LING GU4120 Language Documentation and Field Methods Progress Report 2: Yakut Nominal Morphology and Syntax

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1 Introduction

In this paper, I describe Yakut nominal morphology and some aspects of Yakut syntax. Yakut is a Turkic language spoken by approximately 378,000 people in the Republic of Sakha (also called Yakutia), Irkutsk and Magadan provinces, Khabarovsk Krai, and Krasnoyarsk Krai in Russia. The endonym for the language is Sakha (Yakut 2023). As our consultant usually refers to his language as Yakut, I will use this exonym to refer to the language for the rest of the report.

The consultant for this paper is Platon Shamaev, who is a native speaker of Yakut in his forties. Platon was born in and grew up in the Republic of Sakha. He moved to the United States last year and currently works as a lawyer in New York, where he is affiliated with Columbia University's Human Rights Advocates Program. Platon also speaks English. All data referenced in this paper come from Columbia's Spring 2023 Field Methods class's elicitation sessions with Platon.

In §2, I give an overview of phonological rules which account for all morphophonemic alternations seen in the data. In the remaining sections, I describe describe how nouns (§3), pronouns (§4), noun phrases (§5), and copular clauses (§7) are realized morphologically and syntactically in Yakut. In §6, I also describe some derivational nominal morphology. Based on its realization of the above aspects of nominal morphology, Yakut is highly agglutinative language (Payne 1997: 28).

In §8, I discuss potential future directions for investigation, based on current gaps in our knowledge of Yakut morphosyntax.

2 Phonological rules

In this section, I describe the phonological rules accounting for allophonic variation and contextually limited contrast in Yakut. The following rules should be assumed to account for any and all morphophonemic alternations which appear in the examples in subsequent sections, and all derivation of surface representations from underlying representations, unless explicitly stated otherwise.

Backing harmony

$$\left[\ +\text{syllabic} \ \right] \rightarrow \left[\ \alpha\text{back} \ \right] / \left[\begin{array}{c} +\text{syllabic} \\ \alpha\text{back} \end{array} \right] C_0\_ \qquad \text{Bounding domain: word}$$

A vowel matches the backness of the first vowel preceding it, within the same word.

Rounding harmony for high vowels

$$\left[\begin{array}{c} +\text{syllabic} \\ +\text{high} \end{array} \right] \rightarrow \left[\ \alpha\text{round} \ \right] / \left[\begin{array}{c} +\text{syllabic} \\ \alpha\text{round} \end{array} \right] C_0\_ \qquad \text{Bounding domain: word}$$

A high vowel matches the roundness of the nearest preceding vowel.

Rounding harmony for non-high vowels (part 1)

$$\begin{bmatrix} \text{+syllabic} \\ \text{-high} \end{bmatrix} \rightarrow \begin{bmatrix} \text{-round} \end{bmatrix} / \begin{bmatrix} \text{+syllabic} \\ \text{-round} \end{bmatrix} C_0 \_\_ \qquad \text{Bounding domain: word}$$

A [-high] vowel becomes unrounded when the nearest preceding vowel is unrounded.

Rounding harmony for non-high vowels (part 2)

$$\begin{bmatrix} \text{+syllabic} \\ \text{-high} \end{bmatrix} \rightarrow \begin{bmatrix} \text{+round} \end{bmatrix} / \begin{bmatrix} \text{+syllabic} \\ \text{-high} \\ \text{+round} \end{bmatrix} C_0 \_\_ \qquad \text{Bounding domain: word}$$

A [-high] vowel becomes rounded when the nearest preceding vowel is rounded and [-high].

Nasalization

$$\begin{bmatrix} \text{-syllabic} \\ \text{+voice} \end{bmatrix} \rightarrow \begin{bmatrix} \text{+nasal} \end{bmatrix} / \begin{bmatrix} \text{-syllabic} \\ \text{+nasal} \end{bmatrix} \_\_ \qquad \text{Bounding domain: word}$$

A voiced consonant becomes a nasal when immediately following a nasal consonant.

Voicing assimilation

$$\begin{bmatrix} \text{-syllabic} \end{bmatrix} \rightarrow \begin{bmatrix} \text{-voice} \end{bmatrix} / \begin{bmatrix} \text{-syllabic} \\ \text{-voice} \end{bmatrix} \_\_ \qquad \text{Bounding domain: word}$$

Consonants are devoiced following voiceless consonants.

Stop formation (1)

[l] → [d] / C__   unless [l]___
[l] becomes [d] when following a consonant, unless that consonant is also [l].

Stop formation (2)

[ʁ] → [g] / C__
[ʁ] becomes [g] when following a consonant.

Debuccalization

[s] → [h] / V_V

[s] becomes [h] intervocalically.

Hiatus Resolution

V → ∅ / V__   unless V = V
A vowel following another vowel is deleted, unless the two vowels are the same.

Nasal Deletion

$$\begin{bmatrix} \text{-syllabic} \\ \text{+nasal} \end{bmatrix} \rightarrow \emptyset / \_\_ \begin{bmatrix} \text{-syllabic} \\ \text{+nasal} \end{bmatrix} \qquad \text{unless the two nasals share a place of articulation}$$

A nasal consonant preceding another nasal consonant deletes, unless both share the same place of articulation.

Tapping

/r/ → [ɾ] / V_V
/r/ becomes [ɾ] intervocalically.

Word-Final Lowering

$$\left[\begin{array}{c} +\text{syllabic} \\ -\text{long} \end{array} \right] \rightarrow \left[\begin{array}{c} -\text{tense} \end{array} \right] / \_C_0\#$$

Short vowels become lax in the final syllable of a word.

3   Nouns

In this section, I describe number marking (§3.1), case marking (§3.3), definiteness marking (§3.4), and possessive marking (§3.5) on nominals. I also argue that Yakut does not group nouns into noun classes or grammatical genders (§3.2).

3.1   Number marking

Yakut differentiates between singular and plural nouns by marking the plural form with the suffix *-lEr*, where E stands for the archiphoneme which is $\left[\begin{array}{c} +\text{syllabic, -high} \end{array} \right]$. Surface representations of the plural marker differ based on the phonological rules described in §2. Several examples of possible surface representations follow.

(1)   2023-01-19
kɛhi-lɛr
person-PL
'people'

(2)   2023-01-26
aʁa-lar
father-PL
'fathers'

(3)   2023-02-09
baj-dar
rich-PL
'rich ones'

Yakut also differentiates between count and mass nouns. Mass nouns such as "food" (4) and "meat" (5) cannot take the plural marker.

