts of hedging a prior claim by the same speaker and rejecting a compliment, as well as prosocial devices in claims of forgetfulness in order to recruit a response from another speaker.

In terms of sequential position, both verbs occur in responsive turns, with the negative-initial format of *tietää* showing an especially strong preference to occur in such position. While the negative-initial format of *tietää* is most likely to respond with a claim of no knowledge to something someone else has said or asked about just prior, often disaligning with the prior, the pronoun-initial format for *tietää*, on the other hand, is likely to concern something forthcoming in the speaker's own turn, as a projective construction. As a consequence, the negative-initial format of *tietää* was likely to occur without a complement, and form a turn of its own, while the pronoun-initial format was more likely to occur with complements and other additional talk in the same turn. The format lacking a pronoun tended strongly not to be syntactically integrated into the utterance in which it occurred; this format was associated with hedging as an epistemic marker of uncertainty. Thus each format associated with *tietää* has its own home environments and its characteristic syntactic behaviors.

As for *muistaa*, there is not as clear tendency for the two formats, the pronoun-initial and the negative-initial, to occur in particular sequential environments. We have shown that claims of not remembering may be counterfactual as subsequent talk reveals that the speaker does in fact remember (see ex. 5). As Goodwin (1987) has noted, claiming forgetfulness can be used as an interactional resource for pro-social talk (see also Tao, this issue). We have further shown that remembering may be used as an interactional resource. We found that *muistaa* is likely to occur in contexts of collective remembering or reminiscing. In our data, uses of *muistaa* came in clusters, with more than half of the uses of negated forms of *muistaa* occurring in sequences where there was at least one other use of the verb. The different formats involving *muistaa* can be used as metacognitive formulations (Middleton & Edwards, 1990) through which the process of collective remembering is made explicit.

Both formats show some evidence of phonetic reduction, with the pronoun-initial format of *tietää* being the most reduced phonetically. This indicates that it is being used as a projective epistemic frame or epistemic fragment rather than a proper complement-taking expression (cf. Pekarek Doehler, 2011; Thompson, 2002). Overall, more than half of the uses of *tietää* (40/70) in our data were judged as being phonetically reduced, while less than half (30/77) of the uses of *muistaa* were; no doubt this is a consequence of the greater frequency of use of *tietää* compared to *muistaa* (cf. Scheibman, 2000). The negative-initial format for both verbs was most likely to occur as two prosodic words, with the pronoun cliticized to the negation verb.

Our study shows that linguistic forms specialize in being used in certain specific contexts, their home environments, in which they, with frequent use, may become formulaic and advance toward becoming, for example, projective devices and eventually pragmatic particles, and where their lexical semantics are not as important as their use for various interactional functions, such as backing down from an earlier claim, passing on the turn to talk, and collective reminiscing. Our results also call into question the concept of the paradigm and eventually the view of language as a tightly organized system, and instead tend to lend support to the emergentist view of grammar being an epiphenomenon of the use of frequent combinations of constructions in discourse (Hopper, 1987; 2004).

Acknowledgments

The authors are grateful to the organizers, participants and audience at the panel on Disclaiming Knowledge at the 2014 ICCA conference at UCLA for their comments on an earlier version of this paper, as well as the editors of this special issue and the two anonymous referees for their comments and suggestions. Ritva Laury is also grateful for the opportunity to present the

early beginnings of this research at a meeting of the doctoral school Talk, Action and Interaction in January 2011, and for the comments of the participants at that meeting, as well as the comments of the participants in the project “Grammar and Interaction: The linking of actions in speech and writing”, funded by the Academy of Finland. All remaining shortcomings in our paper are, of course, our responsibility. Ritva Laury gratefully acknowledges the support of the Center of Excellence for the Study of Intersubjectivity in Interaction at the University of Helsinki during the preparation of this article. Marja-Liisa Helasvuo’s work and that of the two research assistants, Jenny Niemelä and Mari Nikonen, has been supported by grants from the Academy of Finland (“Subject expression in Finnish and other Finnic languages” and “The question of units in language and interaction”).

