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Yakut derivational morphology

An historical approach

Deverbal nominals

**DISSERTATION** 

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## 1 Introduction

In the classical period of Turcology a number of serious monographs were published on the morphological system of the Turkic languages; sometimes as part of broader analysis (e.g. together with phonology) of this language group. Generally speaking, these works had two determinative aims:

First, mainly comparative and historical description of Turkic in order to find the common roots, and to outline the ways how contemporary languages were developed from their ancestors. Without completeness, here only some, the most important and influential, books belonging this field will be mentioned. The first summation on comparative-historical morphology of Turkic was made by a team of famous Russian turcologists in 1956 in the book *Issledovanija po sravnitel'noj grammatike tjurkskih jazykov 2. Morfologija* edited by N. K. Dmitriev. Only one year later appeared the book of M. Räsänen entitled *Materialien zur Morphologie der türkischen Sprachen* (here in after RäsMTSp). The book *Sravnitel'no-istoričeskaja grammatika tjurkskih jazykov. Morfologija* edited and published by Ė. R. Tenišev in 1988 (here in after TenM) seems to be the last representation of the classical period showing the limits what the traditional method in Turcology could produce.

Second, comparative analysis of the morphological system of Turkic, Mongolic and Tungusic in order to say something for or against the genetic question of the so called Altaic language family. Since the basic ties between the Turkic languages have already been outlined in the very beginning of the Turkic studies and the morphological description of Turkic seemed to be enough for a broader analysis, some scholars focused to the solution of the genetic question. Great are the merits of G. J. Ramstedt who was the first analysing and comparing the morphological system of the Altaic languages in its entirety; the second volume of his book *Einführung in die altaische Sprachwissenschaft* published in 1952 has been devoted to morphology (here in after RamEAS). By this analysis Ramstedt tried to prove, besides other questions, the genetic relation between the Altaic languages. This work is undoubtedly one of the most important and most cited books of Altaic studies.

In the latest decades, however, the followings became evident: Turcology, in its present state, cannot answer numerous questions that are needed for reconstructing the morphological system of Proto-Turkic. This fact implies that nothing serious can be stated on the question of Altaic morphology, if there is such a term at all, until the morphological system of Proto-Turkic, Proto-Mongolic and Proto-Tungusic are worked out in a sufficient degree. From another point of view: Turkic morphology also has "vote" in the genetic question of Altaic languages.<sup>2</sup>

In his insurmountable paper *Proto-Turkic: Reconstruction problems* (1976) G. Doerfer discussed some aspects of Turkic morphology<sup>3</sup> (besides phonology) opening a new chapter in

In this work Ramstedt went some more forward and did great effort on joining also Korean and Japanese to the group of Altaic languages. This question of the Altaic studies is, however, clearly out of the scope of my work, and will not be touched at all.

<sup>2</sup> On the contrary, some scholars have the opinion that Altaic studies of today has the ability to give definite answer to the genetic question, cf. Starostin *et al.* 2003.

<sup>3</sup> Though he has not touched the problems of derivational morphology, cf. Doerfer 1976: 5–6.

Turcology. His methodology and viewpoint, different in many respects from the former ones, yielded new results for (historical-comparative) Turcology and threw new light upon the problems of the Altaic language family. Another book has to be mentioned here as one of the most important treatises of the resent times: it is M. Erdal's masterpiece *Old Turkic Word Formation* published in 1991 (here in after OTWF). Although he passed over some seriously difficult problems of Old Turkic in silence and his viewpoint is very idealistic in certain questions, e.g. in case of the functional description of the derivational elements, he presented a very impressive way on which new results can be gained from the more or less same materials former scholars also have already used. One of the most important facts Erdal *op. cit.* has pointed out is that the thorough and systematic analysis of the full corpus, word by word, is obligatory; the classical method just citing some typical examples cannot be progressive any more.

There are main pillars can be used in the reconstruction of Proto-Turkic morphology. One of them is the Old Turkic morphological system about which we possess the monograph of Erdal op. cit.<sup>5</sup> Other historical Turkic languages, the older the better, are of great importance. In this regard a book of Á. Berta entitled *Deverbale Wortbildung im Mittelkiptschakisch-Türkischen* (1996) has to be mentioned as a useful source. Among modern Turkic languages some of them have key role: Chuvash is ultimately the most important one, the morphology of which was worked out and published by L. S. Levitskaja in her monograph *Istoričeskaja morfologija čuvašskogo jazyka* in 1976 (here in after LevIMČJa). Although the results of this book are exceeded in some respects, it can be used as a starting point in the reconstruction of certain parts of morphology.

Turning to other Turkic languages, a relatively poor situation can be observed: most of them have no handbook on their comparative-historical morphology. We find only grammars focusing to the description of the synchronic system with minimal diachronic comments, and articles on small segments of historical morphology. In an ideal case every subgroup of the Turkic languages, i.e. Chuvash, Kipchak, Oghuz, Turki, South Siberian, Khalaj and Yakut (plus the historical languages) should possess a good monograph on this subject. Until it does become a reality, reconstruction of Proto-Turkic cannot be fulfilled.

In present monograph my aim is to work out a small part of the Yakut morphological system, namely the system of deverbal nominal suffixes as thorough as possible. Since the Yakut language, preserving several old features of Turkic, has also important role in the reconstruction of every segment of Proto-Turkic, I hope my modest step in Yakut historical morphology helps Turcology to be able to reconstruct Proto-Turkic in the future more precisely.

<sup>4</sup> Of course, there are some other articles of that period dealing with similar questions, but this paper was, to the best of my knowledge, the first one expressing and summarizing the problems clearly.

Although this book does not cover every field of morphology, it is definitely enough for the present aims, because I have now only a share in derivational morphology. For other parts of Old Turkic morphology, cf. GOT.

<sup>6</sup> The considerations regarding the analysis will be discussed later.

As indicated in the title, this work is the very first result of a long term research program in which other parts of Yakut derivational morphology also will be analysed and prepared for publication.

## 2 Derivational morphology

This chapter is neither for presenting the theoretical ideas behind derivational morphology, nor for giving a summary of the vast literature of this subject. Instead, here I define the basic principles that have determined the frame and boundaries of this present work.

As it is indicated in the title, this work will concentrate to a special type, the most common in Turkic, of word formation: derivation with bound morphemes; other types of word formation, such as compounding, etc. will not be touched.

Although derivational morphology is a relatively delimited and defined part of the grammar, and the logic of distinction of derivational morphology from other things might be clear, there are some points where researcher can entertain doubts. Certain suffixes can move easily from the domain of inflection to derivation. For instance, participle of a verbal lexeme being an integral part of its paradigm traditionally considered as inflectional, however such forms have adjectival character. It is the same to converbs (sometimes referred to as adverbial participle) having adverbial character, too. The Yakut past participle -BXt is a clear example of this category: most of these forms are not part of the lexicon, however some could become lexicalized, e.g.  $\ddot{o}l\ddot{b}\ddot{u}t$  'deceased, dead person, corpse; death'  $\leftarrow \ddot{o}l$ - 'to die, to perish; to die out; to be ill; to become numb' found its way to the lexicon being an independent entry in PekSJ.

## 3 A brief survey of Yakutology focusing to morphological studies

Although Yakut is one of the easternmost Turkic languages, the foundation of modern Turkic linguistics has to be associated with Yakutology and the name of O. Böhtlingk who wrote his masterpiece on Yakut in 1851. This book contains a grammar, texts with German translation and a dictionary. The precise analysis and description of the Yakut language made his book *Über die Sprache der Jakuten* (here in after BöhtlSJ) a valuable source for a long time, and it also

served as a model for other works on Turkic languages. It is worth noting that Böhtlingk was the first in Turcology who applied the comparative-historical method of linguistics in his work. Between §233–534 he discusses morphology (*Wortbildung und Wortbiegung*).

Almost five decades later the next grammar of Yakut entitled *Grammatika jakutskago jazyka* (1900) was written by S. V. Jastremskij. Morphology takes part in this book between §79–176; there is no significant difference between Jastremskij's and Böhtlingk's works.

The first epoch of Yakutology in Europe can be linked with the name of Gy. Németh. He mostly focused to Yakut phonology, but had minor statements on morphology, too, cf. Németh 1914, 1914–1915.

The classical period of Russian Yakutology began with L. N. Haritonov. His first book on Yakut grammar Sovremennyj jakutskij jazyk - Fonetika i morfologija was published in 1947. Another work of him, maybe the most important one, has to be mentioned here, that is Tipy glagol'noj osnovy v jakutskom jazyke published in 1954 (here in after HarTip). Making a more precise functional description of Yakut, Haritonov's works could give new results to Yakutology. The Russian school of Yakutology published several other important works on the Yakut language and its dialects. The greatest compendium of their knowledge was published in a book Grammatika sovremennogo jakutskogo literaturnogo jazyka - Fonetika i morfologija in the edition of E. I. Korkina in 1982. Generally speaking, this circle of scholars, being native speakers of Yakut, made seriously useful comments on the functional description of Yakut morphology, however, did minimal researches on comparative-historical analysis, and a plenty of such statements have no scientific value. Another name has to be mentioned in this group: N. K. Antonov who wrote a book, being very close in subject to this present work, on the system of nominal word formation of Yakut entitled Imennoe slovoobrazovanie v jakutskom jazyke (1952). Because I only possess the "Avtoreferat" of his dissertation, nothing serious can be said on it.

A main figure of Altaic studies, N. N. Poppe devoted a short period of his life to Yakut. He wrote an article on Yakut etymologies (here in after PoppeJE) and a short chapter on the general description of Yakut (with minimal morphological comments) in the second volume of *Philologiae Turcicae Fundamenta*, cf. PoppeJ.

The most important figure in Yakutology is, out of question, the Pole S. Kałużyński. His oeuvre covers almost every field of Yakut studies. He devoted a series of articles to etymological studies, cf. KałD 1–8, KałEJE, KałJWf, KałM 1–3 and KałTLw. In other papers he focused to morphology, cf. KałIM 1–2. Summing up these papers, his researches yielded hundreds of new etymologies for Yakutology. In his insurmountable monograph entitled *Mongolische Elemente in der jakutischen Sprache* (1961) Kałużyński discussed almost every aspect of Mongolic influence on Yakut; for instance, he thoroughly analysed many derivational elements of Mongolic origin sometimes adding notes on the Turkic side of the problems. Thus, Kałużyński's works provide a great base for the present study, and are cited in every case.

Another Pole of Yakutology, namely M. Stachowski has to be mentioned here. Although he did not focus in his works on Yakut directly to derivational morphology, his statements on phonology (cf. StachGJV), lexicology and other fields of Yakut studies yielded several important results and threw new light upon many questions, that make his works seriously useful in Yakut morphology, too. In addition, he has a methodically important article on Suffix- und Wortstammtypen im Jakutischen (here in after StachSWst), which is a must-read for anyone who deals with Yakut morphology. Stachowski's researches on Dolgan, a language very close to Yakut, also have importance for the present study. His book on Dolgan word formation entitled Dolganische Wortbildung (here in after StachDWb) provides data for the better understanding of the Yakut morphological system.

## 4 Technical notes

The applied system of transcription is more or less identical to the traditional 'Fundamenta' notation, cf. PhTF 1: xiv–xv, that is usually referred to as 'Turcological notation'.<sup>7</sup>

The allophony of /k/ and /g/ will not be signed in the historical Turkic and Mongolic data and in the reconstructed forms. On the other hand, it will be indicated, being closer to transliteration than transcription, in case of all modern languages where the Cyrillic orthography has different signs for them. However, Pekarskij's notation, cf. PekSJ, of the front : back /l/ will not be signed. Although the modern orthography of Yakut, cf. YakS, does not sign the nasal glide  $/\tilde{y}/$ , I will indicate it in every case according to Pekarskij because of its importance in reconstruction. The sound /s/ has developed to /h/ in intervocalic position in modern Yakut; this sound change, however, does not signed in the older dictionaries, i.e. in BöhtlSJ and PekSJ. Since it has no relevance in historical-comparative analysis, the original forms of the cited dictionaries are always preserved.

