



**HAL**  
open science

## The use of interjections as a discourse phenomenon

Tatiana Nikitina, Ekaterina Aplonova, Leonardo Contreras Roa

► **To cite this version:**

Tatiana Nikitina, Ekaterina Aplonova, Leonardo Contreras Roa. The use of interjections as a discourse phenomenon: A contrastive study of Chuvash (Turkic) and Wan (Mande). Alessandra Barotto; Simone Mattiola. Discourse Phenomena in Typological Perspective, 227, John Benjamins Publishing Company, pp.65-89, 2023, Studies in Language Companion Series, 9789027212900. 10.1075/slcs.227.04nik . hal-04264030

**HAL Id: hal-04264030**

**<https://cnrs.hal.science/hal-04264030>**

Submitted on 30 Oct 2023

**HAL** is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

This is a pre-publication version of a paper that appeared in:

Barotto, Alessandra and Simone Mattiola (eds.)  
*Discourse Phenomena in Typological Perspective*  
John Benjamins, 2023, pp. 65-89.  
<https://doi.org/10.1075/slcs.227.04nik>

Tatiana Nikitina, Ekaterina Aplonova & Leonardo Contreras Roa

**The use of interjections as a discourse phenomenon:**

**A contrastive study of Chuvash (Turkic) and Wan (Mande)<sup>1</sup>**

*Abstract.* This study describes and compares two conventionalized uses of interjections in traditional narratives in Chuvash (Turkic) and Wan (Mande). First, interjections are shown to be associated with a quotative function: they help signal instances of reported speech. The use of interjections interacts with the grammatical marking of reported speech: the presence of an interjection is negatively correlated with the presence of a grammaticalized quotative element. Second, in Chuvash, but not in Wan, interjections are used, outside the context of reported speech, to emphasize an event's intensity or duration. We relate the absence of an intensifying function in Wan to competition between interjections and ideophones. The two phenomena shed light on the interaction between interjections and language-specific grammatical and lexical resources.

*Keywords:* interjection, reported speech, narrative discourse, Mande, Turkic

---

<sup>1</sup> This project has received funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme (grant agreement No 758232, PI Tatiana Nikitina). We are grateful to the editors and the anonymous reviewers, as well as Denys Teptiuk, Bethany Lycan, Stef Spronck and the audience of the online Data Sessions on Reported Speech organized in 2020 by Stef Spronck and Daniela Casartelli (University of Helsinki). Special thanks go to Alexander Savelyev for his help with the analysis of the Chuvash data.

## **1. Introduction**

Advances in the typological study of discourse phenomena have been hindered by two major obstacles: the scarcity of high-quality corpora of spontaneous discourse in lesser-studied languages, and the absence of an established notion of discourse function or a methodology for identifying such functions in a cross-linguistically applicable manner. This study is an attempt to compare the way interjections function in narrative discourse in two unrelated and structurally dissimilar languages: Chuvash (Turkic; Russia) and Wan (Mande; Ivory Coast). We aim to uncover special uses of interjections that go beyond their canonical expressive and interactional functions and pertain instead to various aspects of discourse organization. We are especially concerned with the question of (non-)universality of the discourse functions associated with interjections, since relatively little is known about the way interjections and expressive elements more generally develop new functions over time or the way their use interacts with canonical lexical and grammatical means.

To approach this question, we use two corpora of traditional folk stories, annotated in the same way for a number of discourse phenomena using ELAN-CorpA software and tools (Chanard 2015; Nikitina et al. 2019). Chuvash and Wan were chosen for the comparison because they both introduce reported speech by a specialized quotative element which may appear on its own or in combination with a lexical verb of speaking (to be discussed in more detail below). That similarity allows us to test the hypothesis that the use of interjections in the context of reported speech correlates with the way reported speech is introduced: we expect to find, in the two languages,

similar effects of the presence of an interjection on the presence or absence of the specialized quotative element.

Although both languages use an optional quotative element, the details of its use differ, making it possible to test the hypothesis that the interaction between interjections and grammatical markers of reported speech is independent of such parameters as word order (the quotative element precedes the speech report in Wan but follows it in Chuvash) or the degree of the marker's optionality (the quotative element is much more often omitted in Wan than in Chuvash). The differences in the structural details help us abstract away from the grammatical peculiarities of the individual languages and address the general nature of the interaction between interjections and grammatical markers of reported speech.

Chuvash is a Bulgharic Turkic language spoken in European Russia by over 1,5 million people (Savelyev 2020). The data analyzed here was recorded in the 1980s by A.K. Salmin and digitized in 2018 at the Chuvash State Institute of Humanities as part of the *SPEECHREPORTING* database (Nikitina et al. in prep.). The data comes from three speakers recorded in three different locations: two different villages in the Cheboksary district (representing the Upper Chuvash, or Viryal dialect) and one village in the Kozlovsky district (representing the Middle-Lower Anat Yenči variety, transitional between the Upper and the Lower Chuvash dialects). The portion of the corpus analyzed here consists of about 25.000 words and is restricted to folktales.

Wan is a Mande language spoken in Ivory Coast by approximately 30.000 people (Ravenhill 1982; Nikitina 2018). The data analyzed here is a selection of folktales recorded and transcribed in 1973 by Philip Ravenhill (no date) and digitized by the National Anthropological Archives at the Smithsonian Institution. The relevant portion of the corpus consists of folktales performed by 12 different speakers, with a total of about 23.000 words. Both corpora were glossed by the first author

with the assistance of native speaker consultants; they were also annotated for instances of reported speech according to Nikitina et al.'s (2019) template.

Previous corpus-based studies of interjections are largely based on conversational or literary data from major European languages (Taavitsainen 1995, 2020; Drescher 1997; Aijmer 2004; Norrick 2009, 2015; Martínez Caro and Borreguero 2016). Relatively little attention has been paid, on the one hand, to the ways interjections are used in traditional oral narratives (which may differ significantly from the ways they are used, e.g., in dialogues), and, on the other hand, to interjections of lesser studied languages. Our study aims to show that comparative studies of oral narration may shed new light on the nature of interjections and their functioning in discourse.

While the scarcity of cross-linguistic studies is commonly acknowledged as a problem inherent in the study of interjections (Wierzbicka 1991; Ameka 1992; Kockelman 2003, *inter alia*), the methodological aspects of establishing a cross-linguistically applicable notion of discourse function are rarely addressed in an explicit way. We cannot offer here a principled solution to the problem of cross-linguistic comparability of discourse functions (see Panov this volume), but aim to take an empirical approach by focusing on differences in the distribution of interjections across different contexts, such as their use with reported speech and in other contexts.

We take reported speech to be a universal and cross-linguistically comparable category which is relatively easy to identify in individual languages (with the exception of quantitatively marginal types of non-trivial borderline examples, as discussed in Spronck and Nikitina 2019). We follow Ameka (1992) in assuming that interjections are “little words or non-words which in terms of their distribution can constitute an utterance by themselves and do not normally enter into construction with other word classes” (Ameka 1992: 105). To avoid complications related to drawing the boundary between interjections and other word classes (as in the case of *God* or *damn*), we only

treat here what Ameka describes as *primary* interjections, i.e., forms that are attested exclusively as interjections.

Interjections are characterized by non-propositional, expressive meaning that can be very vague and context-dependent (Wharton 2003). They are sometimes assumed to be “always separated by a pause from the other utterances with which they may co-occur” and to “constitute an intonation unit by themselves” (Ameka 1992: 108), yet this claim is not supported by evidence: as we show in the subsequent sections, interjections are commonly integrated prosodically with their preceding or following context, and sometimes with both (for similar observations, see O’Connell et al. 2005; Aznar 2021).

The paper is organized as follows. In Section 2, we argue that interjections are associated in our data with a *quotative* function: they help narrators signal instances of reported speech. Section 3 discusses a special *intensifying* use of interjections outside reported speech that is attested in Chuvash but not in Wan. Section 4 addresses the problem of heterogeneity of interjections, suggesting directions for further research into the historical development of their discourse functions. Section 5 concludes the paper with a general discussion.

## **2. The quotative function**

### *2.1. Interjections help signal reported speech*

In our sample of narratives, the majority of – but far from all – interjections occur with reported speech. In order to see whether interjections are in fact actively recruited by narrators as a means of signaling instances of reported speech (cf. the discussion in Norrick 2015), we compare their

behavior in two contexts: with reported speech (so that they are naturally interpreted as part of a speech report) and elsewhere (where such an interpretation is not possible). We exclude from our analysis all instances of repeated interjections (since it is hard to determine whether they should be treated as independent instances or parts of a complex or reduplicated interjection) and stand-alone interjections (since they are only loosely related to the surrounding discourse and it is often hard to determine whether or not they belong with reported speech). Table 1 shows the distribution of the remaining interjections in the two corpora.

