

From construction to suffix: Grammaticalization and areal diffusion of jussives and optatives based on ‘say’ in Daghestan

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Submitted: 21/05/2025 Revised version: 15/09/2025

Accepted: 02/10/2025 Published: 23/07/2026



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Abstract

In Nakh-Daghestanian languages (Northern Caucasus), one of the most common sources of the jussive (indirect command such as ‘Let him go’) are grammaticalized from reported speech constructions with the imperative of the main verb followed by the imperative of the verb ‘say’: e.g., literally *go.IMP say.IMP*. In some languages, the imperative of the verb ‘say’ is reduced to a suffix. Suffixes coming back to the verb ‘say’ can also be found in optatives (forms that express the wish of the speaker, such as ‘May God bless you’). The aim of this paper is to model the process of grammaticalization of reported speech constructions into jussive or optative, exploring the accompanying morphosyntactic restructuring and semantic changes in a dozen of languages of the Nakh-Daghestanian family. The paper also discusses possible scenarios of the diffusion of the forms with the ‘say’-element spanning the whole territory where languages from different branches of the family are spoken.

Keywords: Jussives; optatives; grammaticalization; reported speech; Nakh-Daghestanian family; diffusion

1. Introduction

Most languages have highly grammaticalized ways of expressing an indirect command (*third person imperative*, aka *jussive*, Gusev 2013: 210). The wish of the

speaker (*optative*) may also have a grammaticalized expression. In English (eng; Indo-European, Germanic),¹ jussives are typically encoded by the verb ‘let’ (1), whereas optatives can be encoded by the modal verb ‘may’ (2):

(1) *If he needs money, let him earn it!*

(2) *May you have a long and fruitful marriage.*

Optatives and jussives are rarely expressed by synthetic forms in modern Indo-European languages (but see Rusakov & Morozova 2022 about the Albanian optative). Conversely, in Nakh-Daghestanian (East Caucasian) languages, forms of jussives and optatives can be found at different stages of grammaticalization – from the constructions with auxiliary verbs or participles to synthetic forms with bound affixes. A frequent way to encode indirect commands in Nakh-Daghestanian languages is to use the suffix that is based on the verb ‘say’ (see Dobrushina 2012, Authier 2015, Dobrushina 2025):

(3) Chamalal (cji; Nakh-Daghestanian, Avar-Andic-Tsezic; Magomedova 2004: 45; quoted from Mauri & Sansò 2011: 3503)

a. *w-un-abe-ǰ’a*
1-go-IMP-OPT
‘Let him go!’

b. *ǰ’a*
speak-IMP
‘Say!’

As I will demonstrate in this paper, the ‘say’-pattern for jussives and optatives has spread across a large territory with a dozen Nakh-Daghestanian languages, including languages belonging to different branches. Cross-linguistically, however, grammaticalization of the verb ‘say’ to jussives seems to be a rare phenomenon. It is not mentioned in the studies of reported speech in Africa (Güldemann 2008), extended usages of the verb ‘say’ in Siberia (Matić & Pakendorf 2013), and reported

¹ Here and in what follows, when naming a language for the first time, I provide its ISO 639-3 code, as well as its genetic classification according to Glottolog.

speech constructions cross-linguistically (Spronck & Casartelli 2021); nor is it present in the lexicon of grammaticalization by Kuteva et al. (2019). So far, I am aware of three such languages outside the Nakh-Daghestanian family: Dongolese Nubian (kzh; Nubian), Armbruster 1960: 391, Burmese (mya; Sino-Tibetan, Burmo-Qiangic, Bernot 1980: 161–162, via Gusev 2013: 212), and Judeo-Tat (jdt; Indo-European, Indo-Iranian, Authier 2012: 183); the latter is spoken in Daghestan.

In order to understand the mechanism of the remarkable spread of this rare grammaticalization path in Daghestan, I will consider the development of jussives and optatives with the ‘say’-element in thirteen Nakh-Daghestanian languages. I will show that jussive and optative forms originate in the reported speech construction with two imperative clauses: *V-IMP- ‘say’-IMP*. I will trace the entire path from this construction to the suffix in detail and demonstrate the morphosyntactic and semantic changes that appear at different stages of grammaticalization. I will also discuss possible scenarios for the diffusion of forms with the ‘say’-element.

I will start by presenting the categories in the study, defining the terms, and introducing Nakh-Daghestanian languages and Nakh-Daghestanian jussives and optatives (Section 2). Firstly, the patterns of grammaticalization of the verb ‘say’ by periphrastic jussive constructions in Mehweb (dar; Nakh-Daghestanian, Dargwa) will be examined. I will then present other languages with ‘say’-based jussives and ‘say’-based optatives, analyze some structural properties of these forms, and suggest the grammaticalization path from the verb ‘say’ to the optative suffix as suggested by the data from Nakh-Daghestanian languages (Section 3). I will consider scenarios of the diffusion of ‘say’-jussives and optatives in Daghestan in Section 4, and discuss the reasons that have contributed to the spread of the ‘say’-pattern across this large territory in the conclusion (Section 5).

2. Jussives and optatives

There is no consensus on the use of the terms *jussive* and *optative*. One of the reasons for this is that they are rarely expressed by inflectional forms, especially in Europe. The only typological study of optatives (Dobrushina 2013) discovered 48 languages with a morphologically dedicated optative in the sample of 319 languages, and most were found in one of two areas, the Caucasus and Tibet. The actual ratio of languages with dedicated optatives should be much lower, because the sample was not balanced – the chapter on optatives took into consideration as many languages of the Caucasus

as possible. Inflectional jussives seem to be more widely spread, but I am unaware of any typological studies of their distribution.

2.1. Defining jussives and optatives

In this paper, the term *jussive* is used for the forms or constructions that express commands directed towards someone who is not a participant of the speech act, while the interlocutor serves as a mediator between the speaker and this participant (Dobrushina 2012), such as the French (fra; Indo-European) *Qu'il vienne chez moi!*. This category is sometimes called the third person *imperative* (Xrakovskij 2001; Aikhenvald 2010), *exhortative* (Ammann & van der Auwera 2004), or *indirect command* (Aikhenvald 2010: 210).

The term *optative* will be used for the forms or constructions that express a speaker's wish or a hope that something would happen, cf. English *If only I had money*, or *May you live long and happily* (Bybee et al. 1994: 321, Nikolaeva 2016: 77).

Jussives and optatives are semantically rather close, since both categories imply the wish of the speaker. They are often encoded by the same form or construction. For example, the English construction with *let* is more typical of indirect commands (4), but occasionally it may also be found in the expressions of wish (5):

(4) *Let them all come!*

(5) *Let him be happy without me!*

The important distinction between jussives and optatives is the controllability of the situation. As was pointed out in Dobrushina (2013), the state of affairs wished for is typically outside the speaker's sphere of influence in the case of optatives. With jussives, the speaker has more control of the situation for two reasons. Firstly, there is a person responsible for transmitting the command (the hearer) to the person who will fulfil it; secondly, it is in the power of the latter to implement it.

The terms *jussive* and *optative* can be applied to dedicated morphological forms (Dobrushina 2011, 2013) or used for constructions that express the wish of the speaker but do not contain lexical items, the primary meaning of which is that of wish or desire (Grosz 2012: 5). Both cases are encountered in Nakh-Daghestanian languages.

2.2. Jussives and optatives in Nakh-Daghestanian languages

Nakh-Daghestanian (East Caucasian) languages are a family with a time depth comparable to that of Indo-European languages, spanning a relatively small territory in the highlands of the Northern Caucasus. They are spoken in the republics of Daghestan, Chechnya, and Ingushetia (Russia), with spillovers in Northern Azerbaijan and Eastern Georgia. Depending on the researcher, there are 40 to 50 languages belonging to several distinct branches (Nichols 2003, Koryakov 2006), see Figure 1.

