



# Some observations on Moksha passive

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# Structure of our talk

- Canonical passive in Moksha
- Other passive constructions
- Constraints on passive constructions
- Modality in Moksha passive sentences
- Some typological parallels
- Conclusions

# Passive

- Transitive clause in (1) and passive one in (2).

(1) *vas'ε-n' s'embə kel'g-əz'*  
Vasya-GEN all like-PST.3.O.3.PL.S\*  
'Everyone loved Vasya'.

(2) *vas'ε (s'embə-n'd'i) kel'g-əv-s'*  
Vasya all-DAT like-PASS-PST.3SG  
'Vasya was loved (by everyone)'.

- Argument marking: initial DO → SUBJ (nominative NP), initial SUBJ → optional adjunct (dative NP).
- Agreement: only the subject of a passive is indexed in a verb.

\* Glosses are simplified as compared with the actual glossing rules used in the Moksha expedition project.

# Variety of constructions

- Apart from canonical passive in (2) and (3), there are also other possible constructions with  $-(ə)v-$ .

(3) *mon'd'ejən t'εči pid'-əv-s' l'εm*  
I.DAT            today    cook-PASS-PST.3SG    soup  
'I cooked a soup today'.

later: Dat-Nom

(4) *mon t'εči pid'-əv-ən' l'εm*  
I            today    cook-PASS-PST.1SG    soup  
'I cooked a soup today'.

later: Nom-Nom

- In (4), the verb contains passive morphology, however, it agrees with the initial subject (in nominative).
- The meanings of (3) and (4) seem to be the same at first sight.

# Variety of constructions

- Intransitive verbs also combine with the suffix *-v-*.
- Two possible outcomes: initial subject either retains its nominative case (5) or changes it to dative (6).

(5) *mon vor'gəd'-əv-ən' s'ε vast-t' ezdə* later: Nom  
I escape-PASS-PST.1SG this place-DEF.SG.GEN in.ABL  
'I escaped from this place'.

(6) *mon'd'ejən vor'gəd'-əv-s' s'ε vast-t' ezdə* later: Dat  
I.DAT escape-PASS-PST.3SG this place-DEF.SG.GEN in.ABL  
'I escaped from this place'.

- In the last case, the verb takes default agreement (3SG).
- The meanings of (5) and (6) seem to be the same at first sight.

# Syntactic properties

- Common syntactic tests also do not reveal any differences between properties of the dative and nominative subject NPs.
- Control of reflexive pronouns:

(7) *maša-n'd'i / maša šta-v-s' es' panar-c*  
Masha-DAT Masha wash-PASS-PST.3SG REFL.POSS dress-3SG.POSS.SG  
'Masha washed her (own) dress'.

- Control of PRO in subordinate clauses:

(8) *pet'ε-n'd'i / pet'ε kočka-v-s' jarmak rama-m-s mašina*  
Petya-DAT Petya collect-PASS-PST.3SG money buy-INF-ILL car  
'Petya collected money to buy a car'.

# Our goal

- There are yet other constructions with -v- derivatives in Moksha (e. g. anticausative).
- We will focus just on 4 constructions illustrated above and try to answer the following questions:
  - How can we distinguish between 2 constructions from transitive verbs and 2 from intransitive ones?
  - What is the function of the passive marker in these cases?
  - Does it contribute something to the semantics of a clause?
  - Do we find something similar in other languages?



# Our constructions



# Constraints on 1<sup>st</sup> argument

- Despite the seeming similarity of the constructions in question there are a few (mainly semantic) parameters that allow us to distinguish between them.
- Nom-Nom does not accept an inanimate 1<sup>st</sup> participant.

(9) \**mašinka-s'* / *mašinka-t'i*      *višk-stə*    *sta-v-i*      *panər*  
machine-DEF.SG machine-DEF.SG.DAT strong-EL sew-PASS-NPST.3SG dress  
'A machine can sew a dress quickly'.

(10) *maša* / *maša-n'd'i*    *višk-stə*    *sta-v-i*      *panər*  
Masha Masha-DAT strong-EL sew-PASS-NPST.3SG dress  
'Masha can sew a dress quickly'.

- The same is presumably true of Dat.

# Constraints on 2<sup>nd</sup> argument

- Nom-Nom does not accept a definite 2<sup>nd</sup> participate.

(11) *vas'ε luv-əv-s' kn'iga / \*kn'iga-s'*  
Vasya read-PASS-PST.3SG book book-DEF.SG  
'Vasya managed to read a / \*the book'.

(12) *vas'ε-n'd'i luv-əv-s' kn'iga / kn'iga-s'*  
Vasya-DAT read-PASS-PST.3SG book book-DEF.SG  
'Vasya managed to read a / the book'.