References

- Aho, Eija, 2010. Spontaanin puheen prosodinen jaksottelu. Doctoral dissertation. University of Helsinki, <http://hdl.handle.net/10138/19251>.
- Arkisyn: A morphosyntactically coded database of conversational Finnish. Compiled and annotated at the Finnish Section at the University of Turku, with data from the Conversation Analysis Archive at the University of Helsinki and the Recording Archive at the University of Turku.
- Auer, Peter, 2014. Syntactic structures and their symbiotic guests. Notes on analepsis from the perspective of online syntax. *Pragmatics* 24 (3), 533-560.
- Boersma, Paul & David Weenink, (2015). Praat: doing phonetics by computer [Computer program]. Version 5.4.17, retrieved 20 August 2015 from <http://www.praat.org/>.
- Bruce, Gösta, 1998: Allmän och svensk prosodi. *Praktisk lingvistik* 16. Lunds universitet: Institutionen för lingvistik.
- Bybee, Joan, 2010. *Language, Usage and Cognition*. Cambridge UP, Cambridge.
- Chafe, Wallace, 1976. Givenness, contrastiveness, definiteness, subjects, topics and point of view. In: Li, Charles (ed.) *Subject and Topic*, New York: Academic Press, pp. 25-55.
- Endo, Tomoko, 2010. Epistemic stance marker as a disagreement preface: *Wo jue de* ‘I feel/think’ in Mandarin conversation in response to assessments. *Kyoto University Linguistic Research* vol. 29, pp. 43–76.
- Endo, Tomoko, 2013. Epistemic stance in Mandarin conversation: The positions and functions of *wo jue de* “I think”. In: Pan, Yuling and Daniel Kádár (eds.), *Chinese Discourse and Interaction: Theory and Practice*. Equinox, London, pp. 12–34.

- Erman, Britt & Beatrice Warren, 2000. The idiom principles and the open choice principle. *Text* 20, pp. 29–62.
- Etelämäki, Marja, Markku Haakana & Miia Halonen, 2013. Keskustelukumppanin kehuminen suomalaisessa keskustelussa. *Virittäjä* 117, pp. 461–494.
- Goodwin, Charles, 1979. The Interactive Construction of a Sentence in Natural Conversation. In: Psathas, George (ed.), *Everyday Language: Studies in Ethnomethodology*. New York: Irvington, pp. 97–121.
- Goodwin, Charles, 1987. Forgetfulness as an Interactive Resource. *Social Psychology Quarterly*, 50(2), pp. 115–131.
- Günthner, Suzanne & Wolfgang Imo, 2004. Die Reanalyse von Matrixsätzen als Diskursmarker: ICH MEIN-Konstruktionen im gesprochenen Deutsch. In: Orosz, M. & A. Herzog (eds.), *Jahrbuch der Ungarischen Germanistik 2003*. DAAD, Budapest/Bonn, pp. 181–216.
- Hakulinen, Auli, 2012. Näkökulmia suomen kieltolauseen sanajärjestyksen määräytymiseen. In: Argus, R., A. Hussar & T. Rütmaa (eds.), *Pühendusteos emeritprofessor Mati Hindi 75. sünnipäevaks: Tallinna Ülikooli eesti keele ja kultuuri instituudi toimetised* 14. Tallinn University Press, Tallinn, pp. 20–44.
- Helasvuo, Marja-Liisa, 2001. *Syntax in the Making. The emergence of syntactic units in Finnish conversation*. Amsterdam: Benjamins.
- Helasvuo, Marja-Liisa, 2014. Agreement or crystallization: Patterns of 1st and 2nd person subjects and verbs of cognition in Finnish conversational interaction. *Journal of Pragmatics* 63, pp. 63–78.
- Helasvuo, Marja-Liisa, Ritva Laury & Mari Nikonen, 2015. Formulaicity and prosodic nature of ‘remember’ and ‘know’ in Finnish conversation. Paper presented at the International Workshop on Tight and Loose Grammar. November 2014. ILCAA, Tokyo University of Foreign Studies.
- Helmer, Henrike, Reineke, Silke, Deppermann, Arnulf, this issue. A range of uses of negative epistemic constructions in German: *ich weiß nicht* as a resource for dispreferred actions.
- Heritage, John, 2013, Epistemics in conversation. In: Sidnell, J. & T. Stivers (eds.) *The Handbook of Conversation Analysis*. Chichester: Wiley-Blackwell, pp. 370-394.
- Hopper, Paul. 1987. Emergent grammar. In: Aske, John, Natasha Beery, Laura Michaelis & Hana Filip (eds) *Proceedings of the thirteenth annual meeting of the Berkeley Linguistics Society*. Berkeley: Berkeley Linguistics Society, pp. 139-157.

