

UDMURT PARTICLES *JA* AND *NU*: WHAT’S THE DIFFERENCE?

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Abstract: In this paper, we compare semantic-pragmatic profiles of two discourse (modal) particles, *ja* and *nu*, in Udmurt and Beserman (Permic < Uralic), using a mixed-method approach. We first investigate the acceptability of the particles in response utterances on a scale from agreement to disagreement across different types of initiative utterances. We further check the results against corpus data. Our analysis shows that both particles play distinct roles in discourse management. Namely, *ja* is used as a means of discourse topic closure, while *nu* primarily functions as a discourse topic continuer in Udmurt. We discuss how the system of existing discourse particles affects the way of adaptation of the borrowed particle *nu*.

Keywords: discourse particles, discourse management, topic closure, topic continuer, sentence types, response particles, politeness, particle borrowing

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1. Introduction

Discourse (or modal) particles in Udmurt (Permic < Uralic) constitute a closed class of discourse-pragmatic elements that modify the whole proposition rather than some of its parts. These elements are phonologically short (one or, rarely, two syllables) and most commonly unstressed.

This article aims to pinpoint the pragmatic distinction in the use of two Udmurt particles: *nu* and *ja*. At first glance, these particles have similar syntactic properties and may seem to also have similar semantic-pragmatic functions. Their meaning can often be approximated by the English sentence-initial discourse marker ‘well’, as in translations of

examples (1–2). When translating examples into Russian, which was our metalanguage, our consultants often translate both particles in a sentence-initial position as *nu*.

- (1) UdmCorp¹: *IA “Udmurt’ija”*, 2017.10.13
 [The narrator is confused why the traffic lights do not turn green. Then she sees other people waiting too.]
Nu, malpa-ško, jaram, šoñer sıl-iško, dır.
 PTCL think-PRS.1SG okay right stand-PRS.1SG probably
 “‘Well’, I think, “okay, I’m doing right to stand, probably.”
- (2) UdmCorp: *Udmurt duññe*, 2009.12.31
 [A young couple is saying farewell to each other. The man says,]
Ja, L’enuk-e, şures vıl-e pot-ınj dır
 PTCL PN-1SG.POSS road top-LAT come.out-INF time
vu-i-z iñi.
 come-PST-3SG IAM
 ‘Well, my dear Lena, it’s time to get going.’

Syntactically, these two elements stand out in the system of Udmurt discourse particles. First, they can only precede the structures they modify, most typically occurring sentence-initially. Udmurt has a wide range of particles that occur either exclusively or primarily following other elements of a sentence as enclitics, but only a few that precede them.² In conversations, both *ja* and *nu* usually initiate a new turn, but can also appear at the start of a subsequent utterance in the same-speaker turn.

Second, both particles are also attested as stand-alone response words, possibly hosting other clitics (examples 3 and 4), even if the acceptability and frequency of such uses differ. The use of stand-alone *ja* as an agreement marker (‘okay’) is more common, while stand-alone

1 See Section 3 for details on the corpora.

2 The particle *ma* (supposedly originating from the question pronoun *ma(r)* ‘what’) could be a plausible third candidate for the comparison based on this parameter, especially considering its apparent functional closeness to *nu* and *ja* (it can also be rendered through ‘well’ in translations). However, we decided to restrict the investigation with two particles since *ma* cannot be used as a stand-alone positive response word. Along with some other particles that occur sentence-initially (*ben/bon, dak*), it can also be used postposed to other constituents (typically question pronouns).

nu as an agreement marker is quite marginal (attested rarely and primarily in spoken corpora). Most of Udmurt discourse particles cannot become prosodically autonomous, let alone form an utterance by themselves.³

- (3) UdmCorp: *marjamoll.blogspot.ru* 2014.

Lidž'-j, - šu-iško.
 read-IMP.2SG say-PRS.1SG
 'Read, I say.'
-Ja, - pe.
 PTCL REP
 'Okay, s/he says.'

- (4) Beserman Multimedia Corpus (referential communication experiment)⁴

[A] *So-len koržina-ja-z kāk gibi val.*
 that-GEN basket-LOC-3SG.POSS two mushroom be.PST
 'He had two mushrooms in his basket.'

[B] *Nu.*
 PTCL
 'Okay.'

[A] *Odig-ze šot-e so jožik-lâ.*
 one-ACC.3SG.POSS give-PRS.3SG that hedgehog-DAT
 'He is giving one of them to the hedgehog.'

[B] *Kud-iz-lâ?*
 which-3SG.POSS-DAT
 'To which one?'

[A] *Kud-iz sâl-e bakč'a-jân=ik so.*
 which-3SG.POSS stand-PRS.3SG garden-LOC=ID that
 'The one that is in the same garden.'

[B] *Nu.*
 PTCL
 'Okay.'

3 The exception is the particle *ben* that is also used as an autonomous positive response word in Standard, Northern, Central Udmurt, and in Beserman.

4 Beserman is treated here on a par with Udmurt dialects and registers (see the end of this section). Capital letters in brackets refer to the speakers, indicating where their turn starts. This corpus is further abbreviated as BesCorp.

Ja and, to a lesser but still substantial extent, *nu* frequently occur at the beginning of response turns in conversations, often alongside positive response words (cf. example 1). This study takes turn-initial uses of the particles *ja* and *nu* in response utterances as a starting point for investigating their semantic and pragmatic contribution. This is similar to the approach applied to several Russian modal particles, including *nu* (the source of the Udmurt *nu*), by Baranov & Kobozeva (1988). However, whereas Baranov and Kobozeva (1988) focus on answers to questions, we also consider other kinds of contexts.

As a theoretical background, we considered cross-linguistic parallels in the semantic evolution of response markers. Beeching & Wang (2014) consider diachronic development of terms with the canonical meaning ‘good’ in English (*well*), French (*bon*), and Chinese (*hao*). They provide a semantic map suggesting a pathway from response markers of agreement to markers of less-than-full agreement (“dispreferred response or upcoming discourse incoherence”), then to concession and demurral markers, the latter functioning as mitigators of the face threat associated with objections, and finally to modal particles (Beeching & Wang 2014: 67). According to them, the driving factor for this development is politeness, or face-saving strategies, when the speaker must mitigate the negative effect of disagreement. The authors also mention the possible development of “monologual dialogic” usages, when “speakers nuance their opinions by rhetorically exploiting a dialogical style” (Beeching & Wang 2014: 55–56).

The two Udmurt particles do not stem from words meaning “good” (see Section 2), and we do not propose a similar diachronic explanation for either of them. However, on the synchronic level, both units are attested in contexts that cover part of the proposed semantic map, ranging from markers of agreement to markers preceding a negative response. We therefore examine their acceptability across different response types in order to compare the semantic-pragmatic effects triggered by the units. More specifically, we investigate whether the use of these particles is associated with (im)politeness overtones, akin to the mitigating effect that has been proposed for English *well* in contexts of disagreement.

Another dimension of parameters is represented by different types of initiative speech acts that the *ja/nu* utterances respond to. As Wiltschko (2018) shows, response particles (like English *yes* and *no*) can be used

as (dis)agreement markers for various sentence types. She also notes that there are other expressions of (dis)agreement (like English *true / false*) that are used differently from *yes* and *no*. In the case of Udmurt, *ja* and *nu* used as agreement words have a narrower distribution than broader, standard affirmative responses, such as *o-o*, *ben* (Standard, Northern and Central dialects) ‘yes’, *ožj* (Southern dialects) ‘it is so’, *jaram* (Southern dialects), *ladno* (Northern and Central dialects) ‘okay’, and a widely used strategy of echo-responses.⁵ Therefore, we consider it crucial to look at the pragmatics of the particular speech act to which the *ja/nu*-utterance responds. We take the intentionalist view, following Geis (1995), according to which the conversational or non-conversational aim of communication must be considered (see also Grice 1957). It is important for our study, which participant of a particular social action (e.g., invitation, help offer, request, etc.) may potentially experience face loss under different types of responses.

In connection with these dimensions, we have tested three hypotheses:

- 1) *ja* and *nu* in response utterances differ with respect to the scale from full agreement to disagreement.
- 2) *ja* and *nu* in response utterances differ with respect to the type of the initiative speech act;
- 3) *ja* and *nu* in response utterances differ with respect to the (im)politeness effects associated with their use.

All three hypotheses were tested and confirmed. Based on the data we collected, we claim that the main discourse function of *ja* is closing the topic, while *nu* mostly signals that the topic cannot be closed yet. (Im)politeness overtones present in some contexts emerge as a collateral effect of these main functions.

This topic has never been thoroughly studied in Udmurt. Perevoschikov et al. (1962: 336, 349–350) translate *ja* into Russian as *nu* ‘well’ and note that *ja* “can give a statement various shades of meaning:

5 It must be noted that the distribution of the response words in Udmurt has not been fully described and presents an interesting topic of investigation, taking into account a considerable dialectal variation in the use of such words. A notable contribution to this topic is presented as a dialectological map of the lexemes *ben/bon* and their functions (Maksimov 2007).

permission, encouragement, request overtones, agreement, etc.” However, there is a vast literature analyzing the particle *nu* in Russian from where it was borrowed into Udmurt. In the last section, we discuss how the findings concerning *nu* in the donor language (Russian) correspond to our findings for the recipient language (Udmurt), and what role other native particles play in shaping the profile of *nu* in Udmurt. We found that only those functions of the Russian *nu* were reproduced in Udmurt when the particle was borrowed which had not been covered by the already existing *ja*.

