

# Modal analytical forms formed on the basis of participial forms ending with *-ya*, *-yah* in Yakut and *-ar* in Tuvan

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**Abstract.** The article provides a comparative analysis of modal indicators in the Yakut and Tuvan languages. We are talking about analytical grammatical indicators that were formed on the basis of participial forms ending with *-yah* and *-ya* in the Yakut language and the participle ending in *-ar* in the Tuvan language. These participial forms are the main forms in the verb system of the compared languages; they are polyfunctional participles of the past tense. And it is the ability to express by them the attribution of an action (a sign of an action) to the sphere of time that has not passed that allows them to form on their basis a variety of modal meanings - ought, necessity, assumption, desire and unreality.

## 1 Introduction

The Yakut and Tuvan languages, together with the Tofa and Khakass languages, according to the classifications of Turkic language researchers, belong to one branch of the development of Turkic languages – Uighur [10, p. 733; 1, p. 186]. The languages belonging to this group retain common features in the field of phonetics, morphology and vocabulary, which unite them with the language of the ancient Uighurs. Common features characterizing the Uighur group of languages are a) the presence of *t~d~z* instead of *y* in the middle of a word, for example, *atah ~ adak ~ azah* instead of *ayak* ‘leg’; b) the presence of *t~s* instead of *y* at the end of words, for example, *kut-* instead of *kuy-* ‘pour’ and *pos* (ins. *boj*), *pozym* (ins. *bojym*) ‘myself’; c) preservation of the sonorous *g* at the end of the word (*tag* ‘mountain’). The languages of the Uighur group are also distinguished by significant features of the grammatical structure and vocabulary [1, p. 186].

Comparative studies on the materials of the Yakut and Tuvan languages regarding grammatical phenomena have been carried out in a number of works (see, for example, new works [14, 16, etc.]).

## 2 Materials and methods

The ancient Uighur polyfunctional form ending in *-gu*, defined as a future participle or as a form of a verb name with a modal meaning of possibility and obligation, gave in modern South Siberian Turkic languages participial forms ending with *-gu deg*, *-guluk*. In the Yakut language, this form has a sonorous correspondence of *-ya* [12, p. 88; 13, p. 28; 11, p. 90-91].

The combination of *-gu deg*, *-gy deg*, *-gadyk*, *-gadyj*, *-kadyj* (the second component ending with *deg/dyk/dah/dyj* ‘as’) functions as a participle with the meaning of the future presumptive tense in the Shor, Teleut, Altai [13, p. 28], as a form of modality in the Tofa [9, p. 165], as a form of the presumptive mood in the Khakass, Altai and Tuvan [3, p. 198; 2, p. 352; 7]. It is believed that the combination of *-yu tag* even in the ancient Uighur language expressed the modal meaning of supposition, doubt, hint of the possibility of the realization of an action or phenomenon [7, p. 70].

In the verb systems of the South Siberian Turkic languages, the ancient form ending with *-yu* is preserved only in a connected form, whereas in the Yakut, the *-ya* form is a very active multifunctional form. It is a finite form, which enters as a form of the future tense into the indicative, other verb forms are formed on its basis. In the Yakut, the form ending with *-yu* was strengthened by the affix *-h* (*-ah*, *-yah*) and formed the participle ending with *-guh*, which in the modern Yakut has the form ending with *-yah* and is the only multifunctional participle of the future tense [15, p. 116].

In the Tuvan, the form ending with *-gy deg* serves as an indicator of the probability mood [8] and is included in the structure of the modal particle of possibility as part of the analytical participle form. The first component of it is the participle ending with *-a* – the central form in the Tuvan verb system.

When the main verb forms in the languages under consideration, the participles ending with *-yal-yah* in the Yakut and with the *-ar* form in the Tuvan are functionally comparable.

Each participial form in the Yakut and Tuvan has a specific temporal meaning and has the potential to create a certain modal-specific meaning. Taking various affixes and combined with modal and auxiliary verbs, they form

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analytical forms of participles, complex tense forms, mood forms, modal and specific forms. And one of the functions of participial analytical forms is the expression of modal values.

### 3 Results and Discussion

The article presents a comparative analysis of the analytical forms of modality that arose, on the one hand, on the basis of the future participle ending with the *-yah* and *-ya* form in the Yakut and, on the other hand, the participle ending with *-ar* in the Tuvan. As an auxiliary element in the participial analytical forms of the Yakut, the auxiliary verbs *er-* and *ebit-* are the most active, going back to the ancient insufficient verb *e-li-*). Tuvan modal particles *iyik*, *erik* also ascend to it, which also participate in the expression of modal values.