(4)   2023-01-25
as
food
'food'

(5)   2023-02-09
ɛt
meat
'meat'

3.2   Absence of class and gender marking

There is no evidence for noun classes or grammatical gender marking in Yakut. Positive evidence for noun classes would consist of features such as the presence of different classifiers for different classes of nouns in noun phrases featuring numerals. Positive evidence of grammatical gender would include characteristic suffixes for nouns of different genders (Payne 1997: 107-109). Because no such positive evidence has emerged in our elicitation sessions thus far, it is highly unlikely that Yakut features noun classes or grammatical gender.

3.3 Case marking

Yakut differentiates between nominative, accusative, dative, ablative, comparative, and instrumental cases. The nominative case is unmarked. The remaining cases are each marked with a unique suffix. Table 3.3 gives the paradigm for Yakut case marking on nominals.

The nominative case is used for subjects, nominal predicates, and the citation form of nouns. The accusative case is unmarked, except when the noun is definite (see §3.4 for further discussion). In addition to being used to expressed indirect objects and possession, the dative case also marks locations at or toward which an action takes place, as well as the objects of verbs such as "help." (There is no morphologically distinct locative case.) The ablative case is used for the standard against which the subject is compared in the comparative construction. The ablative case is also used for nouns (away) *from* which some action or movement is taking place (e.g. for arguments of verbs such as "ask" and "take"). The comparative case can be used instead of the ablative case in comparative constructions. For more on comparatives, see §5.5. The instrumental case marks the instrument by which an agent carries out an action.

Nominative	$\emptyset$
Accusative	$\emptyset$ or /-E/ (for definite nominals only)
Dative	/-ʁE/
Ablative	/-tEn/
Comparative	/-tEːʁEr/
Instrumental	/-EnEn/

Table 1: Yakut case marking on nominals. Capital letters "I" and "E" denote archiphonemes with features $\begin{bmatrix} +\text{syllabic} \\ +\text{high} \end{bmatrix}$ and $\begin{bmatrix} +\text{syllabic} \\ -\text{high} \end{bmatrix}$, respectively, whose backness and rounding are determined by backing harmony and rounding harmony.

In the following set of examples, I illustrate the full case marking paradigm with singular nominals. In the first of this set, "dog" is given in citation form, which is nominative case.

(6) 2023-01-19, 2023-02-23
  ɯt-∅-∅
  dog-SG-NOM
  'dog'

In the next example, "meat" is accusative definite.

(7) *mɪn*   *ɛt-ɛ*   *bɯhaʁ-anan*   *bɯha-bɯn*
  1SG.NOM   meat-ACC.DEF   knife-INS   cut-1SG.PRS
  'I am cutting the meat with a knife.'

The next three examples feature "dog" in the dative, ablative, and comparative cases, respectively.

(8) 2023-03-07
  mɪn   *ɯt-∅-ka*   *as-∅-∅*   *biɾɛ-bɪn*
  1SG.NOM   dog-SG-DAT   food-SG-ACC   give-1SG.PRS
  'I am giving food to the dog.'

(9) 2023-03-23
  mɪn   *ɛt-ɛ*   *ɯt-∅-tan*   *bɯɪlɟiɛ-bɪn*
  1SG.NOM   meat-ACC.DEF   dog-SG-ABL   take-1SG.PRS
  'I am taking the meat away from the dog.'

(10) 2023-03-07
  mɪn   *ɯt-∅-taːʁar*   *yrdyk-pyn*
  1SG.NOM   dog-SG-COMPAR   tall-1SG.COP
  'I am taller than the dog.'

Finally, the following example illustrates the instrumental case, marked on "pen."

(11) 2023-03-30

mɪn	uɾutʃka-∅-anan	sɔɾy-byt-ɯm
1SG.NOM	pen-SG-INS	write-PST-1SG

'I wrote with a pen.'

Plural suffixes are attached to the stem before case markers, as seen in the word 'dogs (dative plural)' in the following example.

(12) 2023-03-23

mɪn	ɛt-ɛ	ɯt-tar-tan	bɛldʒiɛ-bɪn
1SG.NOM	meat-ACC.DEF	dog-PL-DAT	take-1SG.PRS

'I am taking the meat away from the dogs.'

3.4 Definiteness marking

As described in §3.3, nominals in the accusative case may be marked for definiteness. For the pair of examples below, Platon commented that (14) refers to "this meat" specifically, in contrast to (13), supporting the interpretation of the accusative suffix -*E* as marking definite nouns only.

(13)

mɪn	ɛt-∅	bɯha-bɯn
1SG.NOM	meat-ACC.INDF	cut-1SG.PRS

'I am cutting meat.'

(14)

mɪn	ɛt-ɛ	bɯhaʁ-anan	bɯha-bɯn
1SG.NOM	meat-ACC.DEF	knife-INS	cut-1SG.PRS

'I am cutting the meat with a knife.'

However, our attempts to elicit the definite marker on accusative nominals (by providing discourse context that renders an accusative nominal identifiable) have had mixed results. See §8 for further discussion of possible future directions for investigation of definiteness.

3.5 Possessive marking on nominals

A possessed nominal is preceded by the possessor (another nominal or a pronoun) and is marked with a suffix that indicates the person and number of the possessor and the case of the possessed entity. The inflection for case in the possessive suffix replaces the default nominal case-marking suffixes on possessed nominals. Table 2 lists the possessive suffixes elicited thus far. The paradigm is only missing the third person plural accusative possessive suffix.

The next set of examples illustrates the first person singular possessive suffixes in all cases. The first example features a nominative case citation form.

(15)

mɪn	iɛ-m
1SG.NOM	mother-1SG.POSS.NOM

'My mother'

Next, "my beard" is accusative.

(16)

mɪn	bɯtaχ-pɯn	χɔɾuna-bɯn
1SG.NOM	beard-1SG.POSS.ACC	shave-1SG.PRS

'I am shaving my beard.'

In the next two examples, "my dog" illustrates the dative and ablative cases, respectively.