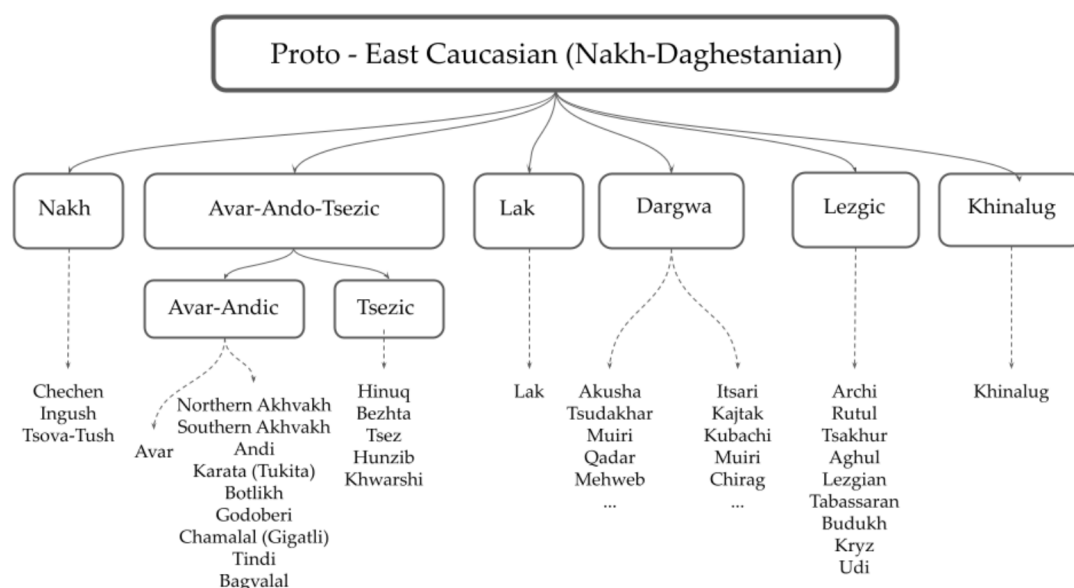


Figure 1. Nakh-Daghestanian family (courtesy of Michael Daniel).

Nakh-Daghestanian languages are morphologically ergative, which means that the sole argument (S) of intransitive verbs is grouped together with P of transitive verbs, but separately from A of transitive verbs: S and P arguments bear nominative (or, in a different terminology, absolutive) case, while A arguments bear the ergative case. Most languages have the category of gender distinguishing from two to six values. Verbs often have slots for prefixal gender agreement. The agreement is usually with the nominative (S/P) argument.

Nakh-Daghestanian languages are special in that they tend to have a dedicated inflectional form for optatives. According to a recent survey, out of 37 Nakh-Daghestanian languages, only one does not have a dedicated optative (Dobrushina 2021). According to another survey, dedicated jussives are much less frequent: only 7 languages out of 37 have them (Dobrushina 2025). This does not signify that the

meaning of indirect command is not expressed in the other 30 languages; there are several other ways to convey it.

The most frequent way is to co-express optative and jussive meanings in one form. In Nakh-Daghestanian languages, such a form is usually available to all persons. It denotes wish (blessings or curses) in the 1/2/3 persons, and command in the 3rd person only. I classify this form as *optative*, reserving the term *jussive* for the form which is available in the third person only (following the terminology used in Dobrushina 2012). Rutul (rut; Nakh-Daghestanian, Lezgetic) instantiates this person/function combination, very typical in Nakh-Daghestanian languages (cf. Table 1).

(6) Rutul (Nakh-Daghestanian, Lezgetic; dialect of Kina, author's field data)

- a. *zi / wi / had* *sax* *r-iš-ij*
 I/ you/ DEM healthy **2-become-OPT**
 'May I (female)/you (female)/she be healthy.'
- b. *said-a* *uq'* *se-j-ij*
 Said-ERG grass **PV-4.mow-OPT**
 'Let Said mow the grass.'
- c. **wa-d* *uq'* *se-j-ij*
 you-ERG grass **PV-4.mow-OPT**
 'You should mow the grass.'

Person	Wish	Command
1		
2		
3		

Table 1. Distribution of the two functions across persons in Rutul optative.

There are, however, Nakh-Daghestanian languages that do not combine the meanings of an indirect command and a wish in the same form. Such languages have a special form or, more often, a construction to encode an indirect command, while the

optative is expressed by a separate form. For example, Chechen (che; Nakh-Daghestanian, Nakh) has several optative forms, and none of these forms are used to encode indirect commands. The form with jussive meaning is built in Chechen as an imperative from the causative of the main verb:

(7) Chechen (Nakh-Daghestanian, Nakh; Zarina Molochieva, p.c.; cited from Dobrushina 2011: 124)

a. third person imperative

p'et'mat-ie bepig d-a-it-a
patimat-ALL bread 3-make-CAUS-IMP
'Let Patimat make bread!'

b. second person wish

lo-hara ho
die-OPT you.SG
'May you die!'

Therefore, Chechen has separate forms for the expression of indirect (third person) commands (jussive) and 1/2/3 person wishes (optative). Another example of the separate expression of the jussive and the optative is Mehweb (Section 3.1).

Quite frequently, jussives and optatives grammaticalize from the reported speech constructions with two imperatives.

3. Grammaticalization of jussives and optatives from the verb 'say'

According to Arkadiev & Maisak (2018: 137), the verb 'say' is among the most grammaticalizable verbs in Nakh-Daghestanian languages. Although the authors do not mention jussives and optatives, they list several other markers that go back to 'say', the most widespread being the *quotative indexes*, i.e., linguistic expressions that signal the presence of a quote. Forms with quotative indexes (or reportatives) come from the combination of two clauses: the reported clause and the matrix clause with the verb 'say'. For example, the reportative *-er* in Archi (aqc; Nakh-Daghestanian, Lezxic) comes from the imperfective form *war* of the verb 'say'. The marker *-er* is

suffixed to various tense and aspect forms of the lexical verb (Kibrik 1977, Chumakina 2019).

Unlike quotative markers, ‘say’-based jussives and optatives contain lexical verbs in a specific form, namely in the imperative. In Nakh-Daghestanian languages, imperatives can be used in both indirect and direct speech (see, for example, Lezgian,² Haspelmath 1993: 355), one of the indications that the direct-indirect speech division is not very distinct in this family (if present at all, see Daniel 2015, Sumbatova 2019).

In this section, I will trace the grammaticalization path from the reported speech construction with the verb ‘say’ to the jussive/optative suffix in Nakh-Daghestanian languages. In order to do this, I will consider periphrastic jussive constructions in Mehweb and look at the other languages with ‘say’-based jussive and ‘say’-based optatives.

3.1. Periphrastic construction for the jussive: the case of Mehweb

In Mehweb, the meanings of the jussive and optative are expressed separately. The optative is a synthetic form with the suffix *-ab*. The jussive is a periphrastic form which consists of the imperative of the main verb and the imperative of the verb ‘say’ *bet’a*:³

- (8) *saʷi-jal* *uʔq’-e* *bet’-a* *heʔʷan-i* *ɛiz-be-ču*
 <1>self-EMPH 1.go.PFV-IMP say.PFV-IMP similar-ATTR hair-PL-COMIT
 ‘With this kind of haircut, let him drive on his own.’ (Mehweb Corpus)

As with all Mehweb imperatives, the verb *bet’a* ‘say’ retains the ability to encode the number of the interlocutors. Conversely, the embedded lexical verb does not inflect for number (see Section 3.4 for the discussion of plural marking in ‘say’ jussives and optatives).

- (9) *urš-be-jni* *deč’* *b-aq’-a* *bet’-a*
 boy-PL-ERG song 3-do.PFV-IMP say.PFV-IMP
 ‘Let the boys sing a song.’ (addressing one person)

² lez; Nakh-Daghestanian, Lezgic.

³ Unless specifically indicated, all examples on Mehweb in this paper come from Dobrushina (2019).

- (10) *urš-be-jni deč' b-aq'-a bet'-a-na*
 boy-PL-ERG song 3-do.PFV-IMP say.PFV-IMP-IMP.PL
 'Let the boys sing a song.' (addressing several people)

The jussive construction shows some evidence of grammaticalization.