Udmurt is a dialectally diverse language with a standardized written register. Spoken Udmurt can be roughly divided into four large dialectal areas: Northern, Central, Southern (proper), and Southern peripheral (Maksimov 2009). The written standard was developed in the 1930s. Most speakers learned it at school, although few attained a high level of proficiency (Edygarova 2014). Beserman, a variety spoken by around 2000 ethnic Besermans, was recently de facto recognized as a separate language (Arkhangelskiy et al. 2026: 11–13). However, it is very close to the Northern Udmurt dialects. We label Beserman examples as such; however, we treat Beserman as a part of a larger Udmurt languoid (in terms of Cysouw & Good 2013). Although we do compare Beserman to the (rest of) Udmurt varieties, this has practical reasons: Beserman was the only variety in the languoid for which we could gather reliable data from multiple consultants or from a spoken corpus of sufficient size. Throughout the paper, “Udmurt” without further specifications means “any variety of Udmurt or Beserman”.

2. Origin and syntax of *nu* and *ja*

The two particles have a different origin. *Nu* is clearly a Russian loan and is assessed as such by the Udmurt native speakers. Differently from the most closely related Komi language, the phonetic variant *no* that would functionally compete with *nu* is not registered in Udmurt or Beserman dictionaries (Kirillova 2008, Usacheva et al. 2017). The functions of the enclitic additive particle =*no* (‘and’, ‘but’, ‘too’, ‘even’) in Udmurt do not overlap with *nu*. Clause-initial *no* is described in the dictionaries as an adversative conjunction (‘but’). However, according to Maria Usacheva (p.c.), the instances of *no* functionally identical to *nu*

are attested in the spoken Beserman corpus and confirmed as possible variants by some of the Beserman speakers.

The particle *nu* most commonly occurs sentence-initially. These occurrences will be the main focus of our investigation and will thus be explained in detail in what follows. There are also corpus examples where the particle occurs sentence-medially, preceding the constituent it modifies. However, *nu* in the sentence-medial position is quite infrequent in the written corpus (5 occurrences in the sample of 155), where it mostly plays the role of a degree modifier, as in (5).

- (5) UdmCorp: *Udmurt duññe*, 2011.02.04
 [...] *Vıl' ar-lj ind'ianka diša-šk-i, aslam*
 new year-DAT Indian.lady wear-DETR-PST.1SG REFL.1SG.GEN
kırž'a-m-e uls-jn ik nu ekt-i soku!
 sing-NMLZ-1SG.POSS under-LOC ID PTCL dance-PST.1SG then
 '[When I was in fifth grade,] I dressed up as an Indian lady for New
 Year's Eve, and danced [so much] to my own singing!'

In the spoken Beserman corpus, the sentence-medial *nu* typically precedes rephrasing or speech disfluences (6).

- (6) BesCorp
Pič'i pi-jen arten=ges, nu, marâm,
 little boy-INS beside=COMP PTCL whatchamacallit
gord skal'-l'os, šur-tem skal'-l'os až.pal-an=ges,
 red cow-PL horn-CAR.ATTR cow-PL in.front-LOC=COMP
parś-jos.
 pig-PL
 'Next to the boy, well, I mean, in front of the red cows, hornless cows,
 there are pigs.'

There are no sentence-final occurrences of *nu* in the analyzed corpora.

The semantics and pragmatics of the Russian *nu*, which are diverse and multi-faceted, have been the object of a number of investigations (Baranov & Kobozeva 1988, Kuosmanen & Multisilta 1999, Shmelev 2005, Auer & Maschler 2016, Bolden 2016). The Russian *nu* is usually pre-clausal. Out of response utterances, it is widely used in affirmative responses but only limitedly in negative ones. The functions and properties commonly ascribed to it include the following:

- continuation of the topic or beginning an addition;
- self-correction;
- difficulty finding an answer;
- indicating that the speaker is forced to say what follows, hoping for the addressee's understanding and cooperation.

The Russian *nu* also appears as a part of many fixed expressions or constructions.

To the best of our knowledge, there has been no in-depth investigation on the particle *ja*. In the written Udmurt corpus, *ja* is frequently used as a bisyndetic conjunction 'or'.⁶ As regards its source, Tarakanov (1975: 184–185) proposed the borrowing path of *ja* as a conjunction from Persian into Turkic languages and then into Udmurt.

In the written Udmurt corpus, there are few sentence-final occurrences of *ja* where it is used as an appeal for agreement (7). In the spoken Beserman corpus, utterance-final *ja* in this function is preceded by a pause of up to 7 seconds.

- (7) UdmCorp: *Udmurt duññe*, 2008.07.02

Apaj, mon tñeštñd ažlo=ges tub-o, ja?
 sister I.NOM you.SG.ABL early=COMP climb-FUT.1SG PTCL
 'Sister, I'll climb first [lit. earlier than you], okay?'

Both in the Udmurt and Beserman corpus, *ja* is attested following a positive response word *ben/bon*, sometimes preceded by the particles *nu* or *ma* (8), or in combination *nu(.) ja* 'well okay'. Utterance-medial *ja* is not attested in the corpora.

- (8) BesCorp

[A] *A vâl-išt-âz vâl-a-z en pun,*
 and top-EL-3SG.POSS top-LAT-3SG.POSS PROH put
po.otd'el'nost'i pun.
 separately put
 'Don't put [them] one onto another, put [them] separately.'

6 Conjunctive usage is not attested in the Beserman corpus, and not all Beserman speakers recognize the usage of *ja* as a conjunction. A more detailed description of the conjunctive uses of *ja* is left out of the scope of this article.

[B] *Ma ben, ja. Tatč'ə mar-e pun-om?*
 PTCL yes PTCL here.LAT what-ACC put-1SG.DELIB
 'Well yes, okay. What shall I put here?'

In the written language (examples retrieved from the subcorpus of press), both particles in sentence-initial position are usually separated by a comma. However, this doesn't always reflect the level of prosodic detachment.

3. Data and methods

Our primary source of data is the acceptability judgment task performed by 6 Udmurt speakers from different dialectal backgrounds (Southern: 4 participants; Central: 2 participants) and 3 to 7 speakers of Beserman. Although Beserman does not stand out more than any Udmurt dialect in terms of sentence-initial particles, we treat the Beserman dataset separately for two reasons. First, the Udmurt questionnaires were collected in written form (digitally) from relatively young, urban respondents who were familiar with the standard Udmurt (at least with the spelling). All Udmurt participants learned Standard Udmurt at school and have higher education; they are capable of cross-dialectal communication and belong to a single community. Two participants have higher education in Udmurt philology. All participants are bilingual (Udmurt and Russian).

By contrast, Beserman questionnaire was discussed with the speakers orally. Our Beserman consultants lived in a village (Shamardan, Yukamenskoye district, Udmurtia, Russia), were on average much older and less familiar with Standard Udmurt. Second, we could cross-check the Beserman data with the 256,000-word Beserman corpus (BesCorp), which mostly contains transcripts of dialogues. No similar comparison with a spoken corpus could be made for Standard Udmurt.

Table 1. Participants' age.

Age cohort	Udmurt participants	Beserman participants
21–30	1	0
31–40	4	0
41–50	1	0
51–60	0	1
61–70	0	3
71–80	0	2
81–90	0	1

The questionnaire data was supplemented by annotated samples from the Corpus of Standard Udmurt (Arkhangelskiy & Medvedeva 2014) and the spoken Beserman corpus (Arkhangelskiy et al. 2003–2025). This allowed us to see how the results of the acceptability ratings correspond to corpus data, as well as to account for non-responsive usages of *ja* and *nu*.

One must keep in mind that corpus-based figures are not directly comparable to those based on questionnaire responses. In many cases, the initiative and response utterances are not immediately adjacent in the corpus. Besides, many of their combinations were not attested in the corpus samples at all; there were only few instances of negative responses in our sample. However, the corpus data adds another dimension by providing contexts or pragmatic settings that were not accounted for in the questionnaire.

The fact that the data from several Udmurt speakers with different dialectal backgrounds was lumped together is explained by the scarcity of consultants available to us. Large interdialectal differences would diminish the validity of our conclusions. However, we will demonstrate, using the more reliable Beserman data as a reference point, that this is likely not the case. First, although Beserman responses differ somewhat from the averaged Udmurt ones, the observed differences are relatively minor. This means that dialect, age and level of education do not drastically affect the outcome. Second, there is variation even among the Beserman respondents. This suggests that some of the variation in the Udmurt responses is not dialectal in origin, either. Therefore, we believe our overall conclusions to be valid.

3.1. Acceptability judgment task

The questions for the acceptability judgment questionnaire for Udmurt speaking participants were set up following the methodology of conversation boards, i.e., “scripted cartoons that set up the scenario for the discourse move” (Wiltschko 2021: 91). The participants saw a series of two pictures of two people having a conversation (Figure 1). Above the pictures is a short textual description of a situation introducing discourse participants, their relationships, and the discourse topic (9). The picture on the left has the initiative utterance in a speech bubble (10). The picture on the right has the highlighted response utterance in the speech bubble (11).

