

The trajectory of the "Možno ja X?" construction: variation in speech acts of request in contemporary Russian

Elmira Zhamaletdinova¹



Accepted: 29 July 2022 / Published online: 26 September 2022 © The Author(s) 2022

Abstract

I explore the ongoing language change in which the impersonal modal word možno 'can, be possible' takes a personal clause (možno + NOM) as its complement instead of the Experiencer in the Dative case (možno + DAT) and the infinitival clause in the speech act of request in Contemporary Russian. The corpus-based evidence reveals that the construction možno + DAT is gradually being replaced by možno + NOM. I discuss various syntactic and pragmatic factors such as verb class, aspect, transitivity and politeness strategies that motivate the choice of a specific modal construction. Methods of statistical modelling, used to sort out the most significant factors contributing to the choice of construction, show that the most important factor is the date of creation of the text. I propose a scenario for the development of the *možno* + NOM construction. First, *možno* began to be used as a tag-question after both infinitive and personal clauses. The requester marked by the Dative has been steadily replaced by the more agentive Subject in the Nominative case. Then, by analogy with the možno + DAT construction, možno was placed at the beginning of the sentence and was reanalyzed as a constructional unit with the following structure: možno + FINITE CLAUSE, in which možno functions as a sentence adverb.

Аннотация

В статье рассматривается процесс языкового изменения, в рамках которого безличный модальный предикатив можно принимает в качестве сентенциального актанта финитную клаузу с субъектом, маркированным именительным падежом, (конструкция "можно + ном") вместо нефинитной клаузы с экспериенцером, маркированным дательным падежом (конструкция "можно + рат"), в речевом акте просьбы в современном русском языке. На материале корпусных данных прослеживается постепенная замена конструкции "можно + DAT" на конструкцию "mожно + NOM" носителями русского языка как в письменной, так и в устной речи. В статье рассматриваются различные синтаксические и прагматические факторы, которые мотивируют выбор конструкции: семантический класс глагола, аспект, транзитивность, стратегии вежливости. Методы статистического моделирования, использованные для определения наиболее значимых факторов, влияющих на выбор конструкции, показывают, что наиболее значимым

E. Zhamaletdinova e.zhamaletdinova@uit.no



UiT – The Arctic University of Norway, Tromsø, Norway

фактором является год создания текста. В статье предложен сценарий появления конструкции "можно + NOM": сначала предикатив можно использовался после финитных и нефинитных клауз в качестве вопросительного слова. В дальнейшем в нефинитных конструкциях адресант, маркированный дательным падежом, постепенно был заменен на более агентивный субъект, маркированный именительным падежом. Затем по аналогии с конструкцией "можно + DAT" предикат можно был помещен в начало предложения и вместе с следующей за ним финитной клаузой был переосмыслен как новая конструкция "можно + FINITE CLAUSE", в которой можно выступает в роли сентенциального наречия.

Keywords Modal constructions · Request · Language change · Corpus · Russian

1 Introduction

Russian modal words or modals¹ denoting possibility and necessity form a syntactically heterogenous class that includes the personal modal verb *moč'/smoč'* 'be able', the personal adjectival predicate *dolžen* 'must', and impersonal adverbial predicates *možno* 'can, may, be possible', *nel'zja* 'not allowed', *nado/nužno* 'have to' etc. In these modal constructions, personal predicates require a Subject in the Nominative case, whereas impersonal predicates require an Experiencer in the Dative case. Modal words are matrix predicates, i.e., modal words can have at least one sentential complement. Typically, the sentential complement is an infinitive phrase.

Russian displays several possibilities for formulating a request. A request is an illocutionary act in which "a speaker (requester) conveys to a hearer (requestee) that he/she wants the requestee to perform an act which is for the benefit of the speaker" (Trosborg, 1995: 187). The speaker may request non-verbal goods or services, e.g., an object or an action, or verbal goods and services, e.g., information or permission to carry out an action.

This article offers an analysis of two syntactic variants of a construction with the modal adverb $mo\check{z}no$ 'can, may, be possible', namely $mo\check{z}no + DAT + INF$, hereinafter " $mo\check{z}no + DAT$ ", and $mo\check{z}no + NOM + V.FIN$, hereinafter " $mo\check{z}no + NOM$ ", which are used to formulate speech acts of request in contemporary Russian. While in the former construction $mo\check{z}no$ is used with an Experiencer in the Dative case and an infinitive, in the latter $mo\check{z}no$ lacks an Experiencer and instead takes a personal clause as a sentential complement. I will provide evidence that the construction with an Experiencer marked by Dative as in (1a) is gradually being replaced by $mo\check{z}no + NOM$ as in (1b). In examples like (1b) $mo\check{z}no$ functions as a sentence adverb, i.e., an adverb that modifies the content of the clause in which it occurs, see Ramat and Ricca (2011).

(1) a. *Možno mne vzja-t' pirožn-oe?* possible I.DAT take.PFV-INF pastry-ACC.SG

²In this formula "V.FIN" stands for any finite verb form that agrees with the Subject in number, person and/or gender as opposed to the infinitive. "DAT" and "NOM" stand for any noun or pronoun in the Dative or in Nominative case respectively. This convention is used throughout the article.



¹We use term modal in the same way as Besters-Dilger et al. (2009: 169) "modals as means of expression of modality, which have undergone a grammaticalization process; they express the basic notions of 'necessity' and 'possibility' and show syntactic properties of auxiliaries."

'Is it okay for me to take a pastry?'
[B. Okudžava. Uprazdnennyi teatr. 1989–1993]³

b. *Možno ja voz'm-u* eščë kusoček tort-a?
possible I.NOM take.PFV-PRS.1SG another piece.ACC.SG cake-GEN.SG
'Is it okay if I take another piece of cake?'
[Kollekcija anekdotov: deti. 1970–2000]

Following Goldberg (2006: 5), I define a construction as a "learned pairing [of] form with semantic meaning or discourse function including morphemes or words, idioms, partially lexically filled and fully general phrase patterns". I am interested in variation in the linguistic expression of a requester (a semantic Subject), and henceforth I will term the options illustrated by (1a)–(1b) DAT–NOM variation. In this article, I define variation in a narrow sense as two or more possible grammatically acceptable ways to express the same meaning by a speaker of a given language.

I suggest that the request formula with a Subject in the Nominative has developed in Russian under the influence of both syntactic and pragmatic factors. First, *možno* demonstrates relative syntactic freedom: *možno* can appear unconnected to any surrounding syntax as in (2).

(2) Pokaza-v na grafinčik, sprosi-l otc-a: «Možno?» point.PFV-PST.GER at decanter.ACC.SG ask.PFV-PST.M.SG father-ACC.SG possible 'He asked his father pointing to the decanter: "May I?"

[A. Najman. Vse i každyj // «Oktjabr'». 2003]

In such examples the speaker asks permission by using the modal word *možno*, which refers to a situation that is indicated by non-verbal means. In example (2) the speaker communicates to the hearer that he wants to drink by merely pointing at the decanter. Thus, the DAT—NOM variation is facilitated and motivated by utterances in which the action desired by the speaker does not have an overt linguistic expression.

Second, requests for permission to carry out an action can be expressed by several modal constructions. The best-known constructions involve the two constructions with the modal adverb $mo\bar{z}no$ 'can, may, be possible' as in (1a) and (1b); a personal modal verb $mo\bar{c}$ ' 'be able' as in (3) and an impersonal modal adverb nel'zja 'not allowed' combined with the particle li 'whether' as in (4). Another way to formulate a request is to pose a direct question as in (5).

- (3) Ja mog-u vzja-t' u tebja èt-u fotografij-u?
 I.NOM can.IPFV-PRS.1SG take.PFV-INF from you.GEN.SG this-F.ACC.SG photo-ACC.SG
 'Can I take this photo from you?'
 [I. Grošek. Restavracija obeda. 2000]
- (4) Proš-u prošćenij-a, no nel'zja li mne
 ask.IPFV-PRS.1SG forgiveness-GEN.SG but impossible whether I.DAT
 ugosti-t'-sja odn-oj iz vašix zamečatel'n-yx sigaret?
 treat.PFV-INF-REFL one-F.INSTR.SG from your wonderful-GEN.PL cigarrete.GEN.PL
 'I apologize, but can I help myself to one of your wonderful cigarettes?'
 [A. Rubanov. Sažajte, i vyrastet. 2005]

³All examples in this article are cited from the Russian National Corpus (ruscorpora.com), and metadata is given in square brackets.



(5) Ja voz'm-u èt-ot snimok?

I.NOM take.PFV-PRS.1sG this-M.ACC.SG photo.ACC.SG

Can I take this picture?

[V. Pronin. Banda 8. 2005]

Requests with the personal construction with the modal verb *moč* 'be able' as in (3) and direct question as in (5) might support the ongoing DAT-NOM change. Speakers have access to all the resources that encode requests, so exposure to the personal constructions that are used for the same pragmatic purposes can be another factor contributing to the ongoing language change.

Third, a speech act of request is a face-threatening act in which the speaker "attempts to exercise power or direct control over the intentional behavior of the hearer" (Trosborg, 1995: 188). At the same time the speaker exposes herself to the risk of being embarrassed if the hearer refuses to comply with her wishes. By using an indirect request with an impersonal modal construction, the speaker mitigates her power over the hearer, but simultaneously the speaker makes herself more vulnerable. My hypothesis is that by using a personal form such as možno + NOM in a request for permission to carry out an action, the speaker secures her freedom to perform an action and desire to be respected by other members of the community.

I examine factors that are associated with the choice of construction, including any formal or pragmatic restrictions that would prompt a speaker to choose one of these constructions, taking into account external factors such as native speakers' personal preferences. I will provide evidence demonstrating that $mo\check{z}no$ is changing its argument structure to accept a personal clause as a sentential complement ($mo\check{z}no + \text{NOM}$) instead of an infinitive phrase with an Experiencer in the Dative case ($mo\check{z}no + \text{DAT}$).

This is a corpus-based quantitative study. For the purposes of this article, I will use two datasets: one based on written texts from the Russian National Corpus, hereinafter the RNC, (main database) and the other based on data retrieved from the spoken subcorpus of the RNC (supplementary database). The data will be analyzed separately since the datasets cover different time periods.

The article is structured as follows. In Sect. 2, I provide a brief overview of background information about modals that are used in speech acts of request in Russian, focusing on the constructions možno + DAT and možno + NOM. In Sect. 3, I describe the main dataset, explaining how the data was obtained and annotated. The analysis of the data is presented in Sect. 4. The results of statistical modelling are explained in Sect. 5. Section 6 describes the supplementary spoken dataset and data analysis. Section 7 outlines background information on speech acts of request and politeness theory. In Sect. 8, I discuss the ongoing language change and propose a scenario for the development of the možno + NOM construction in terms of cognitive linguistics and constructionalization, see Traugott (2015). Section 9 summarizes the findings.