Table 1. Distribution of interjections across two contexts: in reported speech and elsewhere.

	<b>in reported speech</b>	<b>elsewhere</b>	<b>Total</b>
<b>Chuvash</b>	118 (57%)	89 (43%)	207 (100%)
<b>Wan</b>	158 (68%)	73 (32%)	231 (100%)

We start with an observation concerning the interaction of interjections with grammatical markers of reported speech. Across languages, means of signaling reported speech are notoriously versatile, ranging from fully grammaticalized special markers – such as quotative markers (Güldemann 2008, *inter alia*), logophoric pronouns (Nikitina 2012a), reportative subject and topic markers (Hantgan 2020; Nedjalkov and Otaina 2013) – to prosodic and multimodal cues – such as special intonation (Klewitz and Couper-Kuhlen 1999), facial expression, gesture and posture (Lillo-Martin 2012; Quer 2011). In both, Chuvash and Wan, a major grammatical means for introducing reported speech is the use of a special quotative element (a particle in Wan, a semi-grammaticalized verb in Chuvash). Our data therefore allow us to check whether and how the use of interjections interacts with the presence or absence of a specialized quotative element. If

interjections are recruited by narrators as markers of reported speech we would expect their presence to be negatively correlated with overt grammatical marking of reported speech, i.e., the presence of an interjection should make the use of an overt quotative element less likely.

The quotative element of Chuvash differs from that of Wan in several respects. First, they appear in different positions: before reported speech in Wan but after it in Chuvash. Second, the two elements are characterized by different morphosyntactic properties. In Wan, the quotative marker is a particle of unknown origin. In Chuvash, it is a defective verb ‘say’ that retains to a large extent its verbal argument structure and its inventory of morphological forms (Knyazev 2019). Third, the quotative marker shows a much stronger tendency to be omitted in Wan than in Chuvash.

Examples (1)-(2) illustrate reported speech constructions with and without a quotative element. In (1a), reported speech is introduced by both a full-fledged lexical verb *kala* ‘speak’ and a semi-grammaticalized quotative verb. The full-fledged lexical verb of speaking is optional, but the quotative verb is only rarely omitted, and it commonly appears multiple times per speech report. In (1a), the quotative verb appears twice, in the middle of and at the end of a single reported utterance. In (1b), reported speech is introduced by the same full-fledged lexical verb, but this time without a quotative verb.



(1) Chuvash (Turkic)<sup>2</sup>

a. *patša kal-at' at'a t-et äckë töv-as t-et*  
tsar speak-PRS.3SG come.on QV-PRS.3SG feast do-PC\_FUT QV-PRS.3SG

‘The tsar says: “Let us make a feast.”’

b. *snatêêët Ivan kal-at kil-e il-se*  
it.means\RUS Ivan speak-PRS.3SG home-ACC/DAT take-CV.COORD  
*kaj-ər mën... mën kirlë pötöm-pe il-se kaj-ər*  
go-IMP.2PL what what needed all-INSTR take-CV.COORD go-IMP.2PL  
*kil-e*  
home-ACC/DAT

‘That's it, Ivan says: “Take [it] home, take home all you need...”’

In (2a), from Wan, reported speech is introduced by a combination of the lexical verb *gé* ‘say’ and a quotative marker. In (2b), the quotative marker is absent.

(2) Wan (Mande)

a. *è gé blá glē pīlōŋ é lēŋ dóō bāā mī*  
3SG.SUBJ say sheep male two DEF to QUOT LOG+POSS person

---

<sup>2</sup> Although Chuvash is a written language, the literary standard is based on the Lower Chuvash dialect, which differs in its phonology from the varieties used by our speakers. In particular, our transcription draws the distinction between unrounded and rounded mid-back vowels (ə vs. ö) and the distinction between unrounded and rounded mid-front vowels (ë vs. ø), which are not reflected in the standard orthography (Savelyev 2020). In addition, two phonemes, /o/ and /u/, correspond in our varieties to the rounded back vowel /u/ of the literary standard.

*zō*                      *yè*  
 come:PST            here

‘He says to the two rams: “Our person came here.”’

b.    *bé*    *è*                      *gé*    *lèŋ*    *yā*    *ō*    *bā*    *dè*  
 then    3SG.SUBJ            say    to            how    PRT    LOG    father

‘Then he said to [him]: “how [is it], my father?”’

In Chuvash, the construction with the quotative verb is very common, and the construction without it is rare, while in Wan the situation is just the opposite: the construction with an overt quotative marker is by far less common than the construction without it (cf. Table 2).

Table 2. Reported speech constructions in Chuvash and Wan.

	quotative element present	quotative element absent	Total number of reported speech constructions
<b>Chuvash</b>	2154 (93%)	171 (7%)	2325 (100%)
<b>Wan</b>	146 (17%)	734 (83%)	880 (100%)

Crucially, the use of interjections with reported speech correlates in both languages with the absence of quotatives: as shown in Table 3, reported speech that includes interjections is significantly less likely to be introduced by a quotative verb in Chuvash or by a quotative particle in Wan than reported speech that does not include an interjection.

Table 3. Correlation between the presence of an interjection and the absence of a quotative element in Chuvash and Wan.

	<b>Interjection present</b>	<b>No interjection</b>	<b>Total number of RS constructions</b>
<b>Chuvash</b>			
<b>Quotative verb present</b>	90 (4%)	2064 (96%)	2154 (100%)
<b>No quotative verb</b>	<b>30 (18%)</b>	141 (82%)	171 (100%)
<b>Wan</b>			
<b>Quotative marker present</b>	13 (9%)	133 (91%)	146 (100%)
<b>No quotative marker</b>	<b>140 (19%)</b>	594 (81%)	734 (100%)

(Fisher exact p-value < 0.01, two-tailed)

It is important to note that the use of quotative elements does not correspond in our data to a distinction between European-style direct and indirect speech (Coulmas 2011; Evans 2013; Nikitina and Bugaeva 2021, inter alia). Such a correspondence, if it existed, could provide an alternative explanation for the correlation in Table 3: since interjections are normally associated with *direct* speech, the pattern could simply attest to an association of quotative elements with an alternative, *indirect* construction type. An explanation along these lines, however, does not apply to our data. In the Chuvash data, reported speech introduced by the quotative verb is *direct* (by European standards) both with respect to its syntax (it freely accommodates terms of address and expressive elements normally associated with European direct speech) and with respect to

pronominal indexicality. In (3), for example, the reported speaker and the reported addressee are encoded by a first person pronoun and a second person pronoun, respectively.<sup>3</sup>

(3) Chuvash (Turkic)

<i>es</i>	<i>t-et</i>	<i>man-a</i>	<i>t-et</i>	<i>pitar-sa</i>	<i>lar-t</i>
2SG	QV-PRS.3SG	1SG-ACC/DAT	QV-PRS.3SG	bury-CV.COORD	sit-CAUS
	<i>t-et</i>				
	QV-PRS.3SG				

‘“You”, he says, “hide”, he says, “me”, he says.’

In Wan, as in some of its related languages, the distinction between direct and indirect speech is irrelevant at the syntactic level (Nikitina 2012b; Nikitina and Vydrina 2020). The construction’s syntax shows no evidence of subordination, and pronominal indexicality does not depend on the choice of construction (Nikitina and Bugaeva 2021). In (4), for example, the reported addressee is expressed by a second person pronoun, and the reported speaker is expressed by a specialized logophoric pronoun, within the same clause.

---

<sup>3</sup> In Chuvash, the bare verb is used as a singular imperative (see Johanson 2021: 671–672 for parallels and interpretation).

(4) Wan (Mande)

<i>dóō</i>	<i>bā</i>	<i>á</i>	<i>zòh̃</i>	<i>bāā</i>	<i>tònóh̃</i>	<i>è</i>	<i>té-ŋ̃</i>
QUOT	LOG	COP	PROSP	LOG+POSS	under.arm.drum	DEF	kill-PURP
<i>yà</i>	<i>ō</i>	<i>āā</i>	<i>tá</i>	<i>ō</i>			
PRT	PRT	2PL+3SG	weave	PRT			

‘I am going to beat my drum there, and you dance!’ (literally, ‘I am going to kill my drum there, [and] you weave it’)

Hence, the tendency in Table 3 cannot be explained by reference to the distinction between direct and indirect speech, and the choice between constructions with and without a quotative element does not depend on factors that could be expected to interact with the use of interjections. We conclude that it corroborates our initial hypothesis: interjections are employed by narrators as markers of reported speech, on a par with specialized quotatives.