Кык тодмоос верасько ортчем праздник сярысь.



Figure 1. Conversation board. Information-seeking polar question as an initiative utterance. *Nu*-preceded agreement as a response utterance.

- (9) Udmurt, Discourse situation:
Kjk todmo-os vera-šk-o ortč'-em
two acquaintance-PL speak-DETR-PRS.3PL pass-PTCP.PST
prazdník śariś.
party about
'Two friends are talking about a recent holiday party.'
- (10) Udmurt, Initiative utterance:
Ton prazdník-e vetl-i-d=a?
you.SG.NOM party-LAT go-PST-2SG=Q
'Have you been to the party?'
- (11) Udmurt, Response utterance:
Nu o.o.
PTCL yes
'Well yes.'

The acceptability judgment task was designed to test the acceptability of response utterances using the combination of values across two parameters.

The first parameter is the sentence type of the initiative utterance listed and illustrated in Table 2.

Table 2. Types of initiative utterances.

Sentence type	Subtype (illocutionary force)	Example
declarative	assertion of a fact	'Sasha lives in the village with his parents.'
	permission request	(The husband says to his wife,) 'I'm going to hang out with my friends.'
polar interrogative	information request	'Have you been to the party?'
	invitation	'Will you go shopping with me?'
content interrogative	information request	'Who went to the party with you?'
imperative	request	'My sister is coming over, buy something delicious in the store.'
	offer	'Taste this pie, I made it myself.'
deliberative		'Shall I help you?'
hortative		'Let's go to the cinema.'

We took the sentence types that have a specialized grammatical form in Udmurt and require a reaction from the addressee. For each of the three “major” sentence types (declarative, interrogative, and imperative, cf. König & Siemund 2007), two different illocutionary forces were tested; polar and content interrogatives were tested separately. Declaratives with the illocutionary force of assertion do not necessarily require the addressee’s reaction. Nevertheless, agreement with assertions is attested in the spoken corpus. The two types of declaratives are formally distinguished as they yield different types of responses. A positive echo-response to the permission request takes the form of an imperative, as opposed to an indicative echo-response in reaction to an assertion of a fact; a negative response has the form of the prohibitive *en/enj* for a permission request, as opposed to sentential negation for assertions. We narrowed down our investigation to initiative sentences with positive polarity.

The second parameter – the type of response – has the following values:

- 1) a stand-alone particle as a positive response word
- 2) a particle preceding a positive response word
- 3) a particle preceding a positive response word with the following complementary information.
- 4) a particle preceding a positive response word with the following contradictory information.
- 5) a particle preceding a negative response.

In case of a content interrogative as an initiative utterance (‘Who went to the party with you?’), stand-alone particles as positive responses are not applicable.⁷ The positive response in this case was considered a congruent answer to a question (‘My kids.’), and the negative response was a null answer (‘Nobody. I was there by myself.’). For the full stimulus texts used in the design of the questionnaires, see the dataset *Questionnaires for “Udmurt particles ja and nu”* (Zubova & Arkhangelskiy 2026).

7 It is possible to conceive of the context where a positive response particle would follow the content question. Wiltschko suggests that the response words in this case function as agreement with the speech act: “Yes, it’s a good question.”/ “No, you can’t ask me that.” (Wiltschko 2018: 254)

All five sentence-initial particles were included in the questionnaire (*ja*, *nu*, *ben/bon*, *dak*, *ma*), as well as response utterances without particles. However, this article only discusses the results for the two of them (*ja* and *nu*) for the reasons of their structural similarities.

The stimulus texts (without particles) were constructed in Russian, then translated by one speaker from the Central dialectal zone, one speaker from the Southern dialectal zone, and one speaker of Beserman. As a result, three sets of questionnaires were created. The differences in the questionnaires concerned mostly the use of two positive response words. *Ben* ‘yes’ is not in use in the Southern dialectal zone. Also, none of the four participants from the Southern dialectal zone uses *bon* as a positive response word. *Jaram* ‘okay’ is used by the Southern participants, while *ladno* ‘okay’ is preferred by the participants from the Central dialectal zone and Beserman. The use of phonetic variant *j-j* ‘yes’ instead of standard *o-o* was not reflected in the stimulus texts. Some participants left comments about their way of pronunciation, but this didn’t cause any misunderstanding of the stimulus texts. The questionnaires in Beserman have certain phonetic and lexical differences in comparison to the Udmurt questionnaires. However, the inventory of response words used in translations is the same as in the Central dialectal zone.

For the 6 Udmurt speakers, who are used to the Standard Udmurt orthography, the acceptability judgment task was conducted in LimeSurvey environment (LimeSurvey GmbH n.d.). There were 9 questionnaires, each corresponding to one of the nine sentence types of the initiative utterance. Within one questionnaire, only the response utterance was changing; the order of questions within a questionnaire was random. The set of nine questionnaires had 256 questions in total (not counting synonymous dialect-specific variants). The objective of the questionnaire was transparent to the participants; no filler questions were used. The questionnaires were non-anonymous, and gathered metadata about the age cohort and the region of origin. The general task was to evaluate the appropriateness of the highlighted utterance in a given conversation, provide comments if there are any specific connotations of the response (e.g., (im)polite, angry, unfinished) or any other comments, and provide possible rephrasing in case of inappropriateness.

Then the participants saw the conversation board on the screen, the task (“How naturally does the highlighted phrase sound?”), five

descriptive answer options (forced choice), and the comment field. The answer options were formulated as follows:

- 5 It sounds very natural, I would say so myself.
- 4 It's possible to say so but I would rephrase it.
- 3 Somebody may say so but I wouldn't.
- 2 Doesn't sound very natural.
- 1 It's not possible to say so.

For the analysis, the options were coded as numbers from 5 (most acceptable) to 1 (completely unacceptable). We chose against presenting the numerical scale directly because the participants thought it was too complicated. If no grade for any particular InU/answer pair exceeded 3, we counted that as rejection. The option for the grade 3 was selected by participants who don't accept the stimulus themselves, just as with the grades 1–2. Their opinion as to whether other people would accept it – which distinguishes this grade from 1 or 2 – turned out to be very unreliable. We encountered cases when participant A thought that participant B would approve of a certain stimulus (because of their differing dialect) but B graded the same stimulus as 1 or 2.

For the Beserman participants (who are not used to reading in Beserman), the questionnaire was presented in a more traditional field-work setting. The linguist presented the texts orally in Beserman, asking about the evaluation of the last (response) utterance in informal terms. The comments were recorded. For the analysis, the responses were interpreted based on the scale used for Udmurt participants and coded from 5 to 1 as well.

Although there is variation between participants, there were no outlier participants who either accepted or rejected significantly more stimuli than on average.

3.2. Corpus data

Two corpora were used for the analysis of the particles *nu* and *ja*: the main corpus of the Udmurt Corpora (9.6 million words, Arkhangelskiy & Medvedeva 2014) and the spoken Beserman Multimedia Corpus (about 256 thousand words, Arkhangelskiy et al. 2003–2025). The former includes texts of written Udmurt media (contains both monologic and dialogic (interviewee and interviewer) texts; represents the

Standard form of Udmurt), and blogs (less normative, mostly monologic). The latter consists of transcripts: spontaneous dialogues (40%), dialogues produced during referential communication experiments (36%; see Usacheva 2021) and monologues (24%). Obviously, the Udmurt and the Beserman corpora contain very different kinds of data, which does not make them directly comparable. Unfortunately, there is no representative corpus of spoken cross-dialectal Udmurt, other than small personal collections.

Table 3. The frequency distribution of particles in two corpora and in samples.

	<i>ja</i>	<i>nu</i>
Udmurt Corpus (written, 9562233 words), no. (wpm)	approx. 1093 (114)	approx. 964 (101)
Udmurt Corpus, sample size (contexts)	202	155
Stand-alone occurrences in the Udmurt sample, no. (%)	7 (3%)	1 (0.6%)
Beserman Corpus (spoken, 256062 words), no. (wpm)	855 (3 339)	1642 (6 413)
Beserman Corpus, sample size (contexts)	151	150
Stand-alone occurrences in the Beserman sample, no. (%)	31 (21%)	1 (0.7%)

In addition to these, we checked some of our findings against the Corpus of Udmurt social media (Arkhangelskiy 2019). However, we did not analyze its data systematically.

The samples were annotated for the syntactic position of the particle (stand-alone, sentence/clause-initial, clause-medial, sentence-final), host sentence type (excluding stand-alone occurrences), responsive/non-responsive type of the host utterance, occurrence in responses of different types, and occurrence in combination with other discourse markers. For the Beserman corpus, the prosodic integration with the host utterance was also annotated.

4. Results

In this section, we describe our findings for the two particles. We summarize acceptability ratings in tables in subsections 4.1 (*ja*) and 4.3 (*nu*). Below each table, we exemplify the main takeaways and briefly discuss participants' comments and outliers, followed by an analysis. We enhance the questionnaire data for *ja* and *nu* with corpus findings in subsections 4.2 and 4.4, respectively.