In the description of the derivational elements the allomorphs will be formulated: the regular morphophonological variants are always indicated in capital letters. The capital letters  $X^9$  and A are used for the fourfold alternation of the vowels /i i u ü/ and /a ä o ö/ respectively. The ligature XA is used for the diphthongs /ia iä uo üö/. The capital V is a general symbol for vowels, however, it will indicate the possible application of both A and X in suffixes, for example -(V)k, q.v., means -(A)k or -(X)k. In the formulation of the consonantal

Although several attempts have been made to introduce a common system of transcription for Turcology, the applied methods show great variety and differ from each other significantly. For instance, the latest compendium of the Turkic languages used the signs <e> and <e> for the low and higher unrounded front vowels instead of the 'Traditional' <a>and <e> for the low and higher unrounded front vowels instead of the 'Traditional' <a>and <e> for the low and higher unrounded front vowels instead of the 'Traditional' <a>and <e> for the low and higher unrounded front vowels instead of the 'Traditional' <a>and <e> for the low and higher unrounded front vowels instead of the 'Traditional' <a>and <e> for the low and higher unrounded front vowels instead of the 'Traditional' <a>and <e> for the low and higher unrounded front vowels instead of the 'Traditional' <a>and <e> for the low and higher unrounded front vowels instead of the 'Traditional' <a>and <e> for the low and higher unrounded front vowels instead of the 'Traditional' <a>and <e> for the low and higher unrounded front vowels instead of the 'Traditional' <a>and <e> for the low and higher unrounded front vowels instead of the 'Traditional' <a>and <e> for the low and higher unrounded front vowels instead of the 'Traditional' <a>and <e> for the low and higher unrounded front vowels instead of the 'Traditional' <a>and <e> for the low and higher unrounded front vowels instead of the 'Traditional' <a>and <e> for the low and higher unrounded front vowels instead of the 'Traditional' <a>and <e> for the low and higher unrounded front vowels instead of the 'Traditional' <a>and <e> for the low and higher unrounded front vowels instead of the 'Traditional' <a>and <e> for the low and higher unrounded front vowels instead of the 'Traditional' <a>and <e> for the low and <e> for the low and higher unrounded front vowels instead of the 'Traditional' <a>and <e> for the low and <e> fo

There was only one attempt in Yakutology to make a formulation of the allomorphic variants, cf. StachY 420. The system presented here differs slightly from that of StachY, because of the following reason: the formulation given in StachY focusing mostly to the variants of the inflectional system shows minor but important differences from the rules appearing in derivation.

The formulation of the allomorphic variants by capital letters was introduced to Turcology by Thomsen 1963, and later was accepted by other scholars, but could not gain ground for its importance.

<sup>9</sup> In StachY it is identical to I.

variants, the role of signs k and g has to be emphasised: these small letters are used for the allophones k, x and g, g respectively, and the capital g is used for the fourfold variants g, g. Although the allophonic variants of g appear more or less regularly in derivational morphology, some suffixes show onefold variation. These are, representing the back variant only, indicated in every case, see e.g. g. g and g appear more or less regularly in derivational only, indicated in every case, see e.g. g and g and g are also used for consonantal variations: g and g and g are details on morphophonological variants and the differences between their application in derivation and inflexion are given in section 7.5.

If the initial vowel of a suffix is dropped when added to a stem ending in vowel, it will be indicated with brackets, cf.  $-(\bar{A})\check{c}\check{c}X$ , e.g.  $si\ddot{a}\check{c}\check{c}i$  'one who eats'  $\leftarrow$   $si\ddot{a}$ - 'to eat'. In case of dominant suffixes, where the initial vowel of the formative is always applied, brackets are not used, of cf.  $-\bar{A}sXn$ , e.g.  $sur\bar{a}s\ddot{i}n$  'line, feature (of person); image, icon'  $\leftarrow$  suruy- 'to draw; to paint, to write'. The question of dominancy is discussed lengthwise in section 7.5.

The sign ° is used to indicate any possible segment of a word.

## 5 The system of analysis

The detailed description of derivational elements in section 6<sup>11</sup> follows a strict order in which the sequences are:

- (1) the standard (and non-standard/dialectal) forms of the suffix, morphophonological peculiarities;
- (2) the function(s) of the suffix;
- (3) Dolgan parallels;
- (4) etymological notes, parallels from other languages;
- (5) other comments;
- (6) example derivatives; with short etymological notes if parallels exist.

During the preparation of my work, I went through Pekarskij's three volume dictionary, published between 1907–1930, very carefully and put every analysed word into a database. The words in this database were divided into subgroups according to their derivation and etymology. These subgroups provided the material base for the detailed analysis of each Yakut derivational element. The number of words in these subgroups are cited in a statistics. This statistics, however, represents not more than how frequent the derivational elements appear in Pekarskij's dictionary and can only be used together with other facts in the determination of the productivity of suffixes. In present work this property of suffixes is provided only in a twofold system being *productive* or *unproductive*. These statements are

This behaviour of certain suffixes is indicated by the initial sign ( $\emptyset$ ) in certain works, see e.g. TL xx.

<sup>11</sup> Items of suffixes are put into subgroups according to their etymology and given in a simple alphabetical order.

<sup>12</sup> Proper names are not included into this database, even if the etymologies given by Pekarskij seemed to be plausible.

In order to provide a more precise list of frequency of derivational elements, drawing near to the living language, the same analysis should be done on a huge corpus of Yakut texts. Unfortunately, I do not posses such electronic database for Yakut.

drawn from the statistics, from the comparison of PekSJ with modern dictionaries (see below), and from other works on Yakut morphology.

As I said formerly, Pekarskij's dictionary, being one of the biggest and most useful for historical analysis in Turcology, has provided a good base for my research. However, in certain cases additional data had to be cited from other dictionaries and monographs. The relatively long period passed away from the publication of Pekarskij's dictionary resulted several minor but important changes in the field of morphology, too. Though these modern changes have no effects on the main scope of my investigation, can be useful in understanding the system of Yakut morphology in its entirety. The main source for modern Yakut data is the Yakut-Russian dictionary of P. A. Slepcov (cf. YakS). Important dialectal data are also cited from the dictionary *Dialektologičeskij slovar' jakutskogo jazyka* (1976) edited by P. S. Afanas'ev *et al.* (here in after YakD). There are two monographs cited frequently as additional material, i.e. GSJaLJa and KałMEJ.

Of this huge database of Yakut only a relevant subset of the words are cited in the description of the suffixes. I intended to mention enough example for every aspect (morphophonology, functional description, etc.) of morphology and to give some further ones in the example section. However, in case of many suffixes we had to fall back upon an insufficient number of examples; thus, some sections, usually the paragraph of examples, might remain empty.

In the first paragraph of the descriptions, KałMEJ and GSJaLJa are always cited if they dealt with the certain suffix. The standard form(s) of the suffixes were also defined on the base of their researches with my additional notes. Other works are only cited, from BöhtlSJ to HarTip, if they contain relevant information.

The second paragraph describing the function(s) of suffixes is I think not a well elaborated part of my work. Being a non-native speaker of Yakut I do not have the knowledge to perform a deep analysis in this field. I usually accepted the statements of native scholars of Yakutology with a thorough control on my database.

Dolgan being a language very close to Yakut takes an important place in my morphological analysis. Remarks of StachDWb on Dolgan word formation are always cited and compared to Yakut. All the examples given in StachDWb are also mentioned.

From the point of view of etymology, a Yakut derivational suffix can be of (1) Turkic, (2) Mongolic, (3) uncertain, or (4) unknown<sup>15</sup> origin.<sup>16</sup> If a suffix is of Turkic origin and have traces in any periods of Turkic they are always cited. The most important part of this description is the Old Turkic parallels based on OTWF and GOT. For comparative purposes and analogies,

<sup>14</sup> The statistics as a purely quantitative approach of productivity can be complemented and refined by qualitative criteria: for instance, by the analysis how affixes having similarities in their semantic and syntactic properties rival for a position in the lexicon.

<sup>15</sup> Determining whether a Yakut derivational element of unknown origin belongs to the group of inner formatives seems to be extremely difficult. During my work I found no significant signs that could point to such elements. Cf. however the remarks of KałM 2 in case of  $-\bar{A}kX$  and  $-\bar{A}yX$ , q.v.

<sup>16</sup> This classification is based on my corpus of deverbal nominal suffixes, a broader or full analysis of the Yakut morphological system may expand it with new items, e.g. suffixes of Tungizic origin, cf. StachTD for Dolgan.

examples of contemporary Turkic languages are also mentioned: usually the South Siberian group (Khakas, Tuvan and Oyrot) and relevant data picked up from any parts of Turkic territories. If a suffix is of Mongolic origin, parallels from Literary Mongol, if there are, and from the contemporary languages (usually from Buryat and Khalkha) are cited. The description of Literary Mongol is based on PoppeGWM. In some cases, if is of relevance, Russian and Tungusic data are also included in this section.

#### 6 Deverbal nominal derivational suffixes

In section 6 deverbal nominal derivational elements will be discussed separately. They are divided into subgroups according to their etymology, and the entries are in alphabetical order in every subgroup.

## 6.1 Derivational suffixes of Turkic origin

 $-\mathbf{A}$ 

The suffixes in question are originally not derivational elements, but converbs, however a lot of them has become lexicalized and found their ways to the lexicon. In the literature -A and -X are handled together (GSJaLJa §443–449), for the description of the morphophonological distribution, see table 3 in section 7.5, and cf. the agrist in -Ar for the similar phenomenon.

The standard forms are -A,  $-\bar{X}$  or -X (GSJaLJa<sup>17</sup> §692, 697), e.g.  $b\bar{i}sa$  'through, across; directly; without fail; excellently, skilfully; thoroughly'  $\leftarrow b\bar{i}s$ - 'to cut (off); to harvest, to reap; to cut (dress); to harden'<sup>18</sup>,  $xolb\bar{u}$  'together, in general; as a group; connection, linkage, communication'  $\leftarrow xolb\bar{o}$ -, xolbuo- 'to connect, to attach; to connect; to inform; to include, to contain; to interface' and  $asar\bar{i}$  '(situated) on the other side (of sg)'  $\leftarrow asar$ - 'to pass, flow; to bypass, carry out; to be unscrewed; to deprive sy from sg'. Although -A and  $-\bar{X}$  form a pair morphophonologically, their distribution in the lexicon is not even: while there are 36 derivatives in -A in PekSJ, only 1 ( $xolb\bar{u}$ ) in  $-\bar{X}$ . On the other hand, -A and  $-\bar{X}$  are represented more or less equally in the lexicon. However, there is no rule how the two variants are applied for the stems. In some cases both suffixes can join the same verb, see e.g.  $ti\bar{u}r\bar{u}$  'the wrong side; on the contrary, inside out' and  $ti\bar{u}r\bar{i}$ :  $ti\bar{u}r\bar{i}-m\bar{u}r\bar{i}$  'at random'  $\leftarrow ti\bar{u}r$ - 'to turn, to turn up (dress), to reverse, to turn over'.

<sup>17</sup> GSJaLJa §274.9 cites three derivatives in -A as old, petrified words, i.e. iksa 'closeness; close, near'  $\leftarrow i\ddot{g}is$ -, iksV'to be compressed',  $ti\ddot{a}r\ddot{a}$  'the wrong side; on the contrary, inside out'  $\leftarrow ti\ddot{a}r$ - 'to turn, to turn up (dress), to reverse, to turn over'; these two belong here; for the third one  $(k\ddot{o}n\ddot{o})$ , see -(X)y.