2.2. *In the context of reported speech, interjections tend towards initial positions*

In both languages, interjections can occur in different positions within the clause, and they can also appear on their own as independent utterances. Examples (5)-(7) illustrate the different options. In (5a) and (5b), the interjection is initial with respect to reported speech; in (6a) and (6b), it appears in the middle of a report, and in (7a) and (7b), it occurs in a clause-final position.

(5) a. Wan (Mande)

<i>è</i>	<i>gé</i>	<i>û</i>	<i>bā</i>	<i>dè</i>	<i>bā</i>	<i>zòh̃</i>	<i>pà-ŋ̃</i>
3SG.SUBJ	say	INTJ	LOG	father	LOG	PROSP	be.able-PROSP

*à lé wà*  
 3SG on NEG

‘He (hare) said: “Th, father, I will not be capable of it.”’

b. Chuvash (Turkic)

*ax mēlle ɛəl-an ʒi es man-a t-et*  
 INTJ what.ADVZ save-PRS.2SG Q 2SG 1SG-ACC/DAT QV-PRS.3SG

‘“Oh, how shall you rescue me?” - she says.’

(6) a. Wan (Mande)

*è gé Nátó-dè éé lāā klɔ̄lɔ̄ á*  
 3SG.SUBJ say Nato-father INTJ 2SG+POSS evil COP

*bálè ā*

big with

‘She says: “Oh Nato, great is your sorrow!”’

b. Chuvash (Turkic)

*esir man-a apateiměe te ɛi-ter-se e*  
 2PL 1SG-ACC/DAT food and eat-CAUS-CV.COORD INTJ

*pěe-er-se ɛi-ter-es... ɛi-ter-es*  
 be.cooked-CAUS-CV.COORD eat-CAUS-PC\_FUT eat-CAUS-PC\_FUT

*ɛok te-r-ě*  
 EX.NEG QV-PST-3

‘You will not be able to feed... to feed me, eh, and cook [enough] food for me.’

(7) a. Wan (Mande)

*gbógló gé báā lāá yrō má èèè*

hyena say LOG:EMPH SUBJ.FOC+3SG drink:PST FOC INTJ

‘Hyena said: “It was me who drank it, yeah!”’

b. Chuvash (Turkic)

*virt-sa εivər t-εεεë εivər tēpper<sup>j</sup> te a*

lie-CV.COORD sleep QV-PRS.3PL sleep now\RUS and INTJ

“‘Lie down, sleep,’ – they say, – ‘now sleep, ah...’”

When used in the context of reported speech, interjections show a significant bias towards initial positions, compared to their uses elsewhere (cf. Table 4). We interpret this bias as pointing to a difference in discourse function. In the context of reported speech, interjections are associated with a speech-introducing function, and interjections in an early position provide listeners with a clear cue to the presence of reported speech, hence the preference for initial positions.

Table 4. Preference for initial vs. non-initial position in Chuvash and Wan.

	<b>with reported speech</b>	<b>elsewhere</b>	<b>Total</b>
<b>Chuvash</b>			
<b>Initial</b>	<b>110 (63%)</b>	66 (37%)	176 (100%)
<b>Non-initial</b>	8 (26%)	23 (74%)	31 (100%)
<b>Wan</b>			
<b>Initial</b>	<b>140 (79%)</b>	37 (21%)	177 (100%)
<b>Non-initial</b>	18 (33%)	36 (67%)	54 (100%)

(Fisher exact p-value < 0.01, two-tailed)

The same tendency to early marking of reported speech is observed in our data with final-position quotative markers. In Chuvash, the quotative verb follows speech reports and cannot appear at the beginning of a quote. In spontaneous discourse, however, it tends to be *pushed* towards the beginning of reported speech, and often appears as early as possible within the quote: after the first phonological word. Examples (8a) and (8b) illustrate this tendency. The *displaced* early use of the quotative verb in discourse could be explained by the same functional



considerations as the tendency towards initial positions in the case of interjections: a preference for early overt signaling of instances of reported speech.<sup>4</sup>

(8) Chuvash (Turkic)

- a. *esir t-et jəvan-ən aʃʃë-pe aməʃə=i?*  
 2PL QV-PRS.3SG Ivan-GEN father+ POSS.3-INSTR mother+POSS.3=Q

“‘You are,” – he says, – “Ivan’s father and mother?””

- b. *ep t-et sir-e tɛ̃n-me te astu-ma-n*  
 1SG QV-PRS.3SG 2PL-ACC/DAT call-INF and remember-NEG-PC\_PST

“‘I,” – he says, – “[happened to] forget to invite you [two].””

In Wan, the quotative marker normally precedes speech reports, so we do not expect it to show any effects of the preference for early signaling of reported speech. Yet in spontaneous discourse we sometimes find surprising structures that can only be explained by a preference for initial placement of interjections. In (9a), for example, an isolated interjection is found in the position preceding the quotative marker, while the rest of the speech report follows it. In (9b), the interjection appears before the speech-introducing clause, in a structure that is rather exceptional for Wan (speech-introducing clauses normally appear before the speech report).

---

<sup>4</sup> It is even more common to have the quotative repeated several times within the same speech report. In such cases, the speech report is subdivided into several portions, each introduced by its own instance of the quotative verb (see, for example, 3).

(9) Wan (Mande)

a. è                    gé      èèè      dóō      bā      á      yò      l̩-ŋ̩  
3SG.SUBJ      say      INTJ      QUOT      LOG      COP      fetish      eat-PROSP

‘He [Hyena] says: “Eh, I’ll swear by a fetish.”’ (literally, ‘eat a fetish’)

b. b́é      z̩ŋ̩z̩n̩              è      gé      áá      dóō      à      b̀ò      kḗé  
then      young.man      DEF      say      INTJ      QUOT      3SG      leave      like.this

‘Then the young man says: “Ah, leave it like that.”’

The drift of interjections towards the beginning of reported speech occasionally results in word order *reversals* which are highly conspicuous in Wan, a language with extremely rigid word order. In (10), an interjection associated with a speech report appears before the clause introducing reported speech, in a rather exceptional construction unattested in other contexts.<sup>5</sup>

(10) Wan (Mande)

àá      ò-ò      à      dè      gé  
INTJ      INTJ      3SG      father      say

‘“Ah, oh-oh!” – His father says.’

We conclude that in reported speech construction, interjections show a tendency to appear in initial positions. This tendency has parallels in the behavior of grammatical markers of reported speech, and can be explained by an association of interjections with a quotative function.

---

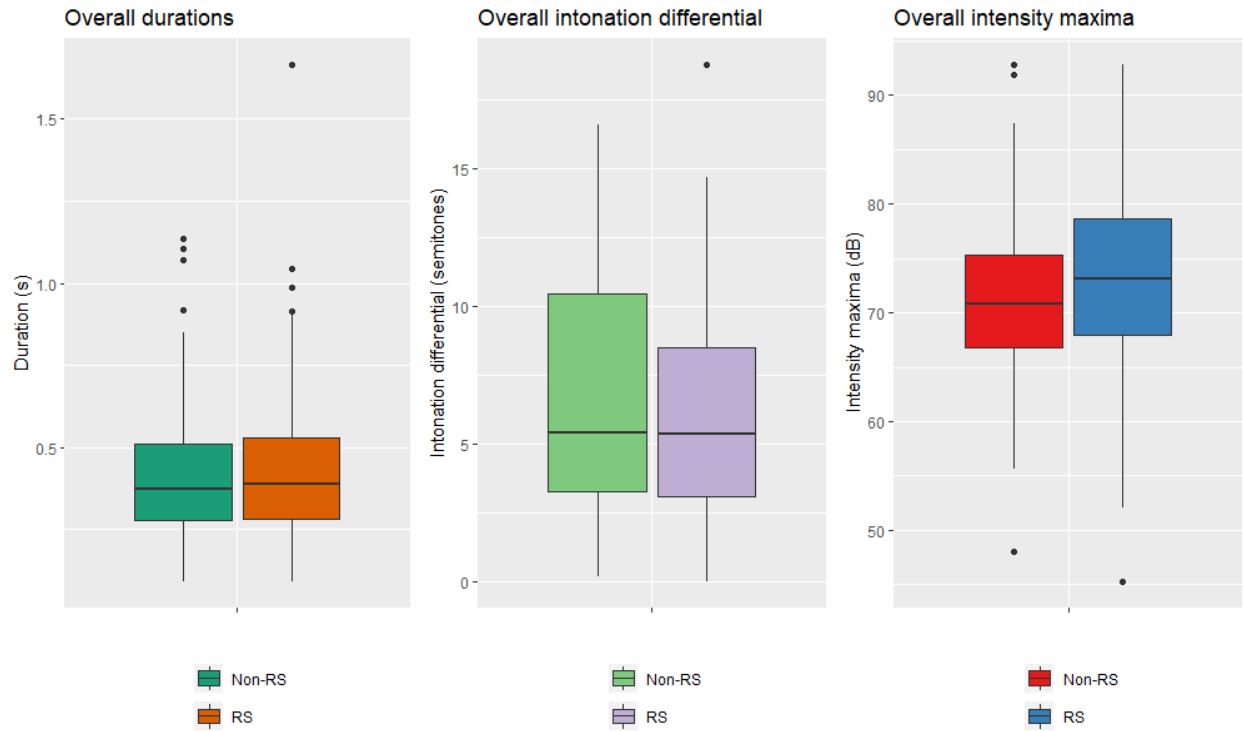
<sup>5</sup> The same structures are unsurprising in Chuvash, where the word order is overall flexible, so we do not treat them here.