Analytical participial forms in the Yakut and Tuvan convey the meanings of ought, necessity, assumption, desire and unreal modality. The latter meaning is conveyed by forms of the subjunctive mood.

#### Glossing conventions

1p – 1st person plural, 1s – 1st person singular, 2p – 2nd person plural, 2s – 2nd person singular, 3p – 3rd person plural, 3s – 3rd person singular, ACC – accusative, AUX – auxiliary verb, CAUS – causative, CV – converb, CVB – accompanist converb, DAT – dative, ITER PAR – iterative, ASSUM – assumptive, COND – conditional, PREM – premonitive, PASS – passive, PAST – past tense, P/F –future participle, PrF – present-future, P/PrF – present-future participle, PL – plural, POSS – possessive, P/P – past participle, PRS – present, PTCL – participle.

#### Obligative

In the Yakut, two analytical forms with the meaning of the ought are formed on the basis of the *-yah* form: *-yah tustaah* (*tus* 'duty' + affix of possession *-laah*), *-yah keringneeh* (*kering* 'duty, measure' + *-laah*). The first has the meaning of duty with a touch of obligation, obligation and necessity [5], while the second expresses duty, which manifests itself as an internal property of the subject of action [6]. For example:

(1) yak. *Komsomuolka östööhhö beyetin tühen bierie suoh tustaah* (NG. UD. 58)

komsomolka	östööh-hö	beyet-i-n
komsomolka	enemy-DAT	herself-POSS3s-{tüh-
en	bier-ie	suoh
{drop- CVB-ACC	AUX-P/F	not
tustaah}		
obliged}		

'Komsomolka is obliged not to drop her honor in front of the enemy'.

(2) yak. *Miehe tyl bierbikkit byhyytynan, subu kurduk etieh ceriineehpin* (GC. OS. 31)

miehe	tyl	bier-bik-kit
me	word	give-P/P-2 <sup>nd</sup>
subu kurduk	{et-ieh	seriH-neeh-pin}

this as.if {say-P/Fobliged-PTCL-1s}  
'Since you gave me your word, I am obliged to say this'.

The Tuvan also has an analytical form ending with *-ar uzhurlug* (*uzhur* 'rule' + affix of possession *-lyg*), which conveys the meaning of the obligation dictated by various external circumstances and conditions [3]. Examples:

(3) tuv. *Shivittig uluzu meen sayak aydim chide bergen dep bilir uzhurlug* (ED, EH, 165)

Shivittig	uluz-u	meeng
sayak		
Shivittig	people-POSS	my
pacer		
ayd-im	{chid-e	ber-gen}

horse-POSS	{miss-CV	AUX-P/P}
dep bi-lir	uzhurlug	
that know-P/PF	should	

'The people of Shivittig should know that my pacer horse is missing'.

#### Modality of necessity

The modality of the necessity in the Yakut is expressed by analytical forms formed by a combination of participles ending with the *-yah* and *-ar* + affix belonging to *baar* (*turar*) and *-yah/-yahxa baar*. Thus, the participle ending with *-yah* in the word *baar* 'is' expresses the modal meaning of necessity with a touch of desire:

(4) yak. *Bu katen turar tahahyn kəruəh baar* (SD. D 64)

bu	{kat-en	tur-ar}
it	{dress-CV	AUX-P/PF}
tanah-y-n	{kər-uəh	baar}
clothes-POSS-ACC	{see-P/F	there.is}

'It would be necessary to see her clothes in which she is dressed'.

In the Tuvan, the analytical form on *-ar herek* (*herek* 'necessary, necessary') expresses the meaning of the "external" necessity in the highest degree of categoricity due to objective external circumstances [15]. For example:

(5) tuv.... *kanchap-chop-daa turgash, planny kuusedir herek* (LH, HH, 207)

kanchap-chop-daa	tur-gash	
whatever-PTCL	be-CV	
plan-ny	küüsed-ir	herek
plan- ACC	fulfill-P/PF	necessary

'... whatever it is, it is necessary to fulfill the plan'.

#### "Subjunctive modality"

The "subjunctive modality" in the Yakut and Tuvan is expressed, as in other Turkic languages, according to the scheme: the form of the future participle is combined with an auxiliary verb. The latter component can be represented both by the ancient insufficient verb *e-li-* in a more archaic way, and by the auxiliary verb *tur-* with the meaning of "being". In the Yakut, this meaning is transmitted in two analytical forms: *-ya et-* + short predicate affix, *-ya ebit-* + predicate affix [4].