2 Prior scholarship on možno + DAT and možno + NOM

The origin of the word *možno* is obscure, however in the scholarly literature we find various alternative descriptions of how this word found its way into modern Russian. Kopečný and Havlová (1981) and Šanskij et al. (1961) claim that *možno* derived from an adjective *možьпъ* 'possible' which in its turn was derived from the Proto-Slavic noun *moga* 'power'. According to Vaulina (1988) *možno* is first documented in the Russian language in the 15th century in "Gramota velikogo knjazja Vasilija Vasil'eviča pol'skomu i velikomu litovskomu knjazju



Kazimiru" (1449) in the negated form *nemožno*. Besters-Dilger (1997) considers this usage of *nemožno* a mistake or a Polish borrowing. In the middle of the 17th century the word *možno* appears in texts along with its derivational relatives *možnyj* 'possible' and *možnost'* 'possibility' and steadily replaces the Old Slavic lexemes *močno* (*mošno*) and *moščno* that existed along with their negative counterparts *nemočno* (*nemošno*) and *nemoščno* since the 12th century and were used to express participant-external and deontic modal meanings.

Besters-Dilger (1997) treats *možno* as a contamination of the Russian modal words *močno*, *moščno*, *vozmožno* and the Polish impersonal modal word *možna*. Kochman (1975) denies any connection between the Old East Slavic lexemes and Russian *možno* and claims that *možno* is a lexeme that was directly borrowed from Polish into Russian. Besters-Dilger's hypothesis is more convincing: it is most likely that *možno* was formed under the influence of Polish, but the presence of lexemes with almost the same meaning, morphology and functional load in the Old East Slavic language must have had an impact as well.

There existed at the same time another pair of modal words with similar semantics: l'zja 'to have conditions or right to act in a certain way' and nel'zja 'not to have conditions to act in a certain way due to the external factors'. The usage of nel'zja significantly increased and nel'zja spreads to contexts where nemožno (nemošno, nemošno or nemoščno) appeared previously. Meanwhile l'zja was steadily replaced by možno. Thus, in Contemporary Standard Russian the paradigm was reduced to an opposition formed by two suppletive members, namely možno 'possible' and nel'zja 'impossible'.

In summary, the modal word *možno* appeared relatively recently in Russian, with the very specific meaning 'to have conditions to carry out an action' taking the place of Old East Slavic lexemes that shared the same semantics but had different functional and stylistic distribution.

In contemporary Russian *možno* can express deontic or participant-external modal values according to the logical-based semantic map classification proposed by Van der Auwera and Plungian (1998). In this research I treat modality in a narrow way as an opposition of possibility and necessity. Deontic possibility is permission, while participant external possibility is defined as "circumstances that are external to participant engaged in the state of affairs and that make this state of affairs possible" (Van der Auwera & Plungian, 1998: 80).

Functionally *možno* can express possibility and permissibility. *Možno* per se is an impersonal modal word, i.e., it does not allow a Subject in the Nominative case and requires an Experiencer in Dative, as opposed to the personal modals (e.g., the verbs *moč*, *smoč* 'be able') that agree with their Subject. However, the Experiencer in the impersonal construction with *možno* can be overtly expressed, as in (6) or elided, as in (7).

- (6) Mne možno govori-t' otkrovenno?
 I.DAT possible speak.IPFV-INF frankly
 'Is it okay if I speak frankly?'
 [A. Obrazcov. Sad vetra. 1980–1995]
- (7) Možno govori-t' otkrovenno? possible speak.IPFV-INF frankly 'Is it okay if I speak frankly? You have strong nerves after all, don't you?' [G. Geršuni. Iz nedavnego prošlogo. 1908]

One of the attested properties of impersonal modals is that when they are used without an Experiencer, the possibility applies to every participant involved in the situation: "The possibility is universal – it could apply to anyone" (Timberlake, 2004: 382). If the speaker



wants to specify who can or cannot carry out an action, the speaker must overtly mark the Experiencer. A corpus study by Grillborzer (2019) demonstrates that overall constructions with the modal *možno* tend to be used with an elided (non-overt) Experiencer. The distribution in her dataset is as follows: 6 constructions with an Experiencer in the Dative case vs. 1790 constructions with an elided Experiencer. The same tendency is discovered for modals *nado* and *nel'zja*. Grillborzer (2019) suggests that modals *možno*, *nado* and *nel'zja* gravitate towards being used in impersonal constructions because the Russian language already has the modal verb *moč* ' that is used in personal constructions.

However, when $mo\bar{z}no$ is used in requests it behaves differently. Example (7) shows that in requests $mo\bar{z}no$ can be used without an overt Experiencer yet possibility is applied to only one specific participant. In this article, I will call examples with the elided Experiencer, as in (7), modal constructions with covert Dative ($mo\bar{z}no + CDAT$) since the Dative Experiencer is unambiguously recoverable.⁴

Furthermore, the verb itself can be elided when a speaker requests an item (8).

(8) Možno mne posledn-ij kusoček?
possible I.DAT last-M.ACC.SG piece.ACC.SG
'Is it okay if I have the last piece?'
[Domašnij razgovor // Iz kollekcii NKRJA, 2005]

To the best of my knowledge, there is little previous scholarship on the DAT—NOM variation, see (1a) and (1b). Scholars have mostly focused on the properties of impersonal uses of *možno*. Beljaeva (1990: 123–140) provides examples exclusively with the *možno* + DAT construction. Padučeva (2016) lists examples with both constructions without any explanatory remarks. In the most recent corpus study on various modal meanings and their constructions, Lyashevskaya et al. (2017), in describing the annotation of their dataset, also mention in passing that *možno* can be used both with Nominative and Dative. Dubinina and Malamud (2017) made a study of how requests are formulated in Russian heritage language. As a baseline for their research, Dubinina and Malamud searched the spoken subcorpus of the RNC for various request formulas including requests with the modal *možno*. Such requests were treated by the authors as impersonal modal constructions, however the examples that are used in the article contain requests formulated mostly with *možno* + NOM.

Choi (1994: 178) treats *možno* as an impersonal modal adverb and argues that *možno* is the only modal word that can be used to formulate requests for permission to carry out an action. According to Choi (1994) *možno* is not interchangeable with *moč* in the speech act of request. I will argue that requests can be formulated with the modal verb *moč*, as in (9a), (9b) and (9c), as well as with *možno*, although the usage of *moč* might be less frequent in such contexts.

(9) a. - Mog-u li ja voj-ti? can.IPFV-PRS.1SG whether I.NOM enter.PFV-INF

⁵However, Choi (1994) does not present clear evidence why the use of *moč*' is atypical in the speech act of request.



⁴This decision might contradict the surface-oriented principles of Usage-based Construction Grammar, i.e., "no underlying levels of syntax or any phonologically empty elements are posited" (see Goldberg, 2003: 219). However, in examples like (7) the requester usually coincides with the speaker (*mne* 'for me') or includes the speaker as a member of a larger group (*nam* 'for us'). Thus, pragmatically it would be incorrect to call such constructions underspecified, because even if the requester is not overtly marked, the hearer is able to unequivocally identify the requester.

'-May I enter? - Come in, - answered Teplyj in surprise.' [D. Lipskerov. Sorok let Čančžoè (1996)]

- b. Ja mog-u vzja-t' u tebja èt-u
 I.NOM can.IPFV-PRS.1SG take.PFV-PRS.1SG from you.GEN.SG this-F.ACC.SG
 fotografij-u?
 photo-ACC.SG
 'Can I take this photo from you?'
 [I. Grošek. Restavracija obeda. 2000]
- c. Mog-u ja vzja-t' ee v medsanbat?
 can.IPFV-PRS.1SG I.NOM take.PFV-INF she.ACC to medical.battalion.ACC.SG
 '- Is it okay if I take her to the medical battalion?'
 [J. Bondarev. Bereg. 1975]

Švedova et al. (1980: 214) list *možno* among other impersonal modal words such as *nel'zja* 'must not', *nado/nužno/neobxodimo* 'have to' etc. and mention that *možno* can be used with or without an Experiencer. In a footnote in a section about particles, Švedova et al. (1980: 388) admit that *možno* can also be considered to be an interrogative particle that, when combined with a future tense verb form, is used to formulate a request as illustrated by examples from literary works:

- (10) Možno ja dosk-i voz'm-u?
 possible I.NOM board-ACC.PL take.PFV-PRS.1SG
 'Is it okay if I take the wooden boards?'
 (Platonov)
- (11) Možno ja odno zamečani-e sdelaj-u?
 possible I.NOM one comment-ACC.SG make.PFV-PRS.1SG
 'Is it okay if I make one comment?'
 (Šukšin)

Hansen (2001: 170) also refers to *možno* when used in requests as a modal particle that expresses courtesy. Thus, both Švedova et al. (1980) and Hansen (2001) posit two homonymous modal words *možno*: one is a modal adverb *možno* with or without an Experiencer in the Dative case, and the other is an interrogative particle *možno* used with the Subject in the Nominative case. This decision might be convenient for the purposes of descriptive grammar; however, the term "particle" lacks accuracy. Particles are usually negatively defined as "the words left over when all the others have been assigned to syntactic categories" (Zwicky, 1985: 292). Zwicky (1985) suggests eliminating the word class of particles from the part of speech inventory across the languages of the world, because particles are semantically heterogenous and syntactically diverse. Endresen et al. (2016) claim that the label particle as a part of speech is superfluous for Russian and provide as an alternative a conceptually motivated classification of nine lexemes previously classed as particles, reassigning them to other syntactic categories.⁶

⁶Although particles such as *razve* 'really' or *neuželi* 'really' that function as epistemic or evidential markers are not included in the analysis proposed in Endresen et al. (2016), the authors provide convincing evidence in favor of Zwicky's claim that the label 'particle' should be removed from the inventory of parts of speech. In this article, we are following the direction set by Endresen et al. (2016) on further reclassification of particles



In agreement with Zwicky (1985) and Endresen et al. (2016), I claim that *možno* should be treated as a modal adverb regardless of the speech act it is used in. First, *možno* preserves its semantics 'the possibility to do X' in all contexts where it occurs. Besters-Dilger et al. (2009: 171) notes that "as modals are the result of grammaticalisation processes their morphology and syntax show traces of the part of speech they originally belonged to." Therefore, the adverbial origin of *možno* can be reactivated in requests, i.e., *možno* transitions from a modal adverb to a modal sentence adverb, cf. lexicalization of *možet* 'perhaps' in Hansen (2010, 2016) (see Sect. 8 for more detail).

Second, Švedova et al. (1980) rely on the written form of language and might be misled by punctuation marks that artificially separate *možno* from other words in the utterance, while in the natural spoken discourse the speaker usually does not have to pause before or after *možno*. I will address this issue in more detail in Sect. 6.