Hopper, Paul, 2004. The openness of grammatical constructions. *Papers from the 40th annual meeting of the Chicago Linguistic Society*, pp. 153-175.

Imo, Wolfgang, 2011. Online changes in syntactic gestalts in spoken German. Or: do garden path sentences exist in everyday conversation? In: Auer, Peter & Stefan Pfänder (eds.), *Constructions: Emerging and Emergent*. Mouton, Berlin, pp. 127–155.

Karlsson, Susanna, 2006. *Positioneringsfraser i interaktion. Syntax, prosodi och funktion*. Gothenburg, Gothenburg University.

Keevallik, Leelo, 2003. *From Interaction to Grammar: Estonian Finite Verb Forms in Conversation*. Acta Universitatis Upsaliensis. Studia Uralica Upsaliensia 34. Uppsala.

Keevallik, Leelo, 2006. From discourse pattern to epistemic marker: Estonian (ei) tea '(don't) know'. *Nordic Journal of Linguistics* 29.2, pp 173-200.

Keevallik, L. 2008 Internal development and borrowing of pragmatic particles: the Estonian vaata/vat 'look', näed 'you see' and vot. *Finnisch-Ugrische Mitteilungen* 30/31. pp. 23–54.

Keevallik, Leelo, 2011. The terms of not knowing. In: Stivers, T., L. Mondada & J. Steensig (eds.), *The Morality of Knowledge in Conversation*. Cambridge University Press, pp. 184–206.

Koivisto, Aino, To appear. On-line emergence of alternative questions in Finnish with the conjunction/particle *vai* 'or'. In Laury, Ritva, Marja Etelämäki and Elizabeth Couper-Kuhlen (eds) *Combining Clauses in Social Interaction*. Forthcoming, Studia Fennica Linguistica, Helsinki: Suomalaisen Kirjallisuuden Seura.

Kärkkäinen, Elise, 2003. *Epistemic Stance in English Conversation. A description of its interactional functions, with a focus on 'I think'*. Benjamins, Amsterdam.

Kärkkäinen, Elise, 2012. I thought it was very interesting. Conversational formats for taking a stance. *Journal of Pragmatics* 44, pp. 2194–2210.

Laakso, Minna, Marja-Leena Sorjonen, 2010. Cut-off or particle: Devices for initiating self-repair in conversation. *Journal of Pragmatics* 42, pp. 1151–1172.

Laury, Ritva, Shigeko Okamoto, 2011. *Teyuuka* and *I mean* as pragmatic parentheticals in Japanese and English. In: Laury, Ritva & Ryoko Suzuki (eds.), *Subordination in Conversation*. Benjamins, Amsterdam, pp. 209–238.

Middleton, David, Derek Edwards, 1990. Conversational remembering: A social psychological approach. In: David Middleton & Derek Edwards (eds.), *Collective remembering*. London, Sage, pp. 23–45.