In Tuvan, it is an analytical form based on the participle ending with *-ar* in combination with the particle *ijik* (an insufficient verb *i-* in the ancient form of the past tense on *-juk*) by both named auxiliary verbs. And the main form of the conditional subjunctive mood in the Tuvan is the form ending with *-ar ijik*.

In the Yakut and Tuvan, the forms ending with *-ya et-* and *-ar ijik* can express the meaning of an assumption or a guess of the speaker about the possibility or impossibility of an action. For example:

(6) yak. *Oᅡolor ajdaannara sügün olorduo suoh ete* (AA. SK. 605)

oᅡo-lor	ajdaan-nar-a		
sügün			
child-PL	noise-PL-POSS/3s		
quiet			
{olor-d-uo suoh ete}			
{sit-CAUS-P/PF	not	AUX/3s }	

‘The noise of the children would not let them sit quietly’.

(7) yak. *Alᅡahaataᅡyn buolaaraj, kihi bert könö kihi buoluo ete* (AA. SK. 179)

{alᅡahaa-taᅡ-yn		buol-aaraj}	
{mistake-ASSUM-2s	AUX-PREM/3s}		
kihi bert	könö	kihi	
person	very	direct	person
{buol-uo	ete}		
{be-P/PF	AUX/3s}		

‘Maybe you were mistaken, he is a very direct person, it must be’.

(8) tuv. *Men bolza bir kash deedi surguuldu dooza shaap aptar iyik men* (LCH, HH, 299)

men bol-za	bir	kash	
I be-OPT	one	several	
{deedi surguul-du}	{dooz-a	sha-ap	
{higher educations-ACC}	{receive-CV	AUX-CV	
a-pt-ar}	iyik		
men			
AUX-PFV-P/PF}	PTCL	1s	

‘I would be in his place (lit. if I) would have received several higher educations’.

The same form in the Yakut can express the statement and intention of the speaker if there are conditions for its commission:

(9) yak. *Mikiiteni subu kərbut ühübüöt, ol kinigeleri kini sieteleen kabihie suoga ete...* (AA. SK. 669)

Mikiite-ni	subu	kər-büt	
Nikita-ACC	this	see-PP	
ühübüöt		ol	kinige-ler-i
suddenly.it.turns.out	that	book-PL-ACC	
kini {sie-teleen	kebih-ie	suoᅡ-a	
he {eat-ITER	AUX-P/F	not-3s	
ete}			
AUX/3s}			

‘Nikita is not only now we see (we have known him for a long time), he would not «eat» those books’.

(10) yak. *Stipendija bierdeller üöreniem ete* (AA. SK. 685)

stipendija	bier-del-ler		
scholarship	give-COND-3p		
{üören-ie-m	ete}		
{study-P/F-1sAUX/3s}			

‘If they gave me a scholarship, I could study’.

The next meaning of the form in the Yakut is a wish, a parting word, a dream of the speaker (more often in the 1st and 3rd persons):

(11) yak. *Kergennener ere kihi baryta d’irneech taptaly körsörö buollar... üchügei da buoluo ete* (NY. Seh. 541)

kergenne-ner ere	kihi	baryta	
merry-RFLP/F	only	person	bcë-3s
d’irneech	taptal-y		{kör-s-ör-ö
true love-ACC		{see-REC-P/PrF/3s	
buol-lar}	üchügei da	{buol-uo	
AUX/COND}	nice	PTCL	{be-P/PF
ete}			
AUX/3s}			

‘If everyone starting a family met true love... how nice it would be’.

Further, this form in both languages regularly expresses the meaning of reproach, accusation, indignation (in the 2nd sometimes in the 3rd person). Intonation is of great importance here. For example:

(12) yak. *Urut унугуан ete, akaarya* (AA. CK. 213)

urut {унугуан	ete}	akaarya	
earlier	{invite-P/F/2s	AUX/3s}	fool

‘I should have invited you earlier, you fool’.

(13) tuv. *Men erte bilgen bolzumza, shagda-la chedip keer ijik men*

men erte	{bil-gen	bol-zumza}	
I earlier	{know-P/P	AUX-1.COND}	
shagda-la		{ched-ip	
long.time.ago-PTCL		{come-CV	
ke-er}	ijik	men	
AUX-P/PF}	PTCL	1s	

‘If I had known earlier, I would have come a long time ago’.