<sup>18</sup> Cf. Dolgan biha 'durch, über; während; [Adv.] hartnäckig; geradeaus'.

<sup>19</sup> Cf. Dolgan ahari 'weiter als..., bis hinter...'.

GSJaLJa §697 also gives no examples for  $-\vec{X}$ . Note that there is a homophone derivational element in  $-\vec{X}$  (~ OT -(X)g), q.v., that is the most frequent and productive formative in Yakut. It is difficult to prove whether this latter element suppresses converbs in  $-\vec{X}$  in the lexicon, or these converbs, contrary to -A, just could not become lexicalized and -A forms a pair with -X in the lexicon.

The original function of these Yakut suffixes is to form converbs, e.g. uol sorukka tuta  $\ddot{i}stanna$  'the boy  $\ddot{i}mmediately$  broke into a run to carry out the task' (GSJaLJa §447). These converbial forms have become lexicalized adverbs, e.g. tuta 'suddenly, immediately, soon'  $\leftarrow tut$ - 'to hold, to retain; to observe; to use; to take, to catch; to be sufficient; to possess; to inherit; to stop' can be registered from the dictionaries. In rare cases the derivatives can be used as adjectives, e.g.  $\ddot{k}\ddot{o}nn\ddot{o}r\ddot{u}$  'simple, usual; without ceremony, directly, simply'  $\leftarrow \ddot{k}\ddot{o}nn\ddot{o}r$ - 'to straighten; to repair, to correct, to direct',  $tiliy\ddot{a}$  'adjacent; continuously, together'  $\leftarrow tiliy$ - 'to accustom a cow to another calf or a mare to another foal; to add a calf to another mother; to double; to connect; to counterfeit'. Some old petrified forms lost their adverbial meanings and became substantives or adjectives, e.g.  $\ddot{k}sa$  'closeness; close, near'  $\leftarrow \ddot{i}g\ddot{i}s$ -,  $\ddot{i}ksV$ - 'to be compressed',  $\ddot{a}psi$  'compressed, tight'  $\leftarrow \ddot{a}bis$ -,  $\ddot{a}psV$ - 'to be compressed, to squeeze; to hold one's tongue, to keep silent'.

Dolgan shows the same functions and forms. StachDWb discusses this derivational element in three different chapters: (1) old (petrified) forms, e.g.  $\ddot{u}\ddot{o}r\ddot{a}$  'Freude'  $\leftarrow \ddot{u}\ddot{o}r$ - 'sich freuen', (2) uncertain forms, e.g.  $\ddot{o}l\ddot{u}$  'Unterwelt'  $\leftarrow \ddot{o}l$ - 'sterben', and (3) lexicalized (petrified) forms, e.g.  $\ddot{k}\ddot{u}ta$  'zusammen mit'  $\leftarrow \ddot{k}\ddot{u}\ddot{u}r$ - 'sich vereinigen, zusammenkommen',  $\ddot{h}\dot{u}\ddot{u}r$  'genügend, genug, ausreichend; zu Ende'  $\leftarrow \ddot{h}\dot{u}\ddot{u}r$ - 'erlangen, erreichen; ergänzen' (StachDWb 37, 50, §6.1).<sup>21</sup> It is dubious whether the adverbial examples discussed under  $-\ddot{X}$  also belong here, see  $\ddot{u}b\bar{u}$  'mehr, zusätzlich'<sup>22</sup> and  $\ddot{h}a\eta ard\bar{u}$  '[Adv.] seit kurzem, neulich; [Adv.] zum ersten Mal; [Adj.] neu, frish' because of morphophonological reasons; \* $\ddot{u}$ bi and \* $\ddot{h}a\eta ard\bar{u}$  should be the regular forms.

The given converbial formatives are of Turkic origin. -A can be connected with the Old Turkic -A, -X with -yU and -X with -I or -yU, cf. GOT §3.286. Petrified forms have appeared even in the Old Turkic period, see e.g. tapa 'towards'  $\leftarrow tap$ - 'to find' and yana 'again'  $\leftarrow yan$ - (intr.) 'to turn back'. It is well-spread in the contemporary languages, cf. Chuvash -A, e.g. kile  $\leftarrow kil$ - 'to come',  $vul\bar{a} \leftarrow vula$ - 'to read' (LevIMČJa 101–102); Tatar - $\ddot{A}$  and -Iy, e.g.  $yaza \leftarrow yaz$ - 'to write',  $uk\ddot{u}y \leftarrow uk\ddot{u}$ - 'to read' and  $yas\ddot{u}y \leftarrow yasa$ - 'to make' (PoppeTM §2.371). The same way of contraction can be seen in Khakas, cf. the gerunds in -A and -I, e.g.  $\check{c}ada \leftarrow \check{c}at$ - 'to lay', sani (<\*sana- $y\ddot{u}$ )  $\leftarrow sana$ - 'to think' and  $t\ddot{v}z\dot{u}$  (<\* $t\ddot{v}\ddot{v}\ddot{u}$ )  $\leftarrow t\ddot{v}\ddot{u}\ddot{u}$  'to spread' (GHJa §251).

#### Examples:

gitta 'with, together with'  $\leftarrow$  gitin-, gittV- 'to connect, to join', cf. OT kat- 'to mix (two tings); to add (something Acc.) to (something else Dat.)';

<sup>21</sup> Other examples from Dolgan being: iŋsä 'Gier, Habsucht', karda 'Vergeltung; Antwort'; uobu, ōbu 'Bissen, Happen'; āga 'alle samt und sonders, alle ohne Ausnahme', ärgiyä 'um...herum', taksa 'mehr als, über', tüörä 'völlig, ganz', ila 'seit'; batarï 'nach innen, in die Tiefe, tief hinein', diäri 'bis (zu), solange', iŋnäri 'schräg, schief, krumm, gebogen', kardarï 'der Reihe nach; entgegen [z.B. kommen]', tobulu '[Adv.] ganz, völlig [z.B. im Schnee einsinken]', toloru 'voll'. The form könö 'gerade, aufrecht; aufrichtig, ehrlich, geradsinnig' ← kön- 'sich aufrichten' wrongly discussed by StachDWb §6.1 as a lexicalized converb; see -(X)y for this word.

<sup>22</sup> Cf. Yakut  $\ddot{a}b\bar{\iota}$  'addition, increase; in addition'  $\leftarrow \ddot{a}p$ - 'to add, join'.

In several cases -X and -X may go back to the same Old Turkic counterpart -yU. -X forms always represent older (petrified) derivatives where contraction could be stronger;  $^{\circ}X < OY *^{\circ}X < ^{*\circ}V - yX > ^{\circ}X$ .

supturuta 'right through; suddenly' ← supturut- 'to pierce, to break through';

bütäri 'to the end' ← bütär- 'to end, to finish, to conclude; to work off; to manage, to succeed; to help to do a service; to destroy; to strike, to conquer', cf. OT bütürü 'completely' ← bütür- 'to perform, carry out';

 $k\ddot{o}\eta\ddot{u}$  'completely, without remainder; destructively'  $\leftarrow k\ddot{o}\eta\ddot{u}\ddot{o}$ - 'to chase, to drive off, to move away, to reject, to deny'.

 $-\bar{\mathbf{A}}\mathbf{k}$  -KAk

The standard form is  $-\bar{A}k$ , e.g.  $mun\bar{a}x$  'lascivious [inconsistent, incorrect]'  $\leftarrow mun$ - 'to stray, to be in error; to be dazzled'. The stem-final segments  ${}^{\circ}Vy$ -,  ${}^{\circ}\bar{V}$ - or  ${}^{\circ}XA$ - are always replaced by the dominant vowel of the suffix, e.g.  $tar\bar{a}x$  'pampered, spoil'  $\leftarrow taray$ - 'to stretch out, to be enlarged; to put on airs, to jeer'. The dominancy of the suffix is, however, virtual, and must be interpreted as a special stage of a historical process, e.g. the Yakut word  $\check{corox}$  'sg rectilinear, outstanding from sg, peaked spoke' is not a direct derivative from  $\check{coroy}$ - 'to stick out; to stretch out', but the result of contraction from the OY \* $\check{corogox}$ , cf. section 7.5 for the details on dominancy. If the base ends in /l s/, <sup>24</sup> it can be -KAk, e.g.  $ad\ddot{a}$  'place between the lake and the forest encumbered with fallen trees'  $\leftarrow at\ddot{a}$ . It is an old, unproductive suffix. The base can be of both Turkic and Mongolic origin.

There is no corresponding suffix in StachDWb.

The derivational element  $-\bar{A}k$  is of Turkic origin. The Old Turkic suffix -gAk, cf. OTWF §3.327, forms names of ailments and instruments, and agent nominals, e.g.  $ilg\ddot{a}k$  'a hook'  $\leftarrow$  il 'to catch (something, with the hand, a hook, a nose, etc.)',  $t\ddot{a}zg\ddot{a}k$  'a man who shies away from a task'  $\leftarrow$   $t\ddot{a}z$ - 'to run away, fly'.

In certain cases derivatives in  $-\bar{A}k$  draw similarities with -XAx nouns, q.v. For example, the word  $tard\bar{u}ax$ , torduox 'hook, wooden hook'  $\leftarrow tart$ - 'to pull, to drag, to draw; to draw off, to

<sup>24</sup> While this morphophonological rule is always applied in case of  $-\bar{A}n$  (< Mongolic -gAn), q.v., here a great number of exceptions can be observed. In suffixes of Mongolic origin belonging to a newer stratum of Yakut the preservation of /g/ after /1 r s/ is a stronger rule.

<sup>25</sup> Cf. OT tutgak 'a mounted detachment that goes out at night to capture the enemy's patrols and reconnoitrers'.

<sup>26</sup> For a similar derivative, see e.g. OT yugak 'constantly washing; some kind of water bird'  $\leftarrow yu$ - 'to wash (something Acc.)',  $\ddot{a}\ddot{s}g\ddot{a}k$  'donkey, (an animal) which habitually ambles'  $\leftarrow \ddot{a}\ddot{s}$ - 'to amble'; note that this latter etymology is however dubious.

extend; to tighten, to twist; to place, to advance; to lengthen (snares); to smoke (e.g. tobacco); to grind; to plough; to be sat down (of material)', being handled as a derivative in -XAx, can be interpreted as a semi-contracted form of \*tartgak, even if the diphthong /ia/ is usually originated from the segment /iga/, for this phenomenon, cf.  $-\bar{A}n$  and  $-\bar{A}sXn$ . This fact may give some -XAx nouns dubious status.

#### Examples:

 $ir\bar{a}k$ -kutur $\bar{a}k$  'extravagant, crazy'  $\leftarrow ir$ - kutur- : ir- 'to be tangled, to be hooked; to be twirled, to turn (of head); to fly into a rage, to rage', cf. OT  $\ddot{a}gir$ - 'to surround, encircle (something Acc.)';

arjāx 'lattice hanger in the yurt near the fireplace; big fishing basket for catching crucian or other species of fish' ← arjay- 'to expose sg latticed; to bare one's rare and large teeth', cf.
 LM arjayi- 'to show one's teeth, grin, to stand on end (of hair); to stand out (of a number of objects); to be rough or uneven'.

 $-\bar{X}r$ , -XAr, -BAt

In Yakut, as in any other Turkic languages, the so called aorist is being used as a participle and a (present-future) tense marker, cf. GSJaLJa §401, 594.<sup>27</sup> Most of the derivatives indicated also by PekSJ are petrified participles.

