Variable-force modality and inevitability in Tatyshly Udmurt: the case of the *-(o)no* modal form

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INTRO

➢ **What:**
modal participle on *-(o)no*, which displays the effects of variable-force modality (see Rullmann et al. 2008, Deal 2011, Newkirk 2022, a.o.)

➢ **Where & when:**
Tatyshly Udmurt < Permic < Uralic languages
Fieldwork in the Tatyshly district of the Republic of Bashkortostan (Russia) in 2022-2023
More details: *https://tatyshly-udmurt.tilda.ws*

Methodology:
elicitation sessions with 8 native speakers of Tatyshly Udmurt
✓ translation task from Russian into Udmurt (context types according to Vander Klok 2022)
✓ felicity judgment task (to evaluate whether the form is felicitous in the designed contexts triggering possibility or necessity reading)
✓ diagnostics suggested for variable-force modals (e.g. downward-entailing contexts (Neg, UQ, etc.), see Mirrazi & Zeijlstra 2022)

Interpretation of -ono depends on its syntactic position:

DATA

attributive

➢ **Affirmative contexts:** variable modal force (1) or "generic" (2) meaning
(1) *mon* **uža-no** *zadač'a-jez tod-is'ko-Ø.*
   I   work-deb task-acc   know-prs-1sg
   'I know which task I **can / must** work on'.
(2) a. *ul-ono gurt*   b. *lob-ono tôloburdo*
      'a village **where people live**'   'a **migratory** bird'

➢ **Negation:** possibility/ ?necessity, esp. for more lexicalized items like (3)
(3) *ton mônôm* **les't-on-tem** *už-ez s'ot-i-d.*
   you I.dat   do-deb-neg   work-acc give-pst-2sg
   'You've given me a task which is **impossible** to do'. [neg>can]
   *'You've given me a task which **needn't be done**'.
      [neg>must = can>neg]
(4) *mon* **mis'k-on-tem** *derem-ez vaj-i- Ø.*
   I   wash-deb-neg   shirt-acc bring-pst-1sg
   'I brought a shirt that **needn't be washed** {it's clean}' .
   [neg>must = can>neg]
   ?'I brought a shirt that is **impossible to wash** {the stains cannot be removed}' [neg>can]

➢ **Universal quantifier:** ??possibility / necessity
(5) *nôl škaf-is'   van'* **lôdž'-ono** *kn'iga-jos-ôz bas't-i-z.*
   girl bookcase-el all   read-deb book-pl-acc   take-pst-3sg
   {The girl must read all the books from the list for her literature class. / The girl has learnt to read and would like to take all the books from the bookcase.} 'The girl took from the bookcase all the books that she **must / ??can** read'.

predicative

Circumstantial necessity reading only:
p is necessary due to the external circumstances

➢ **«No choice»:**
(6) *mon   gorod-e* **môn-ono** *lü-o-Ø.*
   I   city-ill go-deb   become-fut-1sg
   'I **have to go/*can go** to the city {I have no choice}'.

➢ **Scientific predictions:**
(7) *šukaje   s'iz'ôm   sägät kuamôn minut-ôn   met'eorit*
   tomorrow   seven   hour thirty   minute-loc meteorite
   muzjem-en **pumis'k-ono** *lü-o-z.*
   Earth-ins   meet-deb   become-fut-3sg
   'At 7:30 tomorrow the meteorite **will collapse** with Earth'.

➢ **Negation:**
(8) *ataj šukaje* **uža-no** *jevôl.*
   father tomorrow   work-deb   neg
   'Father **isn't working** tomorrow' {it is already decided}.
   [must>neg]

➢ **Construction with a dative subject (mostly dynamic necessity):**
(9) *ž'ôr   vis'-e,   mônôm peˀlo* **pot-ono.**
   head   hurt-prs.3sg   I.dat   outside go_out-deb
   'I've got a headache, I **need to go out** {to get a breath of fresh air} / ***can go out**'.