In summary, it has been shown in this review that the impersonal modal word $mo\bar{z}no$ appeared in the Russian language approximately in the 16th century with the semantics 'to have conditions to carry out an action', a meaning that corresponds to the contemporary deontic and external modal readings. The paradigm of $mo\bar{z}no$ changed dramatically through a relatively short period of time: $mo\bar{z}no$ lost its negative counterpart $nemo\bar{z}no$ and substituted $nemo\bar{z}no$ by another impersonal modal word nel'zja. The original semantics determined the use of the construction $mo\bar{z}no$ + DAT in requests and permissions. However, the $mo\bar{z}no$ + NOM construction is mentioned in some studies but briefly so, and there remain aspects of this construction about which relatively little is known. At the same time Russian has direct questions and the personal construction $mo\bar{c}$ ' + (li) + INF that can be used in requests as well.

3 Data

For the purposes of this study, I created two datasets: one based on data in the entire old version of Russian National Corpus which includes texts from the 18th century until the present (main dataset) and the other based on the data in the spoken subcorpus of the RNC which consists of texts from the 20th century until 2016 (supplementary dataset). The data from the spoken corpus reflects how modal constructions are used in natural discourse, in situations when the speaker has less time to check grammatical (prescriptive) correctness compared to written discourse. Therefore, the speaker displays less control over her speech production and chooses the construction unconsciously. In order to perform statistical analysis, I will analyze the two datasets separately due to the lack of data for 18th – 20th century in the spoken subcorpus.

3.1 Main dataset (written corpus of the RNC)

Given that *možno* is polysemous and can appear at various positions in the sentence (at the beginning or at the end of the sentence, following or preceding the pronoun/noun, the pronoun itself can be elided etc.), I formulated seven specific queries with the modal word *možno*, main verb and its arguments in order to extract as many relevant examples as possible. These queries yielded 1681 occurrences of *možno* up to 10 words before a question mark. Second,

by analyzing properties of *możno* when it is used in requests. Further examination of the behavior of *razve*, *neuželi* and *możno* is beyond the scope of this paper.



Table 1 Search queries and clean numbers in the main dataset. Relative count (%) is given in brackets

Construction and corresponding query	Clean data
možno + dat	
možno + pron.dat + inf možno 1-1 spro, dat 1-3 v 1-10 bques	200 (21%)
možno + INF možno first 1-1 v, inf 1-10 bques	318 (33.4%)
PRON.DAT + $možno$ + INF spro, dat 1-3 možno 1-3 v 1-10 bques	64 (6.7%)
možno + NAME.DAT + INF možno 1-1 dat (famn persn patrn) 1-3 v 1-10 bques	1 (0.1%)
Subtotal	583 (61.2%)
možno + nom	
možno + PRON.NOM + VERB možno 1-1 spro, nom 1-3 v 1-10 bques	356 (37.4%)
možno + VERB možno 1-1budet v sg, pl 1p,2p,3p 1-10 bques	11 (1.1%)
možno + NAME.NOM + VERB možno 1-1 nom (famn persn patrn) 1-3 v 1-10 bques	3 (0.3%)
Subtotal	370 (38.8%)
Total	953 (100%)

I manually removed all noise from the raw numbers and annotated the remaining sentences (clean data). As a result, I obtained 953 sentences for analysis. The entire database is publicly accessible from the Tromsø Repository of Language and Linguistics archive (TROLLing) at https://doi.org/10.18710/JXBOQF. The search queries and numbers for clean data for the main dataset are presented in Table 1.

Due to the fact that *možno* can express various modal meanings (deontic, external and internal possibility) there was considerable noise in the data: almost half of the examples (728 sentences) had to be excluded from the sample. In the majority of cases, sentences were flagged as noise because they were not conventional indirect requests. In the remainder of this section, I will briefly comment the two groups *možno* + DAT and *možno* + NOM mentioned in the Table 1, and illustrate each query with an example.

$3.1.1 \; Možno + DAT$

The pronoun or noun in the Dative case in the $mo\bar{z}no$ + DAT construction can follow the modal word $mo\bar{z}no$ as in (12), be elided as in (13) and (14), or precede the modal word as in (15) and (16).



$mo\bar{z}no + PRON.DAT + INF:$

(12) Možno mne posmotre-t' material-y pervičn-ogo
possible I.dat see.PFV-INF document-ACC.PL primary-M.GEN.SG
pokvartirn-ogo obxod-a?
house.to.house-M.GEN.SG inspection-GEN.SG
'Is it okay for me to see the primary apartment inspection documents?'
[A. Marinina. Angely na l'du ne vyživajut. T. 1. 2014]

In this subgroup I did not exclude twenty-six sentences with a structure like in (13). Such examples were tagged as examples of the covert Dative case (*možno* + CDAT, where C stands for covert) because *vam* 'to you' does not code the Agent or Experiencer but codes the recipient, i.e., the person to whom the speaker wants to address a question.

(13) Možno <u>vam</u> zada-t' odin neskromn-yj vopros?
possible you.dat ask.pfv-inf one.m.acc.sg indelicate-m.acc.sg question.acc.sg
'Is it okay if I ask <u>you</u> an awkward question?'
[E. Suxov. Delu konec – sroku načalo. 2007]

možno + inf:

(14) Možno vzja-t' vodičk-i?
possible take.PFV-INF water-GEN.SG
'Is it okay if I get some water?'
[M. Traub. Ne vsja la vie. 2008]

PRON.DAT + možno + inf:

(15) Tak kak že, mne možno exa-t' v Tixvin?
thus how after all I.DAT possible go.IPFV-INF to Tixvin.ACC.SG
'So, is it okay if I go to Tikhvin?'
[N. Geince. Arakčeev. 1898]

možno + NAME.DAT + INF:

(16) Doktor, kak vy polaga-ete, možno Trilli pogladi-t' doctor.NOM.SG how you.NOM think.IPFV-PRS.2PL possible Trilli.DAT pet.PFV-INF èt-u sobak-u? this-F.ACC.SG dog-ACC.SG 'Doctor, do you think it is okay for Trilli to pet this dog?'

[A. Kuprin. Belyj pudel'. 1903]

3.1.2 Možno + NOM

In contemporary standard Russian, the pronoun or noun in the Nominative case in the construction $mo\check{z}no + \text{NOM}$ must follow the modal word $mo\check{z}no$ (17), (18). Sometimes the Subject can be elided, but the person is still marked on the verb (19). I will refer to examples like (19) as to constructions with covert Nominative ($mo\check{z}no + \text{CNOM}$).



$mo\bar{z}no + PRON.NOM + VERB$:

(17) A možno my voz'm-em sebe na pamjat' neskol'ko but possible we.nom take.pfv-prs.1pl self.dat for memory.acc.sg several štuč-ek?

thing-GEN.PL

'Is it okay if we take a few things as souvenirs?'

[V. Postnikov. Priključenija Karandaša i Samodelkina na «Dryndolete». 1997]

možno + NAME.NOM + VERB:

(18) Možno, Galink-a pobude-t poka u vas?
possible Galinka-NOM stay.PFV-PRS.3SG until at you.GEN.PL
'Is it okay, if Galinka stays with you for the time being?'
[J. Žemojtelite. Aisty. 2002]

možno + verb:

(19) Mam, možno, voz'm-u tvoj platok? mom.voc possible take.pfv-prs.1sg your.m.acc.sg scarf.acc.sg 'Mom, is it okay if I take your scarf?' [N. Mordjukova. Kazačka. 2005]

3.2 Annotation of data

The annotation of clean data includes both syntactic and semantic features (a–f) and metadata for texts (h–j). The metadata reveals how the constructions are distributed through time in the dataset and, in principle, should reflect how the constructions are distributed across various genres, e.g., the možno + DAT construction is expected to be used in formal contexts, while možno + NOM would be typical for casual speech. The requests to carry out an action pragmatically are mostly tied to the speaker (first person singular or plural); however, the speaker might as well ask permission for another participant. Tense, aspect, transitivity, possibility of the infinitive or finite verb to have an argument in the Dative case and the semantic class of the predicate might trigger the choice of a more active semantic Subject, i.e., Agent in the Nominative, or a less actively involved Experiencer in the Dative.

Statistical analysis shows that the text creation date is the most important feature that predicts the choice of construction. Examination of text creation date makes it possible to determine when the $mo\check{z}no + \text{NOM}$ construction appeared in language and how its frequency has changed since.

Punctuation marks to some extent signal whether the speaker interprets $mo\bar{z}no + \text{NOM}$ as a single construction or two constructions: one with the modal adverb $mo\bar{z}no$ and the other with a personal clause. However, punctuation rules are prescriptive and like other literary norms do not always reflect the present-day linguistic reality. Genre can also play role in the choice of construction: formal genres might prefer prescriptively correct $mo\bar{z}no + \text{DAT}$ construction.

- a. case of the semantic Subject (Nominative or Dative);
- b. person and number of the semantic Subject (first singular, first plural, second singular, second plural etc);
- c. tense (past, non-past and future);
- d. aspect (perfective, imperfective);



- e. transitivity;
- f. possibility of the infinitive or finite verb to have an argument in the Dative case;
- g. the semantic class of the predicate under modality (motion, speech, location etc. 7);
- h. text's creation date;
- i. genre (fiction, journalism, etc);
- j. punctuation marks.

I will explore the relationship between the choice of *možno* + NOM or *možno* + DAT constructions and the features listed above. To achieve this, I will examine each factor separately and after that I will apply the statistical method logistic regression. All statistical analyses were carried out using R package {lme4}.

4 Analysis

4.1 Case and person of the semantic Subject

Most of the requests are formulated with the Subject or Experiencer in the first person singular (93.6%). The rest are distributed among the first-person plural (4.1%), the second person singular (0.8%) and the third person singular (1.2%) and plural (0.3%). The distribution of requests according to the semantic Subject's case, person and number is presented in Table 2.

The most semantically ambiguous examples compared to the other constructions are sentences with the covert Dative, i.e., without an overtly expressed Experiencer. The earliest constructions with covert Dative appeared in my dataset at the same time as the Dative constructions at the beginning of the 18th century, and since then the covert Dative constructions are somewhat more frequent in the language than the Dative (approx. in a ratio of 3:2).

Table 2 The distribution of requests according to the semantic Subject's case, person and number. Relative count (%) is given in brackets

Case	Person					
	1 st person, singular	1 st person, plural	2 nd person, singular	3 rd person, singular	3 rd person, plural	
Nominative	336 (35.3%)	18 (1.9%)	2 (0.2%)	2 (0.2%)	1 (0.1%)	359 (37.7%)
Covert nominative	11 (1.1%)	_	-	_	_	11 (1.1%)
Dative	216 (22.7%)	12 (1.3%)	-	9 (0.9%)	2 (0.2%)	239 (25.1%)
Covert dative	329 (34.5%)	9 (0.9%)	6 (0.6)	_	-	344 (36.1%)
Total	892 (93.6%)	39 (4.1%)	8 (0.8%)	11 (1.1%)	3 (0.3%)	953 (100%)

⁷In this article, I use the same semantic tags as assigned in the RNC. The verbs that have not been assigned a semantic tag in the RNC were manually classified by an external linguist. I would like to express my sincere gratitude to Galina Kustova, who generously agreed to class the remaining verbs in my dataset.



Usually, the modal word $mo\check{z}no$ without an Experiencer is used in impersonal constructions, as in (20). In such examples $mo\check{z}no + \text{INF}$ is not a request; the construction expresses the possibility of performing an action. Examples like (20) were excluded from the sample.