Firstly, while the addressee of the verb 'say' in Mehweb is regularly marked by the interlative case, as in (11), the participant that will carry out the action (below, the *subject* of the jussive construction) bears the marking determined by the verb, including ergative with transitive verbs (12), nominative with intransitive verbs (13), experiential marking with experiential verbs, e.g., dative in Mehweb in (14):

- (11) *musa-ze uz-e bet'-a*
musa-INTER(LAT) 1.work.IPFV-IMP say.PFV-IMP
 'Tell Musa to work.'
- (12) *muhammad-ini deč' b-aq'-a bet'-a*
muhammad-ERG song 3-do.PFV-IMP say.PFV-IMP
 'Let Muhammad sing a song.'
- (13) *musa uz-e bet'-a*
Musa 1.work.IPFV-IMP say.PFV-IMP
 'Let Musa work.'
- (14) *rasuj-s madina d-ig-e bet'-a*
rasul-DAT madina F-love-IMP say.PFV-IMP
 'Let Rasul fall in love with Madina.'

The availability of S or A marking in the jussive construction shows that the jussive has developed into a periphrastic form distinct from the complement construction of the verb 'say'.

Secondly, the verb 'say-IMP' has a fixed position in the jussive: it follows the imperative of the main verb, although in general the word order is not rigid in Nakh–Daghestanian languages. The following sentence is ungrammatical:

- (15) **musa bet'-a uz-e*
 Musa say.PFV-IMP 1.work.IPFV-IMP
 Intended: 'Let Musa work.'

Thirdly, the meaning of the jussive construction is different from the reported speech construction (cf. the notion of non-canonical *say* in Matić & Pakendorf (2013) and extended reported speech in Spronck & Casartelli 2021: 2). The Mehweb jussive is used in third person commands and permissions (such as '*He wants to go home.* - *Yes, let him go*'), but also in the contexts of indifference, often with inanimate subjects (16) and with the verbs which normally are not used in the form of the imperative (17), (18):

- (16) *rurž-e bet'-a ħarši*
 boil.IPFV-IMP say.PFV-IMP soup
 'Let the soup boil.'

- (17) **g^w-e!*
 see.PFV-IMP
 Intended: 'See!'

- (18) *g^w-e bet'-a!*
 see.PFV-IMP say.PFV-IMP
 'Let him see!' (he should intentionally try to see something)

The meanings of permission and indifference are cross-linguistically very typical for jussives, being described for English (Collins 2004), Hup (Epps 2010), Manambu (Aikhenvald 2010: 74), Kumyk (Dobrushina 2012), Agul (Dobrushina 2012), Russian (Dobrushina 2019), and Livonian (Dailidénaitė 2022). The contexts with an inanimate subject show that *bet'a* in jussive construction does not retain its initial meaning of the speech verb, because one does not address requests to inanimate objects such as soup.

Unlike the forms which will be described in Section 3.3, the Mehweb jussive is very clearly distinguished from the optative. Firstly, the jussive is only available in the third person and cannot be addressed to the hearer or the speaker; first and second person pronouns cannot occur in jussive constructions. Secondly, unlike the optative,

the jussive is not used to express wishes. Example (19) is acknowledged to be grammatical, but semantically inappropriate; one of the Mehweb speakers suggested that this sentence can be uttered by an atheist who thinks that God can be forced to perform an action. The correct choice would be to use the optative (20).

- (19) *?aradeš* *ag-a* *bet'-a*
 health give.PFV-IMP tell.IPFV-IMP
 ? 'Let [Allah] make [you] healthy.'

- (20) *aradeš* *g-a-b!*
 health give.PFV-IRR-OPT
 'May [Allah] make [you] healthy!'

When the jussive is used to denote uncontrollable situations, it is interpreted as an expression of indifference or allowance but never as a wish. For example, the following utterance can be made if the speaker does not care about the rain, e.g., because she has already finished her work in the field:

- (21) *d-aq'-a* *bet'-a* *zab*
 NPL-do.PFV-IMP say.PFV-IMP rain
 'Let it rain (I don't care).'

If the speaker wants the rain to fall, she would rather use the form of the optative:

- (22) *d-aq'-a-b* *zab!*
 NPL-do.PFV-IRR-OPT rain
 'May it rain!'

To sum up, the Mehweb jussive is grammaticalized from the combination of the imperative of the verb 'say' and the imperative of the lexical verb. It is conceived as a transfer of a command or request to the non-locutor via the interlocutor (*Tell him "work!"* → *Let him work!*). Although the Mehweb jussive consists of two verbs, it is grammaticalized. In particular, the verb 'say' has lost its ability to have the inter-lative argument and acquired the ability to embed a clause with an inanimate subject.

3.2. Other ‘say’-based jussives

‘Say’-constructions with jussive meanings are also found in Archi (aqc; Nakh-Dahestanian, Lezgetic), Chirag Dargwa (Nakh-Daghestanian, Dargwa), and Avar (ava; Nakh-Daghestanian, Avar).

Archi allows the variation: the subject can be marked either by contallative or by nominative/ergative/dative, depending on the argument marking of the lexical verb.

(23) Archi (aqc; Nakh-Dahestanian, Lezgetic)

- a. *jasqi-t:u-t* *Patimat-li* / *Patimat-li-r-ši* *lo*
 today-ATTR-4 patimat-ERG / patimat-OBL-CONT-ALL child
barha-ba
 nurse.IMP-say.IMP
 ‘This day, let Patimat take care of my child.’
- b. *ošob-č-es* *nak’əm-mul* *χa* *ba*
 brother.PL-OBL-DAT key-PL NPL.find.IMP say.IMP
 ‘Let the brothers find the key.’

Contallative marking is inherited from the verb ‘say’; in Archi, the addressee of speech verbs takes the contallative:

- (24) *ba* *to-r* *ʔanna:-r-ši*
 say.IMP DEM-2 woman.OBL-CONT-ALL
 ‘Tell this woman.’

Unlike in Mehweb, the Archi jussive can have plural marking on the lexical imperative.

(25) Archi (Nakh-Dahestanian, Lezgetic; Kibrik 1977: 220)

- teb* *nen-t’u* *eq’en* *b-oci-r* *ba*
 DEM.PL we-LOC.PL.EMPH(INCL) up.to HPL-stand.IMP-IMP.PL say.IMP
 ‘Let them wait for us.’ (lit. ‘Let them stand till us.’)

The availability of the nominative/ergative marking shows that the Archi jussive is on its way to developing into a periphrastic form distinct from the reported speech construction with the verb ‘say’ and the imperative.

In Chirag Dargwa, the imperative can be combined with the word *iga*, the imperative of the verb ‘say’. The main participant takes ergative/nominative marking, unlike reported speech constructions with the verb ‘say’ (cf. 26). In contrast to Mehweb *bet’a*, Chirag Dargwa *iga* ‘say.IMP’ has lost its ability to add a plural suffix when it is a part of a jussive construction.

(26) Chirag Dargwa (Nakh-Daghestanian, Dargwa; Ganenkov 2026)

- a. *it-e* *c:ad-a-d* *b-arq'-a* *ig-a*
 DEM-PL woman-PL-ERG 3-do.PFV-IMP say.PFV-IMP
 ‘Let those women do it.’

- b. *haraj* *gale* *babaj-la,* *babaj-c:ie* *ba^hrtiš:an*
 INTJ boy mom-GEN mom-INTER traditional.dish
b-arq'-a *ig-a-j*
 3-do.PFV-IMP say.PFV-IMP-POL
 ‘Come, dear son [literally ‘mother’s son’], please ask your grandmother to make bartishan.’

A similar example is found in the description of Avar. The combination of the imperative of the main verb with the imperative of the verb ‘say’ is used to form the jussive. As follows from the example (27), the subject is marked by the ergative case which is licensed by the verb ‘do’.

(27) Avar (Nakh-Daghestanian, Avar; Alekseev et al. 2012:152)

- hab-e* *ab-e* *dos* *ka-b* *ħalt'i*
 do-IMP say-IMP DEM.ERG this-3 job
 ‘Let him do this job.’