In the acceptability judgment task, we did our best to ensure that the sentences judged as unacceptable were rejected because of the particle rather than other reasons. Most utterances without any particles were accepted by all participants. Those that turned out to be less acceptable were reformulated according to participants' suggestions. An additional questionnaire was created later, accounting for the preferred structure. This mostly concerned the preference of the prohibitive *enĭ* instead of *en* as a negative response to the declarative permission request by Udmurt participants.

The tables in 4.1 and 4.3 are designed as follows. Each row corresponds to one initiative utterance type, and each column to one response type. Data for Udmurt and Beserman are provided separately in adjacent rows; U stands for Udmurt, and B for Beserman. Each cell contains the data for a particular initiative/response pair. "+" stands for utterances acceptable for all participants (grades 5 or 4); "-" means that the utterance was rejected by all participants in this context (grades 3 to 1). In case of fully (un)acceptable utterances, there are several cases where one participant provided a grade that differs from the other participants by more than 2 points. This is indicated as "1 outlier". The percent sign means low agreement between participants, operationalized as the difference of two or more points on the scale between multiple participants. The average grade is provided in parentheses in this case.

4.1. Acceptability judgment task for *ja*

4.1.1. Summary

The acceptability ratings for *ja* are summarized in Table 4.

Table 4. Acceptability of *ja*.

	Language	Stand-alone particle	Particle+ agreement word	Particle+ agreement word+ complementary information	Particle+ agreement word+ contradictory information	Particle+ disagreement
<u>Declarative: assertion of a fact</u>	U	– (1 outlier)	% (3.4)	– (1 outlier)	% (2.6)	% (2.8)
	B	% (3.0)	% (3.5)	+	+	–
<u>Declarative: permission request</u>	U	+	+	+	+	% (3.0)
	B	+	+	+	+	–
<u>Polar question: information-seeking</u>	U	–	–	– (1 outlier)	% (2.7)	– (1 outlier)
	B	–	–	–	–	– (1 outlier)
<u>Polar question: invitation</u>	U	% (3.5)	% (3.3)	% (3.7)	% (3.7)	% (3.3)
	B	% (3.0)	–	% (3.0)	+ (1 outlier)	+
<u>Wh-question</u>	U	NA	– (1 outlier)	% (1.7)	–	% (2.3)
	B		–	–	–	– (1 outlier)
<u>Deliberative</u>	U	% (3.5)	+	+	+	+
	B	– (1 outlier)	+ (1 outlier)	+	+	% (3.4)
<u>Hortative</u> ⁸	U	+	+	+	+	% (3.5)
	B	+ (1 outlier)	+	+	+	% (2.6)
<u>Imperative: offer</u>	U	+	+	+	+	% (3.3)
	B	+	+	+	+	% (3.7)
<u>Imperative: request</u>	U	+	+	+	+	% (3.5)
	B	+	+	+	+	–

⁸ Two participants gave lower grades for the agreement word *jaram* as a stand-alone response. However, when preceded by *ja*, the grades were higher. *Ja* as a stand-alone response was judged as acceptable by all participants, contrary to other types of stand-alone agreement words, where several participants gave lower grades.

Ja is fully acceptable with positive responses to declarative: permission request, hortative, and both kinds of imperatives. At the same time, its acceptability in negative responses to the same speech acts varies across participants. The details provided below indicate that such a response can be perceived as too direct or impolite.

In the case of a declarative: permission request, two participants commented that the response “sounds better without *ja*”. One participant suggested a paraphrase with the particle *aj*, which usually plays the role of an imperative mitigator, “softening” the request (12).⁹

- (12) Udmurt, Declarative: permission request InU¹⁰ (‘I’m going to hang out with my friends.’)

Ja, *en=aj,* *tunne* *mi* *dor-j* *kuno-je*
 PTCL PROH=IMP.MTG today we.EXCL.NOM near-LAT guest-LAT
tjnad *mam-ed* *papa-jed* *ljkt-o-zj=uk.*
 you.SG.GEN mother-2SG.POSS father-2SG.POSS come-FUT-3PL=ENIM
 ‘Well please don’t, your parents are coming to visit us today.’

A negative *ja*-preceded response to a hortative was rejected by three participants. One suggested paraphrase included the imperative mitigator *aj* (13). However, one participant noted that the combination *ja ug* as a response is altogether impossible in their idiolect.

- (13) Udmurt, Hortative InU (‘Let’s go to the cinema.’)

Ja *ug=aj...*
 PTCL NEG.NPST.1SG=IMP.MTG
 ‘Well I’d rather not.’

In the case of an imperative: offer, a negative response with *ja* sounds less appropriate or inappropriate (commented as “impolite”) for four participants with a Southern dialectal background. However, the option without particles is also assessed as less polite by two participants.

A *ja*-preceded negative answer to an imperative: request was assessed as less appropriate (two Udmurt participants) or inappropriate (Beserman). Suggested paraphrases include a variety of other discourse

9 The imperative mitigator *aj* does not exist in Beserman.

10 InU stands for *initiative utterance*.

particles (e.g., *ni* ‘already’, *aj* / *ajko* ‘imperative mitigator’), whose function here is to mitigate the rejection (14).

- (14) Udmurt, Imperative: request InU (‘My sister is coming over, buy something delicious in the store.’)

Ja *ug=ni=aj* / *ug=ni* /
 PTCL NEG.NPST.1SG=IAM=IMP.MTG NEG.NPST.1SG=IAM
ug=ini=ajko...
 NEG.NPST.1SG=IAM=IMP.MTG
 ‘Well I’d rather not.’

In the case of a simple declarative, the ratings varied a lot. Udmurt participants commented that an answer with a stand-alone *ja* is possible, however, it sounds impolite. Relevant comments include “as if you want to show that this information is uninteresting for you and you want to wrap up the conversation” and “as if you want to change the topic”. Two Beserman consultants also commented that these responses indicate that the speaker doesn’t care about the information provided by the interlocutor.

Positive responses followed by any kind of additional information were assessed as less appropriate or inappropriate by almost all Udmurt participants. A possible paraphrase proposed by one of them suggested the rhetorical expression of disbelief, consisting of the combination of *ja*, the positive response word *o-o* ‘yes’, and the discourse particle *ni*:

- (15) Udmurt, Declarative: assertion of a fact InU (‘Sasha lives in the village with his parents.’)

Ja *o.o=ni*, *so* *gorod-e* *beretsk-jnj*
 PTCL yes=IAM that town-LAT return-INF
daśa-śk-e=uk!
 prepare-DETR-PRS.3SG=ENIM
 ‘Come on, he’s going to move back to town!’

However, *ja*-preceded extended positive responses (16a, b) are perceived as appropriate by the Beserman participants. This is one of the very few areas where the Udmurt and Beserman judgments clearly diverge.

- (16) Beserman, Declarative: assertion of a fact InU ('Sasha lives in the village with his parents.')

a. **Ja** *ben,* *so-os-ân* *č'oš* *šestra-jez=no*
 PTCL yes that-PL-INS together sister-3SG.POSS=ADD
ul-e.
 live-PRS.3SG
 'Well yes, his sister also lives with them.'

b. **Ja** *ben,* *no* *so* *gorod-e* *košk-ânâ*
 PTCL yes but that town-LAT leave-INF
med-e *berlañ.*
 want-PRS.3SG back
 'Well yes, but he wants to go back to town.'

Ja in responses to any information-seeking questions is mostly inappropriate, although several participants provided higher grades for negative responses than for positive ones. One participant commented that a *ja*-preceded negative response to a polar question can be pronounced "with irritation, [as if] to quickly avoid discussing the question and start asking the interlocutor instead".

The grades provided for a polar question-invitation vary a lot across participants, mostly divided between full acceptance and unnaturalness. Several Udmurt participants suggested that different types of *ja*-preceded positive answers must have a prosodic boundary after the particle (indicated by a comma) in order to sound felicitous (17).

- (17) Udmurt, Polar question: invitation InU ('Will you come to the store with me?')

Ja (,) *o.o.*
 PTCL yes
 'Well yes.'

Finally, the acceptability of responses to a deliberative InU ('Shall I help you [carry these heavy things]?') shows a distinct pattern. While positive responses with positive response words were accepted by most participants, the stand-alone *ja* as a positive response was unacceptable or marginally acceptable for several participants. Two participants (Beserman) suggested to paraphrase the response as *Ja (ben) jurtâ* 'JA (well) help'. In the case of a negative response, most Udmurt

participants assessed the response as fully acceptable. Two Beserman participants suggested a paraphrase with the word *ajda* ‘let’s’ to be more appropriate in the given context (18).

- (18) Beserman, Deliberative InU (‘Shall I help you?’)

<i>Ajda</i>	<i>en,</i>	<i>mon</i>	<i>ač’im</i>	<i>nu-o.</i>
let’s	PROH	I.NOM	oneself.1SG.NOM	carry-FUT.1SG

‘Well don’t, I’ll carry [them] myself.’

4.1.2. Analysis

The analysis of the responses has led us to the idea that the core meaning of *ja* is *discourse topic closure*.