(20) Esli postara-t'-sja, moj-u žizn'-ø možno zna-ete kak if try.pfv-Inf-refl my-f.acc.sg life-acc.sg possible know.ipfv-prs.2pl how rasskaza-t'?!
tell.pfv-Inf
'Can you imagine how my life story can be told if one tries hard enough?!'
[K. Bukša. Zavod «Svoboda» // «Novyj mir». 2013]

However, when $mo\bar{z}no$ is used in requests, in most examples the context unambiguously determines which participant is expected to perform an action even if the Experiencer is not overtly expressed as in $(21)^8$ or (22).

- (21) Stuk v dver'. Zaxodi-t Vanj-a.
 knock.nom.sg on door-ACC.sg enter.ipfv-prs.3sg Vanja-nom

 Možno vzja-t' vodičk-i? tixo sprašiva-et mal'čik.
 possible take.pfv-inf water-gen.sg quietly ask.ipfv-prs.3sg boy.nom.sg
 'A knock on the door. Vanja comes in. Is it okay if I get some water? The boy asks quietly.'

 [M. Traub. Ne vsja la vie. 2008]
- (22) Možno prises-t' za vaš stolik? Net, nel'zja, procedi-l-a possible sit.PFV-INF behind your table.ACC.SG no impossible say.PFV-PST-F.SG skvoz' zub-y krasavic-a. through tooth-ACC.PL beautiful.woman-NOM.SG 'Is it okay if I sit at your table? No, you can't, the beauty hissed through gritted teeth.'

 [E. Suxov. Delu konec sroku načalo. 2007]

In example (21) a boy is thirsty, so he asks for permission to take a bottle of water from the refrigerator to quench his thirst. In example (22) a speaker wants to get to know an attractive woman and asks for permission to sit at her table. In requests concerning the first person singular and plural it is almost impossible for the hearer to misinterpret the modal construction even without an overtly present Experiencer. It is pragmatically unlikely that under circumstances as in (21) or (22) the speaker would wonder whether the possibility of performing an action exists in general. In other words, (21) and (22) cannot be understood as 'Is it possible for anyone to get some water?' and 'Is it possible for anyone in the restaurant to sit with you?' respectively. It is also unlikely to suggest that the speaker might be asking permission for other person, e.g., Možno ej vzjat' vodički? 'Can she get some water?'.

I have only five examples in which it is difficult to say whether the speaker requests the hearer to carry out an action or wants to carry out an action himself as in (23) and (24). In (23) a surgeon asks his colleague whether it would be possible to give the corpse of the woman who he operated on to her relatives without an autopsy. It remains unclear whether his colleague, the hospital, or the speaker himself will do this. In (24) Evelina's son is playing with other children in the park and a gentleman asks to keep the noise down. It is not obvious

⁸Example (14) repeated here as (21) with an extended context for readers' convenience.



whether Evelina should ask children to be quiet or the speaker is requesting permission to tell the children off himself.

- (23) I ničego ne smog-l-i sdelat'.
 and nothing not can.PFV-PST-3PL make.PFV-INF

 Možno otdat' bez vskrytij-a?
 possible release.PFV-INF without autopsy-GEN.SG
 'And we could not do anything. Is it okay if I/ you/ the hospital release(s) the corpse without an autopsy?'
 [N. Amosov. Dnevnik. 1985]
- (24) On podoše-l k Èvelin-e i sprosi-l:
 he.NOM come.PFV-M.PST.SG to Evelina-DAT and ask.PFV-PST.M.SG

 Možn-o sdela-t' potiše? Mne bol'še, čem šest'desjat let.
 possible make.PFV-INF quieter I.DAT more than sixty year.GEN.PL
 'He went up to Evelina and asked: Can I/you make them quiet? I am more than sixty years old.'

 [V. Mesjac. Lečenie èlektričestvom // «Ural». 2002]

Taken together these results suggest that there is a strong association between the speech act of request and the first person singular and plural regardless of the type of the construction used: možno + NOM, možno + DAT, možno + CNOM or možno + CDAT. However, requests with covert Dative sometimes require more linguistic and extralinguistic (e.g., gestures) support to be correctly interpreted by the hearer.

4.2 Tense, aspect and transitivity

A request is a future-oriented speech act, and, in addition to infinitive forms, there were only non-past perfective and periphrastic future verb forms in the database. Their distribution is as follows: 799 sentences are with perfective verbs (both finite and non-finite forms), 154 sentences are with imperfective verbs (both finite and non-finite forms). The information about tense and aspect of the lexical verb used in requests with *možno* is given in Table 3.

Table 3 Illustration of tense-aspect forms used in requests with *možno+skazat'/govorit'* 'say/tell', in which *skazat'/govorit'* represent all verbs in the dataset. Relative count (%) is given in brackets

Aspect-tense	možno + dat		možno + nom		Total	
	Dative	Covert dative	Nominative	Covert nominative		
PFV	mne skazat'	skazat'	ja skažu	skažu	799	
	189	312	287	11	(83.8%)	
	(19.9%)	(32.7%)	(30.1%)	(1.1%)		
IPFV	mne govorit'	govorit'	ja budu govorit'	_	154	
	50	32	72		(16.2%)	
	(5.2%)	(3.4%)	(7.6%)			
Total	239	344	359	11	953	
	(25.1%)	(36.1%)	(37.7%)	(1.1%)	(100%)	



Seventy-two of the sentences with imperfective verbs include imperfective future forms with an auxiliary verb *byt*' 'be' and an infinitive, see (25) and (26). *Možno* is used with a Subject marked in the Nominative case.

- (25) Možno, my bud-em govori-t' pro sn-y, sumerk-i, possible we.nom be.fut-2pl talk.ipfv-inf about dream-acc.pl twilight-acc.pl step'? steppe.acc.sg
 'Is it okay if we talk about dreams, twilight, the steppe?"
 [M. Rybakova. Dver' v komnatu Leona // «Zvezda». 2003]
- (26) Možno, ja ne bud-u vyključa-t' svet?
 possible I.nom no be.fut-1sg turn.off.ipfv-inf light.acc.sg
 'Is it okay if I do not turn off the light?'

 [T. Orlova. Lovuška dlja jaščeric // «Oktjabr'». 2003]

The remaining eighty-two sentences are distributed as follows: ten of them contain the future form *budet* (27); seventy-two of them do not have *budet* (28).

- (27) Mne možno bud-et pomoga-t' im?

 I.DAT possible be.FUT-3SG help.IPFV-INF they.DAT

 'Is it okay if I help them?'

 [A. Zarin. Kazn'. 1902]
- (28) Tak kak že, mne možno exa-t' v Tixvin? thus how after.all I.DAT possible go.IPFV-INF to Tixvin.ACC.SG 'So, is it okay if I go to Tikhvin?'
 [N. Gejnce. Arakčeev. 1898]

There are no examples in which *možno* combines with imperfective future forms with auxiliary verb *byt'* 'be' and Subject in the Nominative is elided (*možno* + *budu govorit'*) in my dataset, but such examples are grammatical and can be produced by speakers in spontaneous discourse.

I classed verbs in my database into transitive and intransitive in agreement with the classification used in the RNC. As a result, I obtained 376 examples with intransitive verbs and 577 examples with transitive verbs. I will use this data in the statistical analysis in Sect. 5.

4.3 The possibility of the infinitive or finite verb to have an argument in the Dative case

Following the distinction proposed by Choi (1994), I will refer to *možno* as a modal predicate that represents a modal situation and to a complement clause predicate (infinitive or finite verb form) as a dictal predicate that represents propositional content. The Dative case is used in Russian to mark an Experiencer and the Indirect Object of a sentence, i.e., the Recipient. There are 260 examples out of 953 in which a dictal verb takes the Dative to mark the Recipient in the dataset, see (29) and (30).

(29) A možno mne zada-t' <u>vam</u> vopros?
but possible I.DAT ask.PFV-INF you.DAT question.ACC.SG



'Is it okay if I ask you a question?'

[Č. Abdullaev. Misterija èpoxi zakata. 2007]

(30) Možno my <u>tebe</u> peredad-im neskol'ko dollar-ov čerez possible we.nom you.dat give.pfv-prs.lpl several dollar-gen.pl via *Èsfir'*?
Èsfir'.acc.sg

'Is it okay if we give you a few dollars via Esfir'?'

[I. Efimov. Sud da delo // «Zvezda». 2001]

I did not take into account cases in which verbs, particularly verbs of motion, are followed by the preposition k 'towards/to' and the pronoun in the Dative, because those are arguments of place, not Recipients as in (31).

(31) A nam možno voj-ti tuda <u>k</u> <u>nim?</u> and we.DAT possible enter.PFV-INF there to they.DAT 'Is it okay if we go in there <u>to</u> see <u>them?</u>'
[A. Pisemskij. Masony. 1880]

In 109 out of 260 sentences in the dataset the Recipient of a dictal situation is overtly marked, see Fig. 1. Among those examples there are forty-nine examples with $mo\bar{z}no + DAT$ as in (32), seventeen examples with $mo\bar{z}no + CDAT$ as in (33), forty-one examples with $mo\bar{z}no + NOM$ as in (34), and two examples with $mo\bar{z}no + CNOM$ as in (35).

(32) Možno mne <u>Vam</u> ešče napisa-t' pro sbornik, esli L. N. possible I.DAT you.DAT again write.PFV-INF about anthology.ACC.SG if L. N. da-st?
give.PFV-PRS.3SG
'Is it okay if I write to you about the anthology/story collection, if L. N. will give it to me?'
[L. Avilova. Pis'ma A. P. Čexovu.1904]

- (33) Možno ej postavi-ť tuda vodičk-i?
 possible she.dat put.pfv-inf there water-gen.sg
 'Is it okay if I put a glass of water in there for her?'
 [V. Skvorcov. Kanikuly vne zakona. 2001]
- (34) Možno, ja pokaž-u <u>emu</u> jazyk?
 possible I.NOM show.PFV-PRS.1SG he.DAT tongue.ACC.SG
 'Is it okay if I stick my tongue out <u>at him</u>?

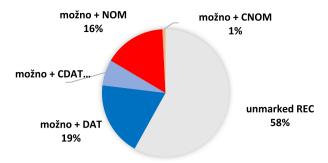
 [M. Gasparov. Zapisi i vypiski. 2001]
- (35) Možno da-m <u>vam</u> svo-i koordinat-y?
 possible give.PFV-PRS.1SG you.DAT self-F.ACC.PL coordinate-ACC.PL

 'Is it okay if I give you my contact information?'

 [D. Doncova. Mikstura ot kosoglazija. 2003]



Fig. 1 Distribution of examples with an overtly marked and unmarked Recipient in the main dataset. REC stands for Recipient



The most interesting cases are the examples in which both the modal adverb and dictal verb have their arguments in the Dative case overtly marked as in (32). A sequence of two arguments in the Dative case makes a sentence difficult to interpret by the hearer. Only one such example was found in our data, see (32). The remaining examples tended to separate the Experiencer from the Recipient by the dictal verb as in (36) or by the modal and the dictal verb as in (37).