A more advanced stage of grammaticalization can be observed in Lak (Ibe; Nakh-Daghestanian, Lak). The Lak jussive consists of the imperative of the lexical verb +

a morpheme that is derived from the imperative of the verb ‘say’. After reduction, the suffix is no longer identical to the regular imperative of ‘say’:⁴

(28) Lak (Nakh-Daghestanian, Lak)

- a. *nasu:* + *uča* → *nasu:-ča*
 ‘go.imp’ + ‘say.imp’ → ‘let him go!’
- b. *Pat’imat-lu-l* *č:at’* *šaši-ča*
 patimat-OBL-ERG bread **bake.IMP-JUSS**
 ‘Let Patimat bake bread.’ (example courtesy of Rosa Eldarova, quoted in Dobrushina 2011: 123)
- c. *zun* *čijkun* *b-ik’u-ča*
 you.PL.DAT however.you.like **3-be.IMP-JUSS**
 ‘Let (it) be as you wish.’ (Abdullaev 2015: 2105)

Lak form in *-ča* can be occasionally used for wishes, only with 3rd person subject; in general, other forms are used to express wishes in Lak.

- (29) *žahannam-ra-w-un* *nasu:-ča*
 hell-OBL.SG-IN-LAT **go.IMP-JUSS**
 ‘Let him go to hell!’ (Abdullaev 2015: 693)

Similar form is attested in Godoberi (gdo; Nakh-Daghestanian, Andic), where the form in *-ž’a* (from *hiž’a* ‘say.IMP’) is used as jussive.

Table 2 presents all the cases I was able to find in Nakh-Daghestanian languages where the verb ‘say’ is used as the source of the jussive.

In all the languages mentioned in this section (Mehweb, Avar, Archi, and Lak), the construction or the form involving ‘say’ is restricted to the third person and is not used (or is infrequently used) for the expression of wishes. According to my definition, these forms are jussives. There is also a group of languages, the forms of which with

⁴ There are however examples of the Lak jussive where the imperative of ‘say’ is preserved in its entirety, see (37).

‘say’-based suffixes include the meaning of wish (blessings and curses), and in which these forms exist in all persons; according to my definition, they are optatives.

Language	Branch	Construction /Form	Pattern	Example	Availability of addressive encoding of the jussive subject
Mehweb	Dargwa	periphrastic construction	IMP + ‘say’.IMP	<i>uz-e bet'-a</i> 1.work.IPFV-IMP say.PFV-IMP	no
Archi	Lezgie	periphrastic construction	IMP + ‘say’.IMP	<i>barha-ba</i> nurse.IMP -say.IMP	yes
Chirag Dargwa	Dargwa	periphrastic construction	IMP + ‘say’.IMP	<i>b-arq'-a ig-a</i> 3-do.PFV-IMP say.PFV-IMP	no
Avar	Avar-Andic-Tsezic	periphrastic construction	IMP + ‘say’.IMP	<i>hab-e ab-e</i> do-IMP say-IMP	no
Lak	Lak	synthetic form	IMP + suffix (< ‘say’.IMP)	<i>nasu:-ča</i> go.IMP-JUSS	no
Godoberi	Andic	synthetic form	IMP + suffix (< ‘say’.IMP)	<i>ik'ja-λ'a</i> give.IMP-JUSS	no

Table 2. Jussives with the verb ‘say’ in Nakh-Daghestanian languages.

3.3. ‘Say’-based optatives

A number of closely related Andic and Tsezic languages (Northern Akhvakh (akv, Nakh-Daghestanian, Andic), Chamalal (Nakh-Daghestanian, Andic), Tindi (tin; Nakh-Daghestanian, Andic), Hinuq (gin; Nakh-Daghestanian, Tsezic), Karata (kpt; Nakh-Daghestanian, Andic), Khwarshi (khv; Nakh-Daghestanian, Tsezic), and Tsez (ddo; Nakh-Daghestanian, Tsezic) have a form of optative which contains a suffix based on the imperative of the verb ‘say’. The usage of this form is very similar in all these languages. It is compatible with all three persons and functionally follows the pattern described in Section 2 (Table 1): it is used for wishes (blessings and curses) in 1/2/3 persons and for commands only in the 3rd person. In all languages, the *subject* of the optative construction bears the marking determined by the verb, showing no traces of the argument marking of the initial verb ‘say’.

(30) Khwarshi (Nakh-Daghestanian, Tsezic; Khalilova 2009: 249-251)

- a. *j-uhō-λō* *do, heresi is-se* *b-us-łō*
 2-die.IMP-OPT I lie say-IPFV.CVB 3-find-COND
 ‘May I die if I lie!’
- b. *žužah-ma-l* *b-ek’lo-λō* *mížō*
 hell-IN-LAT hpl-fall.IMP-OPT you.PL
 ‘May you go to hell!’
- c. *Pat’imat-i* *j-ezō-λō* *bataxu*
 patimat-ERG 5-buy.IMP-OPT bread
 ‘Let Patimat buy bread.’
- d. *b-uxala* *žumru gollu* *b-usō-λō*
 3-long life be.PRS.PTCP 3-find.IMP-OPT
 ‘May he live a long life!’ (about a newborn)

In some other languages of the Avar-Andic-Tsezic branch, there are also optative suffixes of a different (often unknown) origin: Andi has suffix *-do*,⁵ Avar *-gi* and *-ja-CL*, Bagvalal *-la*, Bezhta *-ala*, Botlikh *-ibe*, *-abu*, Hunzib *-ob*, Southern Akhvakh *-la*.

Andic and Tsezic optatives differ from Mehweb, Archi, Chirag, and Avar forms, which were described in the previous section both functionally and formally. In terms of function, they have broader semantics, since they combine jussive and optative meanings and can be used in all persons. In terms of form, they do not contain a full imperative of the verb ‘say’, but just a part of it. The Lak and Godoberi forms with the ‘say’-suffixes only differ from the Andic and Tsezic optatives functionally.

To sum up, there are at least thirteen Nakh-Daghestanian languages where the jussive or optative is expressed by a form containing the ‘say’-element. In Mehweb, Archi, Chirag, and Avar the whole imperative of the verb ‘say’ is used, whereas in the other languages only a fragment of the imperative of ‘say’ remains.

⁵ According to my recent research, the Andic optative is also derived from a combination of the imperative and the verb ‘say’, with the ending ‘-do’ being a remnant of that verb.

Language	Group	Optative	Stem	Say.IMP
Akhvakh	Andic	-ʒ:’a oxa-ʒ:’a ‘may (s/he) give’	imperative	eʒ:’a
Karata	Andic	-ʒ’a beʒda-ʒ’a ‘may (it) stay’	imperative	keʒ’ã
Chamalal	Andic	-ʒ’a guda-ʒ’a ‘may s/he give’	imperative	iʒ’a
Tindi	Andic	-ʒ’a baχa-ʒ’a ‘may s/he take’	imperative	hiʒ’a
Hinuq	Tsezic	-ʒo kekir-ʒo ‘may s/he send’	imperative	eʒo
Khwarshi	Tsezic	-ʒo (-ʒa) depending on the preceding vowel buso-ʒo ‘may s/he find’	imperative	iʒo
Tsez	Tsezic	-oʒ (-ʒ) depending on the preceding phoneme, e.g., cax-oʒ ‘may s/he write’	imperative	eʒo

Table 3. Optatives with the verb ‘say’ in Nakh-Daghestanian languages.

3.4. Plural marking

Jussives and optatives with the ‘say’ element originate from the combination of two imperatives. Both imperatives, lexical and ‘say’, can potentially encode the number of interlocutors. The ability of the imperative to mark the number of interlocutors varies in Nakh-Daghestanian languages (see the overview, Zerzele 2024). Among the languages discussed in this paper, some do not encode it at all (Northern Akhvakh, Avar, Godoberi, Hinuq, Karata proper, Khwarshi, Tsez), some mark the number only in intransitive verbs (Archi, Chamalal, Anchiq dialect of Karata, Tindi), and some encode it in all verbs (Mehweb, Chirag, Lak). The question is whether the latter seven languages mark the number in ‘say’-jussives/optatives as well as in imperatives.

3.4.1 Plural marking on lexical part

Second person imperatives distinguish singular versus plural in Mehweb, Archi, Chirag, Lak, Chamalal, Tindi and Anchiq dialect of Karata. In Mehweb, Archi and

Chirag ‘say’-forms are periphrastic, in the other four languages they are synthetic. Notably, the lexical part of ‘say’-jussive/optative forms tends to retain plural marking both in periphrastic and synthetic forms. Only in Mehweb does the embedded lexical imperative not retain the number marking when it is a part of the jussive/optative form.