Person	Case	Singular	Plural
1	Nominative	-Im	-bIt
	Accusative	-bIn	-bIt:In
	Dative	-bEr	-bItIgEr
	Ablative	-bIt:In	-bItIt:En
	Comparative	-bInE:ʁEr	-bItInE:ʁEr
	Instrumental	-bInEn	-bItInEn
2	Nominative	-In	-ʁIt
	Accusative	-ʁIn	-ʁIt:In
	Dative	-ʁEr	-ʁItIgEr
	Ablative	-ʁIt:En	-ʁItIt:En
	Comparative	-InE:ʁEr	-lE:ʁEr
	Instrumental	-ʁInEn	-ʁItInEn
3	Nominative	-tE	-lErE
	Accusative	-In	
	Dative	-IgEr	-lErIgEr
	Ablative	-It:En	-lErt:En
	Comparative	-InE:ʁEr	-lE:ʁEr
	Instrumental	-InEn	-lErInEn

Table 2: Underlying forms of Yakut possessive suffixes. Capital letters "I" and "E" denote archiphonemes with features $\begin{bmatrix} \text{+syllabic} \\ \text{+high} \end{bmatrix}$ and $\begin{bmatrix} \text{+syllabic} \\ \text{-high} \end{bmatrix}$, respectively, whose backness and rounding are determined by backing harmony and rounding harmony. We have not yet elicited the third person plural accusative possessive suffix.

(17) *mɪn*   *ɯt-par*   *ɛt*   *biɾɛ-bɪn*
     1SG.NOM   dog-1SG.POSS.DAT   meat   give-1SG.PRS
     'I am giving my dog meat.'

(18) *mɪn*   *ɛt-ɛ*   *ɯt-∅-bɯt:an*   *bɛlʤiɛ-bɪn*
     1SG.NOM   meat-ACC.DEF   dog-SG-1SG.POSS.ABL   take-1SG.PRS
     'I am taking the meat from my dog.'

"My older sister" is in the comparative case in the following example.

(19) *mɪn*   *baltɯ-bɯna:ʁar*   *tyrgɛ-mɪn*
     1SG.NOM   older.sister-1SG.POSS.COMPARATIVE   fast-1SG.PRS
     'I am faster than my older sister.'

Finally, "my knife" is in the instrumental case below.

(20) *mɪn*   *ɛt-ɛ*   *bɯhaχ-pɯnan*   *bɯha-bɯn*
     1SG.NOM   meat-ACC.DEF   knife-1SG.POSS.INS   cut-1SG.PRS
     'I am cutting the meat with my knife.'

Possessive noun phrases can embed recursively, as in the following example. In a recursively embedded possessive noun phrase, it is the innermost possessee that carries the expected case marking for the entire noun phrase's grammatical role in the sentence. The possessees at intermediate levels of embedding take nominative case possessive suffixes. In the following example, which features two levels of embedding, "older brother" carries a possessive suffix with accusative case marking, while "mother" (which is both the possessee of the first person subject and the possessor of "older brother") carries a possessive suffix with nominative case marking.

(21) mɪn   iɛ-m   ubaj-ɯɯn   taptɯɯj-bɯɯn
      1SG.NOM   mother-1SG.POSS.NOM   older_brother-3SG.POSS.ACC   love-1SG.PRS
      'I love my mother's older brother.'

4 Pronouns

In this section, I describe inflection for person, number, and case on pronouns (§4.1); how pronominal case marking compares to that for nominals (§4.2); possessive marking on pronouns, as compared to nominals (§4.3); and reflexive pronouns (§4.5). I also address the absence of clusivity (§4.4) and gender (§4.1) distinctions.

4.1 Person, number, and case marking

Yakut pronouns are inflected for person, number, and case. Additionally, Yakut differentiates between animate and inanimate third person singular pronouns. People and animals are referred to with the third person animate pronouns, while plants and non-living entities can be referred to with the third person inanimate pronouns. Table 3 gives the full paradigm for pronouns. We have not yet elicited any pronouns in the instrumental case, and whether or not Yakut finds the use of pronouns in the instrumental case felicitous is open to future investigation (see §8).

   The third-person plural pronouns are formed from the third-person singular pronouns in a similar manner to nominals. First, the plural suffix *-lEr* is affixed to the stem. Then, a case marking suffix is affixed. An exception is the third person plural genitive case pronoun, which departs from this regular pattern of inflectional morphology. The third person plural genitive case pronoun is also unusual in that Platon produced it in conjunction with the nominative case pronoun *kinilɛr* to express possession in the construction "X is Y's." Platon used the genitive case pronouns for other persons and numbers without the addition of the nominative case pronoun to express possession in the following construction.

(22) kɛnɛgɛ   kinilɛr   kiːnɛɾɛ
      book   3PL.NOM   3PL.GEN
      'The book is theirs.'

   In the first and second persons, unlike the third person, the underlying forms of the plural pronouns do not appear to be morphologically derived from the singular forms.

   In (23)-(29) I illustrate the singular and plural first person, second person, and third person nominative case pronouns.

(23) 2023-02-23
      mɪn   ɯɯtɯɯj-bɯɯn
      1SG.NOM   cry-1SG.PRS
      'I am crying.'

(24) 2023-02-23
      ɛn   ɯɯtɯɯj-gɯɯn
      2SG.NOM   cry-2SG.PRS
      'You are crying.'

(25) 2023-02-23
      kinɪ-∅-∅   ɯɯtɯɯj-∅
      3.ANIMATE-SG-NOM   cry-3SG.PRS
      'He/she is crying.'

(26) 2023-03-09
      itɪ   harsɯɯn   tɔŋuɔ
      3SG.NOM.INANIMATE   tomorrow   will.freeze
      'It will freeze tomorrow.'

Person (Gender)	Case	Singular	Plural
1	Nominative	mɯn	bihigɪ
	Accusative	mijigɯn	bihiginɛ
	Dative	miʁɛ	bihiɛʁɛ
	Ablative	mijigitːɛn	bihigitːɛn
	Comparative	mijiginɛːʁɛr	bihiginɛːʁɛr
	Genitive	miɛnɛ	bihiɛnɛ
2	Nominative	ɛn	ɛhigɪ
	Accusative	ɛjigɯn	ɛhiginɛ
	Dative	ɛjiʁɛ	ɛhiɛʁɛ
	Ablative	ɛjigitːɛn	ɛhigitːɛn
	Comparative	ɛjiginɛːʁɛr	
	Genitive	ɛjiɛnɛ	ɛhiɛnɛ
3 (Animate)	Nominative	kinɪ	kinilɛr
	Accusative	kininɛ	kinilɛrɛ
	Dative	kiniʁɛ	kinilɛrgɛ
	Ablative	kinitɛn	kinilɛrtɛn
	Comparative	kinitːɛːʁɛr	kinilɛrdɛːʁɛr
	Genitive	kiniɛnɛ	kiːnɛrɛ
3 (Inanimate)	Nominative	itɪ	
	Accusative	itinɛ	
	Dative		
	Ablative	itiːntɛn	
	Comparative	itiːnɛːʁɛr	
	Genitive		

Table 3: Yakut pronouns. Because we have not yet attempted to elicit pronouns in the instrumental case, this case is omitted from the table.