The standard form is (1) -(A)r after °C- or °Ay-; and (2) -Xr after °Xy-, °XA- or °A-, cf. table 3 in section 7.5, e.g.  $bi\ddot{a}r\ddot{a}r$  'giving, gift, alms; return (giving back)'  $\leftarrow bi\ddot{a}r$ - 'to give, to transfer, to render' and  $bal\ddot{i}r$  'slander, calumny'  $\leftarrow bal\ddot{i}y$ - 'to slander, to calumniate'. In some cases the linking vowel is diphthongic, see e.g.  $arg\ddot{i}ar$  'thrust of cold air through the door; draught'  $\leftarrow arg\ddot{i}y$ - 'to blow (through); to get cold', lonkunuor 'blusterer, blatant'  $\leftarrow lonkun\ddot{a}$ - 'to emit loud sound'. The stem-final sound °y- is always dropped, but see the single exception  $it\ddot{a}\ddot{g}\ddot{a}y\ddot{a}r$  'believing, faith'  $\leftarrow it\ddot{a}\dot{g}\ddot{a}y$ - 'to trust, to believe; to hope, to entrust; to be convinced'. The word bilir 'wisdom-tooth' also belonging here seems to be not a derivative of bil- 'to learn, to get to know, to recognize, to distinguish; to find out, to trace; to be introduced, to be mastered; to know, to understand, to decide, to note; to see, to feel', but of an older form \*bili- id. The negative form of the aorist (-bAt < OT -mAz) also behaves as a derivational element, see e.g.  $\ddot{o}yd\ddot{o}b\ddot{o}t$ ,  $\ddot{o}yd\ddot{u}\ddot{o}b\ddot{a}t$  'unmemorable, slow-witted, unreasoned'  $\leftarrow \ddot{o}yd\ddot{o}$ -,  $\ddot{o}yd\ddot{u}\ddot{o}$ - 'to remember; to note; to understand'.

The standard function of -(A)r is to form action nouns, e.g.  $xam\ddot{i}r$  'gathering'  $\leftarrow xam\ddot{i}y$ - 'to collect, to gather'. The meaning of the petrified aorist may change, for instance, from action noun to *nomen instrumenti* (a tool with which a given task can be performed), see e.g.  $k\ddot{a}b\ddot{a}r$  'wooden mortar'  $\leftarrow k\ddot{a}p$ - 'to push by dull object; to push (slightly); to trample; to push off, to repulse, to reject'. In rare cases adjectival or adverbial meaning can also be registered, e.g.

<sup>27</sup> Some scholars think that the present-future tens marker cannot go back directly to the so-called aorist, for a detailed view, see GSJaLJa §594. Note that Khakas also presents the same distribution (GHJa §209).

<sup>28</sup> Another irregular form is *basir* 'scoop (vowed from horse hair), watering can' ← *bas-* 'to draw, to get, to fill up (of liquid material); to take by pitchfork (hay)'.

bilsär 'familiar, acquaintance [znakomyj, znakomec]'  $\leftarrow$  bilis-, bilsV- 'to be acquainted with sy; to know each other', <sup>29</sup> laspar 'widely'  $\leftarrow$  laspay- 'to be wide'.

The Yakut derivational element -(A)r is of Turkic origin. It goes back to the well-known aorist in -Ar, -Ir, -Ur, -r or -yUr; there is no general rule how variants applied connecting to the stems (GOT §3.233, 3.282). Originally it was both a participle and a finite verb form, however petrified forms have already appeared in the Old Turkic period, e.g. ot öčüri 'des Feuers Verlöschen'  $\leftarrow$  öč- 'verlöschen', ögdir 'Preis'  $\leftarrow$  ögüt- 'preisen' (GabAtG §128). It can be registered from every Turkic language as both participle and finite verb form, see e.g. Turkish çıkar 'he/she leaves; leaving; benefit'  $\leftarrow$  çık- 'to leave' (GSTLJa §218.1). Dominancy also takes place in Khakas, cf. the examples of the infinitive -(V)rgA (a compound of the aorist -(V)r and the dative case marker +gA) in GHJa §184: oynirġa (< \*oyna-yür+ġa) 'to play'.

There is a homophone suffix in  $-\bar{X}r$  ( $\leftarrow$  LM -gUr) forming names of tools, q.v.

#### **Examples:**

 $k\ddot{o}l\ddot{u}r$  'harness(ing)'  $\leftarrow k\ddot{o}l\ddot{u}y$ - 'to harness (horse or ox)', cf. OT  $k\ddot{o}l$ - 'to harness (an animal to a plough, etc.)', and LM  $k\ddot{o}l$ - 'to harness, hitch to a vehicle';

jäηjīr,  $\acute{n}$ äη $\acute{n}$ īr 'search'  $\leftarrow$  jäη $\acute{n}$ iy-,  $\acute{n}$ äη $\acute{n}$ iy- 'to search, to inspect', cf. LM näη $\acute{n}$ i- 'to search, ransack; to inspect, examine, reconnoitre';

 $k\ddot{o}t\ddot{o}r$  'bird; feathered animals, birds generally (e.g. hazel-grouse)'  $\leftarrow k\ddot{o}t$ - 'to fly, to take off, to be raised; to jump (over)', cf. OT  $k\ddot{o}t\ddot{o}r$ - 'to lift up, raise';

 $\ddot{o}l\ddot{o}r$  'dying, mortal, perishable; fatal; death; decease; putrefaction; mortality'  $\leftarrow \ddot{o}l$ - 'to die, to perish; to die out; to be ill; to become numb', cf. OT  $\ddot{o}l$ - 'to die'.

#### -ĀxsX

The standard form is  $-\bar{A}xsX$ , e.g.  $ti\ddot{a}rd\ddot{a}xsi$  'fellow-traveller, guide'  $\leftarrow ti\ddot{a}rt$ - 'to turn, to turn up (dress), to reverse, to turn over; to lead, to accompany; to subject'. It is an old, unproductive element used very rarely.

The function of  $-\bar{A}xsX$  is to form (1) action noun and *nomen actionis*, e.g.  $\bar{u}r\bar{a}xs\ddot{i}$  'placing, packing, one who packs'  $\leftarrow \bar{u}r$ - 'to place, to superimpose, to load, to pack, to embed, to assign,

<sup>29</sup> Cf. Dolgan bilsär '[Adj.] bekannt; [Adj.] bemerkenswert, bemerkbar; [Adv.] bemerkenswerterweise'.

<sup>30</sup> It is also plausible that Dolgan xatīr (?< \*kadagur) is a derivative in -Xr, q.v., cf. Yakut xatīr 'hook' ← xatā- 'to strengthen; to close with key; to shut' and LM kadā- 'to driven in, knock in; to nail; to inscribe or enter one's name on a register; to insert something in a text, to get stuck'

Other examples from Dolgan being: holūr 'Eimer, Kessel', kölūr 'Geschirr für Zugtiere'; ärittärär 'die umkreisen lassende [Methode]', hottor 'Handtuch', hurullar ~ surullar 'Familienname', iččilänär 'böser Geist', köhördör 'Trennung', kötör 'Vogel; Flügel', körünär 'Spiegel', möküttärär 'die kämpfen lassende [Methode]', tardar 'Tabak'; billär '[Adj.] berühmt, bekannt; [Adv.] bemerkenswerterweise'.

to apply; to decree, to assign; to conclude'; and (2) adjectives, e.g.  $bul\bar{a}xs\ddot{i}$  'mixed'  $\leftarrow bul\bar{a}$ - 'to mix anything uniform, to stir slowly, to intermix, to mix up; to knead; to interfere (to disturb); to mix up (to lead into confusion)'.

There is no counterpart of this suffix in StachDWb.

The derivational element  $-\bar{A}xsX$  (< \*gAk+ $\check{c}I$ ) is of Turkic origin. Being a compound of  $-\bar{A}x$  (< -gAk) and +sX (<  $+\check{c}I$ ), the first part is etymologically related to  $-\bar{A}k$ , q.v., and the second one can be connected with the so called Turkic *nomen actoris*  $+\check{c}I$ , cf. OTWF §2.75. Note that the standard *nomen actoris* in modern Yakut is +SXt (GSJaLJa §155).

-BXtča -BXtča

-BXččA is originally not a derivational element, but a converb (cf. GSJaLJa §468–471). The only reason why discussed here is that PekSJ cites many words in -BXččA in separate entries as lexicalized forms; in YakS there are also some examples of this sort, e.g.  $k\bar{\imath}rbi\tilde{\imath}c\tilde{\imath}a$  'once already entered, visited'. The word  $san\bar{a}b\tilde{\imath}c\tilde{\imath}a$  'directly following the fact as it was thought; rashly'  $\leftarrow san\bar{a}$ - 'to think, to imagine, to reflect; to hope, to want, to plan; to decide; to consider; to understand' clearly shows that  $-BX\tilde{c}a$  is not a real derivational element because the stemfinal long vowel remained intact after derivation; an important morphophonological difference between derivational and inflectional elements.

The standard form is  $-BX\check{c}\check{c}A$  (GSJaLJa §695), e.g.  $k\bar{i}rbi\check{c}\check{c}$ ,  $k\bar{i}rbi\check{c}\check{c}$  once entered, fell, etc.'  $\leftarrow$   $k\bar{i}r$ - 'to enter'. There are some old, or dialectal forms in  $-BXt\check{c}A$ , which are important from the point of view of etymology, see below, e.g.  $kuttamm\ddot{i}t\check{c}a$  'after frightening'  $\leftarrow$  kuttan- 'to fear, to be afraid of, to frighten; to burn (of building, of church)'.

The general function of -BXččA is to form adverbs designating the action which cause an occasion or motivation for accomplishing another action, e.g. kīsirbičča tillasar 'speaks with fury/anger (lit. because of anger)' (GSJaLJa §695).

This derivational element is not discussed in StachDWb.

The Yakut suffix  $-BX\check{c}\check{c}A$  (<  $-BXt\check{c}A$ ) is of Turkic origin, and can be parsed into two basic elements, namely -BXt and  $+\check{c}A$ . -BXt goes back to the Turkic perfect participle  $-mX\check{s}$ , cf. GOT §3.283,<sup>32</sup> and the latter can be connected with the Turkic equative case marker  $+\check{c}A$ , cf. GOT §4.1109.<sup>33</sup> Both elements are well-spread in the modern Turkic languages, see e.g. Chuvash  $-m\check{A}\check{s}$ , e.g.  $p\check{e}term\check{e}\check{s}$  'ruiner'  $\leftarrow pet\check{e}r$ - 'to ruin',  $tultarm\check{a}\check{s}$  'a kind of Chuvash sausage'  $\leftarrow tultar$ - 'to fill' (LevIMČJa 161–162); Turkish  $-mX\check{s}$ , e.g. gecmis 'he/she passed; last; past'  $\leftarrow gec$ - 'to pass', and +CA, e.g. uzakca 'not so far'  $\leftarrow uzak$  'far' (GSTLJa §218.2, 244–245).

#### **Examples:**

*bïspïčča* 'once (I, you, he/she) cut off, then...'  $\leftarrow$  *bïs*- 'to cut (off); to harvest, to reap; to cut (dress); to harden', cf. OT *bïč*- 'to cut';

<sup>32</sup> In modern Yakut it is used as both past participle and past tense marker, cf. GSJaLJa §407-411.

<sup>33</sup> In modern Yakut it can only be found in some petrified forms, e.g. oččo 'so, so much' ← ol 'that', uonča 'around ten' ← uon 'ten'.

kürämmitča 'once that ran away' ← kürän- 'to run away, to be hidden, to disappear', cf. OT kürä- 'to run away, desert';

 $k\ddot{i}s\ddot{i}rb\ddot{i}\ddot{c}\ddot{c}a$  'once had been angry, had been angered'  $\leftarrow k\ddot{i}s\ddot{i}r$ - 'to be angry, to be annoyed, to be indignant, to fly into a rage, to be irritated'.