### 2.3. *The prosody of quotative uses*

The prosodic behavior of interjections is hard to describe and measure due to the many dimensions in which it can be analyzed. The way in which acoustic features interact with one another to express emotions or focus, for example, is complex and language-specific, and differences in pitch, duration or intensity observed in isolation do not always correspond to perceivable or semantically meaningful contrasts. Interjections are a particularly difficult case for analysis since they can appear in different prosodic contexts and adopt different prosodic forms (Aijmer 2004: 102). For example, they can be attached to a larger metric, intonational or clausal unit or appear on their own, and they may be associated with very different meanings depending on their prosodic contour.

With these considerations in mind, we made an attempt to identify prosodic features characteristic of the quotative use by comparing interjections attested with and without reported speech in Chuvash (our prosodic data for Wan is less reliable as recordings are only available for some of the stories). Figure 1 summarizes the measurements of duration, intonation differential and intensity maxima of the interjections attested in the two contexts.

Figure 1. Prosodic differences between interjections attested with reported speech and elsewhere in Chuvash.



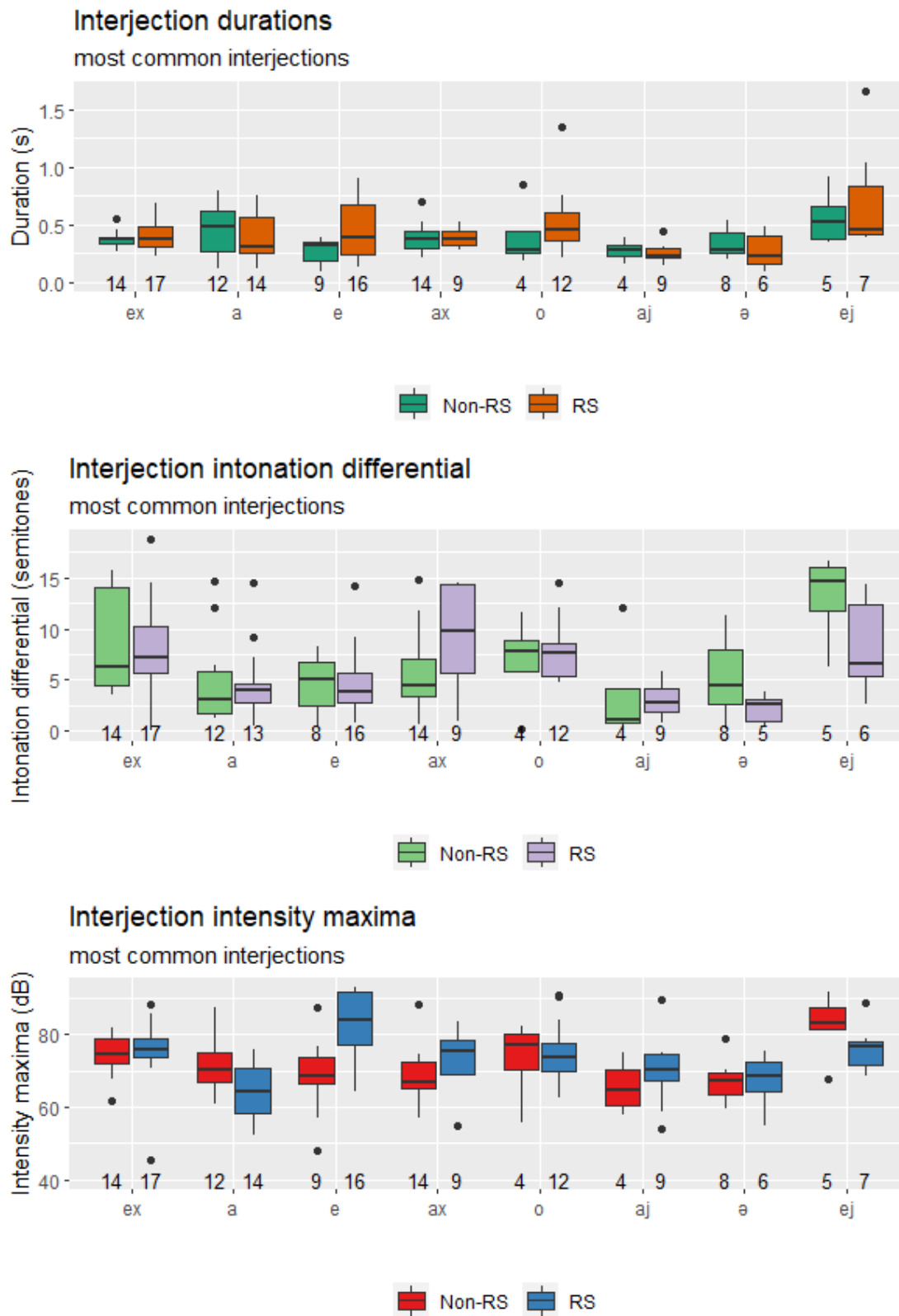
All of the acoustic data were extracted via a custom-made Praat script. Intonation differentials represent the span of the tonal movement performed by speakers throughout the utterance of the interjection. They were obtained through normalizing raw F0 data by converting it to semitones (frequency reference 100 Hz), and subsequently subtracting the lowest intonational value from the highest one within the interjection. High intonation differentials correspond to salient pitch movements, regardless of their direction or shape (i.e. rises, falls or combinations thereof). Intensity maxima were extracted as a means of determining the relative volume at which interjections were uttered. Higher intensity values mean higher energy produced throughout the interjection, likely associated with a higher voice volume.

The only potentially perceptible difference in Figure 1 is in the overall intonation differential: the intonation seems slightly more contrastive outside reported speech. Yet these differences are

neither significant nor dramatic enough to identify distinct prosodic characteristics associated with quotative use.

A closer look at the individual differences reveals that there is indeed no uniform trend among the interjections with respect to the measurements reported in Figure 1. Different interjections pattern differently in the two contexts (but our data is too scarce for any of the differences to be significant). Figure 2 illustrates this variation for the eight most common interjections in our corpus (further differences among the interjections are discussed in Section 4). The numbers represent the interjection's frequency (the few missing values in the intonation charts are due to the absence of fundamental frequency information during the span of articulation of some of the interjections).

Figure 2. Individual differences between the most common Chuvash interjections.



A very different picture emerges when instead of isolating the interjection’s prosodic characteristics, one explores the way in which it is integrated with its surrounding context. As already mentioned, Ameka’s (1992) claim that interjections are always separated from their context by pauses is not supported by the data. Table 5 summarizes the distribution of silent pauses in the positions immediately preceding and immediately following the interjection (for the purposes of this study we define a silent pause as a span of silence of more than 100 milliseconds). The distribution is overall skewed toward the position preceding the interjection; pauses that immediately follow the interjection are relatively infrequent; and a non-negligible portion of interjections are neither preceded nor followed by a pause.