Ja sounds felicitous with all kinds of positive responses to declarative: permission request, hortative, imperative: request, and imperative: offer. All of these are social actions where any type of agreement to act in the interests of the initiator suffices to resolve the issue and close the topic in a cooperative manner. A *ja*-preceded negative response to these types of initiative utterances, on the other hand, was less acceptable for the reasons of impoliteness, or only acceptable with the softening particle *aj*. A negative answer in the discussed situation could be seen as uncooperative even without particles. However, all negative answers in the questionnaire contained a reason for the refusal, which aimed at mitigating the face loss effect. Indeed, most options without particles were assessed as fully felicitous (without impolite overtones) by all participants, except for the InU types “Imperative: offer” and “Polar question: invitation”. In the case of the *ja*-preceded negative response, the refusal to act cooperatively leads to the situation where the issue remains unresolved for the initiator; the rude overtone is present since the responder forces the closure of an unresolved issue. This gives rise to the variety of acceptability grades for such utterances, since some participants evaluated grammaticality (“It’s possible to say so although it sounds rude”), while others considered pragmatic appropriateness (“The response is too rude, I wouldn’t say so”).

Ja was commented as having impolite overtones in any type of reaction to declarative: assertion of a fact and information-seeking questions. In the corresponding social situations, the responder typically doesn’t have the authority to close the issue raised by the initiator,

since the initiator may have more to say on the topic (in the case of a simple declarative) or be willing to ask follow-up questions (in the case of a polar or content information-seeking question).

The acceptability of *ja* in reactions to a polar question: invitation exhibits low inter-participant agreement. This must be due to the fact that different participants conceived the initiative phrase ('Will you go to the store with me?') differently: some viewed it as a simple information-seeking question, while others considered it to be a request for a joint action. Under the former interpretation, the acceptance of *ja* is low, following the pattern of other information-seeking questions. Under the request interpretation, *ja* is acceptable with any kind of response. The reason for that is that, even in the case of a negative response, the face-loss threat is lower for the initiator compared to imperatives or hortatives due to the use of an indirect question (invitation in the question form).

A deliberative initiative phrase can also be seen as an indirect question (the initiator's inquiry about their upcoming actions). In the questionnaire, the action proposed by the initiator was in the interests of the responder ('Shall I help you?'). The deliberative context stood out, featuring a higher acceptability of *ja* preceding a negative response. A refusal to receive help doesn't lead to the initiator's face-loss, therefore it can be seen as a way to cooperatively close the issue without triggering the impoliteness side-effect. Lower acceptance grades provided by the Besermans for the negative response can probably be explained by the use of another marker (*ajda*), more typically associated with responses to deliberatives.

One problematic issue for our analysis is the fact that a stand-alone *ja* sounds "unfinished" without the following agreement word when agreeing to hortatives and deliberatives, according to the comments. This can be explained by the fact that both initiative utterances propose a joint action, either in the interests of both participants (hortative), or in the interest of the responder (deliberative). In these cases, the initiator may expect a more "enthusiastic" agreement than a simple indication of the topic closure. We would expect to see the same effect in imperative: offer ('Try this pie. I baked it myself'), but there was only one participant who suggested that adding a positive response word (in the form of a hortative marker *vaj*) would sound better than stand-alone *ja* agreement (while the latter is still acceptable).

This effect doesn't occur in situations where the initiative utterances propose an action in the interests of the initiator. In these cases, the responder is not expected to be particularly enthusiastic, so a short indication of closing the issue suffices.

4.2. Corpus results for *ja*

In the spoken Beserman corpus sample (n=151), there are 108 response utterances with *ja*. We can roughly classify the responses into several major groups, presented in Table 5.

Table 5. Most frequent occurrences of *ja* in responsive contexts in the spoken corpus.

third turn	31
<i>ja</i> + short positive response (to declarative, imperative, polar interrogative)	23
stand-alone <i>ja</i> as positive response (to declarative, imperative, polar interrogative)	18
<i>ja</i> + positive answer + additional information (to declarative, imperative, polar interrogative, wh-interrogative)	13
negative responses	6
non-congruent answers, “agree-to-disagree”	4

Stand-alone *ja* or *ja*-preceded positive responses occur most frequently as a third turn in a discussion of a topic (n=31). They are typically acknowledgment reactions to positive or congruent non-null answers to a preceding question.

(19) BesCorp

- [A] *Tarelka-zâ mur=a, lapeg=a?*
plate-3PL.POSS deep=Q shallow=Q
‘Are their plates deep or shallow?’
- [B] *Moga! Mur-eś! Mur-eś tabeś-jos-sâ.*
wait deep-PL.ADJ deep-PL.ADJ plate-PL-3PL.POSS
‘Wait! Deep! They have deep plates.’
- [A] *Ja. Ja wań=ni, po.odnomu.*
PTCL PTCL EXIST=IAM separately
‘Okay. Okay, there are [such plates], one for each.’

This corroborates our analysis of *ja* as a topic closer, since the initiator has the authority of closing the topic after receiving an answer. By doing so, they encourage their interlocutor to move on to the next issue. Actually, many of the third-turn *ja*-responses are followed by expressions like *fšo* (*šo*) ‘that’s it’, *sre* ‘then, go on’ and *dal’she* ‘further, go on’.

Other corpus contexts may seemingly contradict the questionnaire responses. For example, most positive responses in the sample followed declarative sentences. This included stand-alone *ja* and *ja* followed by a short positive response. Such pairs received low grades in the questionnaire. However, they can be explained by a larger discourse context absent in the questionnaire.

In the corpus, the declarative sentences that elicited a stand-alone *ja* were of two kinds. First, there were instructions in referential communication experiments. By describing a state of affairs (e.g., the position of figures on their table), the speaker indirectly requests that the other participant recreate it on their table (20).

(20) BesCorp

[A] *Ja, teń kălž’âk. Šâres vâl-a-z č’už č’orog.*
 PTCL there listen road top-LOC-3SG.POSS yellow fish
 ‘Alright, so listen. There’s a yellow fish on the road.’

[B] *Ja.*
 PTCL
 ‘Okay.’

Second, this setting can also explain other pairs with low acceptability, such as a stand-alone *ja* following a question. Here, it is only asked in order to check if the addressee complied with the preceding imperative (21).

(21) BesCorp

[A] *Kâšno-os-te bašt-sa ž’ek vâl-e pun=ńi.*
 woman-PL-ACC.2SG.POSS take-CVB table top-LAT put=1AM
Bašt-i-d=a?
 take-PST-2SG=Q
 ‘Take the [figures of] women and put them on the table. Have you taken them?’

[B] *Ja.*
 PTCL
 ‘Okay / go on.’

Another point of divergence was the disagreement responses with *ja*, which rarely occur in the corpus sample (n=6). None of them corresponds to the questionnaire situations. In (22), the interlocutor reacts with a *ja*-rejection to a potentially unpleasant action of the interlocutor (showing her legs to prove there are no sores):

(22) BesCorp

- [A] *No-kâtân=no* *jazva-jez* *evâl,* *tiñ*
 NEG-where.LOC=ADD sore-3SG.POSS NEG.EXIST here
tač'e=no.
 such=ADD
 '[My legs don't work at all, here, my legs.] There are no sores anywhere, like this.'
- [B] *Ja, en vožmat't'a-šk-â.*
 PTCL PROH show-DETR-CNG.SG
 'Okay, don't show [them].'

There were two examples of "indirect negation", e.g., refusal formulated without any negative markers. In (23), the host is trying to light the fire in the stove. The guest offers to bring a cardboard box to help them, an offer the host indirectly rejects.

(23) BesCorp

- [A] *Možet, marâm-ze,* *koropka-ze*
 maybe whatchamacallit-ACC.3SG.POSS box-ACC.3SG.POSS
pârt-ono?
 bring.inside-DEB
 'Maybe I should bring a box?'
- [B] *Ja šas, ulž'-o-z,* *možot.*
 PTCL one.moment start.burning-FUT-3SG maybe
 'One moment, maybe it will start burning.'

Finally, there were 2 examples of non-congruent answers and *ja*-responses that follow an argument between conversational partners. There, *ja* can be interpreted rather as an "agree-to-disagree" marker rather than a marker of agreement. In all of the above contexts, the topic-closure interpretation is very plausible.

In the sample taken from the written Udmurt corpus, the share of responsive contexts is much lower. These contexts also corroborate

our claim about the meaning of *ja*. *Ja* is frequent in combination with imperatives and prohibitives, encouraging a partner to stop doing the current action (24). These contexts typically have predicates expressing consolation: *bujgatskij* ‘calm down’ (n=4), *en bėrdj* (n=1) ‘don’t cry’, *en řulmařkij* (n=1) / *en kurektj* (n=1) / *en řugjařkij* (n=1) ‘don’t worry’, *en ř’igiřke* (n=1) ‘don’t get upset’, or the form *tjrmoz* ‘enough’ (n=4).

(24) UdmCorp: *Udmurt duńńe*, 2007.07.27

<i>Ja,</i>	<i>řu-e,</i>	<i>en=aj</i>	<i>bėrd-j,</i>	<i>kolxoz</i>
PTCL	say-PRS.3SG	PROH=IMP.MTG	cry-CNG.SG	kolkhoz
<i>ėř’am-ın</i>	<i>kalik</i>	<i>mar</i>	<i>řu-o-z.</i>	
meeting-LOC	people	what	say-FUT-3SG	

‘[I started crying.] Enough, s/he says, don’t cry, what will people at the kolkhoz meeting say.’