# Constraints on predicate

- Dat is not possible with a patientive intransitive predicate.

(13) \**mon'd'ejən ban'a-sə l'ivəs'kəd-əv-s'*  
I.DAT sauna-IN sweat-PASS-PST.3SG

Expected meaning: 'I managed to sweat in Russian baths'.

- Nom-Nom and Dat are not possible with an experiential predicate.

(14) *maša-n'd'i / \*maša nejə-v-i loman'*  
Masha-DAT Masha see-PASS-NPST.3SG man

'Masha can see a man'.

(15) *vas'ε / \*vas'ε-n'd'i af ken'ard'-əv-i*  
Vasya Vasya-DAT NEG be.happy-PASS-NPST.3SG

'Vasya cannot be happy'.

# Our constructions in comparison

Table 1. Constraints on different constructions

	Dat-Nom	Nom-Nom	Dat	Nom
Inanimate 1 <sup>st</sup> participant	+	-	-	+
Definite 2 <sup>nd</sup> participant	+	-		
Experiential predicate	+	-	-	+
Intransitive patientive predicate			-	+

# Our constructions in comparison

- Nom-Nom and Dat appear to have strikingly similar (practically the same!) constraints.
- On the contrary, Dat-Nom and Nom constructions do not have any constraints whatsoever.
- Any *-v-* derivative formed from a transitive verb can appear in Dat-Nom regardless of its surroundings.
- Likewise, *-v-* derivatives formed from intransitive verbs may freely appear in Nom.
- Nom-Nom and Dat constructions are significantly more restricted than Dat-Nom and Nom respectively.

# Further constraints

- Dat cannot be formed with derivatives of labile verbs, as the transitive interpretation “wins” (*narams* ‘to shave someone / oneself’).
- The construction is perceived as Dat-Nom and arises the need of adding a 2<sup>nd</sup> participant.

(16) *vas'ε nara-v-s'*

Vasya shave-PASS-PST.3SG

‘Vasya managed to shave himself’.

(17) *vas'ε-n'd'i nara-v-s'*      \*(*pet'ε*)

Vasya-DAT shave-PASS-PST.3SG Petya

‘Vasya managed to shave Petya’.

Expected meaning: ‘Vasya managed to shave himself’.

# Further constraints

- The impossibility of Nom-Nom with transitive experiential predicates might be explained in a similar way.
- Nom-Nom and Dat constructions indeed have significant restrictions, which result in their infrequent appearance in speech.
- We believe that these constructions appeared at a later stage of development of *-v-* derivatives, probably as a result of analogy.
- Furthermore, there is actually much of variation within the language community: a considerable part of speakers do not accept Nom-Nom (and some speakers also Dat) at all.

# Transitive passive

- In Nom-Nom construction, the 1<sup>st</sup> argument is not demoted and the 2<sup>nd</sup> one is not promoted.
- Actually, what we find here is a “passive” derivative in a transitive clause, which is rather unexpected (DO in Moksha remains unmarked if it is indefinite).

(18) *maša pid'-i lɛm*  
Masha cook-NPST.3SG soup  
'Masha is cooking soup'.

(19) *maša pid'-əv-i lɛm*  
Masha cook-PASS-NPST.3SG soup  
'Masha can cook soup'.

# The taste of -v-

- One can find the same contrast in Nom.

(20) *maša koməc'*

Masha jump.PST.3SG

'Masha jumped'.

(21) *maša komət'-əv-s'*

Masha jump-PASS-PST.3SG

'Masha managed to jump'.

- The difference between (18) and (19), (20) and (21) lies in the modal semantics added by -v-.



Our modality



# When we meet our modality

- Passive verbs are modalized expressions in our constructions, except:
  - Dat-Nom with unexpressed subject;
  - Dat-Nom from experiential predicates.

(22) *val'mε-s'      pan'ž-əv-s'      štobə      aru-ftə-m-s      komnata-t'*  
window-DEF.SG    open-PASS-PST.3SG    in.order    clear-CAUS-INF-ILL    room-DEF.SG.GEN  
'The window was opened in order to clean air'.

(23) *petε-n'd'i    maša    kel'g-əv-i*  
Petya-DAT    Masha    like-PASS-NPST.3SG  
'Petya likes Masha'.

- For transitive verbs, it is namely these 2 environments that lack explicit agent: in (22) it is omitted, in (23) the dative NP is experiencer.

# Possible interpretations

- In all other cases we find additional semantics which can usually be described as modal (~ ‘to manage’ or ‘to be able to’).
- However, *-v-* derivatives allow other interpretations as well.