(27) 2023-02-23

bihigı   *ʉtʉj-bʉt*
1PL.NOM   cry-1PL.PRS

'We are crying.'

(28) 2023-02-21

ɛhigı   *kini-lɛr-ɛ*   *taptʉj-gʉt*
2PL.NOM   3.ANIMATE-PL-ACC   love-2PL.PRS

'You love them.'

(29) 2023-02-23

kini-lɛr-∅   *ʉtʉj-lar*
3.ANIMATE-PL-NOM   cry-3PL.PRS

'They are crying.'

Next, I illustrate the accusative case pronouns (as the direct objects of the verbs "love" and "see") for all (animate) person and number categories.

(30) 2023-02-23

ɛn   *mijigın*   *taptʉj-gʉn*
2SG.NOM   1SG.ACC   love-2SG.PRS

'You love me.'

(31) 2023-02-16

mın   *ɛjigın*   *kœɾœ-byn*
1SG.NOM   2SG.ACC   see-1SG.PRS

'I see you.'

(32) 2023-02-16

ɛn   *kini-∅-nɛ*   *kœɾœ-ʁyn*
2SG.NOM   3.ANIMATE-SG-ACC   see-2SG.PRS

'You see him/her.'

(33) 2023-02-16

kinı-∅-∅   *iti-nɛ*   *kœɾœ-∅*
3.ANIMATE-SG-NOM   3SG.INANIMATE-ACC   see-3SG.PRS

'He/she sees it.'

(34) 2023-02-21

kini-lɛr-∅   *bihigi-nɛ*   *taptʉj-lar*
3.ANIMATE-PL-NOM   1PL-ACC   love-3PL.PRS

'They love us.'

(35) 2023-02-16

mın   *ɛhigi-nɛ*   *kœɾœ-byn*
1SG.NOM   2PL-ACC   see-1SG.PRS

'I see you.'

(36) 2023-02-21

ɛhigı   *kini-lɛr-ɛ*   *taptʉj-gʉt*
2PL.NOM   3.ANIMATE-PL-ACC   love-2PL.PRS

'You love them.'

The next set of examples illustrates the first person singular, second person singular, and third person singular animate dative case pronouns as the indirect objects of the verb "give."

(37) 2023-02-23
kinɪ-∅-∅   *miʁɛ*   *kɛnɛgɛ*   *biɾɛ-∅*
3.ANIMATE-SG-NOM   1SG.DAT   book   give-3SG.PRS

'He/she gives me a book.'

(38) 2023-02-23
mɪn   *ɛjiʁɛ*   *kɛnɛgɛ*   *biɾɛ-bɪn*
1SG.NOM   2SG.DAT   book   give-1SG.PRS

'I give you a book.'

(39) 2023-02-23
mɪn   *kini-∅-ʁɛ*   *kɛnɛgɛ*   *biɾɛ-bɪn*
1SG.NOM   3.ANIMATE-SG-DAT   book   give-1SG.PRS

'I give him/her a book.'

The next set of examples illustrates the ablative case pronouns with the verbs "ask a question,' "ask for a favor (from)," and "take (from)":

(40) 2023-02-23
kini-lɛr-∅   *mijigitːɛn*   *ɯjɯjta-lar*
3.ANIMATE-PL-NOM   1.SG.ABL   ask.question-3PL.PRS

'They are asking me a question.'

(41) 2023-03-07
mɪn   *ɛjigitːɛn*   *kœrdœs-tœm*
1SG.NOM   2.SG.ABL   ask.favor-1SG.PST

'I asked you for a favor.'

(42) 2023-02-23
mɪn   *kini-∅-tɛn*   *ɯjɯjta-bɯn*
1SG.NOM   3.ANIMATE-SG-ABL   ask.question-1SG.PRS

'I am asking him/her question.'

(43) 2023-03-23
ɛn   *ɛt-ɛ*   *bihigi-tːɛn*   *bɯlɡ̌iɛ-gɪn*
2SG.NOM   meat-ACC.DEF   1PL-ABL   take-2PL.PRS

'You are taking the meat away from us.'

(44) 2023-03-07
mɪn   *ɛhigitːɛn*   *kœrdœs-tœm*
1SG.NOM   2.PL.ABL   ask.favor-1SG.PST

'I asked you for a favor.'

(45) 2023-02-23
mɪn   *kini-lɛr-tɛn*   *ɯjɯjta-bɯn*
1SG.NOM   3.ANIMATE-PL-ABL   ask.question-1SG.PRS

'I am asking them a question.'

The last two examples illustrate the comparative and genitive cases of the first person singular pronoun.

(46) *ɛn*   *mijiginɛːʁɛr*   *ɯɾas-kɯn*
2SG.NOM   1SG.COMPARATIVE   clean-2SG.PRS

'You are cleaner than me.'

(47) *kɛnɛgɛ*   *miɛnɛ*
book   1SG.GEN

'The book is mine.'

4.2 Comparison with nominal case marking

As with nominals, pronouns appear to be unmarked in the nominative case and marked with suffixes in the other cases. For example, the nominative case of the first person plural pronoun is *bihigɪ*, and the accusative case is formed by adding suffix *-nɛ*. The form of the case marking suffixes is also similar to that of the nominal suffixes. For example, if the underlying form of "me (dative singular)" is analyzed as *mi-ʁɛ*, then the dative suffix that appears in this particular form is identical to that for nominals.

However, case marking on pronouns diverges from that on nominals in several respects. Unlike nominals, which may optionally be marked for definiteness in the accusative case, pronouns are always marked with an overt morpheme in the accusative case. Moreover, the case marking suffixes differ for different persons and numbers, as enumerated in Table 4.2.

Case	Person/Number	Stem	Suffix
Nominative	All	min, ɛn, kini, iti, bihigi, ɛhigi, kinilɛr	∅
Accusative	1SG, 2SG	miji-, ɛji-	-gin
	1PL, 2PL, 3SG	bihigi-, ɛhigi-, kini-	-nɛ
	3PL.ANIMATE	kinilɛr-	-ɛ
Dative	1SG, 2SG, 3SG.ANIMATE, 3PL.ANIMATE	mi-, ɛji-, kini-, kinilɛr-	-ʁɛ
	1PL, 2PL	bihi-, ɛhi-	-ɛʁɛ
Ablative	1SG, 2SG	miji-, ɛji-,	-gitːɛn
	3SG.ANIMATE, 3PL.ANIMATE	kini-, kinilɛr-	-tɛn
	1PL, 2PL	bihigi-, ɛhigi-	-tːɛn
	3SG.INANIMATE	iti-	-intɛn
Comparative	1SG, 2SG	miji-, ɛji-	-ginɛːʁɛr
	3SG.ANIMATE	kini-	-tːɛːʁɛr
	1PL	bihigi-	-nɛːʁɛr
	3PL.ANIMATE	kinilɛr-	-dɛːʁɛr
	3SG.INANIMATE	iti-	-inɛːʁɛr
Genitive	1SG, 2SG, 3SG.ANIMATE, 1PL, 2PL	mi-, ɛji-, kini-, bihi-, ɛhi-	-ɛnɛ
	3PL.ANIMATE	ki-	-inɛrɛ

Table 4: Yakut case marking on pronouns. Stems and suffixes are shown in their underlying representations (before application of the rules listed in §2).