In Archi, intransitive imperatives can optionally take the suffix *-r* to mark the plural interlocutor. Jussive construction preserves the option to have the plural marker on the lexical imperative.

(31) Archi (Nakh-Dagestanian, Lezgitic; Bulbul Musaeva, p.c.; Kibrik 1977: 220)

- a. *č’an inž-i u b-erq^əa ba*
 sheep self- <3>_{EMPH} 3-go.IMP say.IMP
 ‘Let the sheep walk on its own.’ (unassisted; can be said when the sheep was sick, but now it needs to start walking)
- b. *gid-ib noλ’-a-ši b-erq^əa-r ba*
 DEM.PL-3 house-IN-ALL HPL-go.IMP-IMP.PL say.IMP
 ‘Let them come home.’

In Lak, the jussive contains a suffix which originates from the imperative of the verb ‘say’: *uča* ‘say.IMP’ becomes *-ča*. The first part of this form inflects for number (Eldarova 1999: 57, Friedman 2020: 227):

(32) Lak (Nakh-Daghestanian, Lak; Roza Eldarova, p.c.)

- a. *nasu:-ča*
 go.IMP-JUSS
 ‘Let him go.’
- b. *nasi:-ča*
 go.IMP.PL-JUSS
 ‘Let them go.’

In the Anchiq dialect of Karata, the imperative inflects for number, and the optative retains this inflection:

(33) Anchiq Karata (Nakh-Daghestanian, Andic; Magomed Gadžimagomedov, p.c.)

- a. *χeriq* *w-ołi-λ'a* *ho-w*
 back 1-go.IMP-OPT DEM-1
 'Let him go.'
- b. *χeriq* *b-ełibi-λ'a* *ho-be*
 back HPL-go.IMP.PL-OPT DEM-HPL
 'Let them go.'

As follows from these examples, number marking is determined by the number of subjects of jussives/optatives. Table 4 presents the examples of all 'say'-jussives/optatives where the lexical part encodes number.

At the same time, in some languages, which can potentially contain plural marking on the lexical part, it is optional or even less felicitous than singular marking. In Chirag Dargwa, the distinction of the number of the interlocutors is obligatory in 2nd person imperatives, but optional in jussives: the imperative of the lexical verb can appear in the plural form (34a) or remain singular with plural subjects (34b).

(34) Chirag Dargwa (Nakh-Daghestanian, Dargwa; Ganenkov 2026)

- a. *u'l-d-irg-a-ja* *ig-a*
 look-LCT-LV.IPF-IMP-PL say.PFV-IMP
 'Let them look!'
- b. *č'a-b-aq'-a* *ig-a*
 hear-3.SG-LV.PFV-IMP say.PFV-IMP
 'Let them hear this (I don't care).'

In Mehweb, my consultants prefer the lexical imperative to be unmarked for the number in the jussive construction, while the plural marking of the imperative outside the jussive construction is obligatory:

(35) Mehweb (Nakh-Daghestanian, Dargwa)

- a. *deč' b-aq'-a*
 song 3-do.PFV-IMP
 'Sing a song!' (addressing one person)
- b. *deč' b-aq'-a-na*
 song 3-do.PFV-IMP-IMP.PL
 'Sing a song!' (addressing several people)
- c. *urš-be-jni deč' b-aq'-a bet'-a*
 boy-PL-ERG song 3-do.PFV-IMP say.PFV-IMP
 'Let the boys sing a song.' (addressing one person)
- d. ?? *urš-be-jni deč' b-aq'-a-na bet'-a*
 boy-PL-ERG song 3-do.PFV-IMP-IMP.PL say.PFV-IMP
 'Let the boys sing a song.' (addressing several people)

Meanwhile, in the construction which is closer formally to reported speech construction in that the addressee of the verb 'say' is marked by the interlative, the native speaker of Mehweb chose plural marking of the embedded imperative:

- (36) *urš-be-ze deč' b-aq'-a-na bet'-a*
 boy-PL-INTER(LAT) song 3-do.PFV-IMP-IMP.PL say.PFV-IMP
 'Tell boys to sing a song/Let boys sing a song.' (addressing one person) (p.c. with Patimat Sharbuzova)

The tendency to lose plural marking of the embedded imperative found in Mehweb and Chirag Dargwa has a functional explanation. While in the second person imperatives, the number marker denotes the number of the interlocutors, the same marker does not refer to the interlocutor when it is transferred to the third person

form; it rather denotes the number of the agents of the desired situation. This might be the reason why plural marking is optional in the Chirag Dargwa jussive and is less favored in Mehweb. Note that a typological study by Gusev (2013: 2014) revealed that cross-linguistically, third-person imperatives less frequently mark number than other moods.

It is important to add that there is no adequate field data about the actual use of plural forms in other languages where plural marking of the lexical imperative was evidenced (Lak, Chamalal, Tindi, and Anchiq dialect of Karata). It might be that they also tend to vary between marking and not marking plurality.

3.4.2 Plural marking on ‘say’

The verb ‘say’ is transitive, therefore it can express the number of interlocutors only in those languages where both transitive and intransitive imperatives inflect for number – Mehweb, Chirag, and Lak. These three languages behave differently in this respect.

Lak has a synthetic jussive form with the verb ‘say’ reduced to the suffix; it did not retain plural marking:

(37) Lak (Nakh-Daghestanian, Lak; examples courtesy of Rosa Eldarova)

- a. *uča*
say.IMP
‘Say!’ (addressing one person)
- b. *uča:ra*
say.IMP.PL
‘Say!’ (addressing several people)
- c. *wi-l ars t:u-č’a-n ux:u-wča*
you.SG.OBL-GEN son I.OBL-APUD-LAT come.IMP-JUSS
‘Let your (singular) son come to me.’ (addressing one person)

- d. *zu-l* *ars* *tʉ-č'a-n* *ux:u-wča*
 you.PL.OBL-GEN son I.OBL-APUD-LAT come.IMP-JUSS
 'Let your (plural) son come to me.' (addressing several people)

Language	Singular	Plural marking on lexical verb	Plural marking on 'say'
Mehweb	<i>b-aq'-a bet'-a</i> 3-do.PFV-IMP say.PFV-IMP 'Let him/her do'	absent	<i>b-aq'-a bet'a-na</i> 3-do.PFV-IMP say.PFV-IMP-IMP.PL 'Let them do'
Archi (own elicitation; Kibrik 1977: 220)	<i>b-erq^ɛ-a ba</i> 3-walk-IMP say.IMP 'Let it go' (of a donkey)	<i>b-erq^ɛ-a-r ba</i> HPL-walk-IMP-IMP.PL say.IMP 'Let them go'	absent
Chirag Dargwa (Ganenkov 2026)	<i>r-uk-aba ig-a</i> 2-take.PFV-IMP1 say.PFV-IMP 'Let him/her/them take me'	<i>r-uk-aba-ja ig-a</i> 2-take.PFV-IMP1-PL say.PFV-IMP 'Let them take me'	absent
Lak (Roza Eldarova, p.c.)	<i>nasu:-ča</i> go.IMP-JUSS 'Let him go'	<i>nasit:-ča</i> go.IMP.PL-JUSS 'Let them go'	absent
Chamalal (Magomedova 1999: 99)	<i>bu-k'-abe-λ'a</i> 3-be-IMP-OPT 'Let it be'	<i>ba-k''abi-λ'a</i> HPL-be-IMP.PL-OPT 'Let them be'	not applicable
Tindi (Magomed Magomedov, p.c.)	<i>w-ič'-iba-λ'a</i> 1-die-IMP-OPT 'May he die'	<i>b-ič'-ibi-λ'a</i> HPL-die-IMP.PL-OPT 'May they die'	not applicable
Anchik dialect of Karata (Magomed Gadžimagomedov, p.c.)	<i>w-ox-u-λ'a</i> 1-come-IMP-OPT 'Let him come'	<i>b-ex''abi-λ'a</i> 3-come-IMP-OPT 'Let them come'	not applicable

Table 4. Plural marking in 'say'-jussives and optatives.

The Chirag Dargwa jussive is periphrastic. The imperative of the verb 'say' *iga* has a plural marker when it is used in the literal imperative meaning, but the auxiliary part of the jussive cannot appear in the plural form. In the example (38), the jussive is

directed to parents (plural addressees), but the verb ‘say’ does not have plural marking.