Table 5. Distribution of silent pauses across the positions immediately preceding and immediately following the interjection (n = 207).<sup>6</sup>

The interjection is...	followed by a pause	<b>not</b> followed by a pause
preceded by a pause	30 (14%)	121 (58%)
<b>not</b> preceded by a pause	15 (7%)	41 (20%)

Crucially, the silent pauses are not distributed uniformly across the contexts. In the context of reported speech, interjections are significantly more likely to be preceded by a pause (Table 6a), and significantly less likely to be followed by a pause (Table 6b). The tendency to be preceded by a pause can be explained by a shift from non-reported to reported speech (interjections are commonly the initial element in a speech report). The tendency not to be followed by a pause,

---

<sup>6</sup> The percentages in this table correspond to the number of interjections attested in the given configuration, out of the total number of 207 instances.

however, cannot be explained in the same way, and could point to a higher degree of integration of interjections with the following utterance.

Table 6a. Pauses preceding the interjection.

	with reported speech	elsewhere	Total
pause present	<b>92 (61%)</b>	58 (39%)	150 (100%)
no pause	25 (44%)	32 (56%)	57 (100%)

(marginally significant: Fisher exact p-value < 0.05, two-tailed)

Table 6b. Pauses following the interjection.

	with reported speech	elsewhere	Total
pause present	16 (35%)	30 (65%)	46 (100%)
no pause	<b>101 (63%)</b>	60 (37%)	161 (100%)

(Fisher exact p-value < 0.01, two-tailed)

We conclude, tentatively, that in Chuvash the quotative use of interjections is not reflected in the interjection's distinct acoustic properties (or if such a signal exists, it is not strong enough to be detected in our data). Yet interjections appearing in the context of reported speech differ from interjections appearing elsewhere by a higher degree of prosodic integration with the following utterance. While we cannot explore possible reasons for such a difference, we hypothesize that it may have to do with the special way in which quotative uses of interjections are integrated in the reported speech construction.



## 4. Functions outside reported speech

### 4.1. *The intensifying use in Chuvash*

In the previous section, we showed that both Chuvash and Wan provide evidence for a quotative function of interjections. Given the mentions of similar tendencies in European languages (Norrick 2015; Martínez Caro and Borreguero 2016), one could further hypothesize that the functional mechanisms behind the development of the quotative use are universal. It does not follow, however, that all discourse uses of interjections should be the same across languages. Differences can be observed in our data in the way interjections are used outside constructions with reported speech.

Both in Wan and in Chuvash, interjections can signal the storyteller's attitude to the narrated events. They help render narration more vivid by establishing a connection between the events in the story and the moment of narration. For example, interjections appear at culmination points of the narrative to single out its most surprising and exciting parts. The sentence in (11a) describes the king's discovery of his long-missing daughter, and (11b) describes a woman dancing uncontrollably after having scolded her daughter for doing exactly the same.

(11) a. Chuvash (Turkic)

*o aʃʃë kor-të-ë xër lar-nə xajxi-sker*

INTJ father+ POSS.3 see-PST-3 daughter sit-PC\_PST this-SUBST

‘Oh, her father saw his daughter sitting [there], herself!’

b. Wan (Mande)

*áá à znò nā gè tǝ b̄b̄*

INTJ 3SG husband mother POSS weave surpass.PST+ADJ.FOC

*àé znāgó lèj̄*

that.one self to

‘Ah! Her mother-in-law [even] surpassed her in dancing!’ (Literally, ‘Her mother-in-law’s weaving surpassed her own self.’)

The particulars of surprise-related uses, however, differ across the two languages. In Chuvash, interjections in narrative portions of the text are commonly associated with an intensifying function. In (12a) and (12b), for example, an interjection is used together with repetition to describe intensive or prolonged activity.

(12) Chuvash (Turkic)

a. *a:x ɛap-əɛ-aceë a:x ɛap-əɛ-aceë a:x ɛap-əɛ-aceë*

INTJ beat-RCPR-PRS.3PL INTJ beat-RCPR-PRS.3PL INTJ beat-RCPR-PRS.3PL

*ax... petë trutnə pol-të-ë*

INTJ very difficult\RUS be-PST-3

‘Ah they are fighting, ah they are fighting, ah they are fighting, ah... It was very tough.’

- b. *ax* *εav* *tök-et* *tök-et* *tök-et* *εav*  
 INTJ that push-PRS.3SG push-PRS.3SG push-PRS.3SG that  
 ‘Ah, she pushes [and] pushes [and] pushes [him].’

Such interjections are normally sentence-initial; they are commonly found in descriptions of motion events, where they signal unusual speed, duration or some other surprising circumstance (cf. the ideophonic description of the accompanying sound in 13d):

(13) Chuvash (Turkic)

- a. *vo:t* *kaj-accë* *ox* *për* *tinës* *orlə* *kaε-r-ë-ε* *tepër*  
 so\RUS go-PRS.3PL INTJ one sea across pass-PST-3-PL now\RUS  
*tinës* *orlə* *kaε-r-ë-ε* *tepër* *tinës* *orlə* *kaε-r-ë-ε*  
 sea across pass-PST-3-PL now\RUS see across pass-PST-3-PL

‘Here they are going away, oh, they flew across one sea, they flew across [another] sea, they flew across [still another] sea.’

- b. *ex* *kaj-atʲ* *ex* *kaj-atʲ* *ex* *kaj-atʲ* *ëntë*  
 INTJ go-PRS.3SG INTJ go-PRS.3SG INTJ go-PRS.3SG already

‘Ah he is leaving, ah he is leaving, ah he is leaving already.’

- c. *ex* *xipalan-accë* *têas-tarax* *εit-es* *te-se*  
 INTJ hurry-PRS.3PL quickly-CMPR reach-PC\_FUT QV-CV.COORD  
*kil-e*  
 house-ACC/DAT

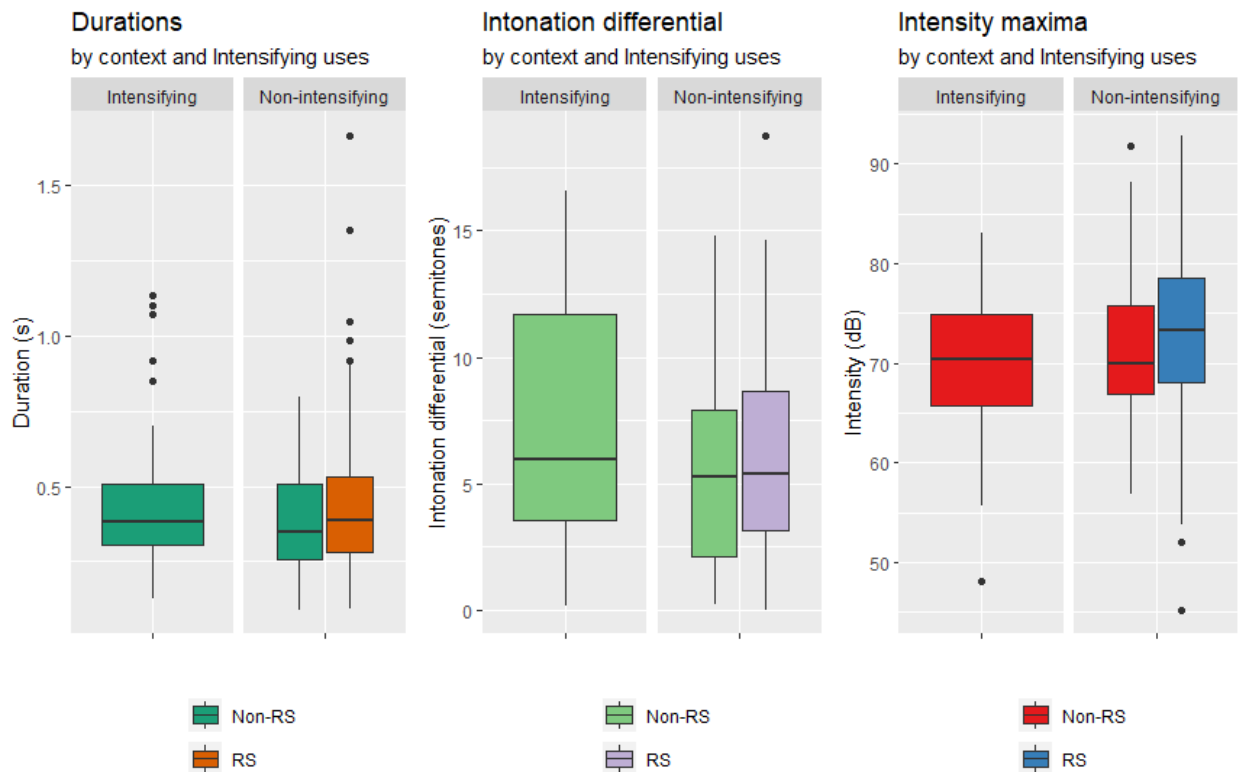
‘Ah, they are hurrying, in order to come home sooner.’