4.3 Possessive marking on pronouns as compared with nominals

In contrast to nominal possessors, which are generally unmarked (since it is the possessed nominal that usually carries the possessive marking), a pronominal possessor may be marked or unmarked in Yakut, depending on the possessive construction used. The possessor may appear in the dative case, as in the following example.

(48) *miɛʁɛ   batːaχ   ba*
    1SG.DAT   hair   exists

    'I have hair.'

The possessor may also appear in the genitive case, as in (47). Or, the possessor may appear in the nominative case (i.e. unmarked), with the possessee carrying case marking and agreement marking with the possessor, as in (15).

4.4 Absence of inclusive/exclusive marking

Yakut does not appear to distinguish between the inclusive and exclusive senses of the first person pronoun through morphology.

4.5 Reflexives

Table §4.5 lists the reflexive pronouns we have elicited thus far.

Person (Gender)	Case	Singular	Plural
1	Nominative	bɛjɛm	
	Accusative	bɛjɛbɯn	bɛjɛbɛtːɯn
	Dative		
	Ablative		
	Comparative		
2	Nominative	bɛjɛn	
	Accusative	bɛjɛʁɛn	bɛjɛʁɛtːɯn
	Dative	bɛjɛʁɛr	
	Ablative		
	Comparative		
3 (Animate)	Nominative	bɛjɛtɛ	
	Accusative	bɛjɛtːɛn	bɛjɛlɛʁɛn
	Dative		
	Ablative		
	Comparative		
3 (Inanimate)	Nominative		
	Accusative		
	Dative		
	Ablative		
	Comparative		

Table 5: Yakut reflexive pronouns

The following examples illustrate the nominative, accusative, and dative cases of the second person singular reflexive pronoun. We have not elicited reflexive pronouns in any other cases.

(49) ɛn   bɛjɛn   bar   buɔlaŋ-ŋɯɯn   ɛn   ʤɔlɔx-xʊn
      2SG.NOM   2SG.NOM.REFL   exist because-2SG   2SG.NOM   happy-2SG.PRS
      'You are happy because of yourself.'

(50) ɛn   bɛjɛʁɛn   kœɾœʁʏn
      2SG.NOM   2SG.ACC.REFL   see-2SG.PRS
      'You see yourself.'

(51) ɛn   bɛjɛʁɛr   kɛnɛgɛ   biɾɛ-ʁɪn
      2SG.NOM   2SG.DAT.REFL   book.SG.ACC.INDF   give-2SG.PRS
      'You give yourself a book.'

5 Noun phrase syntax

In this section, I summarize the ordering of constituents in noun phrases (§5.1) and describe characteristics of several possible noun phrase consituents, including demonstratives (§5.2), quantifiers (§5.3), numerals (§5.4), and adjectives (§5.5). Adjectives seem to be the only one of these constituents which may appear multiple times in the same noun phrase; see §5.5.3 for a description of adjective chaining.

5.1 Noun phrase constituents and ordering

The possible constituents of a noun phrase are listed in order of increasing complexity in Table 6. (For discussion of other possible constituent orderings to be tested in the future, see §8.) Noun phrases may

12

include nouns, pronouns, demonstratives, quantifiers, numerals, degree adverbs, and adjectives. We have not found any evidence for the existence of articles, however.

Yakut NP constituent orderings
NP → PN
NP → (Num) (Adj) N
NP → DegAdv Adj N
NP → Quant N
NP → Dem N

Table 6: Possible noun phrase constituents and their default orderings

The following example illustrates that a noun phrase can consist of a single pronoun (the subject in this sentence) or a single noun (the predicate).

(52) *kinɪ-∅-∅*   *uʧutal-∅-∅*
     3.ANIMATE-SG-NOM   teacher-SG-COP.3SG

     'He/she is a teacher.'

The next noun phrase consists of a numeral, adjective, and noun.

(53) *alta*   *kiɾidɛɾ*   *kuga:χ-tar*
     six   dirty   ear-PL

     'six dirty ears'

The predicate of the next sentence demonstrates that a noun phrase may consist of a degree adverb, adjective, and noun.

(54) *kinɪ-∅-∅*   *samaj*   *yʧygɛj*   *uʧutal-∅-∅*
     3.ANIMATE-SG-NOM   most   good   teacher-SG-COP.3SG

     'He/she is the best teacher.'

The last two examples in this section illustrate that a noun phrase can consist of a quantifier and a noun, as in (55), or a demonstrative and a noun, as in (56).

(55) *ɛlbɛχ*   *ɔskuɔla*
     many   school

     'many schools'

(56) *bu*   *uɾu:ʧka*   *kiniɛnɛ*
     this   pen   hers

     'This pen is hers.'

5.2   Demonstratives

Yakut uses demonstratives *bu* and *ɔl* to refer to entities which are close to or far from the speaker (physically or conceptually), respectively. In particular, Platon says that (57) is appropriate if the pen is close enough for the speaker to reach, and (58) is appropriate if the pen is out of reach.

(57) *bu*   *uɾu:ʧka*
     this   pen

     'this pen'

(58) *ɔl*   *uɾu:ʧka*
     that   pen

     'that pen'

Both *bu* and *ɔl* can function as demonstrative pronouns, as in the following example.

(59) *bu   mɪn   uɾuːʧka*
this   my   pen
'This is my pen.'

5.3   Quantifiers

Yakut often expresses quantification with adverbs rather than quantifiers. For example, in the following sentence, *kɯɾatɯɯk* features adverbial morphology (the adverbial suffix *-tɯɯk* is affixed to the adjective *kɯɾa*, meaning "small"), suggesting that the sentence "The dog ate a little bit of the meat" is expressed in Yakut as "The dog ate the meat a little bit," with the extent of the action, rather than the noun, quantified.