(38) Chirag Dargwa (Nakh-Daghestanian, Dargwa; Ganenkov 2026)

*nuš:a-la gale ja^s-ma elg-e **ig-a***

you.PL-GEN boy DEM-LOC stay.PFV-IMP **say.PFV-IMP**

‘Let your (plural) son stay here.’ (as in suggesting that the boy stays overnight at our place)

In contrast, the verb ‘say.IMP’ in the Mehweb periphrastic jussive retains its ability to inflect for plural when it becomes part of the jussive:

(39) *musa-ze uz-e bet'-a-na*

Musa-INTER(LAT) 1.work.IPFV-IMP say.PFV-IMP-IMP.PL

‘Let Musa work.’ (addressing several people)

As it follows from the example (39), the plural of the verb ‘say’ in Mehweb jussive encodes the number of interlocutors, not the number of subjects.

To summarize, number marking can be retained or lost on both parts of ‘say’ jussives and optatives. While the plural of the verb ‘say’ denotes the number of interlocutors, the plural of the lexical verb denotes the number of subjects. This shows that some ‘say’-forms have certain biclausal properties, as discussed in the next section.

3.4.2 ‘Say’-jussives and optatives as univerbation

‘Say’-jussives and optatives present an interesting case of what is called phrasal univerbation – an expression condensed into a word (Lehmann 2020: 214).

There are several indications of the morphological boundness of ‘say’-jussives/optatives.

First of all, the ‘say’-element often shows the loss of autonomy. In many languages, the ‘say’-element is a suffix that cannot be used independently. In other languages, where the imperative of the verb ‘say’ is not reduced to a suffix, it has a fixed position after the lexical verb (see example (15)). In Chirag Dargwa, the verb ‘say’ has lost its ability to take the plural suffix, which also speaks for its reduced autonomy.

The second argument in favor of the morphological boundness of ‘say’-jussives/optatives is that the verbs, which normally cannot be used in the imperative, appear in the form of the imperative as a part of the jussive/optative construction. This was illustrated by Mehweb (example (18)).

On the other hand, there is evidence of the syntactic independence of the embedded lexical verb.

Firstly, it can contain a plural marker in the same way as the independent imperative does, even if the ‘say’-part is a suffix (this happened in Lak, Chamalal, Tindi, and Anchiq Karata, see Section 3.4.1). These forms resemble what is sometimes called morphologically bound complementation, i.e., a construction where a matrix predicate and the head of its clausal complement constitute a single word form but retain their syntactic and semantic independence; in particular, both parts of such constructions have their own sets of arguments (see Maisak 2016, Panova 2018). The ‘say’-element in jussives and optatives can be considered a complement-taking predicate where the lexical part and its dependents are its complement clause. The plural marker on the embedded lexical imperative signals the presence of its argument. The second part of the ‘say’-imperative (originally the matrix verb) can also mark the plurality of its argument in some languages. However, as follows from Table 4, there are no cases where both lexical and ‘say’ imperatives mark plurality. The three forms where it potentially could have happened (Chirag, Mehweb, and Lak), each mark plurality only once, either on the lexical imperative (Chirag and Lak), or on the ‘say’-imperative (Mehweb), thus showing the tendency to lose the autonomy of one of the two parts. The analogy to the morphologically bound complementation is thus not complete.

The second indication of syntactic independence of the lexical verb is the fact that its negative counterpart is prohibitive. Most Nakh-Daghestanian languages have special forms for negative imperatives that are unrelated to the imperatives morphologically and employ a special negation marker (Ochs 2021). Prohibitive, like imperative, is a form that is only used independently, as a separate sentence. As well as prohibitives, the only forms where this marker is found are jussives and optatives. This is not always the case; in some Nakh-Daghestanian languages, optatives use indicative negation, and in some others (e.g., Dargwa branch), the optative has a prohibitive prefix, but the stem of the negative optative is different from that of the prohibitive (Dobrushina 2021).

Meanwhile, ‘say’-based jussives and optatives contain an entire prohibitive form, as in the Northern Akhvakh examples presented in Table 5.

	Positive	Negative
Imperative	<i>o-x:-a</i> 3-give-IMP ‘Give!’	<i>o-x:-uba</i> 3-give-PROH ‘Don’t give!’
Optative	<i>o-x:-a-ʒ’a</i> 3-give-IMP-OPT ‘May (he) give!’	<i>o-x:-uba-ʒ’a</i> 3-give-PROH-OPT ‘May (he) not give!’

Table 5. Positive and negative imperatives and optatives in Northern Akhvakh (examples courtesy of Indira Abdullaeva).

Finally, the jussive/optative argument inherits its case from the lexical verb: ergative if the lexical verb is transitive, nominative if the lexical verb is intransitive, dative (or equivalent case) if the verb is experiential (see examples 12, 13, 14). The lexical imperative, therefore, retains a certain independence.

At the same time, the very fact that the lexical verb has an overtly expressed argument speaks for the boundness of the jussive/optative form. Normally, imperative clauses cannot contain third-person subjects. Although there are some special types of contexts when this is possible (only in the presence of the interlocutor; see Dobrushina 2019: 124-125), in the regular situation, imperative clauses are subjectless or contain second person pronouns. Meanwhile, jussive/optative clauses commonly have overt third-person subjects whose case is assigned by the embedded imperative. This means that the subject of jussive/optative clauses is induced by the jussive/optative form as a whole rather than by the embedded imperative: the possibility of having an overt third-person subject is due to the fact that jussives/optatives allow it, unlike second-person imperatives.

‘Say’ jussives/optatives add to the list of the Nakh-Daghestanian forms which exhibit the mixed properties of being morphologically bounded and containing two predicates with certain morphosyntactic independence (see verificatives – Maisak 2016, Daniel & Maisak 2014, and reportatives – Chumakina 2019, Arkadjev & Maisak 2018, Kibrik 1977).

Now, the tentative grammaticalization path for these forms can be discussed.

3.6. Grammaticalization path

In all the languages considered above, the jussive/optative form developed from the reported speech construction with two imperatives. The origin of such a form can be traced based not only on its suffix, but also on its stem. The stem corresponds to the first imperative in the construction (that of the lexical verb), the suffix corresponds to the second imperative (that of the verb ‘say’). Negative counterparts of ‘say’-based jussives and optatives were grammaticalized directly from the reported speech construction with prohibitive and ‘say’-imperatives.

Left-branching syntax, typical of Nakh-Daghestanian languages, could facilitate the coalescence of two imperatives. In Nakh-Daghestanian languages, all arguments tend to be placed to the left of the verb, so that, for example, the sentence ‘Say bring the book to school’ might be literally realized as ‘To school the book bring say’, where the two imperatives are juxtaposed (see examples 11 and 36).

Several facts suggest that ‘say’-optatives occur at a later stage of grammaticalization than jussives. Firstly, while there are jussives which contain the full form of the imperative of the verb ‘say’ (in Mehweb, Archi, Chirag Dargwa, and Avar), there are no such optatives – in optatives, the ‘say’-element is always reduced to a suffix. Secondly, jussives with the ‘say’-element may retain the possibility of argument marking with overtly expressed addressees inherited from the verb ‘say’ (as is partly the case in Archi), while optatives with ‘say’-elements do not show any traces of the argument-marking of the verb ‘say’. Thirdly, there are ‘say’-jussives which do not express an optative meaning (such as in Mehweb or Archi), but there are no ‘say’-optatives which do not also express a jussive meaning. This all points to the fact that ‘say’-optatives develop from ‘say’-jussives by the extension of the jussive meaning to other persons and its transformation to the optative.

The resulting optative form demonstrates further loss of the lexical content of the verb ‘say’. While the jussive often implies the presence of the mediator who will transmit the command to the third person, wishes are meant to be fulfilled by a supernatural power (in Daghestan, usually Allah or, rarely, shaitan in the case of a curse), and there is no need for the mediator between the speaker and the supernatural power. This is especially clear with second-person optatives, such as ‘May you go to hell’:

(40) Khwarshi (Nakh-Daghestanian, Tsezic; Khalilova 2009: 249-251)

žučah-ma-l b-ek'lo-λo mízho
hell-IN-LAT HPL-fall.IMP-OPT you.PL.ABS
'May you go to hell!'