- d.    *o*    *ot-aεεë*    *e*    *kaj-aεεë*    *te*    *têarək-têarək*    *ëntë*  
 INTJ    walk-PRS.3PL    INTJ    go-PRS.3PL    and    IDPH    already  
 ‘Oh, they are marching, eh, they are going, with a clatter.’

#### 4.2. *The prosody of the intensifying use*

As with the quotative function, we are unable to identify a reliable acoustic difference between intensifying and non-intensifying uses. The interjection’s function does not seem to produce any significant effect on the way the interjection is pronounced (again with the possible exception of intonation). Figure 3 represents the measurements of duration, fundamental frequency differential and intensity maxima distributions of unambiguously intensifying uses (only attested outside constructions with reported speech) as compared to other uses, within and outside reported speech.

Figure 3. Prosodic characteristics of interjections in the intensifying vs. non-intensifying function.



As in the case of quotative use, we see a difference in the distribution of pauses. There is no significant difference in the percentage of interjections preceded by a pause (Table 7a), but there is a difference in the distribution of pauses following the interjection: intensifying uses are less likely to be followed by a pause than non-intensifying ones (Table 7b).

Table 7a. Pauses preceding the interjection (examples associated with reported speech excluded).

	Intensifying uses	Others	Total
pause present	28 (48%)	30 (52%)	58 (100%)
no pause	18 (58%)	13 (42%)	31 (100%)

(the difference is **not** significant)

Table 7b. Pauses following the interjection (examples associated with reported speech excluded).

	Intensifying uses	Others	Total
pause present	11 (37%)	19 (63%)	30 (100%)
no pause	<b>35 (59%)</b>	24 (41%)	59 (100%)

(marginally significant: Fisher exact p-value < 0.05, two-tailed)

This difference is parallel to the one we observed with quotative uses. We hypothesize that it reflects a higher degree of prosodic integration of intensifying uses with the utterance with which they form a semantic unit, and that the integration is a result of a higher degree of conventionalization of the intensifying use as compared to regular expressive uses.

#### 4.3. *Absence of the intensifying use in Wan*

The intensification use seems to be conventionalized in Chuvash: it is attested in our data in a rather consistent way, in narratives by different speakers. In Wan, on the other hand, there is no evidence for such conventionalization: interjections are often associated with unexpected turns of events,

but other means tend to be used to express intensity. One of the most prominent means associated with intensification is the use of ideophones – a special class of expressive words loosely integrated into syntactic structure and normally accompanied by gesture. In (14a), two ideophones combine with an interjection in a structure superficially similar to the one illustrated above for Chuvash; yet it is more common in Wan for ideophones to appear on their own, without any support from interjections; the descriptions of events of *intense* motion in (14b) and (14c), for example, are directly comparable to the Chuvash examples in (13a) and (13d).

(14) Wan (Mande)

a. *bā gnù tē é tā áá ìgũ ēàō*  
 LOG jump fire DEF on INTJ IDPH IDPH

‘He leaps over the fire – he jumps, he falls!’

b. *bé crà bé è tā yē gó*  
 then IDPH then 3SG.SUBJ put:PST grass in

‘And kra! – he rushed to the bush.’

c. *è ĩj dì lòḡ nì klā cà cà cà cà*  
 3SG.SUBJ PERF set hare little behind IDPH IDPH IDPH IDPH

‘He started pursuing the hare – ka-ka-ka-ka!’

The example of different conventionalization paths of surprise-related uses suggests that the same underlying functional motivation can lead to the development of different kinds of discourse uses depending on language-specific circumstances such as different rhetorical preferences and competition with other available expressive means.

## 5. Heterogeneity among interjections

As mentioned in Section 2, interjections are a highly heterogeneous class, varying widely in their meaning and function (Wharton 2003; Aijmer 2004). In this section, we briefly describe this heterogeneity in our data and suggest that individual interjections are associated with discourse functions to a different degree, in a way correlated with the interjection's frequency. Our observations are only tentative because the data is too scarce to allow for a full-scale exploration of individual interjections.

The two languages differ in frequency distributions of different interjections. Our corpora are of comparable size (about 25.000 words for Chuvash, 23.000 words for Wan), and they feature the same number of types of interjections (19) and a similar number of tokens (207 in Chuvash, 231 in Wan). Yet the tokens are distributed across the types in a rather different way (Figures 4a and 4b): there is a group of several frequent interjections in Chuvash that do not differ much in frequency, but a single most frequent multi-functional interjection in Wan is by far more common than any other.

Figure 4a. Frequency distributions of interjections in Chuvash.

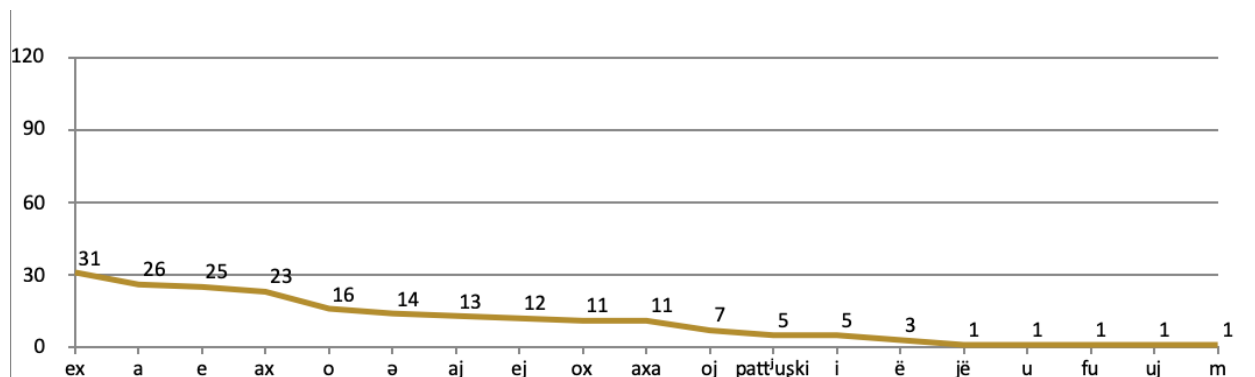
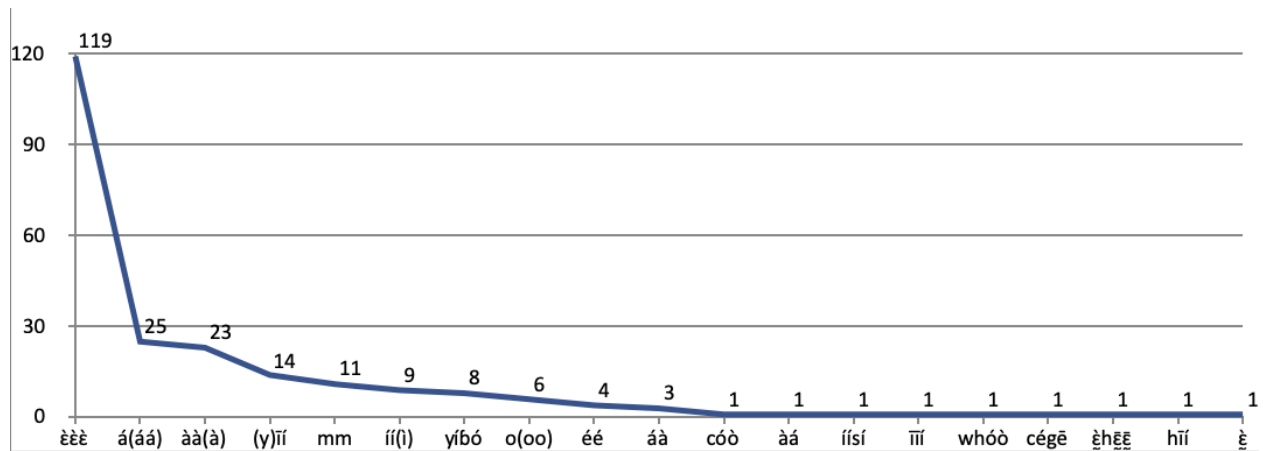




Figure 4b. Frequency distributions of interjections in Wan.



Tables 8a and 8b show the distribution of the most frequent interjections in the context of reported speech and elsewhere. The distribution suggests that the quotative function is not associated with all interjections to the same degree. For example, while no interjection is attested in our data exclusively outside the context of reported speech, some interjections are only attested with speech reports. These are relatively infrequent interjections associated with strong emotion, such as *oj* (unexpectedness and intensity) in Chuvash and *yíbó/cíbó* (unpleasant surprise) in Wan.