#### -BXt

The suffix -BXt is originally a past participle, and also used as a past tense marker (GSJaLJa §407–411, 602–608). However, some participal forms have become lexicalized and thus appeared in dictionaries as independent entries.

The standard form is -BXt, e.g.  $\ddot{o}l\ddot{b}\ddot{u}t$  'deceased, dead person, corpse; death'  $\leftarrow \ddot{o}l$ - 'to die, to perish; to die out; to be ill; to become numb'. This is the only example in Pekarskij's dictionary. Cf.  $\ddot{s}\ddot{t}\ddot{u}\ddot{b}\ddot{u}t$ :  $m\ddot{a}\ddot{a}ya$   $\ddot{s}\ddot{t}\ddot{u}\ddot{b}\ddot{u}t$  xanna  $barb\ddot{u}tay$ ? 'Where has this bandy-legged, ugly creature left?'  $\leftarrow \ddot{s}\ddot{t}\ddot{u}y$ - 'to decay, spoil; to become corrupted' in YakS.

-BXt forms adjectives, but substantivized forms can appear.

There are two lexicalized forms mentioned in StachDWb §6.1, i.e.  $t\ddot{o}r\ddot{o}tp\ddot{u}tt\ddot{a}r^{34}$  'Eltern'  $\leftarrow$  \* $t\ddot{o}r\ddot{o}t$ - 'gebären' and  $t\ddot{u}b\ddot{a}spit$  'Beute'  $\leftarrow t\ddot{u}b\ddot{a}s$ - 'geraten'.

This suffix if of Turkic origin, cf. Old Turkic  $-mX\tilde{s}$  in GOT §3.283 and further details under  $-BX\tilde{c}\tilde{c}A$ .

**-MA** -XmA

The standard form is -MA, e.g.  $\ddot{u}r\ddot{a}yb\ddot{a}$  'disorder'  $\leftarrow \ddot{u}r\ddot{a}y$ - 'to separate, to interrupt communication; to ruin; to exterminate, to exhaust'. In two cases a linking sound is applied after the stem-final consonant, i.e.  $suoruma: suoruma \ t\bar{a}s\ osox$  'fireplace made of carved stone'  $\leftarrow suor$ - 'to carve; to hew into shape; to pare',  $xar\bar{a}r\ddot{u}ma$  'something blackening'  $\leftarrow xar\bar{a}r$ - 'to blacken, darken'.

It forms both (1) adjectives, e.g.  $s\ddot{i}lba$  'sluggish, slow, sleepy, non-enduring (man, child, bull, horse); slovenly, sleepy and weak (of woman)'  $\leftarrow s\ddot{i}l$ -,  $s\ddot{i}l$ - 'to move, to move hardly, to be moved, to be pushed, to be slid, to crawl, to creep (up); to roll; to dive; to walk on skis', and (2) substantives, e.g.  $s\ddot{u}rb\ddot{a}$ ,  $s\ddot{u}rg\ddot{a}$  'flow'  $\leftarrow s\ddot{u}r$ - 'to run; to leak, to flow; to emerge'.

There is no counterpart of this element in StachDWb.

-MA is of Turkic origin. In Old Turkic -mA formed the subject of intransitive verbs, and the object of transitive ones (OTWF §3.109), see e.g.  $y\ddot{a}lm\ddot{a}$  'a reconnoitring patrol'  $\leftarrow y\ddot{a}l$ - 'to trot, amble',  $t\ddot{u}gm\ddot{a}$  'a button'  $\leftarrow t\ddot{u}g$ - 'to tie (a knot), to knot (a string)'. -mA is popular in Turkic forming substantives, cf. Chuvash  $p\ddot{u}lme$  'granary; bulkhead; room'  $\leftarrow p\ddot{u}l$ - 'to block; to interrupt; to surround',  $p\ddot{e}rme$  'folds; crinkles, wrinkle'  $\leftarrow p\ddot{e}r$ - 'to narrow; to collect; to do folds; to wrinkle' (LevIMČJa 159–160); Tatar  $b\ddot{u}lm\ddot{a}$  'room, partition in a house'  $\leftarrow b\ddot{u}l$ - 'to divide, to partition',  $tuk\ddot{u}ma$  'textile'  $\leftarrow tuk\ddot{u}$ - 'to weave' (PoppeTM §4.13.3). The adjectival meanings in Yakut might appear because of the Buryat influence, cf. -mA in PoppeBG §4.24.4, e.g. gayxama 'admirable, astonishing'  $\leftarrow gayxa$ - 'to admire', and its Literary Mongol

<sup>34</sup> Cf. Yakut töröppüt 'parents' ← töröt- 'to give birth'.

counterpart in PoppeGWM §165, e.g. bayima 'such (place) where there can be something' ← bayi- 'to be'.

#### **Examples:**

 $\bar{\imath}rb\ddot{a}$  'obstacle, cavil, quarrel'  $\leftarrow \bar{\imath}r$ - 'to be tangled, to be hooked; to be twirled, to turn (of head); to fly into a rage, to rage', cf. OT  $\ddot{a}gir$ - 'to surround, encircle (something Acc.); to twist, spin (something Acc.)';

 $\ddot{o}rb\ddot{o}:\ddot{o}rb\ddot{o$ 

 $s\ddot{u}lb\ddot{a}$  'ragged crust [obodrannaja kora], skin stripped by knife'  $\leftarrow s\ddot{u}l$ - 'to strip, to tear off, to tear up; to skin', cf. OT yul- 'to pull out, pluck out'.

#### -MAn

The standard form is -MAn, e.g. nanaman 'wide-breasted'  $\leftarrow$  nanay- 'to push out one's wide breast'. There is only one example with stem-final consonant where the consonantal allomorphs can be seen, i.e. oybon 'ice-hole; a small cavity; drinking-trough'  $\leftarrow$  \*oy- 'to hollow out'. It seems to be an unproductive element.

-MAn forms both (1) substantives, e.g.  $t\ddot{a}l\ddot{a}m\ddot{a}n$  'spreading, opening out'  $\leftarrow t\ddot{a}l\ddot{a}y$ - 'to be opened; to scatter, to be thrown open; to open, to reveal' and (2) adjectives, e.g.  $n\ddot{a}l\ddot{a}m\ddot{a}n$ ,  $n\ddot{a}l\ddot{a}m\ddot{a}n$  'wide, large, spread'  $\leftarrow n\ddot{a}l\ddot{a}y$ -,  $n\ddot{a}l\ddot{a}y$ - 'to be thrown open, to spread, to lie down by spreading'.

There are no examples for this suffix in StachDWb.

It is of Turkic origin, cf. -mAn in OTWF §3.325, e.g.  $s\"{o}km\ddot{a}n$  'one who breaks the ranks of the (enemy) army'  $\leftarrow s\ddot{o}k$ - 'to tear apart, pull down, break through (an obstacle)',  $s\"{i}kman$  'the season of pressing the grapes in the autumn'  $\leftarrow s\ddot{i}k$ - 'to squeeze, press, compress'. It is wild-spread in the contemporary languages, see e.g. Chuvash -mAn, e.g. arman 'mill'  $\leftarrow ar$ -,  $av\breve{a}r$ - 'to mill',  $s\breve{a}xman$ ,  $s\breve{a}kman$  'caftan'  $\leftarrow s\breve{a}k$ - 'to put (on)' (LevIMČJa 135–137), Turkish -mAn, e.g. seçmen 'voter'  $\leftarrow seç$ - 'to choose', uçman 'pilot'  $\leftarrow uç$ - 'to fly' (GSTLJa §148).

#### Examples:

nalaman 'scattered' ← nalay- (intr.) 'to spread majestically', cf. LM nalayi- 'to be broad, wide (of an overflowing river)';

ñilaban 'shining', ñilaman, ńilaman : ńilaman maġan (maŋan) 'entirely white; white-faced' ← ńilay- 'to be flat, plain', cf. B nilagar 'flat, flat-bottomed'.

-MAs

The standard form is -MAs (KałIM 1: 111), e.g. susumas 'thin layer of fat'  $\leftarrow$  susuy- 'to become light grey, whitish, pale, to turn pale; to wither, to fade; to be seen hardly'. In some cases a linking vowel appears after the stem-final consonant, e.g. talimas, talamas 'selected, chosen;

<sup>35</sup> Cf. Old Turkic oy- 'to hollow out (something Acc., by removing its contents)'.

selection, sample; very legible'  $\leftarrow$  *tal-* 'to select' versus *tuppas* 'tenacious'  $\leftarrow$  *tut-* 'to hold, to retain, to have, to contain; to take, to catch'. It is an old, unproductive suffix rendering several derivatives where the base cannot be observed in modern Yakut, see e.g. *ätärbäs* 'any kind of footwear' (<\**ätürmäč*, KałIM 1: 111), cf. Old Turkic *ätük* 'boot'.

-MAs usually forms substantives, e.g.  $t\ddot{a}l\ddot{a}m\ddot{a}s$  'large quadrangular rag'  $\leftarrow t\ddot{a}l$ - 'to cut; to cut sg from leather; to mow', but there are adjectival derivatives, too, e.g.  $\ddot{a}l\ddot{a}m\ddot{a}s$  'speckled (of horse), motley (of livestock); a special disease appearing on the skin by white and yellow spots'  $\leftarrow \ddot{a}l\ddot{a}y$ - 'to decrease the volume, to be rubbed (of skin), to be erased, to be worn out, to be worn to rags, to be dulled'.

StachDWb 40 (-bas) has only two examples for this derivational element, i.e.  $\ddot{a}t\ddot{a}r\ddot{a}b\ddot{a}s$  'Schuhe mit Pelzfutter' (see its Yakut counterpart above) and  $t\ddot{a}r\ddot{b}\ddot{a}s$  'ein Ring, gefertigt aus dem Horn des wilden Widders, zum Befestigen der Last auf dem Schlitten'  $\leftarrow$   $t\ddot{a}r$ - 'das Innere nach außen kehren, die innere Seite herauskehren', cf. Yakut  $t\ddot{a}rm\ddot{a}s$  'ring, ringlet, loop'  $\leftarrow$   $t\ddot{a}r$ - (tr.) 'to turn (dress) inside out, to turn'. The main difference is that Dolgan has -bAs even in intervocalic position.

The Yakut suffix -MAs is of Turkic origin. According to KałIM 1: 111, it goes back to a proto-form \*-mAč (< -mA and a diminutive +č; cf. -mA for the first part). Because of semantic differences KałIM 1: 112 rejects the connection with the well-known Turkic suffix -mAč forming usually names of food. However -mAč has other functions too, cf. TenM and Turkish, e.g. bulamaç 'flour porridge'  $\leftarrow$  bula- 'to stir' versus yanıltmaç 'tongue-twister (game)'  $\leftarrow$  yanılt- 'to lead into error; to deceive', yırtmaç 'cut (of dress, shirt, etc.)'  $\leftarrow$  yırt- 'to cut' (GSTLJa §176).

## Examples:

tōromos 'small piece of something being slivered/cut off from anything' ← tōroy- 'to become smaller in weight by cutting off small pieces', cf. OT togra- 'to cut, or split into slices or small pieces';

kuolbas 'barked larch log' ← \*kuol-, cf. LM kagul- 'to peel off, skin, flay; to copy'.