ANALYSIS

semantics

➢ **Yanovich (2016): "collapse variable-force" semantics of Old English *motan (> must)**
*motan(p) 1) asserts that the situation *p* is an open **possibility**;
2) presupposes that if *p* gets a chance to actualize, it **inevitably** will do so.
→ Due to the presupposition, **motan* is only used in a limited set of contexts, where the future is predetermined.
(10) *and gedo me þæs   wyrðne þæt ic   þe*
   and make me that.gen worthy   that I   you
   mote   *geseon.*
   motan.prs.sbj.1sg   see
   'and make me worthy of it that I **mote** see you.' (Sol:1.55.23)
   (= if God makes it possible for the speaker to see them, then obviously the speaker would use that chance)

➢ **Semantics for *V-ono*:**
1) in **predicative** contexts, *V-ono* entails an absence of alternatives for *V*: there is a possibility for *V* (assertion), and *V* will inevitably actualize (presupposition);
2) in **attributive** contexts, *V-ono* is no longer the only component of the clause assertion, and its interpretation (whether the situation actualizes due to the possibility at the subject's disposal or their necessity to act in a particular way) depends on the contextual environment.

remarks on diachrony & discussion

Serebrennikov (1963): *-ono* is derived from the **verbal noun on -on**, encoding possibility and purpose (*ž'u-on vü* 'drinking water') + **attributive -o**, encoding a (usually inalienable) feature of an entity (*vož s'inm-o koč'ôš* 'a green-eyed cat')

❖ inner form ('permanent possibility/purpose') motivating the "generic" readings and the inevitability component ('smth. destined')?
❖ 'more lexicalized' negative forms (with a single [neg>can] interpretation) derived from the older *-on* form?
❖ habitual-future polysemy as a closely related phenomenon? (see Tatevosov 2005 on development of habituals into futures via modality)
Cf. Shagal (2017:111): "participles expressing future meaning are used to describe modified nouns with regard to possible or necessary situations", presumably due to "pragmatic inefficiency of characterizing a participant by referring to an event that has not yet taken place".

References. Deal, A. R. 2011. Modals without scales // Language 87.3. P. 559–585. | **Mirrazi**, Z. & **Zeijlstra** H. 2022. Incomplete Modal Paradigms. A lecture given at Virtual NYI #4. | **Newkirk**, L. Be flexible, but not too flexible: limited variable-force modals in Kinande and the typology of modal force. PhD dissertation, The State University of New Jersey, 2022. | **Rullmann**, H., **Matthewson** L. & **Davis** H. 2008. Modals as distributive indefinites // Natural Language Semantics 16.4. P. 317–357. | **Serebrennikov**, B. 1963. Istoricheskaya morfologiya permskix yazykov [Historical morphology of Permic languages]. Moscow. | **Shagal**, K. 2017. Towards a typology of participles. University of Helsinki Ph.D. dissertation. | **Tatevosov**, S. (2005). From Habituals to Futures. In: Verkuyl, H.J., de Swart, H., van Hout, A. (eds) Perspectives on Aspect. Studies in Theoretical Psycholinguistics, vol 32. Springer, Dordrecht. | **Vander Klok**, J. 2022. Revised modal questionnaire for cross-linguistic use. Open access field linguistics tool: https://jozinav.wordpress.com/linguistics. | **Yanovich**, I. 2016. Old English *motan, variable-force modality, and the presupposition of inevitable actualization. Language 92(3). 489–521.

Abbreviations: 1–3 – 1–3 person, ACC – accusative, DEB – debitive, EQU – equative, FUT – future, GEN – genitive, GEN2 – 2nd genitive, ILL – illative, INS – instrumental, LOC – locative, PL – plural, POSS – possessive marker, PST – past tense, PST2 – 2nd past tense, PTCP.ACT – active participle, SG – singular.