(60) *ɯɯt   ɛt-ɛ   kɯɾa-tɯɯk   siɛbitɛ*
dog   meat-ACC.DEF   small-ADV   ate
'The dog ate a little bit of the meat.'

When Platon translates an English sentence featuring a quantified noun phrase, it can be difficult to determine whether his Yakut translation uses a quantifier or an adverb. However, since, plural marking on nouns is optional when they are quantified, as in (61) below, absence of plural marking on a quantified, plural, countable nominal can serve as evidence that the noun is indeed quantified. In particular, based on (61), *ɛlbɛχ* is a quantifier, not an adverb.

(61) *ɛlbɛx   ɔskuɔla-∅*
many   school-SG
'many schools'

Table 5.3 lists quantifiers and whether they are used with count or mass nouns. Most quantifiers we have elicited can be used with both count and mass nouns. For example, *ɛlbɛχ* quantifies the count noun "school" in (61), and quantifies "meat," a mass noun, in the following example.

(62) *ɛlbɛx   ɛt*
much   meat
'much meat'

English	Yakut	Used with count nouns	Used with mass nouns
some, several	sɔɾɔx	Y	Y
many, a lot of, much	ɛlbɛχ	Y	Y
all	baɾɯ	Y	Y
every	hɔs birdi	Y	Unknown

Table 7: Yakut quantifiers

The next set of examples illustrates the remaining quantifiers *sɔɾɔx, baɾɯ,* and *hɔs birdi*. The gloss for *hɔs birdi* is uncertain, as we have yet to examine the possible meanings of its constituent words.

(63) *ɔnɔ   sɔɾɔx   χaja-lar   baː-lar*
there several mountain-PL exist-3PL
'There are several mountains.'

(64) *ɛhigɪ   baɾɯ   yʧygɛj-gɪt*
2PL.NOM   all   good-2PL
'You are all good.'

(65) *hɔs   birdi   balɯksɯt   tɯɯj-la*
every every   fisherman   boat-has
'Every fisherman has a boat.'

5.4 Numerals

In this section I describe ordinal numerals (§5.4.1), cardinal numerals (§5.4.2), and the interaction between numerals and number marking (§5.4.3).

5.4.1 Ordinal numerals

The Yakut number system is base ten. Table 5.4.1 lists ordinal numerals one through fourteen, as well as some larger numbers. Based on the forms of numbers $11-14$, it appears that the numbers $11-19$ are formed by the word for "ten" followed by the word for the ones digit. For example, the literal translation of "eleven" would be "ten one."

The word for "twenty" does not appear to be formed from the words for any of the numbers $1-19$.

The number "three hundred" appears to consist of the word for "three" followed by the word for "hundred," as it does in English.

English	Yakut	English	Yakut	English	Yakut
one	bir	eleven	uɔn bir	one hundred	sys
two	ikkɪ	twelve	uɔn ikkɪ		
three	ys	thirteen	uɔn ys	three hundred	ys sys
four	tyœt	fourteen	uɔn tyœt		
five	biɛs				
six	altɑ				
seven	sɛttɛ				
eight	aʁɯs				
nine	tɔʁʊs				
ten	uɔn	twenty	sybɛ		

Table 8: Yakut ordinal numerals (elicited January 19, 2023)

5.4.2 Cardinal numerals

Table 5.4.2 lists the cardinal numerals corresponding to the ordinals listed in Table 5.4.1 (except for "fourteenth," which was not elicited).

The formation of cardinal numerals from ordinal numerals is not entirely regular. The word for "first" appears to be formed through suppletion. Some of the cardinal numerals can be formed from the ordinals by suffixing -Is, followed by the application of the phonological rules enumerated in §2. For cardinals consisting of more than one word, it is the last word which is suffixed.

Some cardinals exhibit alternations not already accounted for by the phonological rules in §2. For example, ordinal numbers with a diphthong in the stem lose the first vowel of the diphthong in their cardinal form, causing alternations such as between *uɔn* ("twenty") and *ɔnʊs* ("twentieth"). To form "eighth" and "ninth," it appears that the roots *aʁɯs* and *tɔʁʊs* have undergone syncope, each losing the vowel of its final syllable. Additionally, [ʁ] has devoiced to [χ] in both cardinals, perhaps in an anticipatory manner to match the voicing of [s].

5.4.3 Interaction between numerals and number marking

Plural marking on nominals is optional when a nominal is already quantified by a numeral. In first two examples in the following set, plural marking on the quantified nominal has been omitted, while in the third example, it has been included. In general, Platon tends to omit plural marking from quantified noun phrases.

(66) 2023-01-25
　　 alta　sɪɾɛj-∅
　　 six　　face-SG

English	Yakut	English	Yakut	English	Yakut
first	bɑstɑkɯɯ	eleventh	uɔn birıs	one hundredth	syhys
second	ikkıs	twelfth	uɔn ikkıs		
third	yhys	thirteenth	uɔn yhys	three hundredth	ys syhys
fourth	tœrdys				
fifth	bɛhıs				
sixth	ɑltɯıs				
seventh	sɛttıs				
eighth	ɑχsıs				
ninth	tɔχsʊs				
tenth	ɔnʊs	twentieth	sybɛhıs		

Table 9: Yakut cardinal numerals (elicited February 16, 2023)

'six faces'

(67) 2023-01-25
      alta sɔlʊs-∅
      six   star-SG

      'six stars'

(68) *ik:ı   kɛhi-lɛr*
      two   person-PL

      'two people'

5.5 Adjectives

In this section, I discuss comparatives (§5.5.1), superlatives (§5.5.2), and adjective chaining (§5.5.3).

5.5.1 Comparatives

The Yakut comparative construction employs a copular clause (see §7), with the subject predicated by the compared quality. The standard of comparison takes the ablative case, as in (69) below, or the comparative case, as in (70). As in other copular clauses, the predicate (in this case, the adjective) is marked for person-number agreement with the subject of the clause.

(69) 2023-03-07
      mın   ɛjigit:ɛn   yrdyk-pyn
      1SG.NOM   2SG.ABL   tall-1SG

      'I am taller than you.'

(70) 2023-03-07
      mın   ɛjiginɛʁɛr   yrdyk-pyn
      1SG.NOM   2SG.COMPARATIVE   tall-1SG

      'I am taller than you.'

5.5.2 Superlatives

Superlatives are expressed using the degree adverb *samaj*, which can be glossed as "the most," as in the example below. Like the comparative construction in the previous section, the superlative construction also employs a copular clause.

(71) 2023-03-07
  mɯn   samaj   ɯɾas-pɯn
  1SG.NOM   most   clean-1SG
  'I am the cleanest.'