-MAx

The standard form is -MAx, e.g.  $xar\bar{a}rbax$  'black'  $\leftarrow xar\bar{a}r$ - 'to blacken, darken',  $k\ddot{a}t\ddot{a}m\ddot{a}x$  'prudent, careful'  $\leftarrow k\ddot{a}t\ddot{a}$ -,  $k\ddot{a}t\ddot{a}$ - 'to await, to wait (until); to guard, to take care, to protect, to save, to store, to preserve'. In a single case a linking vowel is applied after the stem-final consonant, i.e.  $to\eta umax$  'lightly frozen mud'  $\leftarrow to\eta$ - 'to shiver, to feel cold, to freeze'. For this phenomenon, see -MAs. It is an old, unproductive suffix.

-MAx usually forms adjectives, e.g. tuppax 'tenacious'  $\leftarrow tut$ - 'to hold, to retain, to have, to contain; to take, to catch' (cf. tuppas under -MAs), but there are some substantives, e.g. sasarbax 'citrine wagtail,  $Motacilla\ citreola' \leftarrow sasar$ - 'to turn yellow; to redden; to suffer jaundice'.

StachDWb 40 has only one metathetic example, i.e. kopsox 'Vorratskammer' (< \*košbak <  $košmak \leftarrow koš$ - 'to conjoin, unite (two things)'), cf. Yakut xospox 'a small, low extension to the yurt or barn; room; cave'.

-MAx is of Turkic origin, cf. the Chuvash infinitive in -mA, e.g.  $v\ddot{v}rma$  'harvesting; cleaning'  $\leftarrow v\ddot{v}r$ - 'to harvest; to clean',  $\breve{e}sme$  'drinking'  $\leftarrow \breve{e}s$ - 'to drink' (LevIMČJa 112–113, 159–160); and the Turkish infinitive in -mAk, <sup>36</sup> e.g.  $yazmak \leftarrow yaz$ - 'to write',  $okumak \leftarrow oku$ - 'to read' (GSTLJa §171). According to StachDWb 40, it is a compound of -mA and +k; cf. -MA for the first part. Maybe this derivational element was influenced by Mongolic, cf. -mAg in Literary Mongol, forming nouns designating the result of the actions, e.g. kagurmag 'fraud'  $\leftarrow kagur$ - 'to deceive', jorimag 'bravery'  $\leftarrow jori$ - 'to make a decision' (PoppeGWM §166), and in Buryat, e.g.  $x\bar{u}rmag$  'lie, deception, fraud'  $\leftarrow x\bar{u}r$ - 'to deceive, to lie' and  $\bar{e}demeg$  'sour milk'  $\leftarrow \bar{e}de$ - 'to become sour, to ferment' (PoppeGB §4.13.5.k). <sup>37</sup>

#### Examples:

butumax 'mixed' ← butuy- 'to mix up, to shake up, to confuse, to distort';

 $si\ddot{a}m\ddot{a}x$  'gluttonous, gobbler'  $\leftarrow si\ddot{a}$ - 'to eat, to taste, to eat up, to corrode; to ruin, to destroy; to burn; to beat the cards, to take pawn or figure (in games like chess)', cf. OT ye- 'to eat';

xaspax 'rut, hollow, hole'  $\leftarrow xas$ - 'to dig, to pick; to hollow out (wood)', cf. OT kaz- 'to dig, to dig out'.

-kAs,  $-\bar{A}s$ 

The standard form is -gAs with a linking sound depending on the stem-final segment (GSJaLJa §263, 264; the variants are discussed in separate chapters). The rules of this linking sound can be summed up in the followings: (1) °C-  $\rightarrow$  °CXgAs/°CAgAs, e.g. ätigäs 'talkative; talkativeness'  $\leftarrow$  ät- 'to speak, to utter, to say, to pronounce; to call, name; to cuckoo; to thunder', asaġas 'open(ed), hollow'  $\leftarrow$  as- 'to open, to reveal';  $^{38}$  (2) °Xy-  $\rightarrow$  °XgAs/°XyXgAs, e.g. kutaljūgas 'unsteady, unstable (place, hummock)'  $\leftarrow$  kutaljūy- 'to vary, to shake, to wave', duosuyugas 'easily satisfying'  $\leftarrow$  duosuy- 'to be satisfied, to be saturated', (3) °Ay-  $\rightarrow$  °AgAs/°AyXgAs, e.g. julaġas 'cautious, timid', julayigas 'cowardly, timid, irresolute'  $\leftarrow$  julay- 'to fear, to be scared, to be frightened, to be afraid of, to be troubled',  $^{39}$  (4) °Ā-  $\rightarrow$  °XgAs/°AgAs, e.g. kuttaġas 'faint-hearted, timid'  $\leftarrow$  kuttā- 'to frighten, to threaten; to amaze, to astonish', battūgas 'pressure, oppression; offence; overloading; oppressive'  $\leftarrow$  battā- 'to press, to suppress, to oppress; to chase, to banish, to offend; to burden'. The segment °XgA° can shorten to a long vowel, e.g. araljūgas 'different; change; difference'  $\sim$  araljūs 'scattered'  $\leftarrow$  araljūy- 'to undergo a

<sup>36</sup> It can be observed in some old, petrified words, e.g. yemek 'food' ← ye- 'to eat' (GSTLJa §170).

<sup>37</sup> It would be logic to make an attempt to separate derivatives from each other and to handle as (1) derivatives of Mongolic -mA and -mAg, and (2) derivatives of Turkic -mA and -mAk. However, I did not find any clear linguistic phenomenon which could have given clear guideline.

<sup>38</sup> Cf. Dolgan ahagas 'offen, geöffnet, aufgemacht'.

<sup>39</sup> In case of monosyllabic stems ((C)Vy-) the stem-final /y/ remains intact almost always, cf. tāyigas 'quick-witted' ← tāy- 'to surmise, to sense, to assume; to foresee, to realize; to guess; to interpret (sleep); to be revealed, to be manifested'.

change; to come to disorder, be distorted; to be scattered, dispersed'. In rare cases the stem takes both variants, e.g.  $b\ddot{i}sta\dot{g}as$  'knotty, torn',  $b\ddot{i}st\ddot{i}gas$  'tearing easily; being separated'  $\leftarrow b\ddot{i}s\ddot{i}n$ -,  $b\ddot{i}stV$ - 'to be separated, to be torn off, to be broken; to be bifurcated (cloud), to be torn, to burst open; to die'.

In addition, there are some very old, petrified derivatives from the period when the linking sound had not been applied, e.g. ätiŋkäs 'objection, contradiction', ätäŋkäs 'distrustfulness, fluctuation, doubt', cf. \*säzinkäč in StachGJV §30.6. For further possible candidates, cf. bulās, bīlās in -(V)s.

It is one of the most commonly used suffix to form (1) adjectives expressing tendency, habitualness, special capability for action or state designated by the base verb, e.g.  $\ddot{a}rill\ddot{a}\ddot{g}\ddot{a}s$  'twisted'  $\leftarrow$   $\ddot{a}rilin$ - 'to be twirled, be twisted; to be screwed; to be implicated', tartal'igas 'inflated'  $\leftarrow$  tartal'iy- 'to swell (of the nostrils of horse)'; and in some cases (2) verbal nouns designating the instrument, object, result, etc. of an action, e.g.  $tasa\dot{g}as$  'burden, gravity, load (cart); caravan'  $\leftarrow$  tas- 'to bear, to transfer, to drag, to drag over',  $arba\dot{g}as$  'shabby fur coat; bear'  $\leftarrow$  arbay- 'to be tattered, to tousle; to come to disorder' (GSJaLJa loc. cit., KałIM 1: 114, 116). <sup>40</sup>

Dolgan shows the same form and function, e.g. bütügäs 'letzter; Ende, Schluß' ← büt-'beenden, schließen; enden, zu Ende kommen', imigäs 'weich' ← \*imiy- (StachDWb 43–44).<sup>41</sup>

The suffix -(V)gAs is of Turkic origin, and can be observed in other contemporary Turkic languages, cf. Turkish -gAc,  $^{42}$  e.g.  $s\ddot{u}zgec$  'filter, strainer'  $\leftarrow s\ddot{u}z$ - 'to filter', kiskac 'tongs'  $\leftarrow kis$ - 'to press' (GSTLJa §199, 267); and Kirghiz -(A)gAc, e.g.  $bil\ddot{u}g\ddot{u}c$  'clever'  $\leftarrow bil$ - 'to know, to understand',  $k\ddot{v}r\ddot{v}g\ddot{v}c$  'sharp-sighted'  $\leftarrow k\ddot{v}r$ - 'to see' (cf. KałIM 1: 115). These derivational elements go back to the Old Turkic form -gAc,  $^{43}$  however it does hardly left traces in the Old Turkic manuscripts; there are altogether two examples in GabAtG §110, which can be connected to this category:  $a\ddot{c}ka\ddot{c}$  'Schlüssel'  $\leftarrow a\ddot{c}$ - 'öffnen',  $k\ddot{i}ska\ddot{c}$  'Zange'  $\leftarrow k\ddot{i}s$ - 'kneifen', cf. further the word  $yasga\ddot{c}$  'rolling-pin for dough' (Kāš 461)  $\leftarrow yas$ - 'to disband (troops); to unstring (bow); to unfurl (royal canopy)' (Kāš 470). The old petrified forms mentioned above are directly related to the Turkic element -gAc. The so called long forms (similarly to Kirghiz) go back to the proto-form \*- $A\ddot{u}r$ -gAc, for the same phenomenon cf. -(X)gAn, and section 7.3 and 7.6 for a detailed description.

<sup>40</sup> Generally speaking, -XgAs forms adjectives belonging to group 1, and -AgAs forms adjectives belonging to group 2. bistaġas 'knotty, torn' and bistigas 'tearing easily; being separated' also show the semantic difference between the two derivatives, however cf. kibaġas, kibigas 'thievish, roguish' ← kip- 'to filch, to pilfer; to steal, to conceal'.

<sup>41</sup> Further examples from Dolgan being: būrgās 'ein Kampfpfeil mit pfriemförmiger Spitze; Ahle, Pfriem', hïmnagas 'gehorsam (vom Rentier)', itägās 'Makel, Fehler, Mangel', kīrjagas, kīrd'agas 'alt', minnigās 'sūß, schmackhaft; Sūßigkeit', ubagas 'flüssig'.

<sup>42</sup> It is not productive in modern Turkish (GSTLJa §199).

<sup>43</sup> A similar formative in -gUč is mentioned in OTWF §3.21.

Note that, to the best of my knowledge, there are no examples in the early documents of the Turkic languages for adjectival derivatives. This semantic problem implies the question whether there exist two homophone suffixes of different origin (1. forming adjectives, and 2. forming names of tools); but it has to be addressed to future investigation in comparative Turcology.

## Examples:

järgäljigäs 'flickering' ← järgäljiy- 'to flicker, to blink', cf. LM jergel-, jirgel- 'to shine at a distance; to appear indistinctly at a distance';

*kïlabačigas* 'shining' ← *kïlabačiy*- 'to shine, to sparkle';

bïsaġas 'incomplete; half' ← bïs- 'to cut (off); to harvest, to reap; to cut (dress); to harden', cf. OT bïč- 'to cut';

 $\bar{\imath}l\ddot{a}\ddot{g}\ddot{a}s$  'chain'  $\leftarrow \bar{\imath}l$ - 'to hang, to hang up; to string', cf. OT il- 'to catch (something with the hand, a hook, a noose, etc.); to hang (something Acc., on to something Dat.)';

 $t\ddot{a}sitt\ddot{a}\dot{g}\ddot{a}s$  'perforated'  $\leftarrow t\ddot{a}sittv$ - 'to burst open (of wound)', cf. OT  $t\ddot{a}s$ - 'to pierce, bore'.