The original reported speech construction which underlies this expression is 'to hell fall.IMP say.IMP you', where 'you' is an argument of the verb 'fall'. The interlocutor to whom the imperative 'say' is addressed and the potential subject of this curse coincide (*'you tell you "you go to hell"'), which does not make any sense.

In addition, 'say'-optatives have a wider range of functions compared to jussives, since they express both indirect commands and wishes, thereby covering a broader range of volitional meanings. This can be qualified as the process of *desemanticization*, or *semantic bleaching*, accompanied by the contraction of the 'say'-imperative (*phonological reduction*).

We can suggest the following grammaticalization path for 'say'-optatives. The starting point is a reportative construction meaning 'tell him to do smth' which contains two verbs: the imperative of the verb 'say' and the imperative of the lexical verb. In this construction, the addressee is encoded by the case which is normally used in this language for the addressee with the verb 'say':

noun.ADDRESSEE verb.IMP say.IMP

This stage is illustrated by examples (11) and (36).

Later, another argument pattern may develop. Instead of marking the subject of the intended situation as an addressee (licensed by 'say'), the new argument emerges in the form assigned by the lexical verb: ergative with transitive verb, nominative with intransitive verbs, dative or another case with experiential verbs (examples (12)-(14)):

noun.NOM/ERG/EXP verb.IMP say.IMP

At this stage, variation may be present when the encoding of the arguments follows either the pattern of reported speech with an overtly expressed addressee or is assigned by the lexical verb. This case is illustrated by example (23a). Most likely, at this time, the construction develops other usages, which are incompatible with the

lexical ‘say’. For example, the contexts with an inanimate subject cannot be interpreted as a reported speech construction, such as “Let the soup boil”, where the ‘soup’ cannot be an addressee (example (16)):

animate/inanimate noun.NOM/ERG/EXP verb.IMP say.IMP

Later, the imperative of the verb ‘say’ can be reduced and become a bound suffix (this stage is found in Lak and Godoberi, see examples (28b-c)):

noun.NOM/ERG/EXP verb.IMP-JUSS

Finally, at the last stage, the form extends its meaning to the wishes, and starts being used not only with third-person subjects but also with first and second persons. I classify this form as an optative (see examples (30a-d)).

noun.NOM/ERG/EXP verb.IMP-OPT

In Nakh-Daghestanian languages, different stages of grammaticalization of the verb ‘say’ to jussives and optatives were attested: from the periphrastic forms with two imperatives to synthetic forms with a bound suffix originating from ‘say’.

4. Diffusion of ‘say’-jussives and optatives across Nakh-Daghestanian languages

From the 13⁶ Nakh-Daghestanian languages discussed above, nine languages are closely related, all belonging to the same Avar-Andic-Tsezic branch (Avar, Northern Akhvakh, Chamalal, Godoberi, Hinuq, Karata, Khwarshi, Tindi, and Tsez). The other four languages belong to the other three branches: Dargwa (Mehweb and Chirag), Lezgi (Archi), and Lak, which constitutes a separate branch (Lak) (see Figure 2). Since the pattern of ‘say’ jussives and optatives is typologically infrequent, the following question arises: how did all these languages develop the same jussive/optative grammaticalization pattern? Was it due to inheritance or contact?

⁶ There is, however, one more language which is likely to have ‘say’-optative, but needs special discussion (Dobrushina, accepted for publication) – Rutul, a language of the Lezgi branch.



Figure 2. Map of ‘say’-jussives and optatives (courtesy of Yuri Koryakov).

4.1. Avar-Andic-Tsezic languages

Although ‘say’-suffixes in Andic and Tsezic languages look similar, there are significant differences between them. As follows from Table 6, the verb ‘say’ has a non-ejective lateral λ in Tsezic languages, and an ejective lateral consonant λ' in Andic languages, including Northern Akhvakh, where the ejective lateral is geminated. The same distinction holds for the optative suffixes. The correspondence between non-ejective lateral λ , ejective lateral λ' , and geminated ejective lateral $\lambda\lambda'$ is regular in Andic and Tsezic languages; cf. the word ‘meat’ in those Andic and Tsezic languages which have the same root for it (Table 6).

In the closely related Avar, the verb *abize* (‘say’, infinitive) is not a cognate to the Andic and Tsezic forms. Avar has periphrastic jussives based on the imperative of this verb, *abe* ‘say.IMP’. This verb is not found in Andic and Tsezic languages, nor is the verb with a lateral root found in Avar (Mudrak 2019, 2020). It could have been the case that the proto-Avar-Andic-Tsezic root with a lateral consonant was lost in Avar

and replaced by a new verb (however, note that, according to the reconstruction in Nikolaev & Starostin 1994, both roots existed on the Proto-North-Caucasian level, although their meaning could have changed).

Language	Group	‘meat’	‘say’-IMP	Optative suffix
Northern Akhvakh	Andic	<i>riʎːʔi</i>	<i>eʎːʔa</i>	<i>-ʎːʔa</i>
Karata	Andic	<i>riʎːʔi</i>	<i>keʎːʔã</i>	<i>-ʎːʔa</i>
Chamalal	Andic	<i>jiʎːʔi</i>	<i>iʎːʔa</i>	<i>-ʎːʔa</i>
Godoberi	Andic	<i>riʎːʔi</i>	<i>hiʎːʔa</i>	<i>-ʎːʔa</i>
Tindi	Andic	<i>jiʎːʔi</i>	<i>hiʎːʔa</i>	<i>-ʎːʔa</i>
Khwarshi	Tsezic	<i>liʎ</i>	<i>iʎo</i>	<i>-ʎo</i>
Tsez	Tsezic	<i>reʎ</i>	<i>eʎo</i>	<i>-oʎ/-ʎ</i>

Table 6. ‘Meat’, ‘say’ and optative suffix in Andic and Tsezic languages (Kibrik & Kodzasov 1990, Filatov & Daniel 2021).

Therefore, Avar, Andic, and Tsezic languages use their own verbs to construct a jussive/optative. This means that there was no borrowing of matter involved in the diffusion of ‘say’-forms. The inheritance of the whole form from the proto-Avar-Andic-Tsezic is also unlikely. Firstly, because the Avar form is very different from other languages. Secondly, because in Chamalal, Tindi, and Anchiq Karata the lexical imperative retains inflection in number and hence is rather “young”. Thirdly, because in Tsezic languages the suffix looks different depending on the imperative suffix in a respective language (*-ʎo* in Hinuq, *-ʎo* (*-ʎa*) in Khwarshi, *-oʎ* (*-ʎ*) in Tsez), which shows that the development of the synthetic form took place in individual languages.

If we reject the option of borrowing or inheriting synthetic form, we should consider the scenarios of the emergence of a structural pattern, which later developed into synthetic forms in each language. Two such scenarios are possible.

According to the first scenario, that of inheritance, the ‘say’-construction was present at the level of proto-Avar-Andic-Tsezic. It was then retained in some Avar-Andic-Tsezic languages, and lost in others (such as Botlikh, Bagvalal, Bezhta and Hunzib). In the languages where the pattern was retained, the verbs underwent certain phonological changes before they became suffixes. In Avar, the pattern was probably lost when Avar lost the proto-Avar-Andic-Tsezic verb ‘say’ and was renewed by using a new verb ‘say’. This is why Avar has the periphrastic form and uses another verb as compared to all other languages.

The second scenario, that of a contact-induced diffusion, suggests that the ‘say’-pattern emerged in one of the Avar-Andic-Tsezic languages and spread through horizontal transmission due to the contact between these languages⁷. It seems certain that what was copied was a construction (periphrastic form) rather than a synthetic form. In order to be copied and transferred, the structural pattern should be visible and transparent. The synthetic form with the verb ‘say’ reduced to a suffix could hardly have been recognized by the speakers as a structural pattern that can be copied. Since the languages borrowed the structure rather than the matter, each utilized its own ‘say’-verb and its own imperative affix.