- (36) A možno mne podari-t' <u>vam</u> èt-ot natjurmort? and possible I.DAT give.PFV-INF you.DAT this-M.ACC. SG still.life.ACC.SG 'Is it okay if I give you this still life as a gift?'

 [I. Pivovarova. Odnaždy Katja s Manečkoj. 1986]
- (37) A mne možno skaza-t' vam dva slov-a, Vladimir Il'ič? and I.DAT possible say.PFV-INF you.DAT two word-GEN.SG Vladimir Il'ič 'Is it okay if I say two words to you, Vladimir Ilyich?'
 [M. Gor'kij. Mužik. 1899]

To sum up, the Recipient marked by Dative appears in both Dative and Nominative constructions. Apparently, speakers tend to avoid structures in which the Experiencer is directly followed by the Recipient in the Dative case as in (38), because such structures require an extra effort to be processed by the hearer. Otherwise, both arguments can be present in the same utterance.

4.4 The semantic class of the predicate under modality

There are 312 unique verbs in the dataset. 131 of them are attested in two or more sentences. For the purposes of this study, I used the semantic classification independently established and annotated by the RNC. However, 109 verbs remain unclassified in the RNC. To avoid bias in the data analysis, these verbs were independently manually classed by an external specialist. The verbs in the data I collected fall into twenty verb classes: creation, existence, change of state, contact, impact, light, location, location of body, mental, motion, motion of body, perception, phasal, physiological, possession, emotion, placement (put), sound, speech and miscellaneous. The miscellaneous verb class includes 39 words that were not classified in the RNC, nor by the external linguist.

The ten most frequent verbs are presented in Table 4. These verbs are distributed among seven different verb classes that can be divided into two groups: physical activities (motion, location of body, possession) and mental activities (speech, mental, existence and perception). Rows containing physical activities are highlighted in light grey.



#	INF and translation	# of occurrences with IPM in brackets	Verb class	# with DAT	# with CDAT	# with NOM	# with CNOM
1	vzjat' 'take'	48 (0.17)	possession	9	12	26	1
2	pojti 'go'	40 (0.14)	motion	14	2	24	-
3	uznat' 'find out'	39 (0.14)	mental	-	39	_	-
4	zadat' 'ask'	30 (0.11)	speech	13	12	5	_
5	skazat' 'say'	23 (0.08)	speech	9	7	7	_
6	sprosit' 'ask'	20 (0.07)	speech	4	15	1	_
7	videt' 'see'	18 (0.06)	perception	3	15	_	_
8	nazyvat' 'call by name'	18 (0.06)	speech	5	1	12	_
9	prijti 'come'	18 (0.06)	motion	7	1	10	-
10	poprosit' 'request'	17 (0.06)	speech	-	14	3	-

Table 4 The ten most frequent verbs in the infinitive form in the main dataset and their verb classes

As can be seen from Table 4, the verbs *uznat*' 'find out', *videt*''see' and *vojti* 'enter' are never used in the construction *možno* + NOM. On the one hand these constructions might be interpreted by the speakers as idiomatic expressions. For instance, *možno vojti* 'may I enter' in a spoken discourse tends to be reduced to the bare modal word *možno* with an interrogative intonation and a co-speech gesture like knocking. The construction *možno uznat*' 'I wonder' is frequently used as a polite formula to pose an uncomfortable question. On the other hand, I would argue that constructions like *Možno ja uznaju* or *Možno ja vojdu* are grammatical and can be heard and seen in natural spoken or written discourse. Therefore, the results in Table 4 might not reflect the holistic picture due to the limited sample size and should be treated with caution.

Overall, the findings discussed in this subsection suggest that both constructions can be used with a variety of verb classes.

4.5 Text creation date and genre

The examples in my dataset are drawn from texts that can be broadly classified into six genres, namely fiction, journalism, forums and blogs, epistolary, liturgy/theology and science fiction. The main body of texts (95%) is distributed between fiction and journalism. The ratio of Nominative constructions to the Dative ones across these two genres is 2:3 the same as in the total dataset. Given that forums and blogs, epistolary, liturgy and science fiction are relatively rare in the database, I therefore collapsed those genres into one category, namely "Other". Moreover, the statistical analysis in Sect. 5 shows that genre did not play a role whereas text creation date is by far the most important factor.

The dataset contains texts from the 18th to the 21st century. The earliest attestation of $mo\bar{z}no$ + DAT was registered in the second half of 18th century, the earliest attestation of $mo\bar{z}no$ + NOM was registered in the first half of 20th century. Figure 2 shows an upward trend for Nominative constructions whereas the Dative constructions remained almost at the same rate during the 20th century and decreased significantly compared to the Nominative ones for the past 15 years.

⁹Examples with mozňo (ja) uznaju or mozňo mne uznať can be found in the GICR corpus (Belikov et al. (2013), http://www.webcorpora.ru/), e.g.: Možno ja uznaju? – umoljajušče stala prosiť ja prepodavatelja 'Is



Distribution of možno + DAT, možno + CDAT, možno + NOM and možno + CNOM

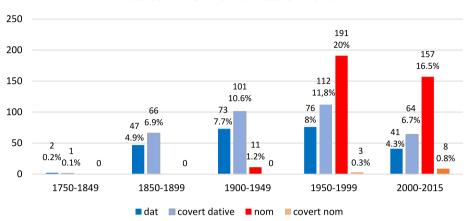


Fig. 2 Distribution of four constructions used in requests for permission to carry out an action: $mo\bar{z}no + DAT$, $mo\bar{z}no + CDAT$, $mo\bar{z}no + NOM$ and $mo\bar{z}no + CNOM$ across the main database

4.6 Punctuation marks

The Russian language has a strictly regulated system of punctuation rules. Punctuation is used to show the reader how the utterance should be interpreted and where to pause. The speaker must use a comma to separate two different clauses. The $mo\check{z}no + DAT$ construction does not require any punctuation marks within it.

In contrast one can suggest that $mo\bar{z}no$ behaves as an independent elliptic modal clause when $mo\bar{z}no$ is used in the construction $mo\bar{z}no + \text{NOM}$, therefore $mo\bar{z}no$ should be separated from the subject in the Nominative by a comma or another punctuation mark. However, the punctuation marks in my dataset are not consistent. There are 201 (54%) examples in which there is no comma following $mo\bar{z}no$ and 169 (46%) examples in which $mo\bar{z}no$ is separated from the personal clause by a comma or dash (one sentence). The speakers' uncertainty regarding punctuation marks indicates that some speakers interpret $mo\bar{z}no + \text{NOM}$ as a single construction (similar to $mo\bar{z}no + \text{DAT}$).

To sum up, punctuation is a weak factor when it comes to tracking a language change. Punctuation rules are conservative and slow to change. Nevertheless, the absence of a comma in half of the examples in the dataset within the možno + NOM suggests that this construction is undergoing a language change in which the modal adverbial is being integrated into the clause.

5 Statistical modelling of factors contributing to the choice of construction

A logistic regression analysis was performed in order to sort out the influence of various factors contributing to the choice of Nominative versus Dative case in construction with

it okay if I check on him? – I began to plead the professor'; A možno mne uznat' pro rabotu? 'Is it okay if I ask about a job?'.



Table 5 Semantic and syntactic control variables

Variable	Values			
FORM	možno + nom možno + dat			
CREATED	1841	1862	1869	1872
	1853	1863	1870	1873
	1857	1868	1871	etc.
VERBCLASS	Be:creat	Impact	Miscellaneous	Physiological
	Be:exist	Loc	Move	Possession
	Changest	Loc:body	Move:body	Speech
	Contact	Mental	Perception	
ASP	IPFV			
	PFV			
TRANS	Yes			
	No			
DATGOV	Yes			
	No			

možno. First, because the construction možno + CNOM is very rare (eleven sentences in the dataset), that data does not support a meaningful statistical distinction of možno + CNOM vs. možno + NOM. Therefore, that data is aggregated with možno + NOM and consequently covert Dative was aggregated with Dative. In a fact this is a distinction between the construction with infinitive where the only way we can insert the argument is the argument in the Dative case as opposed to možno with a finite verb where the only option is the Nominative case.

Second, examples with the verb byt' 'be' were merged with imperfective verbs (according to traditional recognition of this verb as imperfective), therefore aspect (ASP) was represented by the opposition imperfective (IPFV) — perfective (PFV). Third, verb classes (VERBCLASS) represented by less than ten verbs, namely emotion, light, phasal, placement (put) and sound, were added to the miscellaneous group. Fourth, in CREATED we removed one data point in 1751 that is all by itself ninety years earlier than any other datapoint. Since that point alone could not give us a reliable measure of the use of možno + NOM vs. možno + DAT. From 1841 onward we have fairly dense data. The remaining features: transitivity (TRANS) and possibility of the infinitive or finite form to have an argument in the Dative case (DATGOV) were not changed. The semantic and syntactic control variables are presented in Table 5.

We started with a statistical model of our maximal hypothesis according to the following formula form ~ Created + ASP + DATGOV + TRANS + VERBCLASS, meaning that the FORM is predicted according to the values of Created, ASP, DATGOV, TRANS and VERBCLASS. We then followed a "drop one" procedure to eliminate any non-significant factors. The statistical model showed that predictors ASP, TRANS, DATGOV and VERBCLASS are not statistically significant. For instance, for perfective verbs 61.4% are used within the dative construction and for imperfective verbs the proportion is almost identical: 59.8%. Similar distributions are observed for DATGOV and TRANS. The code that I used is available at TROLLing repository (https://doi.org/10.18710/JXBOQF).



Table 6 Results of logistic regression for FORM \sim CREATED, where CI stands for confidence interval

form (možno + nom)				
Predictors	Log-Odds	CI	p	
(Intercept)	-76.61	-88.64 – -65.52	<0.001	
CREATED	0.04	0.03 - 0.04	< 0.001	
Observations	952			

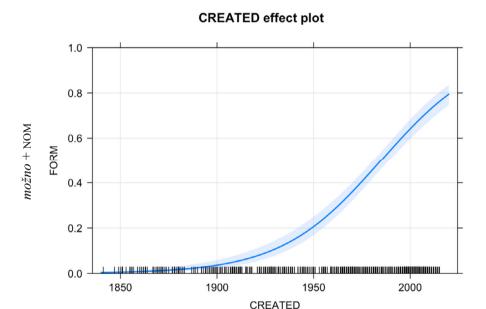


Fig. 3 Predicted probability of getting možno + NOM construction (Color figure online)

The optimal model is FORM \sim CREATED, which yields the following results: for each year the log-odds of getting Subject in the Nominative increases by 0.04, see Table 6.