(24) *mon nara-v-ən'*

I shave-PASS-PST.1SG

- a. ‘I managed to shave myself (although the razor was blunt)’.
  - b. ‘I finally shaved myself (and earlier there was no water)’.
  - c. ‘I finished shaving myself (and am ready to go)’.
- Three different translations of such constructions are possible.
  - Do they truly reflect distinct meanings of the suffix?
  - We believe that this diversity arises (mainly) from the context.

# Possible interpretations

- The completive interpretation ‘to finish’ is possible for weak telic predicates; the modal one ‘to manage, to be able to’ for agentive ones; the ‘finally’ interpretation is possible for all predicates.
- Some predicates such as agentive *narams* in (24) allow all three interpretations, some have only two or one of them.
- See, for instance, patientive *kos'kəms* ‘to dry (intr.)’ which is a strong telic predicate in Moksha and cannot describe a process in the past.

- (25) *prost'ina-t'n'ə kos'k-əv-s'-t'*  
sheet-DEF.PL      dry-PASS-PST.3-PL
- a. ‘The sheets finally dried.’
  - b. \*‘The sheets finished drying’.
  - c. \*‘The sheets managed to dry’.

# Recursive derivation

- We suppose that if the three interpretations listed above truly represented separate meanings, it would be possible to use recursive attachment of the suffix to combine various meanings of *-v-*, such as ‘to finally manage’.
- However, we do not find any examples of this kind, whereas there are other cases, when recursive *-v-* derivation is possible.
- The first *-v-* must indeed bear a separate meaning (such as the anticausative one in the example below).

(26) *s'embə radn'ε-t'n'ə kočka-v-əv-s'-t' mar-s*  
all relative-DEF.PL gather-PASS-PASS-PST.3-PL pile-ILL  
‘All the relatives managed to gather together (is was difficult)’.

# Recursive derivation

- Or it does not express any semantics (!) and serves to form a prototypical passive construction.

(27) *pet'ε-n'd'i af kel'g-əv-i maša, no kel'g-əv-əv-i*  
Petya-DAT NEG love-PASS-NPST.3SG Masha HO love-PASS-PASS-NPST.3SG  
'Petya does not love Masha, but he will be able\* to love her'.

- The second *-v-* in such cases introduces one of the interpretations illustrated before.

\* The verb *kel'gams* 'to love' is not agentive, however, 'to be able' is used in the translation. So we have some shift here. 23

# Modality in Moksha

- Rather heterogeneous system: PASS & NMLZ suffixes, lexical verb *maštəms* ‘to be able’, *er'avəms* ‘to need’ (lexicalized passive derivative of *er'ams* ‘to live’), particles, Russian adverbs, code-switching.
- Modal force is settled lexically.
- Epistemic / non-epistemic modality expressed via distinct strategies.
- Modal flavours are not usually differentiated in necessity modals.

Table 2. Modal forces and modal flavours in Moksha (in terms of Matthewson (in press))

	Circumstantial	Deontic	Epistemic
◇	-əv, <i>maštəms</i> , (МОЖЕТ, МОЖЕШЬ...)	(možna)	particles
□	-ma, <i>er'avəms</i> , ( <i>savəms</i> )	-ma, <i>er'avəms</i>	we don't know :)

# Passive suffix vs. *maštəms*

- Both passive derivative and *maštəms* can be translated as ‘to be able’.
- However, these ones are different types of ability.
- *Maštəms* describes generic participant-internal ability (individual-level state).
- *-v-* is usually used when we speak about the ability to perform a single action.

(28) A: *uj-t'*                      B: *mon af uj-əv-an*  
         swim-IMP.2SG            I            NEG swim-PASS-NPST.1SG  
A: *a mes?*                      B: *da af mast-an uj-əmə*  
         but why                      well NEG can-NPST.1SG swim-INF

‘A: Swim! B: I won’t be able to swim (now)’.

‘A: But why? B: Well, I can’t swim (at all)’.

# Actuality entailments of ability modals

- Ability modals + perfective aspect = implicative inference (“actuality entailment”).
- Cf. *passé composé* (29) vs. *imparfait* (30) in French.

(29) *Jean a pu prendre le train, #mais il ne l'a pas pris.*  
John has can.PST.PFV take the train but he not that.has taken  
‘John managed to take the train, #but he did not take it’.

(30) *Jean pouvait prendre le train, mais il ne l'a pas pris.*  
John can.PST.IPFV take the train but he not that.has taken  
‘John could have taken the train, but he did not take it’.