Ja is also attested in combination with the formulaic expressions of farewell (n=6), thus closing the entire conversation (***Ja,*** *ř’eč’ lu!* ‘Alright, goodbye!’). Another type of use of *ja* is in combination with the discourse particle *xot’* / *kot’* ‘at least’ marking concessive-like relations, “although A, fortunately, B”.

(25) UdmCorp: *kyshman.blogspot.ru*

<i>Malpa-j</i>	<i>uč’k-ınj</i>	<i>kino,</i>	<i>uřast’ik-ez.</i>	<i>Ja</i>	<i>xot’</i>
think-PST.1SG	see-INF	movie	horror-ACC	PTCL	at.least
<i>nunař-e</i>	<i>uč’k-i.</i>				
daytime-LAT	see-PST.1SG				

‘I thought to watch a horror movie. Fortunately, I watched at the daytime.’

4.3. Acceptability judgment task for *nu*

4.3.1. Summary

The acceptability ratings for *nu* are summarized in Table 6.

Table 6. Acceptability of *nu*.

	Language	Stand-alone particle	Particle+ agreement word	Particle+ agreement word+ additional information	Particle+ agreement word+ contradictory information	Particle+ disagreement
<u>Declarative: assertion of a fact</u>	U	+ (1 outlier)	+	+	+	% (3.6)
	B	–	+	+	+	– (1 outlier)
<u>Declarative: permission request</u>	U	– (1 outlier)	+	+	+	% (3.8)
	B	– (1 outlier)	+	+	+	–
<u>Polar question: information-seeking</u>	U	% (3.2)	% (4.2)	+	+	+ (1 outlier)
	B	–	+	+	+	+
<u>Polar question: invitation</u>	U	% (2.5)	+ (1 outlier)	+	+ (1 outlier)	+ (1 outlier)
	B	–	+ (1 outlier)	+	% (3.7)	+
<u>Wh-question</u>	U	NA	+ (1 outlier)	% (4.2)	% (4.0)	+ (1 outlier)
	B		– (1 outlier)	% (2.4)	– (1 outlier)	% (2.8)
<u>Deliberative</u>	U	% (2.8)	+	+	+	+ (1 outlier)
	B	–	+ (1 outlier)	+	+ (1 outlier)	% (3.0)
<u>Hortative</u>	U	–	+	+ (1 outlier)	+	+ (1 outlier)
	B	–	+	+ (1 outlier)	+	– (1 outlier)
<u>Imperative: offer</u>	U	– (1 outlier)	+	+	+ (1 outlier)	% (3.5)
	B	–	+	+	+	% (3.3)
<u>Imperative: request</u>	U	–	% (4.0)	% (4.0)	+ (1 outlier)	% (4.3)
	B	–	+ (1 outlier)	% (3.8)	+	–

The acceptability of *nu* as a stand-alone positive reaction is very restricted. In the case of declaratives, two participants commented that it is a characteristic use of *nu* by younger Udmurt speakers, and can be understood as agreement to a statement. One Udmurt participant graded the response low, since they could only interpret it as “So what?” rather than as an agreement. As a reaction to polar questions, a stand-alone *nu* was unacceptable for three participants. The only possible interpretation for them was a confrontational “so what?” for information-seeking questions.

With a declarative permission request, four participants suggested that the response can be seen as unfinished and must be followed by, for example, an ellipsis mark or a response word.

By contrast, all types of non-stand-alone positive responses (short and extended) were acceptable for most participants. Nevertheless, many respondents pointed out that the *nu*-containing utterance would sound better with a continuation.

For short positive responses to information-seeking polar questions (‘Have you been to the party?’), two participants commented that they lack a continuation of the kind ‘NU yes, but...’. Others suggested that such a response can be interpreted as an unwilling confession or a disappointment (‘NU yes, I went there, but there was nothing good there’). One suggested continuing the utterance with ‘So what?’.

For a short positive response to a polar question: invitation, one participant commented that the response must be continued, while another suggested to use *ja* in place of a positive response marker (*Nu ja.*)

Nu preceding a short congruent response to a content question (‘Who went to the party with you?’) was fully acceptable for five out of six Udmurt participants. However, one participant commented that such a response doesn’t sound very polite. Similarly, Beserman participants commented that a *nu*-preceded short response sounds “as if the person doesn’t want to respond”, or implies a dismissive question “So what?”. As for the positive answer followed by complementary information, one participant commented that the response sounds as if the speaker is trying to remember who she went to the party with (suggesting there must be a list of people).

Nu preceding positive responses to a hortative was judged as acceptable. However, two Udmurt participants suggested changing the agreement word from *jaram* to *ja*, and one comment suggested adding

an echo response to the short positive response (26a). Two Beserman participants also suggested changing the agreement words (26b):

(26) Hortative InU ('Let's go to the cinema.')

a. *Nu ja. / Nu jaram, mĭn-o-m.*
 PTCL PTCL PTCL okay go-FUT-1PL
 'Well okay.' / 'Well okay, let's go.'

b. *Nu ladno, ajda mĕn-o-m. / Nu mĕn-o-m.*
 PTCL okay let's go-FUT-1PL PTCL go-FUT-1PL
 'Well okay, let's go.' / 'Well let's go.'

A short positive answer to an imperative: offer ('Taste the pie, I made it myself.') was unanimously judged as acceptable. However, three comments make it clear that such a response is not considered polite and indicates an unwilling agreement, e.g., one given after a prolonged persuasion, or as a favor to the other interlocutor.

The extended responses were judged as acceptable. Two comments suggested paraphrasing the extended responses using a marker of epistemic uncertainty *-a mar-a* and the particle *ni* (27).

(27) Beserman, Imperative: offer InU ('Taste this pie, I made it myself.')

Nu ladno, ŝemja-lo pič'i=a mar=a=ni.
 PTCL okay taste-FUT.1SG little=Q what=Q=IAM
 'Alright, I guess I'll try a bit.'

One respondent rejected an extended response to imperative: request ('My sister is coming over, buy something delicious in the store.') with complementary information, commenting that "it sounds somehow rude, as if doing a favor". Another participant accepted it but commented that it sounds better without *nu*. One Beserman participant commented that such a response sounds angry because *nu* might indicate that the request was repeated unnecessarily.

Nu-preceded negative responses were mostly acceptable with initiative utterances in the form of a question and mostly rejected otherwise. One participant commented that a negative response to an information-seeking polar question actually "sounds softer" with *nu* ("Did you go to the party?" – "Well no, I couldn't").

The content and deliberative questions received lower grades from the Beserman speakers. A negative response to a deliberative question

“sounds a bit rude”; “the person is kind of ashamed of being offered help”.

Nu-preceded negative response was mostly unacceptable or graded lower with declaratives. For various initiative-response pairs, both Udmurt and Beserman respondents suggested adding the enitive particle *uk* in the response, as in (28–29).¹¹ For two Beserman participants, *nu* in a negative response to a declarative: permission request signals a recurrent refusal or persuasion against doing the action.

- (28) Udmurt, Declarative: assertion of a fact InU (‘Sasha lives in the village with his parents.’)

Nu ug=uk, so gorod-jn ul-e.
 PTCL NEG.PRS.3=ENIM that town-LOC live-PRS.3SG
 ‘Come on, he lives in town.’

- (29) Udmurt, Declarative: permission request InU (‘I’m going to hang out with my friends.’)

Nu enj, tunne tinad mama-jed papa-jed
 PTCL PROH today you.SG.GEN mother-2SG.POSS father-2SG.POSS
mi dor-i kuno-je ljkt-o-zj=uk!
 we.EXCL.NOM near-LAT guest-LAT come-FUT-3PL=ENIM
 ‘Come on, don’t, your parents are coming to visit us today, aren’t they!’

The assessment of *nu* preceding a negative response to an imperative: offer or imperative: request varied a lot across participants. Just as with the declaratives, Beserman participants commented that responses to imperatives are only acceptable if these are repeated refusals, or suggested a paraphrase with the particle *uk* (30).

- (30) Beserman, Imperative: request InU (‘My sister is coming over, buy something delicious in the store.’)

Nu ug, šu-i=uk. Bašt-ə ač’id.
 PTCL NEG.NPST.1SG say-PST.1SG=ENIM take-IMP.2SG REFL.2SG.NOM
 ‘But I told you no, didn’t I. Buy it yourself.’

11 An enitive particle presents the information as uncontroversial (Panov 2020). Here, it emphasizes that the information should have been known to the interlocutor, or that the speaker thinks there is reason enough for the interlocutor to believe it. See Arkhangelskiy (2023a).

4.3.2. Analysis

This data shows that *nu* has a somewhat broader and more diverse set of functions than *ja*. This is similar to its Russian source, which has so many functions that some researchers see only a “chain polysemy” between them, but no single, unifying meaning (Baranov & Kobozeva 1988: 66). Nevertheless, we believe that the core function of the Udmurt *nu* can be defined as a discourse topic continuer. It can thus be paraphrased as “You might have assumed that the issue can be closed after I provide a response, but this is not the case”. By using *nu*, the responder may elicit an elaboration on the topic from the initiator; preface (or presuppose) their own elaborated response, or imply unwillingness to provide the expected response.