Then we created a plot of the effect of CREATED for analysis on predicted probability of use of the Nominative construction, see Fig. 3. The probability of use of the možno + NOM construction is plotted on the Y-axis, where 0.2 equals 20%, 0.4 equals 40%, 0.6 equals 60%, 0.8 equals 80% and 1 equals 100%, while the creation date is plotted on the X-axis. Data points are projected onto the X-axis and represented as thin lines creating a "rug". The "Rug" represents the density of data for each year in the time span. The blue line in Fig. 3 shows the prediction, whereas the light blue area is the two-sided 95% confidence interval with upper and lower limits. The confidence interval indicates the most likely range of values associated with the form, i.e., with the probability of using the Nominative construction.

Overall, statistical modeling confirms that we are dealing with a linguistic change, since the only statistically significant factor that influences the choice of construction is the date of creation of the text, and we see a clear upward trend. The shape of the curve is consistent with the s-curve that is associated with language change, see Blythe and Croft (2012).



Table 7 Search queries and clean numbers in the supplementary dataset. Relative count (%) is given in brackets

#	Construction and corresponding query	Clean data
možno +	DAT	
1.	možno + PRON.DAT + INF	77
	možno 1-1 spro, dat 1-10 bques	(15.3%)
2.	možno + inf	53
	možno first 1-1 v, inf 1-10 bques	(10.6%)
Subtotal	130 (25.9%)	
možno +	NOM	
3.	možno + pron.nom + verb	366
	možno 1-1 spro, nom 1-10 bques	(72.9%)
4.	možno + verb	6
	možno 1-1budet v sg, pl 1p,2p,3p 1-10 bques	(1.2%)
Subtotal	372 (74.1%)	
Total	502 (100%)	

6 Data from the spoken subcorpus of the RNC

I created a supplementary dataset based on data in the spoken sub-corpus of the RNC in order to determine whether there are pauses that might indicate that $mo\bar{z}no + \text{NOM}$ is not a construction parallel to $mo\bar{z}no + \text{DAT}$. The corpus consists of 12 113 491 words of transcripts of recorded public and non-public speech of various genres produced by speakers of various ages and backgrounds as well as film transcripts from 1900 through 2016.

I formulated four specific queries with $mo\bar{z}no + \text{NOM}$ and $mo\bar{z}no + \text{DAT}$, these queries yielded 649 occurrences of $mo\bar{z}no$ up to ten words before a question mark. Second, I manually removed all noise from the raw numbers and annotated the remaining sentences (clean data). As a result, I obtained 502 sentences for analysis. The search queries and numbers for clean data are presented in Table 7.

Overall, I removed 147 irrelevant examples that were not requests. The annotation of the clean data was made in accordance with the annotation of the examples in the main dataset.

6.1 Analysis

In this article I will not provide a detailed analysis of the data retrieved from the spoken subcorpus due to space limitations. However, I will provide a summary and highlight the most important findings.

The distribution of requests according to the case of the semantic Subject reflects the distribution of the data in the main dataset: *možno* is mostly used with the Subject in the Nominative or the Experiencer in the Dative in the first person singular (94%). 467 examples (93%) of dictal predicates were perfectives, followed by a small group of thirty imperfectives that included eighteen examples with periphrastic future forms (*budu govorit* '1 will talk'). The remaining five examples are used with the verb *byt* ''be'. 168 predicates are intransitive, whereas 334 verbs are transitive. 195 out of 502 dictal predicates can take an argument in the Dative case.



#	INF and translation	# of occurrences	Verb class	# with DAT	# with CDAT	# with NOM
	translation	with IPM in brackets		DAI	CDAI	NOM
1	skazat' 'say'	43 (3.55)	speech	9	-	34
2	zadat' 'ask'	28 (2.31)	speech	8	7	13
3	vzjat' 'take'	26 (2.14)	possession	4	2	20
4	pojti 'go'	15 (1.24)	motion	_	_	15
5	dobavit' 'add'	14 (1.16)	speech	3	_	11
6	pocelovat' 'kiss'	11 (0.91)	contact	_	_	11
7	posmotret' 'watch'	10 (0.83)	perception	_	3	7
8	posidet' 'sit'	10 (0.83)	location: body	1	1	8
9	sprosit' 'ask'	9 (0.74)	speech	_	2	7
10	sest' 'sit down'	8 (0.66)	location: body	1	_	7

Table 8 Ten most frequent verbs in the infinitive form in the supplementary dataset and their verb classes

Distribution of možno + DAT, možno + CDAT, možno + NOM and možno + CNOM

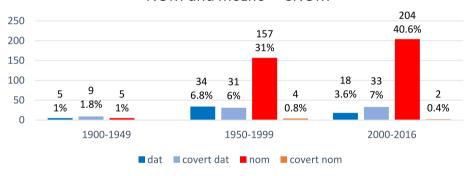


Fig. 4 Distribution of four constructions used in requests for carry out an action: $mo\bar{z}no + DAT$, $mo\bar{z}no + CDAT$, $mo\bar{z}no + NOM$ across the supplementary database

The dictal predicates were classified into seventeen verb classes, namely creation, existence, change of state, contact, emotion, impact, location, location of body, mental, motion, motion of body, perception, phasal, physiological, possession, speech and miscellaneous. The ten most frequent verbs are given in Table 8. The verbs in rows highlighted in light grey coincide with the most frequent verbs in the main dataset (see Table 4).

The genres are distributed among film and theater transcripts (293 examples) and transcripts of public (154 examples) and non-public (55 examples) discussions. There are not many occurrences of both Dative and Nominative constructions during the first half of the 20th century. However, Fig. 4 shows that from 1950 to 1999 the use of *možno* + NOM is almost 2.5 times more frequent compared to the Dative constructions. At the beginning of the 21st century *možno* + NOM is used 4 times more frequently than the Dative constructions.

Texts in the spoken subcorpus are manually transcribed by native speakers. Usually, the slash mark signals that the speaker paused, or that the annotator expected that the speaker



should pause there. Only in 80 (22%) out of 372 examples $mo\bar{z}no$ is separated by slash when used in the $mo\bar{z}no + \text{NOM}$ or $mo\bar{z}no + \text{CNOM}$ construction, see (38).

(38) Možno / ja prosto fartuk-om vytr-u?
possible I.nom simply apron-INSTR.SG wipe.off.PFV-PRS.1SG
'Is it okay if / I just wipe it off with an apron?'
[A. Učitel', A. Smirnova. Dnevnik ego ženy. k/f. 2000]

The spoken subcorpus lacks information about the pause length or original recordings, so it is impossible to verify whether the speaker paused or not. In order to get more precise information, I searched for možno + NOM and možno + CNOM constructions in two corpora of spoken Russian that contain information about pause length, namely "Corpus of Russian Spoken Language" (http://russpeech.spbu.ru) and "Stories about dreams and other corpora of Spoken Language" (http://spokencorpora.ru). I found only three examples with možno + NOM, and none of them attested to any pauses that separate the modal word možno and a pronoun, see (39)–(41). The examples are given with a simplified version of annotation for the reader's convenience.

- (39) A /možno ja govori-t ····(1.21) ja \pokurj-u ···(0.62) \nu ···(0.64) and possible I.nom say.ipfv-prs.3sg I.nom smoke.pfv-prs.1sg well ''(0.42) \tak-oj kosjačok s \travk-oj? such-M.ACC.sg joint.ACC.sg with weed-instr.sg 'Is it okay if I, he says, ····(1.21) smoke ··· (0.62) \ well ··· (0.64)' '(0.42) \ a joint with \ weed?'

 [Stories about dreams and other corpora of Spoken Speech]
- (40) volontërsk-om dviženi-i. (pause) možno ja (pause) volunteer- N.LOC.SG movement-LOC.SG possible I.NOM oxarakterizuj-u characterize.PFV-PRS.1SG 'volunteer movement. pause. Is it okay if I (pause) characterize..?' [Corpus of Russian Spoken Speech]
- (41) vo-pervyx, možno ja? (ansmbl) menja obvini-l-i v first possible I.NOM I.ACC accuse.PFV-PST-3PL in lukavstv-e. cheating-Loc.sG 'First, may I? (talk together) I was accused of cheating.' [Corpus of Russian Spoken Speech]

The absence of a pause demonstrates that in these three examples $mo\bar{z}no ja$ is processed by speakers as a single unit parallel to the $mo\bar{z}no$ + DAT construction. However, due to the small number of examples I cannot extrapolate this assumption to all data.

Overall, the data from the spoken subcorpus confirms that the $mo\bar{z}no$ + NOM construction is much more frequent than the $mo\bar{z}no$ + DAT construction in the contemporary Russian language.



7 Speech act requests and politeness strategies

Let us now turn to the pragmatic factors that motivate the choice of the request formula. Requests are face-threatening illocutionary acts. According to Brown and Levinson's Politeness theory (1978: 311) "'face' is the public self-image that every member wants to claim for himself". "Face" can be both positive and negative. Negative face is "the basic claim to territories, personal preserves, rights to non-distraction – i.e., to freedom of action and freedom from imposition". Positive face is "the positive consistent self-image or "personality" (crucially including the desire that this self-image be appreciated and approved of) claimed by interactants".

Requests by their nature are intended to threaten the hearer's negative face because "the speaker tries to exercise power or direct control over the intentional behavior of the hearer" (Trosborg, 1995: 188). At the same time the speaker loses positive face by imposing her will over the hearer. The speaker may lose a negative face herself, as "the hearer may choose to refuse to comply with her wishes". Requests for permission to carry out an action are peculiar because as a pre-condition the speaker admits that the hearer has more power and controls the whole situation. Thus, to maintain successful communication it is crucial for the speaker to minimize the risks of losing face not only for the hearer but for herself as well.

One strategy to formulate polite requests is to use conventionally indirect requests. The speaker's goal is to obtain permission from the hearer, so the speaker is interested in mitigating her request in order to keep the hearer's face intact. The default way to formulate a conventionally indirect request to carry out an action in Russian is by making a question that begins with the impersonal modal word *možno*. The other ways of asking permission involve constructions with a personal modal verb *moč* ' 'be able', as in (42); an impersonal modal adverb *nel'zja* 'not allowed' and the particle *li* 'whether' as in (43) and direct questions as in (44).

- (42) Mog-u ja vzja-t' vaš kodak?
 can.ipfv-prs.1sg I.nom take.pfv-inf your.m.acc.sg Kodak.acc
 'Is it okay if I take your Kodak?'
 [E. Nagrodskaja. Gnev Dionisa. 1910]
- (43) *U menja est'* russk-ij tramvaj vypusk-a 1911 at I.GEN be.PRS.3SG Russsian-M.NOM.SG tram.NOM.SG release-GEN.SG 1911 god-a. Nel'zja li mne priobres-ti u Vas bolee year-GEN.SG impossible whether I.DAT buy.PFV-INF at you.GEN more sovremenn-yj?

 modern- M.ACC.SG
 'I have a 1911 Russian tram. Can I buy a more modern one from you?'

 [E. Kovalenko. Kollekcioner! // «Pjatoe izmerenie». 2002]
- (44) Ja voz'm-u morožen-oe?
 I.NOM take.PFV-PRS.1SG ice.cream-ACC.SG
 'Is it okay if I take an ice-cream?'
 [M. Zosimkina. Ty prosneš'sja. Kniga pervaja. 2015]

Such requests are traditionally considered as polite requests as compared with direct requests formulated with an imperative form (45).