- A good deal of literature: Bhatt (1999), Hacquard (2006, 2009, 2014), Mari & Martin (2007), Mari (ms.), just to name a few.

# Moksha passive in the present tense

- There are no perfective vs. imperfective pairs, but “plain” vs. frequentative\* verbs.

- (31) *c'ora-n'ε-s'    jaka-v-i* (potential)  
boy-DIM-DEF.SG go.FREQ-PASS-NPST.3SG ability  
'The boy can go (after he was ill).'
- (32) *son višk-stə    mol'-əv-i    no jaka-j    valəm* non-actualized  
he intense-EL go-PASS-NPST.3SG but go.FREQ-NPST.3SG slow ability  
'He can go rapidly but (usually) goes slowly'.
- (33) *son mol'-əv-i    kud-u* actualized  
he go-PASS-NPST.3SG home-LAT ability  
'He is able to go home (and succeeds in it, though he is lame).'

\* This is the only suppletive pair in Moksha that is used in the examples above.

# Moksha passive in the past tense

- Two major functions of *-l-* (“second past tense”): past habitual (competes with simple past tense) and conditional.

(34) *ingəl'i min' jaka-v-əl'-əmə / <sup>OK</sup>jaka-v-əmə oš-u* past habitual, actualized ability  
formerly we go.FREQ-PASS-PQP-PST.1PL go.FREQ-PASS-PST.1PL city-LAT  
‘Earlier, we could go to the city (and did so, but now we can’t)’.

(35) *mon is'ak mol'-əv-əl'-ən' (bə)/#mol'-əv-ən' ul'c'a-v* episodical, non-actualized ability = conditional  
I yesterday go-PASS-PQP-PST.1SG go-PASS-PST.1SG outdoors-LAT  
‘Yesterday, I could go outside (but it was too cold, so I didn’t)’.

- In case of non-actualized ability in the past, one needs *-l-* on top of a passive verb.

# Moksha passive in the past tense

- Negation test:

(36) *mon mol'-əv-ən' saldak-ən' iļ't'-əmə*  
I go-PASS-PST.1SG soldier-GEN see.off-INF  
*no iz'-ən' #mol'-ə / <sup>OK</sup>s'im-ə*  
but NEG-PST.1SG go-CN drink-CN

episodical,  
actualized  
ability

- a. 'I was able to go to see off the soldier, but I didn't drink.'
- b. \*'I was able to go to see off the soldier, but I didn't go.'

- We always find actuality entailments in the past tense with *-v-* derivatives in all our constructions.

# Typological parallels: Indo-Aryan

- In addition to regular passive, passive constructions may exhibit some modal meaning (“inabilitative” passive); cf. ex. from Hindi.

(37) *mujh-se kuchh-bhii kah-aa nahĩ: gay-aa*

I.OBL-INSTR something-even say-PFV NEG PASS-PFV

‘I couldn’t say anything’ (see Bhatt (2003) and references therein).

- As well as in Moksha, the modal meaning vanishes when the demoted subject is omitted.

(38) *kuchh-bhii kah-aa nahĩ: gay-aa*

something-even say-PFV NEG PASS-PFV

a. ‘Nothing was said’.

b. \*‘Nothing could be said’.

# Typological parallels: Indo-Aryan

- However, in Hindi inability meaning appears only in affected environments: under negation, in implicit negation questions, conditionals, with *only*, adverbs of difficulty or unlikelihood etc.
- Unlike most other Indo-Aryan languages, Kashmiri (Dardic subgroup) does not have any restrictions on the availability of (in)ability reading (Srishti & Bhat 2014).
- It is readily formed from transitive and intransitive predicates, but cannot be formed from stative predicates.

(39) \**farooq-ni zaryi aayi-nI bochi lag-nI*  
Farooq-GEN by come-PRF-NEG hunger happen-INF.OBL  
Expected meaning: ‘Farooq was not able to be hungry.’

# Conclusions

- There is normal passive in Moksha, but only in constructions with experiential verbs or omitted agent.
- In all other cases, irrespective of actual argument structure, *-v-* contributes something to the semantics of a clause.
- We believe that *-v-* in our constructions is an ability modal with actuality entailments in the past tense.
- There are some typological parallels for similar development of modal meanings of passive, for example, in Indo-Aryan...
  - But in Moksha modal meaning does not require affected environments!
  - And passive is formed with a suffix :)

# Conclusions

- We see that common syntactic tests do not reveal any differences between our constructions.
- The constraints on their use are mainly semantic, for example, animacy or definiteness of arguments.
- It might be the case that the modality introduced by the *-v-* suffix in different constructions is a little bit different.
- However, this is the subject of yet another talk :)



Thank you for your attention!