5.5.3 Adjective chaining

Yakut allows for multiple adjectives in a single noun phrase, as in the next example.

(72) *yrdyk   maʁan   xaja-lar   ɯɾaxtan*
  tall   white   mountain-PL   far.away
  'The tall, white mountains are far away.'

6 Derivational nominal morphology

A noun describing a human agent can be formed by adding the suffix /-sIt/ to a noun related to the action performed by the agent. For example, "fisherman" (74) is formed from the word for "fish" (73), "hunter" is formed from the word for "hunting," and "warrior" is formed from the word for "war." Alternations in the agentive suffix are partially accounted for by Backing Harmony and Debuccalization. Additionally, in "hunter" (76), it appears that the underlying sequence /ts/ becomes the affricate [ʧ].

(73) 2023-01-19
  balɯk-∅-∅
  fish-SG-NOM
  'fish'

(74) 2023-02-21
  balɯk-sɯt-∅-∅
  fish-A-SG-NOM
  'fisherman'

(75) 2023-03-09
  bɯlt-∅-∅
  hunting-SG-NOM
  'hunting'

(76) 2023-02-21
  bɯlt-ʃɯt-∅-∅
  hunter-A-SG-NOM
  'hunter'

(77) 2023-02-21
  sɛɾi-∅-∅
  war-SG-NOM
  'war'

(78) 2023-02-21
  sɛɾi-hɪt-∅-∅
  warrior-A-SG-NOM
  'warrior'

7 Copular clauses

In this section, I describe how copular clauses are realized morphologically and syntactially with nominal (§7.1), adjectival (§7.2), locational (§7.3), and pronominal (§7.4) predicates.

7.1 Copular clauses with nominal predicates

Copular clauses with nominal predicates are realized by suffixing a person-number agreement marker to the predicate nominal. The subject precedes the predicate. Table 10 gives the full paradigm for the agreement markers. The predicate nominal must also agree in number with the subject, so for plural nouns, the plural marker is affixed to the stem before the person-number agreement marker. In the third person, the person-number agreement marker is a null morpheme.

Given that the suffixes used to mark nominal predicates have the same forms as the markers for person-number agreement on verbs, and that the suffixed predicate nominal occupies the same position in the sentence as a verb, the Yakut copula can be viewed as a derivational operation that forms a verb from the nominal predicate (Payne 1997: 118).

Person	Singular	Plural
1	-bin	-bit
2	-gin	-git
3	∅	-lEr

Table 10: Underlying forms of Yakut person-number agreement suffixes for verbs. Copular clauses mark the predicate with these suffixes, except for third person plural predicate nominals, which take the null morpheme.

The next set of examples illustrates the copular clause with the nominal predicate "teacher" for all persons and numbers.

(79) 2023-02-09
mɪn   utʃutal-∅-buɪn
1SG.NOM   teacher-SG-1SG

'I am a teacher.'

(80) 2023-02-09
ɛn   utʃutal-∅-guɪn
2SG.NOM   teacher-SG-2SG

'You are a teacher.'

(81) 2023-02-09
kinɪ-∅-∅   utʃutal-∅-∅
3-SG-NOM   teacher-SG-3SG

'He/she is a teacher.'

(82) 2023-02-09
bihigɪ   utʃutal-lar-buɪt
1PL.NOM   teacher-PL-1PL

'We are teachers.'

(83) 2023-02-09
ɛhigɪ   utʃutal-lar-guɪt
2PL.NOM   teacher-PL-2PL

'You are teachers.'

(84) 2023-02-09
kini-lɛr-∅   utʃutal-lar-∅
3-PL-NOM   teacher-PL-3PL

'They are teachers.'

7.2 Copular clauses with adjectival predicates

Like nominal predicates, adjective predicates are marked for agreement in person and number with the subject through suffixation. The person-number agreement markers used for adjectival predicates are the same as those used for nominal predicates, listed in Table 10. (Again, these are also the same agreement markers as are used for verbs.)

Unlike predicate nominals, which are suffixed in the plural form with the plural marker for nominals, followed by the suffix for person-number agreement for verbs, adjectival predicates are (in most cases) suffixed only with the person-number agreement marker for verbs. The third person is an exception: the adjectival predicate is suffixed with a morpheme identical in form to the nominal plural marker when the subject is plural.

One possible analysis is that the adjective is nominalized to form a predicate nominal in the third person, which would explain why its morphological realization is identical to that of predicate nominals. Additional support for this analysis comes from our elicitations of adjective-to-noun nominalizations. For example, Platon translates "young ones" as $\varepsilon d\varepsilon r$-$d\varepsilon r$, from $\varepsilon d\varepsilon r$ ("young"), demonstrating that an adjective can be nominalized and will carry the expected nominal number marking suffix.

However, a second possible analysis is that the form of the third person plural agreement marker is identical to that of the plural marker for nominals. We see *-lEr* as the agreement marker for the third person plural on verbs, so perhaps the third person plural agreement marker is non-null for copular clauses with adjectival predicates (unlike for copular clauses with nominal predicates, for which it is null).

Below, I illustrate copular clauses for all persons and numbers with the adjective predicate "good."

(85) 2023-03-07
  mɪn   *ytʃygɛj-bɪn*
  1SG.NOM   good-1SG
  'I am good.'

(86) 2023-02-09
  ɛn   *ytʃygɛj-gɪn*
  2SG.NOM   good-2SG
  'You are good.'

(87) 2023-02-09
  kinɪ-∅-∅   *ytʃygɛj-∅*
  3-SG-NOM   good-3SG
  'He/she is good.'

(88) 2023-02-09
  bihigɪ   *ytʃygɛj-bɪt*
  1PL.NOM   good-1PL
  'We are good.'

(89) 2023-02-09
  ɛhigɪ   *ytʃygɛj-gɪt*
  2PL.NOM   good-2PL
  'You are good.'

(90) 2023-02-09
  kini-lɛr-∅   *ytʃygɛj-dɛr*
  3-PL-NOM   good-3PL
  'They are good.'

For examples of copular clauses with comparatives and superlatives as adjectival predicates, see §5.5.

7.3 Copular clauses with locational predicates

Copular clauses with locational predicates can be constructed in multiple ways. A locational predicate can simply consist of a dative case nominal, as in the following example, with no overt copula morpheme. When the predicate is expressed in this manner, the subject is "at," "in," or "on" the specified location.

(91) *bihigı*   *ɔskuɔlːa-ʁa*
    1PL.NOM   school-DAT
    'We are at school.'