E. I. Korkina calls the form ending with *-ya et-* in the Yakut, a truncated version of the subjunctive mood index considers the form *-yah et-* [4]. The form ending with *-yah et-* has a wider range of meanings than *-yah et-* does and in addition to the value of the subjunctive modality it expresses modal shades:

a) assumptions and guesses:

(14) yak. *Holkular, baᅡar, tumnuohtar ete* (AA. SK. 481)

holkular	baᅡar	
calmly	maybe	
{tumnuohtar	ete}	
{bypass-PASS/P/F/3s	AUX/3s}	

‘Calmly, maybe (they) would have bypassed’;

b) statements:

(15) yak. *Kini sin biir baryah ete* (NY. Seh. 601)

kini sin.biir	{bar-yah	ete}
he anyway	{left-P/PF	AUX/3s}

‘He would have left anyway’;

c) intentions:

(16) yak. *Uol ebitir by buollar, beyem ideber, metallurgist idetiger, uoretieh etym* (NY. Seh. 493)

uol ebit-ir by buol-lar  
boy be-HTCL/2s this be-COND  
beyem ide-ber  
myself profession-POSS/1s DAT  
metallurgist ide-ti-ger

metallurg profession-POSS/3s-DAT

{üoret-ieh eti-m}  
{teach-P/PF AUX-1s}

‘If you were a boy, I could teach my profession as a metallurgist’;

d) inducement, appeal:

(17) yak. *Ojom, Tooromohum, ahyah etir* (AF. TA. P. 57)

ojom-m Tooromoh-um  
child-POSS/1s Tooromoh-POSS/1s  
{ah-yah et-ir}  
{eat-P/PF AUX-2s}

‘My child, Toromos, would eat’.

In the Yakut, the subjunctive mood forms [4] also functions ending with *-ya ebit*, which expresses the speaker's attitude to the perfect or expected possible or desirable action of the subject:

a) preferably-subjunctive meaning

(18) yak. *Tyal küühürbeter, üchügej buoluo ebit* (NG, 5)

tyal küühür-be-ter {üchügej  
wind get.stronger-NEG-COND {good  
buol-uo ebit}

AUX-P/PF PTCL-PAST/3s}

‘It would be good if it were not for the wind’;

b) possibly-subjunctive modality

(19) yak. *Tyyj, ehe baara buollar, miine tühüö ebikkin* (AF. Comrade. p. 347)

tyyj ehe baar-a buol-lar  
well bear есть-POSS AUX-COND miin-e  
{tüh-üö

sit.right-CVB-ACC {AUX-P/PF

ebik-kin}

AUX-PTCL/2s}

‘Well, if he was a bear, it turns out, he would sit right (on top) of him’.

### Obligative

The presumptive modality is characterized by the uncertainty of the perfection of the action, its possibilities. The analytical participial form of supposition - with the meaning of a conceivable, apparent, presumptive action or quality of an object – in the Yakut is the form ending with *-yah kurduk* (*kurduk* ‘as’). For example:

(20) yak. *Kyys üögülüöh kurduk ajaşyn atta* (IG. HC. 69)

kyys {üögü-lüöh kurduk}  
girl {scream-P/PF as.if}

ajaş-y-n at-ta  
mouth-POSS-ACC open-PAST/3s

‘The girl opens her mouth as if she would scream’.

In the Tuvan, the assumption is expressed by combining the participle ending with *-ar* with the particle *bolgu deg*, which goes back to the verb *bol-* in the form of the possibility and assumption on *-gy deg*. The analytical participial form expresses an assumption based on external signs, circumstances, and a particular state of affairs. For example:

(21) tuv. *Erge-chagyrga deesh demisel boop turar bolgu deg* (KL, BB)

erge-chagyrga deesh demisel  
struggle for power

{bo-op tur-ar bol-gu.deg}  
{go-CV AUX-P/PF be-OBL/3s}

‘It looks like there is a power struggle going on’;

(22) tuv. *Meeng bodalyzny olar detkiir bolgu deg* (SHS, KHN, 5)

meeng bodal-ym-ny olar {detki-ir  
my idea-POSS-ACC they {support-P/PF  
bol-gu deg}  
AUX-OBL/3s}

‘It looks like they will support my idea’.