The reasons for inappropriateness of closing the issue vary depending on the social situation. *Nu* as a stand-alone response to initiative utterances where some form of elaboration on the topic can be expected from the initiator (declarative: assertion of a fact, questions) recurrently got the interpretation of requesting more information on the issue (“So what?”). The fact that participants who were younger than 40 accepted the use of *nu* as a stand-alone agreement to a simple declarative requires further investigation (see the discussion section).

Our analysis explains why extended positive answers to questions were rated higher or suggested as better options than short answers. In these situations, the responder is either recalling some complementary information or warning that some contradictory information is to follow. In many of the *nu*-preceded short answers to questions, such additional information is implicitly conveyed (causing the overtones of unwillingness, disappointment, etc.).

It is also consistent with our analysis that most participants rejected a stand-alone *nu* in responses to declarative: permission request, imperatives, and hortative. These initiative utterances normally presuppose that the issue can be closed after the agreement; therefore, the interpretation of *nu* as a request for elaboration is inappropriate. For short positive answers, an implied unwillingness of the responder (yielding overtones of impoliteness) or a need to extend the answer was suggested for hortatives and imperative: offer. All types of *nu*-preceded positive responses to an imperative: request were judged as indicating an unwilling agreement or annoyance of the responder; *ja* was suggested as a preferred agreement word.

However, it is more difficult to explain the behavior of *nu* in the context of disagreement through the proposed meaning of topic continuation alone. In responses to both types of declaratives, *nu* may exhibit some of the functions typically expressed by the enimitive particle *uk*, freely combining with it. The motivation for this development may be that the contradictory information is presented by the responder as known or previously mentioned and uncontroversial (simple declarative), or as a repeated refusal (declarative permission request; for some respondents, also imperatives). By adding *nu*, the responder is forcing the initiator to repair or explain the controversy as quickly as possible. As opposed to *ja* attested in the function labeled as “agree-to-disagree” (closing the issue that cannot be resolved at the moment), the responder uses *nu* for continuing with the topic unless some form of agreement on the issue is reached between the participants.

Nu in negative answers to questions, including the deliberative question, can raise different implications, which may sound pragmatically natural or unnatural, depending on the situation described in the questionnaire. For example, the negative answer may be understood as the most obvious one (wh-question), as softened (polar question), or the responder being too shy to receive help (deliberative question). As commented by some participants, the exact reading in these cases may depend on specific intonation, which requires a separate investigation.

4.4. Corpus results for *nu*

Out of 150 analyzed Beserman contexts, there were 55 responsive contexts, most of which we could classify into several types. Most frequent of those are summarized in Table 7.

Table 7. Most frequent contexts for *nu* in the Beserman corpus.

<i>nu</i> + extended positive response (to interrogatives, declaratives)	21
<i>nu</i> + disagreement response (to polar interrogative, declarative)	13
agreement + <i>nu</i> + elaborated response (to interrogatives, declarative)	7
<i>nu</i> + short positive response	6

Among those, *nu* preceding an extended positive response (agreement / positive answer / non-null answer) was the most frequent (n=21). 14 utterances were responses to interrogatives of different types (polar, disjunctive, tag, content), the rest were responses to declaratives. Typically, *nu* precedes a detailed answer with background information, including, e.g., conditionals (31).

(31) BesCorp

(The non-native interviewer asks in Beserman, ‘The remaining bee queens, do they die or do they fly off somewhere?’)

Nu, jesl’i dor-a-zâ=ke [...] mâš-jos-âz
 PTCL if near-LOC-3PL.POSS=if bee-PL-3SG.POSS
keňa-ke wań, so-os mogut
 how.many-INDEF EXIST that-PL can.RUS.PRS.3PL
vžit’ kar-ânâ, košk-i-zâ=ke.
 survive.RUS.INF do-INF leave-PST-3PL=if

‘Well, if there are some bees near them, they can survive if they fly away.’

This type of response semantically clusters together with examples of short positive responses containing discourse markers indicating that there can be other possible responses, such as the word *naprimer* ‘for example’ in (32).

(32) BesCorp

(The non-native interviewer asks in Beserman, ‘So why do the bees fly away?’)

Nu, ug jara č’âr-k-ez naprimer.
 PTCL NEG.PRS.3 be.liked beehive-3SG.POSS for.example

‘Well, for example, they don’t like their beehive.’

In 13 cases, *nu* preceded a disagreement or a negative answer. Out of these, five responses contained speech disfluencies (33), an epistemic marker of uncertainty, or enimitive particles *uk* or *ved’*.

(33) BesCorp

[A] *A cvet-sâ so-os-len šed=a mar=a?*
 and color-3PL.POSS that-PL-GEN black=Q what=Q
 ‘So are they black or what?’

- [B] *Nu tai=... Proš kal' ta šed*
 PTCL (this.3SG.POSS) totally now this black
evâl=ni.
 NEG.EXIST=IAM
 'Well, this – It's not really that black right now.'

There were six cases where a conversational partner elaborated on their own previous utterance, not picking up the other partner's topic.

Stand-alone *nu* in the Beserman sample occurred only once. The declarative initiative utterance was aimed to help identify the figure on the map in order to fulfil the instruction after that (34). Here, *nu* can be interpreted as a request for further information.

(34) BesCorp

- [A] *So-je pun-ono šed pič'i pi-jen...*
 that-ACC put-DEB black little boy-INS
Šed wań=uk pič'i pi-len jârč'i-jez.
 black EXIST=ENIM little boy-GEN hair-3SG.POSS
 'You have to put it [next to] the black boy – You have a black-haired boy, right.'
- [B] *Ben.*
 yes
 'Yes.'
- [A] *Babuš sâl-e.*
 old.lady stand-PRS.3SG
 'There is an old lady [next to him].'
- [B] *Nu.*
 PTCL
 'Go on.'
- [A] *Fiol'etovij, aloj kâšet-en, so-len vâl-a-z.*
 purple magenta headscarf-INS that-GEN top-LOC-3SG.POSS
 'With a purple, magenta headscarf, she is wearing it.'
- [B] *Mh.*
 uh.huh
 'Uh-huh.'

Among non-interactional contexts, the most frequent relation of the *nu*-preceded fragments to their context is that of elaborating on the topic. This includes both sentence-initial and sentence-medial positions

of *nu* and is often associated with different types of speech disfluencies (word break, false start, echo constituents).

In (35), the unanticipated additional information introduced with *nu* induces a concessive relation between the two sentences. The *nu*-preceded sentence answers a potential question on the part of the addressee, dealing with a contradiction between the propositional content and the world knowledge of the addressee: “You say you don’t pay anything. But don’t you have to pay taxes or utility bills?”. The speaker confesses that the potential assumptions are correct but do not negate her main point.

(35) BesCorp

A mil'am d'erevña-jân tatân za.kvart'iru=no
 and we.EXCL.GEN village-LOC here.LOC for.apartment.RUS=ADD
mar=no târ-ono evâl. Nu, vu dun
 what=ADD pay-DEB NEG.EXIST PTCL water price
târ-iško, bakč'a... bakč'a-lâ dun târ-iško...
 pay-PRS.1SG garden garden-DAT price pay-PRS.1SG
nu súj-lâ=ni, źemel'nij.nalog.
 PTCL land-DAT=1AM property.tax
 ‘Here in the village, I don’t have to pay for an apartment or whatever.
 Well, I pay for water, garden... Well [let’s call it in Beserman] “for the
 land”, the property tax. [But anyway, we have enough, and we try to help
 our children somehow.]’

In the written corpus, *nu* is typically used in the contexts of elaboration or specification on the current topic, preceding declaratives or questions (36).

(36) UdmCorp: *Udmurt duññe*, 2012.08.08

“Jarāt-on, jarāt-on, mar meda sijče ton?..”
 love-NMLZ love-NMLZ what I.wonder such you.SG.NOM
Ta jua-n mone pič'i-įsen=ik šulemšugjašk-įt-įnj
 this ask-NMLZ I.ACC little-EGR=ID be.bothered-CAUS-INF
kutsk-i-z=iñi. Nu kiče pič'i-įsen? Škola-je
 start-PST-3SG=1AM PTCL which little-EGR school-LAT
nįrįseti klass-e lįkt-em-e bere.
 first class-LAT come-NMLZ-1SG.POSS after
 “‘Love, love, I wonder what kind of thing it is?’ This question started
 bothering me when I was a child yet. Well, how (in what sense) a child?
 After I went to the first grade at school.’

Another clearly standing-out context of *nu* in the written corpus is degree exclamative (n=22):

- (37) UdmCorp: *Udmurt duññe*, 2013.04.19
 [<...> we ate it all together right out of the jar.]
Nu, *č'eskit!*
 PTCL delicious
 'So delicious!'

In our view, contexts like (37) semantically cluster together with *nu*-preceded negative responses with the particle *uk*, marking the proposition as uncontroversial (7 out of 22 exclamative contexts in our sample contained the particle *uk*).