Table 8a. The distribution of the most common interjections in Chuvash.

<b>Interjection</b>	<b>With reported speech</b>	<b>Elsewhere</b>	<b>Total</b>
<i>ex</i>	17	14	<b>31</b>
<i>a</i>	14	12	<b>26</b>
<i>e</i>	16	9	<b>25</b>
<i>ax</i>	9	14	<b>23</b>
<i>o</i>	12	4	<b>16</b>
<i>ə</i>	6	8	<b>14</b>
<i>aj</i>	9	4	<b>13</b>
<i>ej</i>	7	5	<b>12</b>

Table 8b. The distribution of the most common interjections in Wan.

<b>Interjection</b>	<b>With reported speech</b>	<b>Elsewhere</b>	<b>Total</b>
<i>èèè</i>	74	45	<b>119</b>
<i>àà(à)</i>	14	9	<b>23</b>
<i>á(áá)</i>	15	10	<b>25</b>
<i>(y)ĩ</i>	12	2	<b>14</b>
<i>mm</i>	9	2	<b>11</b>
<i>yíbo/cíbo</i>	8	0	<b>8</b>
<i>oo(o)</i>	4	2	<b>6</b>

As discussed in Section 2.3, interjections show very different prosodic characteristics (see Figures 1 and 2). Similar heterogeneity seems to characterize the way they are integrated with the preceding and following context, as illustrated in Table 9 for the most common interjections of Chuvash.

Table 9. Distribution of pauses with the most frequent interjections in Chuvash.

	Silence before	Silence after	Silence before & after	No silence	Total
<i>ex</i>	24	0	1	6	<b>31</b>
<i>a</i>	10	2	7	7	<b>26</b>
<i>e</i>	10	6	3	6	<b>25</b>
<i>ax</i>	12	0	2	9	<b>23</b>
<i>o</i>	10	1	3	2	<b>16</b>
<i>a</i>	7	0	5	2	<b>14</b>
<i>aj</i>	9	0	1	3	<b>13</b>
<i>ej</i>	11	0	1	0	<b>12</b>
<b>Total</b>	<b>93</b>	<b>9</b>	<b>23</b>	<b>35</b>	<b>160</b>

Finally, Figures 5a and 5b illustrate different tendencies in the way individual interjections are associated with sentence-initial vs. non-initial positions.

Figure 5a. The most common Chuvash interjections attested in all contexts, by position.

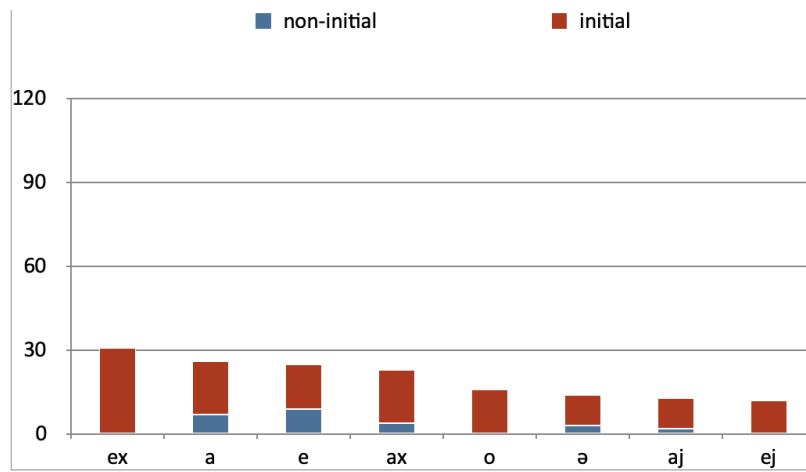
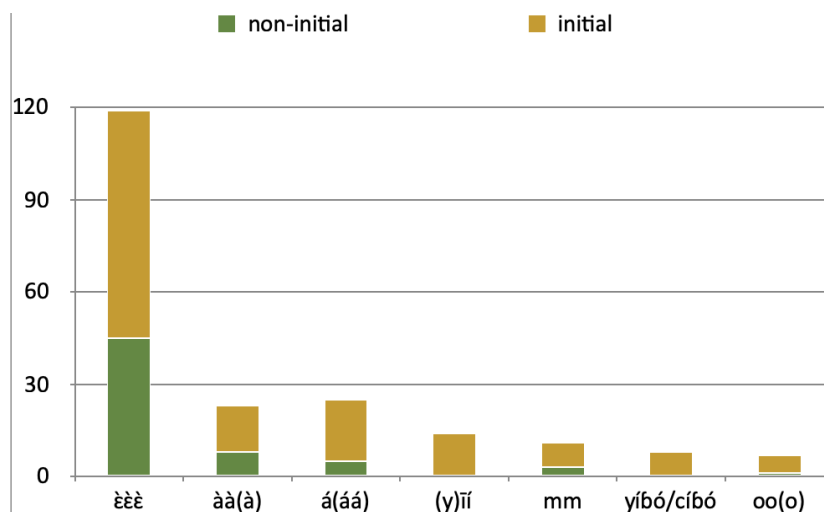


Figure 5b. The most common Wan interjections attested in all contexts, by position.



The data presented in this section are consistent with the view of interjections as a highly heterogeneous word class. Our analysis suggests that not only does the class of interjections differ in its internal structure between the two languages, but individual class members differ from each other in their preferred uses, position, and prosodic behavior. Taken together, the evidence points

to a highly variable, non-conventional nature of interjections and the need for a systematic study of that variation at the level of individual class members.

## **6. Conclusion**

In the course of our comparative study, we have identified two different discourse functions associated with interjections in Chuvash and Wan. One of them is a quotative function, for which we find evidence in both languages; the other is an intensifying function which we could only identify in Chuvash.

The quotative function is remarkable in showing interaction with the grammatical marking of reported speech. This interaction is reflected in a negative correlation between the use of interjections and overt marking of reported speech by specialized quotative elements. The same correlation is attested in both languages and is independent of word order or the quotative element's morphosyntactic properties. Interaction between the use of interjections and grammatical phenomena have not, to our knowledge, been previously documented, and the fact that it actually occurs may shed new light on the status of interjections within the linguistic system (Goffman 1981; Wilkins 1992; Wharton 2003).

The intensifying use is remarkable for a different reason. Unlike the quotative use, it is only attested in Chuvash, while in Wan a similar function is associated with ideophones – a different word class that is similarly expressive and commonly treated as peripheral to the linguistic system (Dingemanse 2017). This difference suggests that while some discourse functions of interjections may be universal, others arise through conventionalization of particular rhetorical strategies, and are subject to the effects of such language-specific factors as competition with functionally similar

alternative means of expression. The possibility of competition between interjections and other linguistic resources points once again to our as yet insufficient understanding of the ways in which interjections interact with the rest of the linguistic system.

One of the underexplored aspects of the relationship between interjections and other word classes is their virtual lack of diachronic interaction. While some interjections develop from nouns and verbs, interjections do not seem to develop into lexical words or grammatical markers. Despite the wide-spread use of interjections in the quotative function, for example, we are not aware of any cases of quotative markers originating in an interjection. Our data does not allow us to determine the sources of this asymmetry, and we can only speculate that they may have to do with two different aspects of interjectional behavior.

On the one hand, interjections are commonly claimed to have a special communicative and semiotic status (Wharton 2003, *inter alia*), and the semantic difference from other word classes may prevent them from undergoing the usual processes of grammaticalization and lexicalization.<sup>7</sup> On the other hand, there is a competing explanation that currently seems more plausible to us: interjections may be prevented from developing into grammatical markers by their special prosodic behavior. The tendency – albeit far from absolute – to be preceded by a pause, along with distinctive acoustic properties, may make it difficult for an interjection to be reinterpreted as a grammatical marker of reported speech. This explanation, if confirmed, would be consistent with Reinöhl and Casaretto’s (2018) discussion of mismatches between prosodic and semantic-syntactic chunking as a reason for the absence of certain types of grammaticalization in Indo-Aryan spatial adverbs.

---

<sup>7</sup> It is interesting, on this account, that the opposite development is well attested, as already mentioned for secondary interjections such as *hell* or *damn*.

We hope that further research into the way interjections function in typologically diverse languages will help shed more light on this and other theoretical issues.