### Desiderative

In the Yakut, combinations of participles ending with *-ar* and *-yah* in the form of accusative/ dative / genitive /main cases are used to express the desired modality in combination with words having the semantics of desire, intention, aspiration (*başa* ‘desire, aspiration; hunting, desire, dream’; *sanaa* ‘thought, dream, goal, aspiration, intention, desire’; ‘thought, thought, intention, intention, desire’; tokuj ‘thought’, etc.). For example:

(23) yak. *Kolhuozka baryan başalaah oşoloru haarchahtyy satyyr ebikkit* (ser. TP. 275)

kolhoz-ka bar-yan başa-laah  
collective.farm-DAT go-P/F wish-POSSV  
oşo-lor-u {haarchah-taa-yy  
child-PL-ACC {prevent-CVB-ACC  
sat-yyr ebik-kit}  
AUX-PrF PTCL-PAST/2p}

‘Refuses, they intend to prevent children wishing (aspiring) to go to the collective farm’.

(24) yak. *Ürdük üörehhe tuttarsyah başalaah kellibit ürdük.üöreh-he tut-tar-s-yah*

university-DAT enter-CAUS-REC-P/F  
başalaah kel-l-ibit  
desire-POSSV come-PAST/1p

‘We came with a desire to enter a university’, where the form ending with *-yah başalaah* (*sanaalaah*) (the name of the action) acts as a circumstance.

In the Tuvan, in addition to the synthetic forms of desiderative (*-sa*, *-ksa*), there is a similar Yakut form ending with *-ar küzeldig*, where the second component is translated as ‘having a desire, having a desire’. It is regularly used in speech. For example:

(25) tuv. *Chalyy üjemni charashtyr, höglüg, solun, khostug churttap erttirer küzeldig men* (VH, CHA)  
{chalyy.üje-m-ni} charashtyr  
youth-POSS-ACC beautifully  
höglüg solun khostug  
cheerfully interestingly freely  
{churtta-p erttir-er} küzel-dig  
{live-CV spend-P/F} wish-POSSV  
men  
1s

'I wish to spend my beautifully, cheerfully, interestingly, freely'.

## 4 Conclusion

Thus, in the South Siberian Turkic languages, verb forms dating back to the ancient form ending with *-yu* are used with the service element *täg* with the meaning of assimilation and express the meanings of assumption and possibility. In Yakut, the ancient form ending with *-yu* actively functions in the sound ending with *-ya* and one of its functions is the expression of modal values as part of analytical forms. Functionally, it corresponds to the participial form ending with *-ar* in the Tuvan.

A comparative analysis of the analytical forms of modality formed on the basis of the forms ending with *-ya* and *-yah* in the Yakut and the participle ending with *-ar* in the Tuvan showed the following.

1. The compared participial analytical forms with modal meanings in the Yakut and Tuvan reveal structural correspondences. Differences are found in terms of semantics with respect to additional meanings, while the basic meanings coincide.

2. The modality of duty in the Yakut and Tuvan have structural correspondences in "the form of the participle *-yahl-ar* + lexemes with the meaning 'duty, rule' + affix of possession" – *-yah tustaah*, *-yah kerinneeh*, *-ar uzhurlug*. Yakut forms of indebtedness convey both "external" and "internal" indebtedness. At the same time, in the Tuvan, only "external obligation" is marked.

3. The modality of necessity in the Yakut is conveyed by complex analytical forms: *-yahl-ar* in the form of accessories + *baar lturar*; *-yahl-yahxa baar*. The lexeme *baar* 'is' gives the modal meaning of necessity a shade of desire. In the Tuvan language, the form ending with *-ar kherek* expresses an "external" categorical necessity.

4. The unreal modality represented by the analytical forms of the subjunctive mood in the languages under consideration is expressed, as in other Turkic languages, by structures constructed according to the scheme "future participle form + auxiliary verb in the form of the past tense/ participle".

5. The presumptive modality in the Yakut is conveyed by the form ending with *-yah kurduk* with the meaning of a conceivable, apparent, presumptive action or quality of the object. In the Tuvan, the participial form *bolgu deg* particle expresses an assumption conditioned on external signs. Participation in the analytical forms of the assumption of the elements of "assimilation" of *kurduk* and *deg* is characteristic both for the languages

under consideration and for the Turkic languages of Southern Siberia.

6. Analytical means of expressing the desired modality on the basis of participle forms ending with *-ar* and *-yah* in the Yakut and Tuvan include words adjacent to them with the semantics of desire, intention, aspiration.

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