A copular verb may also be used with dative locational predicates, but is not obligatory. For example, in the following sentence, Platon judges it acceptable to omit *barbɯn*.

(92) *mın*   *utujɛr*   *hɔs-kɔ*   *bar-bɯn*
    1SG.NOM   sleeping   room-DAT   COP-1SG
    'I am in the bedroom.'

Alternatively, a predicate locative may employ an adpositional phrase, in which case the adposition is marked for agreement in number with its noun complement, using the same number marking suffixes as for nominals. Additionally, the invariant suffix *-IgEr* (which I analyze here as a copula) is affixed after any number marking on the adposition. The noun complement appears in the nominative case. Below, (93) and (94) illustrate copular clauses with adpositional phrases, including contrasting singular and plural number marking on the adposition.

(93) *at*   *ʤiɛ-∅-∅*   *tah-ɯgar*
    horse   house-SG-NOM   outside-COP
    'The horse is outside the house.'

(94) *at*   *ʤiɛ-lɛr-∅*   *tas-taɾ-ɯgar*
    horse   house-PL-NOM   outside-PL-COP
    'The horse is outside the houses.'

7.4 Copular clauses with pronominal predicates

Our elicitations have not yielded any instances of copular clauses with pronominal predicates. However, we have observed pronominal predicate constructions that do not use a copula. As seen in (47), a nominal may be juxtaposed with a genitive pronominal predicate to express possession.

    See §8 for possible future directions for investigating pronominal predicates.

8 Future work

In this section, I describe gaps in our current understanding of Yakut morphosyntax, and possible approaches to future investigation.

    In addition to use of the demonstratives *bu* and *ɔl* discussed previously, Yakut appears to mark several degrees of definiteness which are poorly captured by our metalanguage articles "the" and "a," based on the examples elicited below.

(95) *ɯrɯa*   *ɯlarχa*
    song   let_us_sing
    'Let's sing the song.'

(96) *ɯrɯata*   *ɯlarχa*
    song   let_us_sing
    'Let's sing the song.'

Moreover, sometimes the use of *bu* and *ɔl* induces suffixation on the noun:

(97) *ɔl   ɯɾɯana   istiɛɋʁɛ*
    that   song   let_us_listen
    'Let's listen to that song.'

Notably, all three examples above seem to feature the definiteness marking on an accusative case noun, for which we have already identified one definiteness marker *-E*. To investigate whether the suffixes in the preceding examples indeed mark definiteness, we will need to design elicitation prompts that provide discourse contexts with varying levels of identifiability for a fixed noun, and observe which suffixes are used in each context. We should also design elicitation prompts which employ the demonstratives in different cases, as we have previously mostly elicited demonstratives with nominative case nouns, and therefore we may have missed any case marking specific to demonstratives.

    We also currently lack data on whether pronouns can occur in the instrumental case. This may be infelicitous, since people are generally agents, not instruments. However, an instrumental case third person inanimate pronoun would perhaps be less infelicitous than instrumental pronouns for animate entities, and could be elicited through prompts of the form "I use **it** to . . . " and "I VERB with **it**" (with discourse context providing an inanimate antecedent for "it").

    Future elicitations could also devote time to filling in the paradigm for reflexive pronouns. Additionally, we could investigate whether reflexives have additional uses, such as in reciprocal clauses or for emphasis (Payne 1997: 198-203). Potential verbs to use in elicitation prompts for investigating reciprocal clauses include "see" and "meet." To investigate whether Yakut uses reflexives for emphasis, it may be helpful to provide discourse context that sets up a contrast between the emphasized referent and others (e.g. "Did your mother prepare the food? No, **I** prepared the food **myself**").

    We also lack data on the full range of noun phrase constituent orderings possible. We can test, for example, whether a quantifier and an adjective, or a demonstrative and numeral, can occur in the same noun phrase, by constructing sentences featuring these constituents, using the words we have already elicited.

    Based on Platon's comments, Yakut may have a vocative case, but further elicitation is required to confirm this. For example, he noted that the vowels in the word for mother, *i:ɛ*, are lengthened if one is calling directly to one's mother. We might ask Platon to translate a short dialogue in which the speakers address one another by name in order to elicit the vocative case.

    As we observed genitive case marking on pronouns, Yakut may also have a genitive case that marks nominal possessors, serving as an alternative to the possessor agreement suffixes introduced in §3.5 (which mark the possessee). The genitive case may appear in embedded possessive noun phrases such as in the following example.

(98) *mɪn   iɛ-m   ubaj-ɯɯn   kɛrgɛn-ɪn   ɛhɛː-tɛ*
    1SG.NOM   mother-1SG.POSS.NOM   older_brother-GEN   spouse-GEN   grandfather-3SG.POSS.NOM
    ynkylyr
    dances
    'My mother's older brother's wife's grandfather dances.'

In the above analysis, the underlying form of the nominal genitive suffix is assumed to be *-In*, which is identical to the third person singular accusative possessive suffix. In order to test whether *-In* is indeed the genitive case marking suffix for nominals, we might reformulate some of the possessive clause translations we have elicited from Platon, using the genitive case to mark the possessor. For example, for the sentence "The woman's arm is long" (translated by Platon as *ʤaxtar ili-tɛ uʁun*, with possessor agreement marking on the possessee *ili*, "arm") we might ask Platon if it is grammatical to say *ʤaxtar-ɯɯn ili-tɛ uʁun* (with "woman" in the genitive case). (I have included the possessive marker *-te* on the possessee in the constructed example because it appears in the previous example on "grandfather," suggesting that it can co-occur with the proposed genitive marking.)

    We might investigate copular clauses with pronominal predicates, given our current lack of data for this construction. We could test whether pronominal predicates are treated similarly to nominal predicates, by constructing copular clauses with the pronouns and subject agreement markers we have collected, and

applying the rules described in §7.1 for constructing copular clauses with nominal predicates. We would then ask Platon whether the constructed sentences are grammatical.

Finally, there may be more derivational nominal morphology which we have not yet explored. In particular, in the future we could explore whether Yakut allows for various types of nominalization, such as action nominalization, agent nominalization, and patient nominalization (Payne 1997: 223-231). For example, since we previously elicited the verb "sing," we could elicit sentences including the words "singing (noun)" (action nominalization) and "singer" (agent nominalization) and analyze whether the forms of these nouns are derived from the verb.

References

Payne, Thomas E. 1997. *Describing morphosyntax.* Cambridge: Cambridge University Press.
Yakut. 2023. *Ethnologue.* (`https://www.ethnologue.com/language/sah/`) (Accessed 2023-2-26.)