-(V)k -Vk

The standard form is -(X)k or -(A)k (GSJaLJa §178, 179, 273).<sup>45</sup> In most cases it is -(X)k, e.g. busuk 'ripening; autumn time when grain crops or vegetables ripen, fruits' ← bus- (intr.) 'to steam, to bake, to cook; to ripen', aygistik 'conceited, proud' ← aygisin-, aygistV- 'to linger; to boast; to ooze', however there can be derivatives in -(A)k, e.g. bölöx 'heap, gathering, crowd; group', cf. OT böl- 'to divide, separate, distinguish', bïstax<sup>46</sup> 'isolated, independent part; section, fragment; lonely, not wholesale'  $\leftarrow b\ddot{i}s\ddot{i}n$ -,  $b\ddot{i}stV$ - 'to be separated, to be torn off, to be broken; to be bifurcated (cloud), to be torn, to burst open; to die', . The stem-final °y- is usually dropped, but it can remain intact, e.g. kuoxayik 'exclamation from happiness' ← kuoxay- 'to draw out the neck'. In rare cases the linking vowel of both -(X)k and -(A)k behave as dominant, e.g. battik 'pressure, oppression' ← battā- 'to press, to suppress, to oppress; to chase, to banish, to offend; to burden'47 and atarax: atarax-butarax 'carelessly, absentmindedly', atarax-xatarax 'apart' ← atariy- 'to be situated crosswise, across'. The word bisax 'knife; any cutting instrument: razor, dagger, sword' is traditionally labeled as a derivative of bis-'to cut (off); to harvest, to reap; to cut (dress); to harden', cf. StachDWb 45 (bahak 'Messer') and GSJaLJa §179. This etymology, however, rises several problems, and most probably a derivative from bi 'knife', for the details, see OTWF 47. Long vowel may appear in place of the linking sound due to contraction, see e.g. the old, petrified word tarāx 'crest, comb; cock crest; harrow; belt' < Old Turkic targak ( $\leftarrow targa- + -(O)k$ ) id., cf.  $tar\bar{a}$ - 'to comb, to comb hair, to comb out; to harrow' and Old Turkic targa-id.

The function of -(V)k is to form (1) nouns designating instrument, or the result/process of the action, e.g. butuk 'red vegetable dye; painting, dyeing'  $\leftarrow butuy$ - 'to colour, to paint',  $\ddot{o}l\ddot{u}k$  'corpse; meat of cattle died in exhaustion; weak (horse, bull), sleepy, lazy; phlegmatic person; sleepiness; old cloud'  $\leftarrow \ddot{o}l$ - 'to die, to perish; to die out; to be ill; to become numb'; and (2) adjectives, e.g.  $\ddot{a}lik$  'fast, rapid, quick'  $\leftarrow \ddot{a}liy$ - 'to throw oneself on sg, to jump to; to hurl

<sup>45</sup> GSJaLJa discusses this suffix in three independent chapters: (1) -Xk, (2) -Ax forming substantives; and (3) -(X)k, -(A)x forming adjectives (§178, §179 and §273). From the point of view of etymology, these suffixes belong together.

<sup>46</sup> Cf. Dolgan bistak 'Ausschnitt, Fragment'.

<sup>47</sup> Cf. Dolgan battik 'jeder Gegenstand, der auf die čum-Decken gelegt wird, damit sie im Wind nicht flattern'.

oneself on sy; to rapidly pass by',  $a\ddot{g}iyax$  'few, little; small quantity, deficiency'  $\leftarrow a\ddot{g}iy\bar{a}$ - 'to grow less, to decrease, diminish'.<sup>48</sup>

The corresponding Dolgan suffix shows the same functions, and the variety of allomorphs, e.g. ardak 'Unwetter, Regen'  $\leftarrow$  \* $art\bar{a}$ - 'verderben, schlecht werden', horuk 'Auftrag'  $\leftarrow$  horuy-'befehlen' (StachDWb 44–46). \*StachDWb 45 cites two examples where the stem-final long vowel remains intact, see  $b\bar{\imath}l\bar{a}k$  'scharf (von Schneiden u.ä.)'  $\leftarrow$   $b\bar{\imath}l\bar{a}$ - 'schärfen, schleifen' and  $\ddot{o}yd\bar{o}k$  'vernünftig, klug'  $\leftarrow$   $\ddot{o}yd\bar{o}$ - 'denken, überlegen' suggesting that these exceptions may belong in another, maybe newer chronological layer, if these are not simply notation errors. It is more plausible that these words are not derivatives in -(V)k, but in  $+L\bar{A}k^{50}$  from the nominal bases  $b\bar{\imath}$  'Schneide, Klinge' and  $\ddot{o}y$  'Verstand; Gedächtnis; Wunsch'. Some derivatives mentioned in StachDWb 44–46 do not belong here but to -(A)k, q.v., i.e.  $\ddot{c}u\eta k \ddot{u}k$  'traurig', \* $h\ddot{a}r\ddot{a}k$  (in  $h\ddot{a}r\ddot{a}kt\ddot{a}k$ ) 'Vorsicht' and  $him\ddot{a}k$  '(Fest-)Kleid; schön gekleidet'. On the contrary, the Dolgan word  $\ddot{k}ur\ddot{j}\ddot{a}x$  'Schaufel, Spaten', being discussed in StachDWb 41 as a derivative in  $-\ddot{c}Ak$  (\* $\ddot{k}urt\ddot{c}\ddot{a}k < *k\ddot{u}rt-$  'schaufeln'), seems to belong here, cf. Yakut  $\ddot{k}ur\ddot{j}\ddot{a}x$  'shovel; wide shovel for raking up the snow'  $\leftarrow$   $\ddot{k}urt-$ ,  $\ddot{k}ur\ddot{j}V-$  'to rake up; to rake away by shovel; to remove'.

The Yakut suffix -(V)k is of Turkic origin. It can be observed from the Old Turkic period, cf. -(O)k in OTWF §3.102, and wide-spread in all contemporary Turkic languages. Its primary function is to form nouns. See, for instance, Chuvash  $-(\check{A})k$ , e.g.  $p\check{a}s\check{a}k$  'spoiled'  $\leftarrow p\check{a}s$ - 'to spoil, to break',  $kas\check{a}k$  'piece, chunk'  $\leftarrow kas$ - 'to cut' (LevIMČJa 154–155); Turkish -(X)k, e.g. dilek 'wish, request'  $\leftarrow dile$ - 'to desire, request',  $\ddot{o}dek$  'payment, compensation'  $\leftarrow \ddot{o}de$ - 'to pay' (GSTLJa §189–191, 261); Tuvan -(X)k, e.g.  $ad\ddot{i}r\ddot{i}k$  'inflow, fork, delta of river'  $\leftarrow ad\ddot{i}r$ - 'to separate',  $b\ddot{o}l\ddot{u}k$  'group'  $\leftarrow b\ddot{o}l$ - 'to gather into heap, groups' (GTJa §179); and Tatar -(E)k, e.g.  $il\ddot{a}k$  'sieve'  $\leftarrow il\ddot{a}$ - 'to sift' (PoppeTM §4.13.4), etc.

There is a homophone suffix in Yakut, the origin of which is Mongolic, see at -(A)k. Practically it is hardly possible to divide -(V)k formatives into two groups because of their similarities in function. The method we use here is the etymological one: if the base is of Turkic origin the derivative is included here, otherwise in -(A)k. However, in some cases this method seems to be dubious or not exact.

#### **Examples:**

 $kist\ddot{a}x$  'secret'  $\leftarrow kist\ddot{a}$ -,  $kisti\ddot{a}$ - 'to hide, to conceal, to cover; to bury';

tammax, tamax 'drop, dripping, leak by drops; speckle' ← tammay- 'to drip';

 $tir\ddot{a}x$  'possessing strong muscles; strong, steady; stability; support'  $\leftarrow tir\ddot{a}$ -,  $tiri\ddot{a}$ - 'to prop up, to support; to bring', cf. OT  $tir\ddot{a}k$  'support, prop, column'  $\leftarrow tir\ddot{a}$ - 'to prop up, support';

 $b\ddot{u}r\ddot{u}k$  'narrow skin, border, edge, cover, scar'  $\leftarrow b\ddot{u}r$ - 'to border, to face, to edge with fur', cf. OT  $b\ddot{u}r$ - 'to twist, wind round, screw together';

<sup>48</sup> Cf. Dolgan agiyak 'wenig, knapp'.

<sup>49</sup> Further examples from Dolgan being:Bitte'; bögök 'satt', munńak 'Versammlung'; kördük 'wie, ähnlich; nach, gemäß', mäŋähik 'Mitfahrender, Fahrgast (auf dem Schlitten)', itirik 'böse, bissig (vom Hund)'.

<sup>50 +</sup>LĀk mostly forms adjectives, cf. StachDWb 19–22 and GSJaLJa §262.

<sup>51</sup> This form might be influenced by the Mongolic word kürje 'shovel, spade'.

 $s\ddot{u}r\ddot{u}k$  'running, flowing; rapid; runner; run, rapidity, flow, jet, wave; swift; tendency'  $\leftarrow s\ddot{u}r$ 'to run; to leak, to flow; to emerge', cf. OT  $y\ddot{u}g(\ddot{u})r\ddot{u}k$  'fast-running, swift'  $\leftarrow y\ddot{u}g\ddot{u}r$ - 'to run fast':

muńax 'meeting, collection, assembly, council, assemblage; gathering, meeting'  $\leftarrow$  mus-, muńV-, muyńV- 'to gather, to collect, to accumulate; to huddle together; to rake up'; sogox 'pestle; mortar'  $\leftarrow$  sox- 'to pound in mortar'.

#### -(V)s

The standard form is -(V)s (GSJaLJa §271), e.g. balligras 'chatterer, spouter, twaddler'  $\leftarrow$  balligrā- 'to speak disconnectedly, to chatter, to speak twaddle'. The stem-final °y- is always dropped, e.g. bügüs 'genuflection'  $\leftarrow$  bügüy- 'to kneel down'. In a unique word the suffix behaves dominant, i.e. imäräs 'soft'  $\leftarrow$  imäriy- 'to stroke, to rub (by hand)'. If the stem ends in consonant, the linking vowel can be either low, e.g. tiäräs 'somersault'  $\leftarrow$  tiär- 'to turn, to turn up (dress), to reverse, to turn over', or high, e.g. tardïs 'lack of mind, brain'  $\leftarrow$  tart- 'to pull, to drag, to draw; to draw off, to extend; to tighten, to twist; to place, to advance; to lengthen (snares); to smoke (e.g. tobacco); to grind; to plough; to be sat down (of material)', tabïs 'success'  $\leftarrow$  tap- 'to hit the target; to do successfully'. In Dolgan there is only one example with stem-final consonant, i.e. \*dölüs 'Bohren, Stechen' ((s. dölühön sub +ān)  $\leftarrow$  döl- 'durchbohren') showing a high linking vowel /X/.

The Yakut suffix -(V)s forms both (1) substantives, e.g. aygüras 'rattle, clatter (silver, metallic adornment); fashion-jewellery'  $\leftarrow$  aygürā- 'to sound, clang; to boast; to shake loose'; and (2) adjectives, e.g. asas 'gluttonous, hearty eater, the ability of eating much'  $\leftarrow$  asā- 'to eat; to drink; to feed', from verbs of action or state. It is frequently used with onomatopoeic verbs, e.g. bardarġas, bardürġas 'loud'  $\leftarrow$  bardarġā-, bardürġā- 'to produce loud voice; to bubble, to boil with noise; to be capricious, to be indignant'. Derivatives from onomatopoeic verbs may designate animals, see bočuguras, bočugras 'hazel-grouse, Tetrastes bonasia'  $\leftarrow$  bočugurā- 'to twitter, chirp; to read rapidly (of man emitting quiet voice)', bābigrās, bābigirās 'ptarmigan, Tetrao lagopus'  $\leftarrow$  bābigrā-, bābigrāy- 'to emit sounds bā-bā-bā'. See -(Ā)ččX, which also produces biological names. The suffix -(V)s is frequently used with the verb kīn-, gīn- 'to do, to cause, to produce, to act' for expressing the rapidity of the action, the moment when the action takes place, or when the result of the action can be seen, e.g. küöräs kīn- 'to appear suddenly, to emerge'  $\leftarrow$  küöräy- 'to rise upward; to float; to hover', mičis gīn! 'smile!'  $\leftarrow$  mičiy- 'to smile slightly', kündāris gīn- 'to become shiny, light (suddenly)'  $\leftarrow$  kündāriy- 'to shine, to reflect'.