5. Discussion and conclusion

We have demonstrated that there is a clear division of labor between the two structurally similar particles, which play the role of discourse management devices. We analyze *ja* as a means of closing the discourse topic, and *nu* as primarily indicating that the discourse topic can't be closed just yet. Together, they roughly occupy the domain of their approximate translation equivalent *well*, each being responsible for a subset of its functions. Topic shift/closure, an important function of *well* (Heritage 2015), is expressed by *ja*. Other properties characteristic of *well* are exhibited by *nu*, specifically that it tends to preface expanded or dispreferred responses to questions (Heritage 2015: 93). Using the mixed questionnaire/corpus method allowed us to account for a wide range of structures hosting the particles both as minimal pairs (acceptability ratings), and in a non-controlled environment (spoken and written corpus data).

When we compare our data for the Udmurt (and Beserman) *nu* to what has been written about its Russian source, a twofold picture emerges. On the one hand – quite expectedly – we see that the Udmurt and the Russian *nu* share a lot of functions and properties. Just as in Udmurt, the Russian *nu* is typically pre-clausal; its most frequent position in discourse is at the beginning of an answer or a response in a dialogue, followed by the beginning of an addition in a narration

(Kuosmanen & Multisilta 1999: 52). The Russian *nu* almost always precedes extended (multi-sentence) responses; can mark reluctant admission of something; can signal a “so what”-like affront; is not felicitous in negative responses to requests (Kobozeva & Baranov 1988).

On the other hand, there are differences, both quantitative and qualitative, in functions or positions of the Udmurt *nu* in comparison to its Russian counterpart. As for the syntactic position, the Russian particle can be used as a stand-alone utterance, as well as turn-finally (Auer & Maschler 2016: 10). The turn-final position only has a handful of attestations in the Corpus of Udmurt social media, but not in more codified written texts or in spoken Beserman. Stand-alone *nu* responses are very rare in Udmurt corpus data. They may have two interpretations in Udmurt: ‘So what?’, corresponding to the “urging continuation” function attested in Standard Russian (Bolden 2016: 53–56), and a simple confirmation of a fact. The acceptance of the latter demonstrates a clear age split. Only younger Udmurt speakers accept *nu* as a stand-alone positive response. Shmelev (2005: 522) and Bolden (2016: 53) mention that *nu* as a positive answer to a question or a confirming response is only attested in regional varieties of Russian. The influence of regional/dialectal varieties is quite prominent in the Russian speech of Udmurts. However, it is more prominent for older generation, which contradicts the age distribution for acceptability of *nu* as a stand-alone agreement marker. A further investigation would require the analysis of both the data of Russian spoken in the Udmurt Republic and the colloquial data of younger speakers of Udmurt.

Functionally, the Russian *nu* is also used as a means of closing the topic, even if this is not one of its most frequent functions, statistically (Kuosmanen & Multisilta 1999). As Shmelev (2005: 520) puts it, “the speaker feels the need to close a situation and move on to the next stage, hoping for the understanding of the addressee”. Specifically, *nu* often precedes farewell words in Russian. This class of contexts is extremely rare for the Udmurt *nu* (just one example of a *nu*-preceded farewell in the written corpus sample). The reason for that, obviously, is that this domain had already been occupied by the discourse closure particle *ja* at the time of borrowing. Borrowed functional or discourse elements often co-occur with their native synonyms cross-linguistically, including in Permic languages (see examples in Stolz & Levkovych 2022: 322, 340; Arkhangelskiy 2023b). However, *nu* occupies the same position as *ja*

and therefore has to compete with it. At the current stage, no functions of *nu* already associated with *ja* have been transferred from Russian to Udmurt. This facilitates its interpretation as a discourse topic continuer in Udmurt, an analysis that would have been more problematic for the Russian *nu*. A long-term outcome of such competition, however, is not a given (see Forker & Grenoble 2021: 277–278 on gradual replacement of older functional loans with newer, Russian ones, in languages spoken in Russia).

Finally, let us briefly discuss constructions containing *nu*. In Russian, *nu* is a part of many multi-word expressions, such as the topic-closing *nu vot* (Kuosmanen & Multisilta 1999). Although they were not the primary object of our investigation, we attested their replicas in the corpora.

One noteworthy point is that constructions that involve other fixed elements tend to be replicated verbatim. For example, the Russian collocation *nu i X*, which consists of *nu*, *i* ‘and’ and a slot for a wh-word or an agreement word, is directly copied into Udmurt as *nu i X* (*Nu i mar?* ‘So what?’, *Nu i jaram* ‘Whatever. / Okay then.’), rather than with a calque involving a native equivalent of *i* ‘and’ (**Nu mar no?* Intended meaning: ‘So what?’).

However, here as well, combinations with clear topic-closing semantics can be replicated using *ja* instead of *nu*. An example is Russian *nu ladno* ‘well okay’, which expresses agreement to a proposal and signals that the issue can be closed. In Beserman it is predominantly replicated with *ja* (44 occurrences of *ja ladno* vs. 20 of *nu ladno* in the spoken corpus; *ladno* is much less widespread in the written Udmurt corpus). This demonstrates a conflict between the semantically driven preference for *ja* and the general trend to copy such constructions verbatim.

Degree exclamatives (expression of surprise at a high degree of a property), where a possibly sentence-medial *nu* precedes a predicate (examples (5), (37)), instantiate a construction that has apparently evolved in Udmurt compared to its Russian source. At least according to our intuitions for Standard Russian, the corresponding Russian construction can only involve a sentence-initial *nu* (or the combination *nu i*) and clearly imposes more restrictions on its environment than in Udmurt (for example, literal translations of Udmurt degree exclamatives into Rus-

sian in both (5) and (37) would be infelicitous).¹² This internal Udmurt development could have been facilitated by the existence of an enimitive particle *uk*, which has very high frequency in Udmurt (seven times more frequent than *nu* in the Udmurt corpus) and, among other functions, forms a degree exclamative construction (Zubova, submitted).¹³

All in all, we see that the way *nu* is borrowed is shaped by the landscape of the existing discourse particles. Discourse topic closure function continues to be associated with *ja* rather than *nu*, including in fixed expressions that otherwise tend to be borrowed verbatim. In other cases, the existence of a synonymous construction with *uk* probably helped extend the domain of the borrowed degree exclamative construction involving *nu*.

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Abbreviations

12 We are not aware of any works discussing the use of *nu* (or collocations with *nu*) in Russian degree exclamatives of different types.

13 In his article introducing the category of enimitive, Panov (2020: 25) mentions that some languages use the “generalized discourse connectors” *n[u/o/ɔ/a]*, including Russian *nu*, that “co-occur with core enimitive markers” but are “unable to mark the core enimitive functions”.

Glossing abbreviations

ABL – ablative, ACC – accusative, ADD – additive particle, CAR.ATTR – caritive attributivizer (“without X”), CNG – connegative (glossed only if overt), COMP – comparative/attenuative, CVB – general converb, DAT – dative, DEB – debitive, DETR – detransitivizing derivation, EGR – egressive, EL – elative, ENIM – enimitive particle, EXIST – existential predicate, FUT – future tense, GEN – genitive, IAM – iamitive particle (‘already / anymore’), ID – particle of emphatic identity, IMP – imperative (glossed only if overt), IMP.MTG – imperative mitigator (softening particle), INDEF – indefinite pronoun, INF – infinitive, INS – instrumental, LAT – lative, LOC – locative, NEG – negative verb or pronoun, NMLZ – nominalizer, NOM – nominative, NPST – non-past negative verb, PL – plural, PL.ADJ – adjectival plural, POSS – possessive, PROH – prohibitive, PRS – present tense, PST – past tense, PTCL – discourse particle, PTCP.PST – past participle, Q – question marker, REFL – reflexive pronoun, REP – reportative particle, RUS – glosses of Russian categories in code-switching segments

Other abbreviations

InU – initiative utterance, UdmCorp – Corpus of Standard Udmurt, BesCorp – Beserman Multimedia Corpus

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Kokkuvõte. Iuliia Zubova & Timofey Arkhangelskiy: Udmurdi keele partiklid *ja* ja *nu*: mis on erinevus? Selles artiklis võrdleme kahe diskursuspartikli, *ja* ja *nu*, semantika-pragmaatika profiile udmurdi ja bessermani keeles (permi < urali), kasutades segameetodit. Esialgu uurime, kui vastuvõetavad on partiklid vastuslausungite skaalal nõusolekust mittenõusolekuni erinevat tüüpi stiimullausungite puhul. Järgmisena võrdleme hinnangukatse tulemusi korpusandmetega. Meie analüüs näitab, et kaks partiklit mängivad erinevat rolli diskursuse organiseerimises. Täpsemalt kasutatakse *ja* diskursuse teema sulgemiseks, samas *nu*-d kasutatakse diskursuse teema jätkamiseks. Arutleme, kuidas keeles olemasolev diskursuspartiklite süsteem mõjutab laenatud partikli *nu* kohandumist.

Märksõnad: diskursusepartiklid, diskursuse organiseerimine, diskursuse teema sulgemine, lausetüübid, diskursuse teema jätkamine, vastuspartiklid, viisakus, partikli laenamine