In the latter case, it is unclear which language could have been the source of the pattern. Socio-linguistically, the most likely candidate is Avar. At the moment, all Avar-Andic-Tsezic languages form an area with Avar as a *lingua franca*. Avar is spoken as a second language by almost everyone and is used for inter-ethnic communication. Its influence is quite strong, and there are instances of various borrowings from Avar to Andic and Tsezic languages. What prevents one from accepting this hypothesis is that it is in Avar that the construction looks young: the verb ‘say’ is not reduced to a suffix. It could have been the case that Avar had lost the ‘say’-construction and renewed it later, as suggested above. Another alternative is that, on the contrary, jussive construction in Avar developed under the influence of Andic and Tsezic languages. While linguistically this direction is the most plausible, socio-linguistically it is not, because most Andic and Tsezic languages are minorities and are usually not spoken as second languages even by small adjacent groups, let alone the Avar people.

The two scenarios could have been combined. One of the sub-branches could inherit the pattern from the proto-language. The pattern could have been further diffused to other languages due to contact. In any case, the synthetic form developed separately in each language or dialect.

4.2. *Non Avar-Andic-Tsezic languages*

The scenario of inheritance is excluded for the four non-Avar-Andic-Tsezic languages – Mehweb Dargwa, Chirag Dargwa, Archi and Lak. They belong to different branches,

⁷ Cf. Nasledskova & Netkachev (submitted) for the study of a diffusion of structural pattern with the verb ‘say’ for ordinal pronouns.

and other languages in these branches seem not to have ‘say’-jussives or optatives (except Rutul – Dobrushina, accepted for publication). Meanwhile, the contact origin of the ‘say’-forms in these languages seems quite probable, since they are all spoken within one contiguous geographic zone. The Dargwa language Mehweb and Lezgian language Archi (both minority languages) are surrounded by the speakers of Avar and Lak, both large influential languages in which Mehweb and Archi people were bilingual (Dobrushina 2013, Dobrushina 2019). Chirag Dargwa people border Lak, and many of them were bilingual in Lak (Ganenkova 2026). All these languages use their own verbs ‘say’ for jussives and optatives while sharing the structural pattern. I suppose that Lak or Avar or both could have been the sources of this shared grammaticalization. Mehweb Dargwa, Chirag Dargwa, and Archi have a “new” periphrastic form for jussives. Lak has a synthetic (thus probably older) form, which makes it a suitable candidate to be the source of the pattern.

It is important to note that the form with the ‘say’-element in Mehweb Dargwa, Chirag Dargwa, Archi, and Lak seems younger compared to the form in Andic and Tsezic languages. Most Andic/Tsezic ‘say’-forms developed an optative meaning. As I showed in Section 3.6, this meaning emerges at later stages of grammaticalization. This suggests that the Avar-Andic-Tsezic area might have been the starting point of the diffusion.

4.3. Diffusion of ‘say’-jussives and optatives: summary

I suggested that the structural pattern of ‘say’ jussives and optatives first spread among Avar-Andic-Tsezic languages due to inheritance, contact, or both, and then influenced non-Avar-Andic-Tsezic languages spoken in the same area.

As was shown above (Section 3.6), the development from reported speech constructions to inflectional forms is similar in all thirteen languages: change of argument marking of the verb ‘say’, loss of its meaning, phonological reduction, and emergence of optative usages. The noticeable similarity of the grammaticalization processes in different languages is in accordance with the findings of grammaticalization and language contact studies: “contact-induced grammaticalization proceeds in one direction from one stage to the next, where a new stage is built on the stage immediately preceding it” (Heine & Kuteva 2020: 94).

5. Conclusion

The pattern of grammaticalization of jussives from the verb ‘say’ covers a large territory of at least 13 languages from different branches of the Nakh-Daghestanian family. I have shown that what was shared by all these languages and dialects was a reported speech construction with two imperatives (*verb.IMP say.IMP*). The study demonstrated that tracing the suffix back to its lexical source is not sufficient to uncover its origin. In line with the study by Spronck & Casartelli (2021), which deals with the grammaticalization of reported speech rather than the verb ‘say’, the case of grammaticalization described in this paper distinctly showed that the reported speech construction was at the source of jussives and optatives. The traces of two predicates can be seen in the stems and the bound suffixes of inflectional jussives and optatives. Some processes of grammaticalization had already taken place at the level of the constructions, including the changes in the argument coding and semantics. As formulated by Bybee (2006: 730), “grammar is built up from specific instances of use that marry lexical items with constructions”.

In the course of grammaticalization, the verb ‘say’ underwent desemanticization. Just as quotative markers are usually attested in complement clauses with verbs of thinking and knowledge or emotional predicates, as well as clauses expressing cause and purpose, ‘say’-jussives and optatives drifted away from the reportative construction. Firstly, they obtained the ability to combine with inanimate subjects and denote indifference. Later, they developed the meaning of the speaker’s wish.

In the study of the contexts where the speech verbs are used in functions that are not explicable in terms of their primary meaning in the languages of Siberia, Matić & Pakendorf (2013) come to the conclusion that practically all functions of speech verbs can be reduced to one common semantic/pragmatic feature labelled *dissociation* which highlights the fact that the speaker distances him/herself from the representation of a spoken or mental text (see the definition in Güldemann 2008: 6). This observation does not hold for jussives. Although the speaker delegates the command to the third person or the fulfilment of the blessing or curse to the supernatural forces, the dissociation is not in the focus of this pattern. The verb ‘say’ in jussives plays a role which in many other languages is played by causative verbs, such as *let* in English, *pustit’* (‘let’) in Russian or the causative morpheme in Chechen. The role of the verb ‘say’ is therefore close to that of ‘order’ or ‘request’. This was noticed in the typological study of the most frequent diachronic processes of

emergence of positive directive strategies by Mauri & Sanso (2011). In their sample of 200 languages, they found only one language that used the verb ‘say’ as a source for the jussive; unsurprisingly, it was the Nakh-Daghestanian language, Chamalal. Mauri & Sanso (2011) qualified this case as a subtype of causative-based jussives.

While the jussives based on causative-proper verbs are common, ‘say’-based jussives seem rare. The factor that enhanced its wide expansion in Daghestan might be related to the very fact that the ‘say’-forms serve for the indirect command. As was repeatedly observed, pragmatically motivated linguistic items with interactional meaning are easily borrowed and quickly diffused between languages (Aikhenvald 2007: 261, Andersen 2014, Daniels & Brooks 2019: 536). The indirect commands are prominent discourse forms; frequently encountered in dialogues, they are easily spotted, copied, and used.

The combination of inheritance and contact led to the wide diffusion of the typologically infrequent grammaticalization pattern with reported imperatives used for jussives. The pattern emerged in the Avar-Andic-Tsezic proto-language or was already at the level of descendant languages, was maintained, lost, or renewed due to contact, and spread to the non-Avar-Andic-Tsezic languages, resulting in a grammaticalization area spanning a large territory of the Central and Northern Daghestan.

Acknowledgements

First of all, I would like to express my sincere gratitude to the native consultants. Without their willingness to share their knowledge, this paper would not have been possible. I am also grateful to Michael Daniel, Timur Maisak, and Konstantin Filatov for discussing some of the preliminary findings of the study with me. Finally, I thank the editors and anonymous reviewers for their helpful comments on this paper.

Abbreviation

1,2,3,4,5 = gender markers	F = feminine	LAT = motion into a spatial domain
ABS = absolutive	GEN = genitive	LCT = locutor
ALL = allative	HPL = human plural	LOC = locative
APUD = spatial domain near a hallmark	IMP = imperative	LV = light verb
ATTR = attributivizer	IMP1 = imperative in transitive imperative utterances where p is expressed by a first person pronoun	NOM = nominative
CAUS = causative	IN = spatial domain inside a (hollow) landmark	NPL = non-human plural
COMIT = comitative	INCL = inclusive	OBL = oblique
COND = conditional	INTER = spatial domain between multiple landmarks	OPT = optative
CONT = spatial domain in contact with a hallmark	IPFV = imperfective	PFV = perfective
CVS = converb	IRR = irrealis	PL = plural
DAT = dative	JUSS = jussive	PROH = prohibitive
DEM = demonstrative		PRS = present
EMPH = emphatic		PTCP = participle
ERG = ergative		PV = preverb
EXP = experiential		SG = singular

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