(45) ...daj, mne šokolad, nu daj mne give.IPFV.IMP I.DAT chocolate.ACC.SG come.on give.IPFV.IMP I.DAT šokolad! chocolate.ACC.SG

'Give me chocolate, give me chocolate!'

[Fizičeskoe nakazanie: «za» i «protiv» (forum). 2007.01.05]

Politeness is a complex phenomenon with many facets to be taken into consideration simultaneously. In everyday communication between family members the imperatives might sound most natural as polite requests, while requests with *nel'zja li* may sound ironic. However, I suggest that in less familiar context speakers might interpret direct questions as less polite than the requests that begin with modal words. Consequently, speakers will attempt to mitigate the impoliteness of direct questions by adding the modal word *možno* as a tagquestion. However, it is pragmatically unwise to place *možno* at the final position in a clause, because the hearer could be already upset by the lack of politeness and could refuse to comply with the speakers wishes. Thus, it is advantageous to place *možno* in the initial position in order to provide the mitigation before the hearer might get annoyed by a request. Thus, by using *možno* + NOM the speaker secures her freedom to act according to her will. On the other hand, the construction with the agentive Subject reduces the hearer's responsibility for the further development of the situation. However, these claims need to be experimentally tested on a representative group of native speakers.

8 Development of the *možno* + NOM construction

My data demonstrates that the *možno* + NOM construction has become more frequent in contemporary Russian compared to the beginning of the 20th century, while the use of the *možno* + DAT construction has decreased. Language is a system of various forces that motivate the speaker's linguistic behavior. In the previous sections, I presented various pragmatic (politeness), semantic (the semantic class of the predicate under modality (motion, speech, location etc.) and syntactic (tense, aspect, transitivity, possibility of the infinitive or finite verb to have an argument in the Dative case) factors that provide a conducive environment for the expansion of a new request formula with the Subject in the Nominative case. In this section, I will discuss in detail a possible scenario of the development of the *možno*+ NOM construction and I will hypothesize how the initial construction *možno* + DAT started to be replaced by the construction *možno* + NOM.

The pattern in which the Experiencer in the Dative case is replaced by the Subject in the Nominative case has been discussed in the linguistic literature (Haspelmath, 2001; Seržant, 2013; Grillborzer, 2019). Haspelmath (2001) discusses cases of non-canonical marking of agents in Standard Average European (SAE) languages. Haspelmath (2001) claims that the semantic Subject marked by the Dative case is one of the types of non-canonical marking on experiential predicates (often called "psychological" predicates, e.g., nravit'sja 'like'). Haspelmath interprets modality predicates of possibility may, can as Experiential predicates as well. Haspelmath (2001: 60) claims that "while Dative Experiencers in modern SAE languages exhibit few (if any) behavioral Subject properties, it might well be that they will acquire some in the future. There is a well-established diachronic tendency for oblique experiencer arguments to acquire behavioral Subject properties, which has been described for various languages by Cole et al. (1980)". In example (46) taken from Old English the verb licodon 'like' requires an Experiencer in the Dative case, whereas in modern English the verb like uses the Subject in the Nominative case.



(46) Pam wife pa word wel licodon.

[the.DAT woman.DAT those.NOM words.NOM well liked.3PL]

'The woman (DAT) liked those words (NOM) well.'

(Beowulf 639)

If *možno* directly followed the path proposed by Haspelmath, we would have expected the result to be a modal construction with *možno* in which the pronoun in the Nominative case precedes the modal word, i.e., PRON.NOM + *možno* + VERB. This could not be the case for two reasons. First, *možno* is a modal adverb, so it cannot have a Subject. Syntactically the Experiencer in the Dative case belongs to *možno* and a semantic subject in the Nominative belongs to the finite verb form (dictal predicate). Second, in Haspelmath's example the verb *like* does not have other dependent verb forms, whereas originally *možno* has an infinitive phrase as a sentential complement.

In natural spoken discourse the pronoun in the Nominative case can be used before *možno*. There are two examples in the spoken subcorpus of the RNC that reflect the pattern PRON.NOM + *možno* + VERB, see (47) and (48). Despite the word order, the Subject obviously belongs to the verbs *nal'ju* 'I will pour' and *skažu* 'I will tell'.

- (47) [Š., muž, 42] A ja možno poln-uju nal'j-u? and I.NOM possible full-F.ACC.SG pour.PFV-PRS.1SG [Š., muž, 42] 'Is it okay if I pour it full?' [Razgovory vo vremja prazdnovanija dnja roždenija na ostrove na Volge // Iz kollekcii Saratovskogo universiteta. 2002]
- (48) [Tokarev E.V., muž, 40] Ja ja možno skaž-u?

 I.NOM I.NOM possible say.PFV-PRS.1sG

 [Tokarev E.V., muž, 40] 'Is it okay if I tell? '

 [Dopros svidetelja zaščity Antipovoj na sudebnom zasedanii po delu G.P. Grabovogo
 // Internet. 2008]

At the same time the examples provided by Haspelmath are parallel to constructions with *možno* because the Experiencer in the Dative case and the subject in the Nominative case in the constructions with *možno* are referring to the same semantic Subject (a requester). The requester has all the semantic properties of a Subject, so potentially it can be marked not by the Dative case, but by Nominative as a canonical Subject. Based on that premise, I suggest that at some stage *možno* lost the Experiencer and began to be a part of a new construction combined with a personal clause.

Hansen (2010, 2016) examines the lexicalization pattern of the Russian modal verb *možet* byt' 'perhaps' into an epistemic sentence marker *možet* 'perhaps'. Lexicalization is a "change whereby in certain linguistic contexts speakers use a syntactic construction or a word formation as a new contentful form with formal and semantic properties that are not completely derivable or predictable from the constituents of the construction or the word formation pattern. Over time, there may be further loss of internal constituency and the item may become more lexical" (Brinton & Traugott, 2005: 144). Hansen (2010, 2016) claims that modal infinitival *možet* byt' construction as in (49) was reanalyzed and, as a result, gave rise to a sentence adverb *možet* 'perhaps' as in (50). ¹⁰

¹⁰Examples are cited from Hansen (2016: 273–274); COMP stands for complementizer, whereas COND stands for conditional.



(49) Mož-et by-t', cto eto problema ne fiziceskaja, a psixiceskaja. can-3sg be-INF COMP this problem not physical but psychological 'It is possible that this is not a physical, but a psychological problem.'
(Russian National Corpus; http://ruscorpora.ru, accessed on 6 August 2013)

(50) Minutočkoj by priš-l-i ran'še, to, može-t, zasta-l-i by doma. minute COND come-PST-PL earlier then can-3sg meet-PST-PL COND at.home 'Had you arrived one minute earlier, you might have found himat home.'

(Russian National Corpus; http://ruscorpora.ru, accessed on 6 August 2013)

I suggest that $mo\check{z}no$ has undergone a lexicalization process similar to $mo\check{z}et$, and as a result transitioned from a modal of possibility into a sentence (modal) adverb in the $mo\check{z}no + \text{NOM}$ construction.

Možno appeared in the language as a modal that could have an Experiencer in the Dative case and an infinitival clause as its complements. At the same time, it could be used as an unconnected and independent *možno* in requests and permissions, as in (51).

(51) Podoždi-te. vmeša-l-a-s' Lidija Timofeevna. wait.PFV-IMP.2PL intervene.PFV-PST-F.SG-REFL Lidija Timofeevna U menia koe-čto est'. Ona vernu-l-a-s' at I.GEN something be.PRS.3SG she.NOM return-PST-F.SG-REFL from bol'š-oj kuxn-i tarelk-oj v ruk-ax. Apel'sin-y, kitchen-GEN.SG with big-F.INSTR.SG plate-INSTR.SG in hand-LOC.PL orange-NOM.PL vostorženno protjanu-l-a Elena Nikolaevna. – Možno? – Konečno. Ja exuberantly stretch.PFV-PST-F.SG Elena Nikolaevna possible I.NOM special'no dlja vas pokupa-l-a. specially for you.GEN buy.IPFV-PST-F.SG '- Wait a second, - intervened Lidija Timofeevna. - I have something here. She returned from the kitchen with a big plate in her hands. - Oranges, - whooped Elena Nikolaevna. – May I? – Of course. I have bought them specially for you.' [A. Gelasimov. Foks Malder poxož na svin'ju. 2001]

In example (51) Marina is at a dinner where the hostess serves oranges as a special treat for her guests, so Marina requests permission to take an orange by using the modal word *možno* because she knows that the hearer would understand what she requested. Moreover, the hearer anticipates that the speaker will be tempted by oranges as she says *Podoždite*, (...) *u menja koe-čto est'* 'Wait a second, I have something here' and brings plate with oranges into the room. Both the hearer and the speaker have enough knowledge about what the speaker may potentially request, so the speaker can covertly refer to the action which she wants to carry out by uttering just *možno* with interrogative intonation. Such examples when the action desired by the speaker does not have an overt linguistic expression open up space for activation of both *možno* + DAT and *možno* + NOM constructions. These utterances are typical of spoken language.

For the purposes of this study, I made an additional search in the written part of the RNC for sentences in which *možno* syntactically behaves as an independent clause or as a tagquestion. In other words, I searched for sentences with unconnected *možno*. I looked for *možno* after any punctuation mark and before a question mark. This query returned 416 examples. I manually removed noise and annotated the remaining 353 examples, see Table 9. The first occurrences of unconnected use of *možno* in the RNC date from 1847.



Table 9 Search queries, raw numbers and clean numbers for the unconnected *možno*

Construction and corresponding query	Raw data	Clean data
možno?	416	353
možno bques, amark		

In some situations, the bare modal word *možno* can be used as a request formula with interrogative intonation as in (52). In such situations speakers often use various extralinguistic means, such as knocking, pointing or nodding to let the hearer know what they want to do. In general, speakers ask whether there are conditions that might stop speakers from carrying out an action.

(52) Čertyxa-ja-s' ja koe-kak probra-l-sja po curse.IPFV-GER-REFL I.NOM somehow made.way.PFV-PST.M.1SG-REFL down koridor-u i postuča-l: — Alla Vladimirovna, možno? corridor-DAT.SG and knock.PFV-PST.M.1SG Alla Vladimirovna possible 'Cursing, I somehow made my way down the corridor and knocked: — Alla Vladimirovna, may I (enter)?'

[A. Volos. Nedvižimost' (2000) // «Novyj Mir», 2001]

258 examples in this sample are uses of *možno* in an independent clause. Even if *možno* is used as an independent clause, it still can be preceded by a personal or an infinitival clause. In ninety-five examples *možno* appears as a tag-question as in (53). As a tag-question *možno* can follow both a clause with a conjugated verb form or an infinitival one as in (53) and (54) respectively. Sixty-seven out of ninety-seven examples have a conjugated verb form in a clause that precedes *možno* as in (53).