- Miestamo, Matti, 2011. A typological perspective on negation in Finnish dialects. *Nordic Journal of Linguistics* 34:2, pp. 83-104.
- Ochs, Elinor, Emanuel A. Schegloff & Sandra A. Thompson (eds.), 1996. *Interaction and grammar*. Cambridge University Press, Cambridge.
- Pekarek Doehler, Simona, 2011. Emergent grammar for all practical purposes: The on-line formatting of left- and right dislocations in French conversation. In: Peter Auer & Stefan Pfänder (eds.), *Constructions: Emerging and Emergent*. Mouton, Berlin, pp. 45–87.
- Pomerantz, Anita, 1980. Telling my side: "limited access" as a fishing device. *Sociological Inquiry*, vol. 50, no. 3–4, pp. 186–198.
- Pomerantz, Anita, 1978. Compliment responses: Notes on the co-operation of multiple constraints. In: J. Schenkein (ed.), *Studies in the Organization of Conversational Interaction*. Academic Press, New York, pp. 79–112.
- Posio, Pekka, 2014. Subject expression in grammaticalizing constructions: The case of *creo* and *acho* 'I think' in Spanish and Portuguese. *Journal of Pragmatics* 63, pp. 5–18.
- Posio, Pekka, 2015. Subject pronoun usage in formulaic sequences: Evidence from Peninsular Spanish. In: Carvalho, Ana M., Orozco, Rafael, Shin, Naomi (Eds.), *Subject Pronoun Expression in Spanish: A cross-dialectal perspective*. Georgetown University Press, pp. 59-74.
- Schegloff, Emanuel, 1980. Preliminaries to Preliminaries: 'Can I Ask You a Question'." *Sociological Inquiry* 50, pp. 104–152.
- Scheibman, Joanne, 2000. *I dunno but...* a usage-based account of the phonological reduction of *don't*. *Journal of Pragmatics* 32, pp. 104–124.
- Scheibman, Joanne, 2001. Local patterns of subjectivity in person and verb type in American English conversation. In: Bybee, Joan and Paul Hopper (eds.), *Frequency and the emergence of linguistic structure*. Benjamins, Amsterdam, pp. 61–89.
- Scheibman, Joanne, 2002. *Point of View and Grammar*. Benjamins, Amsterdam.
- Selting, Margret & Elizabeth Couper-Kuhlen (eds.), 2011. *Studies in interactional linguistics*. Benjamins, Amsterdam.
- Tainio, Liisa, 2001. *Puhuvan naisen paikka: Sukupuoli kulttuurisena kategoriana kielenkäytössä*. Finnish Literature Society, Helsinki.
- Tao, Hongyin, 2001. Discovering the usual with corpora: the case of 'remember'. In: Simpson, R. & J. Swales (eds.), *Corpus Linguistics in North America*. University of Michigan Press, Ann Arbor, pp. 116–144.

- Tao, Hongyin, 2003. A usage-based approach to argument structure. 'Remember' and 'forget' in spoken English. *International Journal of Corpus Linguistics* 8 (1), pp. 75–95.
- Tao, Hongyin, 2013. Remembering in discourse and grammar: Integrating corpus-based and social interactive approaches. Plenary talk given in the 12th International Cognitive Linguistic Conference, Edmonton, Canada, June 24, 2013.
- Tao, Hongyin, this issue. Disputed memory and the social interactive functions of remembering/forgetting expressions in Mandarin conversation.
- Thompson, Sandra A., 2002. "Object complements" and Conversation: Towards a Realistic Account. *Studies in Language* 26:1, pp. 125–164.
- Thompson, Sandra A. & Anthony Mulac, 1991. A quantitative perspective on the grammaticization of epistemic parentheticals in English. In: Traugott, Elizabeth & Bernd Heine (eds.), *Approaches to Grammaticalization, volume II*. Benjamins, Amsterdam, pp. 237–251.
- Vilkuna, Maria, 1989. *Free Word Order in Finnish. Its syntax and discourse functions*. Helsinki: Suomalaisen Kirjallisuuden Seura.
- Weatherall, Ann, 2011. *I don't know* as a pre-positioned hedge. *Research on Language and Social Interaction*, 44 (4), pp. 317–337.
- Östman, Jan-Ola, 1981. *'You Know'. A discourse-functional approach*. Benjamins, Amsterdam.