## Abbreviations

+	two meanings fused in one morpheme
1	1st person
2	2nd person
3	3rd person
ACC/DAT	accusative/dative
ADJ.FOC	adjunct focus
ADVBZ	adverbializer
CAUS	causative
CMPR	comparative
COP	copula
CV.COORD	coordinative converb
DEF	definite marker
EMPH	emphatic form of pronoun
EX.NEG	negative existential
FOC	focus
GEN	genitive case
IDPH	ideophone
IMP	imperative
INF	infinitive
INSTR	instrumental case
INTJ	interjection
LOG	logophoric pronoun



NEG	negation
PC_FUT	future participle
PC_PST	past participle
PERF	perfect
PL	plural
POSS	possessor
PROSP	prospective
PRS	present tense
PRT	particle
PST	past tense
PURP	purpose marker
Q	question
QUOT	quotative marker
QV	quotative verb
RCPR	reciprocal
RUS	borrowing from Russian
SG	singular
SUBJ	subject pronominal series
SUBST	nominalization marker

## References

- Aijmer, Karin. 2004. Interjections in a contrastive perspective. In *Emotion in Dialogic Interaction: Advances in the Complex*, Edda Weigand (ed.), 99–120. Amsterdam: John Benjamins.
- Ameka, Felix. 1992. Interjections: The universal yet neglected part of speech. *Journal of Pragmatics* 18(2/3): 101–118.
- Aznar, Jocelyn. 2021. Silent gaps as a distinctive feature of direct speech: A corpus study of Nisvai narratives, Vanuatu. Presentation at the Workshop “From Dialogue to Grammar”, University of Helsinki.
- Chanard, Christian. 2015. ELAN-CorpA: Lexicon-aided annotation in ELAN. In *Corpus-based Studies of Lesser-described Languages: The CorpAfroAs Corpus of Spoken AfroAsiatic Languages*, Amina Mettouchi, Martine Vanhove & Dominique Caubet (eds.), 311–332. Amsterdam: John Benjamins.
- Coulmas, Florian. 2011. *Direct and Indirect Speech*. Berlin: Mouton de Gruyter.
- Dingemanse, Mark. 2017. On the margins of language Ideophones, interjections and dependencies in linguistic theory. In *Dependencies in Language: On the Causal Ontology of Linguistic Systems*, N. J. Enfield (ed.), 193–202. Berlin: Language Science Press.
- Drescher, Martina. 1997. French interjections and their use in discourse: ah dis donc les vieux souvenirs. In *The Language of Emotions: Conceptualization, Expression, and Theoretical Foundation*, Susanne Niemeier & René Dirven (eds.), 233–246. Amsterdam: John Benjamins.
- Evans, Nicholas. 2013. Some problems in the typology of quotation: A canonical approach. In *Canonical Morphology and Syntax*, Dunstan Brown, Marina Chumakina & Greville G.

- Corbett (eds.), 48–98. Oxford: Oxford University Press.
- Goffman, Erving. 1981. *Forms of Talk*. Oxford: Blackwell.
- Güldemann, Tom. 2008. *Quotative Indexes in African Languages: A Synchronic and Diachronic Survey*. Berlin: Mouton de Gruyter.
- Hantgan, Abbie. 2020. Dogon reported discourse markers: The Ben Tey quotative topicalizer. *Folia Linguistica* 54(3): 581–613.
- Johanson, Lars. 2021. *Turkic*. Cambridge: Cambridge University Press.
- Klewitz, Gabriele & Couper-Kuhlen, Elizabeth. 1999. Quote – unquote? The role of prosody in the contextualization of reported speech sequences. *Pragmatics* 9(4): 459–485.
- Knyazev, Mikhail. 2019. Two ‘say’-complementizers in Poshkart Chuvash: Subject-orientation, logophoricity and indexical shift under verbs of hearing. In *Proceedings of the 14th Workshop on Altaic Formal Linguistics (WAFLL14)*, Tatiana Bondarenko, Colin Davis, Justin Colley & Dmitry Privoznov (eds.), 137–144. Cambridge: MIT.
- Kockelman, Paul. 2003. The meanings of interjections in Q’eqchi’ Maya: From emotive reaction to social and discursive action. *Current Anthropology* 44(4): 467–490.
- Lillo-Martin, Diana. 2012. Utterance reports and constructed action. In *Sign Language: An International Handbook*, Roland Pfau, Markus Steinbach & Bencie Woll (eds.), 365–387. Berlin: Mouton de Gruyter.
- Martínez Caro, Elena & Borreguero, Margarita. 2016. Discourse markers in reported speech: Evidence from English and Spanish. Presentation at the FDG Conference, Vienna.
- Nedjalkov, Vladimir & Otaina, Galina. 2013. *A Syntax of the Nivkh Language: The Amur Dialect*. Amsterdam: John Benjamins.
- Nikitina, Tatiana. 2012a. Personal deixis and reported discourse: Towards a typology of person alignment. *Linguistic Typology* 16(2): 233–263.

- Nikitina, Tatiana. 2012b. Logophoric discourse and first person reporting in Wan (West Africa). *Anthropological Linguistics* 54(3): 280–301.
- Nikitina, Tatiana. 2018. When linguists and speakers do not agree: The endangered grammar of verbal art in West Africa. *Journal of Linguistic Anthropology* 28(2): 1–24.
- Nikitina, Tatiana & Bugaeva, Anna. 2021. Logophoric speech is not indirect: Towards a syntactic approach to reported speech constructions. *Linguistics* 59(3): 609–633.
- Nikitina, Tatiana & Hantgan, Abbie & Chanard, Christian. 2019. Reported speech annotation template for ELAN. Villejuif: LLACAN.  
<http://discoursereporting.huma-num.fr/annotation.pdf>
- Nikitina, Tatiana, Ekaterina Aplonova, Abbie Hantgan-Sonko, Izabela Jordanoska & Elena Perekhval'skaya (eds.). In prep. The SpeechReporting Corpus: Discourse Reporting in Storytelling. Villejuif-Paris: CNRS-LLACAN.  
<http://discoursereporting.huma-num.fr/corpus.html>
- Nikitina, Tatiana & Vydrina, Alexandra. 2020. Reported speech in Kakabe: Loose syntax with flexible indexicality. *Folia Linguistica* 54(1): 133–166.
- Norrick, Neal. 2009. Interjections as pragmatic markers. *Journal of Pragmatics* 41(5): 866–891.
- Norrick, Neal. 2015. Interjections. In *Corpus pragmatics*, Karin Aijmer & Christoph Rühlemann (eds.), 249–279. Cambridge: Cambridge University Press.
- O'Connell, Daniel & Kowal, Sabine & Ageneau, Carie. 2005. Interjections in interviews. *Journal of Psycholinguistic Research* 34(2):153–171.
- Quer, Josep. 2011. Reporting and quoting in signed discourse. In *Understanding Quotation*, Elke Brendel, Jörg Meibauer & Markus Steinbach (eds.), 277–302. Berlin: Mouton de Gruyter.
- Ravenhill, Philip L. 1982. The Wan language. *Mandenkan* 4: 57–69.
- Ravenhill, Philip L. no date. Philip L. Ravenhill papers, National Anthropological Archives,

Smithsonian Institution.

- Reinöhl, Uta & Casaretto, Antje. 2018. When grammaticalization does not occur: Prosody-syntax mismatches in Indo-Aryan. *Diachronica* 35(2): 238–276.
- Savelyev, Alexander. 2020. Chuvash and the Bulgharic languages. In *The Oxford Guide to the Transeurasian Languages*, Martine Robbeets & Alexander Savelyev (eds.), 446–464. Oxford: Oxford University Press.
- Spronck, Stef & Nikitina, Tatiana. 2019. Reported speech forms a dedicated syntactic domain. *Linguistic Typology* 23(1): 119–159.
- Taavitsainen, Irma. 1995. Interjections in Early Modern English: From imitation of spoken to conventions of written language. In *Historical Pragmatics: Pragmatic developments in the history of English*, Andreas H. Jucker (ed.), 439–465. Amsterdam: John Benjamins.
- Taavitsainen, Irma. 2020. Interjections in early popular literature: stereotype and innovation. In *Voices Past and Present: Studies of Involved, Speech-related and Spoken*, Ewa Jonsson & Tove Larsson (eds.), 79–93. Amsterdam: John Benjamins.
- Wharton, Tim. 2003. Interjections, language, and the “showing/saying” continuum. *Pragmatics & Cognition* 11(1): 39–91.
- Wierzbicka, Anna. 1991. Interjections across cultures. In *Cross-Cultural Pragmatics: The Semantics of Human Interaction*, Werner Winter (ed.), 285–340. Berlin: Mouton de Gruyter.
- Wilkins, David. 1992. Interjections as deictics. *Journal of Pragmatics* 18(2/3): 119–158.