- (53) Tak ja bud-u za vami, možno?
 so I.NOM be.FUT-1SG behind you.INSTR possible
 'So, I'll be next in line, may I?'
 [I. Grekova. Damskij master. 1963]
- (54) A podbi-t' tebja nog-oj, kak mjač, možno? and kick.pfv-inf you.acc leg-instr.sg like ball.acc.sg possible 'Is it okay if I kick you like a ball?' [A. Volkov. Likvidatory // «Zvezda», 2001]

Examples like (53) and (54) have all the elements of a "prototypical" request, namely the modal word *možno* and an Experiencer in the Dative as in (54) or the Subject in the Nominative case as in (53).

I suggest that we are facing the constructionalization of the *možno* + NOM construction in Contemporary Russian. Traugott (2015: 56) claims that constructionalization occurs when:

"Some hearers (re)analyze the morphosyntactic form of constructs arising at Step c. When there have been morphosyntactic and semantic reanalyses that are shared across speakers and hearers in a social network, a new micro-construction or schema is added to the network, because a new conventional symbolic unit, and hence a new type node, has been created."

My hypothesis is that examples with unconnected $mo\bar{z}no$ served as an intermediate stage in the development of the $mo\bar{z}no$ + NOM construction. First, speakers used $mo\bar{z}no$ as a tag-



question for requesting permission. As a tag-question *možno* does not require the Experiencer in the Dative and syntactically behaves like a sentence adverb. Later speakers analogically began to place *možno* at the beginning of the sentence as in other requests with modal words. At this stage *možno* was reanalyzed as a part of a finite clause. As a result, the new *možno* + NOM construction emerged in the language and began to compete with the synonymous *možno* + DAT construction.

9 Conclusions

In this article I discussed the DAT-NOM variation in a speech act of request in the contemporary Russian language. My contribution can be summarized as follows. First, data from corpora provides evidence that the $mo\bar{z}no + \text{NOM}$ construction is steadily taking the place of the $mo\bar{z}no + \text{DAT}$ construction in both written and spoken discourse.

Second, the analysis of corpus data demonstrates that $mo\bar{z}no$ takes the finite clause as its complement and that the use of $mo\bar{z}no + \text{NOM}$ construction is not restricted by syntactic, semantic or pragmatic factors. Third, methods of statistical modelling confirm that the most important factor is the text creation date, while other factors such as aspect, transitivity and semantic verb class of the dictal verb are insignificant. Fourth, I proposed a scenario for the development of the $mo\bar{z}no + \text{NOM}$ construction. $Mo\bar{z}no$ began to be used as a tag-question after both infinitive and personal clauses. Steadily the requester marked by the Dative has been replaced by the more agentive Subject in the Nominative case. Then, by analogy with other constructions that are used to ask permission to carry out an action, $mo\bar{z}no$ was placed at the beginning of the sentence, and was reanalyzed as constructional unit with the following structure $mo\bar{z}no + \text{FINITE CLAUSE}$ in which $mo\bar{z}no$ functions as a sentence adverb. As a result, in contemporary Russian $mo\bar{z}no + \text{NOM}$ functions as a default construction to formulate a request for permission to carry out an action.

Language change is a gradual process, and variation is an integral part of that process. We may expect that in the future the $mo\check{z}no$ + DAT construction will disappear from the Russian language, however it is also possible that $mo\check{z}no$ + DAT may never cease to be used, and remain a low-frequent alternative to the request formula $mo\check{z}no$ + NOM.

Authors' contributions Not applicable.

Funding Open access funding provided by UiT The Arctic University of Norway (incl University Hospital of North Norway). Financial support was received from the PhD programme from the Arctic University of Norway.

This work was partially supported by TWIRLL: Targeting Wordforms in Russian Language Learning (CPRU-2017/10027).

Data Availability Data will be available at TROLLing repository (https://dataverse.no/dataverse/trolling).

Code Availability Code will be available at TROLLing repository (https://dataverse.no/dataverse/trolling).

Declarations

Conflict of Interest/Competing interests The authors have no relevant financial or non-financial interests to disclose.



Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit http://creativecommons.org/licenses/by/4.0/.

References

- Belikov, V., Kopylov, N., Piperski, A., Selegey, V., & Sharoff, S. (2013). Corpus as language: from scalability to register variation. In *Dialogue, Russian international conference on computational linguistics*, Bekasovo.
- Beljaeva, E. I. (1990). Vozmožnost'. In A. V. Bondarko (Ed.), Teorija funkcional'noj grammatiki. Temporal'nost'. Modal'nost' (pp. 126–142). Leningrad: Nauka.
- Besters-Dilger, J. (1997). Modal'nost' v pol'skom i russkom jazykax. Istoričeskoe razvitie vyraženija neobxodimosti i vozmožnosti kak rezul'tat vne-mežslavjanskogo vlijanija. Wiener Slavistisches Jahrbuch, 43, 17–31.
- Besters-Dilger, J., Drobnjaković, A., & Hansen, B. (2009). Modals in the Slavonic languages. In B. Hansen & F. Haan (Eds.), *Modals in the languages of Europe: a reference work* (pp. 167–198). Berlin, New York: de Gruyter. https://doi.org/10.1515/9783110219210.2.167.
- Blythe, R. A., & Croft, W. (2012). S-curves and the mechanisms of propagation in language change. Language, 88(2), 269–304. https://doi.org/10.1353/lan.2012.0027.
- Brinton, L. J., & Traugott, E. C. (2005). Lexicalization and language change. Cambridge University Press.
- Brown, P., & Levinson, S. C. (1978). Universals in language usage: politeness phenomena. In E. Goody (Ed.), Questions and politeness: Strategies in social interaction (pp. 56–311). Cambridge: Cambridge University Press.
- Choi, S.-H. (1994). Modal predicates in Russian: semantics and syntax [Doctoral dissertation, UCLA].
- Cole, P., Harbert, W., Hermon, G., & Sridhar, S. N. (1980). The acquisition of subjecthood. *Language*, 56(4), 719–743.
- Dubinina, I. Y., & Malamud, S. A. (2017). Emergent communicative norms in a contact language: indirect requests in heritage Russian. *Linguistics*, 55(1), 67–116. https://doi.org/10.1515/ling-2016-0039.
- Endresen, A., Janda, L. A., Reynolds, R., & Tyers, F. M. (2016). Who needs particles? A challenge to the classification of particles as a part of speech in Russian. *Russian Linguistics*, 40(2), 103–132. https://doi.org/10.1007/s11185-016-9160-2.
- Goldberg, A. (2003). Constructions: a new theoretical approach to language. *Trends in Cognitive Sciences*, 7(5), 219–224. https://doi.org/10.1016/S1364-6613(03)00080-9.
- Goldberg, A. (2006). Constructions at work: the nature of generalization in language. Oxford: Oxford University Press.
- Grillborzer, C. (2019). Sintaksis konstrukcij s pervym dativnym aktantom. Sinxronnyj i diaxronnyj analiz. Berlin: Peter Lang. Retrieved May 15, 2022, from https://www.peterlang.com/document/1110877.
- Hansen, B. (2001). Das slavische Modalauxiliar: Semantik und Grammatikalisierung im Russischen, Polnischen, Serbischen/Kroatischen und Altkirchenslavischen. München: O. Sagner.
- Hansen, B. (2010). Constructional aspects of the rise of epistemic sentence adverbs in Russian. Wiener Slawistischer Almanach, 74, 75–86.
- Hansen, B. (2016). What happens after grammaticalization? Post-grammaticalization processes in the area of modality. In D. Olmen, H. Cuyckens, & L. Ghesquière (Eds.), Aspects of grammaticalization: (inter) subjectification and directionality (pp. 257–280). Berlin, Boston: de Gruyter. https://doi.org/10.1515/ 9783110492347-010.
- Haspelmath, M. (2001). Non-canonical marking of core arguments in European languages. *Typological Studies in Language*, 46, 53–84. https://doi.org/10.1075/tsl.46.04has.
- Kochman, S. (1975). Polsko-rosyjskie stosunki jezykowe od XVI do XVIII wieku. Opole: Wydawnictwo Uniwersytetu Opolskiego.
- Kopečný, F., & Havlová, E. (1981). Základní všeslovanská slovní zásoba. Praha: Academia.
- Lyashevskaya, O., Ovsjannikova, M., Szymor, N., & Divjak, D. (2017). Looking for contextual cues to differentiating modal meanings. A corpus-based study. In M. Kopotev, O. Lyashevskaya & A. Mustajoki (Eds.), *Quantitative Approaches to the Russian Language* (pp. 51–78). Abingdon: Routledge.



Padučeva, E. (2016). Modal'nost'. Materiały dlja proekta korpusnogo opisanija russkoj grammatiki. Retrieved April, 12, 2021 from http://rusgram.ru.

- Ramat, P., & Ricca, D. (2011). Sentence adverbs in the languages of Europe. In J. Auwera (Ed.), Adverbial constructions in the languages of Europe (pp. 187–276). Berlin, New York: de Gruyter. https://doi.org/ 10.1515/9783110802610.187.
- Seržant, I. A. (2013). The diachronic typology of non-canonical subjects. In I. A. Seržant & L. Kulikov (Eds.), *The diachrony of non-canonical subjects. SLCS 140* (pp. 313–360). Amsterdam/Philadelphia: Benjamins. https://doi.org/10.1075/slcs.140.
- Šanskij, N. M., Ivanov, V. V., & Šanskaja, T. V. (1961). Kratkij ètimologičeskij slovar' russkogo jazyka. Moskva: Prosveščenie.
- Švedova, N., Arutjunova, N., Bondarko, A., Ivanov, V., Lopatin, V., Uluxanov, I., & Filin, F. (Eds.) (1980). Russkaja grammatika (Vol. 1). Moscow: Nauka.
- Timberlake, A. (2004). A reference grammar of Russian. Cambridge: Cambridge University Press.
- Traugott, E. C. (2015). Toward a coherent account of grammatical constructionalization. In J. Barðdal, E. Smirnova, L. Sommerer, & G. Spike (Eds.), *Diachronic Construction Grammar* (pp. 51–80). Amsterdam: Benjamins. https://doi.org/10.1075/cal.18.02tra.
- Trosborg, A. (1995). Interlanguage pragmatics: requests, complaints and apologies. Berlin: de Gruyter.
- Van der Auwera, J., & Plungian, V. A. (1998). Modality's semantic map. Linguistic Typology, 2(1), 79–124. https://doi.org/10.1515/lity.1998.2.1.79.
- Vaulina, S. S. (1988). *Èvoljucija sredstv vyraženija modal'nosti v russkom jazyke (XI–XVII vv.)*. Leningrad: Izdatel'stvo Leningradskogo universiteta.
- Zwicky, A. M. (1985). Clitics and particles. Language, 61(2), 283-305. https://doi.org/10.2307/414146.

Corpora

Corpus of Russian Spoken Language. http://russpeech.spbu.ru.
RNC – Russian National Corpus. http://www.ruscorpora.ru.
Stories about dreams and other corpora of Spoken Language. http://spokencorpora.ru.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