Dolgan shows the same pattern regarding forms, e.g.  $\check{cirilas}$  'Rauschen'  $\leftarrow \check{cirila}$ - 'rauschen, rieseln', kilgas 'kurz'  $\leftarrow kilg\bar{a}$ - 'kurz/kürzer werden'. However, while Yakut -(V)s mostly forms adjectives, in Dolgan half of the derivatives are substantives (StachDWb 48–49). In addition, adverbial examples can also be registered, e.g. bilsis '[Adj.] bekannt; [Adj.] bemerkenswert; [Adv.] bemerkenswerterweise'.

Further examples from Dolgan being: hübäläs 'Rat, Hinweis'; prahlerisch', kolbōs 'eine Verbindungsstelle im Gespann'; jirilas 'zitternd', tälibiräs 'energisch, lebendig', türilas 'klingelnd, klirrend'.

The Yakut suffix -(V)s is of Turkic origin, cf. OT  $-X\check{s}$  forming abstract nouns, or subject/object of transitive/intransitive bases (OTWF §3.103). It was quite productive in the Old Turkic period, and preserved its state in the contemporary languages. Cf. Chuvash  $-(\check{A})\check{s}$ , e.g.  $sivl\check{a}\check{s}$  'breath, air'  $\leftarrow sivla$ —' 'to breathe',  $p\check{e}l\check{e}\check{s}$  'acquaintance'  $\leftarrow p\check{e}l$ —' 'to know' (LevIMČJa 164); Tuvan  $-(X)\check{s}$ , e.g.  $k\ddot{o}r\ddot{u}\check{s}$  'view; form; spectacle'  $\leftarrow k\ddot{o}r$ —' 'to see; to look',  $tan\check{u}\check{s}$  'familiar person'  $\leftarrow tan\check{u}$ —' 'to learn; to be familiar' (GTJa §182); and Turkish  $-(X)\check{s}$ , e.g. alis 'adoption; purchase'  $\leftarrow al$ —' 'to take', bulus 'presence; finding; discovery'  $\leftarrow bul$ —' 'to find' (GSTLJa §178—181). The vowel of the suffix was originally dominant, but it gradually lost dominancy. Finder Yakut the initial vowel of -(V)s behaves as a linking sound. However, there are some petrified forms where the original system has been preserved, e.g.  $alg\check{u}s$  'blessings; benevolence; praise, praying'  $\leftarrow al\dot{g}\bar{a}$ —' 'to bless; to mean sy well; to greet; to glorify', cf. OT  $alk\check{u}s$  'praise; blessing';  $arg\check{u}s$  'travelling companion, comrade on the way'  $\leftarrow *arg\bar{a}$ —, cf. OT  $ark\check{u}s$  'a person or group of persons travelling for commercial or official purposes; travelling merchants, caravan; official envoys, mission'. Fig. 10.

At first sight the Yakut word  $bul\bar{a}s$  'mixing'  $\leftarrow bul\bar{a}$ - 'to mix anything uniform, to stir slowly, to intermix, to mix up; to knead; to interfere (to disturb); to mix up (to lead into confusion)' and  $b\ddot{u}l\bar{a}s$  'mixing'  $\leftarrow b\ddot{u}l\bar{a}$ - 'to mix up; to confuse, to lead into confusion' may also belong to this category. However, it is uncertain whether they are derivatives in -(V)s (< OT -Xš), or go back to a proto-form \*bulgagaš  $\leftarrow bulga$ - + -gAč. Regarding the Yakut form, the latter seems to be more acceptable.

#### **Examples:**

bigiäs 'feeling, perceiving; knowing how to feel, perceive' ← bigiä- 'to feel, to perceive; to aim, to look fixedly';

*illas* 'bifurcation' ← *ilin-, illV-* 'to fork, to be separated; to extend';

kisirgäs 'boastful, braggart' ← kisirgä- 'to boast, to brag', D kihirgäs 'Prahler, Großtuer';

 $k\ddot{i}rg\ddot{i}s$  'cutting; fight'  $\leftarrow k\ddot{i}rt$ -,  $k\ddot{i}rgV$ - 'to cut; to beat; to interrupt', cf. OT  $k\ddot{i}rk$ - 'to shear (sheep and the like)';

kördös 'beggar' ← kördö-, kördüö- 'to search for; to request; to claim', cf. OT közlä- 'to keep under observation';

kuogas 'loon [besides other meanings]' ← kuogay- 'to draw out the neck', D kuogas '[ornit.] Taucher'.

<sup>53</sup> On the question of dominant deverbal nominal suffixes in Old Turkic, cf. Károly (forthcoming).

There is another Yakut word belonging to the group of petrified forms, see e.g.  $a\ddot{g}\ddot{s}$  'number'  $\leftarrow \bar{a}x$ - 'to add up, count; to comprise in, to take into account; to apprise; to read', cf. OT  $sak\ddot{s}$  'counting, calculation'.

<sup>55</sup> Cf. OT bulgaš 'confusion, disorder; confused, disorderly'; as for the possibilities, see OTWF §3.103 and EDPT 336b.

 $-\bar{\mathbf{X}}$ 

- $\vec{X}$  is one of the most productive derivational element in Yakut.<sup>56</sup> In the literature it is referred to as *nomen actionis*.

The standard form is  $-\bar{X}$  (GSJaLJa §174), e.g.  $abar\bar{i}$  'anger, vexation; irritation'  $\leftarrow abar$ - 'to be angry; to be furious',  $boxs\bar{u}$  'knot'  $\leftarrow bogus$ -, boxsV- 'to knot, to tie; not to release'. If the stem ends in  $^{\circ}\bar{A}$ - or  $^{\circ}XA$ -, it is replaced by the suffix, e.g.  $aym\bar{i}$  'agitating, upsetting; wasting, prodigality'  $\leftarrow aym\bar{a}$ - 'to disturb, upset; to waste, squander'; detailed description of this phenomenon is in section 7.5. Variants in -XA can be found in very few number, see e.g.  $k\bar{i}t\bar{i}$ ,  $k\bar{i}t\bar{i}a$  'coast, edge' being a regular correspondence of OT  $k\bar{i}d\bar{i}g$  'the edge; the sea shore; the frontier (of a country); the lip (of a cup)'  $\leftarrow k\bar{i}d(\bar{i})$ -.

The suffix  $-\bar{X}$  has wide variety of functions. It is used to denote (1) action nouns (primary function), e.g.  $bar\bar{i}$  'going'<sup>57</sup>  $\leftarrow bar$ - 'to go',  $aray\bar{i}$  'weakening, growing old'  $\leftarrow aray$ - 'to weaken because of old age, to grow old'; (2) substantives, e.g.  $at\bar{i}$  'goods; price; exchange, sale, trade', <sup>58</sup> cf. OT  $sat\bar{i}g$  'selling; trade, commerce; sale price'  $\leftarrow sat$ - 'to sell',  $battan\bar{i}$  'pressure, constraint, oppression'  $\leftarrow battan$ - 'to be suppressed, to be oppressed, to be offended; to be enslaved; to be tortured'; (3) instruments, tools:  $an\bar{i}$  'icepick, crowbar'<sup>59</sup>  $\leftarrow as$ -, anV-,  $an\bar{j}V$ - 'to push, push off; to poke; hollow',  $k\bar{o}l\bar{u}y\bar{u}$  'harnessing of horse or ox; harness'  $\leftarrow k\bar{o}l\bar{u}y$ - 'to harness (horse or ox)'; (4) local formations, e.g.  $al\bar{i}$  'valley, long and narrow land'  $\leftarrow *al(g)ig$ , see OT alkig 'wide, broad' (StGJV §24.7),  $k\bar{u}s\bar{i}$  'ford'  $\leftarrow k\bar{u}s$ - 'to wade across the stream, to ford; to break, to reject'; (5) adjectives, e.g.  $as\bar{i}$  'bitter; caustic; acid; salty; bitterness; salt; misfortune; grif', cf. OT  $ac\bar{i}g$  'bitter, sour'  $\leftarrow ac\bar{i}s\bar{i}$ - 'to be bitter'; and, similarly to  $-(\bar{A})c\bar{c}X$ , q.v., (6) names of animals, e.g.  $tig\bar{i}$  'sewing; gadfly, wasp'  $\leftarrow tik$ - 'to sting (of bee, fly, etc.); to pummel; to sew'.

Dolgan shows the same forms and functions (StachDWb 53–54), see e.g.  $ar\bar{a}r\bar{i}$  'Trennung; Abteilung'  $\leftarrow ar\bar{a}r$ - 'trennen',  $kardar\bar{i}$  'Antwort'  $\leftarrow kardar$ - 'heimzahlen, vergelten; antworten, erwidern, entgegnen';  $h\ddot{o}g\ddot{u}$  'wunderbar'  $\leftarrow h\ddot{o}k$ - 'sich wundern'. There is an examples with short vowel, i.e.  $\ddot{a}rgiy\bar{i} \sim \ddot{a}rgiy\bar{i}$  'Umkreisung', which only seems to be a notation error.

The Yakut suffix  $-\bar{X}$  is of Turkic origin, cf. Old Turkic -(X)g forming subject from intransitive and object from transitive verbs (OTWF §3.101). It was productive in Old and Middle Turkic, and can be found in every contemporary Turkic language, see e.g. Chuvash  $v\bar{e}sev$  'flight'  $\leftarrow v\bar{e}sev$  'fly', yuratu 'love'  $\leftarrow yurate$  'to love' (LevIMČJa 162–163); Tuvan  $dil\bar{a}g$  'request'  $\leftarrow dil\bar{a}e$  'to request; to search for' (GTJa §178); Khakas satig 'trade'  $\leftarrow sate$  'to trade; to

<sup>56</sup> In a vast number of cases Pekarskij does not give the meaning of -X nouns, only indicates the base verb, cf. aŋaliÿi, ärbättärī.

<sup>57</sup> Cf. Dolgan barī 'Reise; Abreise'.

<sup>58</sup> Cf. Dolgan atī 'Verkauf'.

<sup>59</sup> Cf. Dolgan anńi 'Brechstange (Fischfanggerät)'.

<sup>60</sup> Further examples from Dolgan being: baliktanī 'Fischfang', buolū 'Anbruch, Beginn [einer Jahreszeit]', dogordohū 'Freundschaft', habī 'Zudecken; Deckel; Rollvorhang, Rouleau', hottū 'Handtuch', huruyū '[literarisches u.ä.] Werk', hīlayī 'Müdigkeit, Ermüdung', hīrsī 'Wettlauf, -kampf', kayītī 'altes, trockenes Fladenplätzchen', kāhī 'Geschenk', körū 'Schau', kuotalahī 'Wettkampf/-bewerb', ölū 'Tod', örū 'Zopf', ugū 'Einfügen, Einsatz'; haŋardī '[Adv.] seit kurzem, neulich; [Adv.] zum ersten Mal; [Adj.] neu, frisch', harīlī 'lautes Weinen, Heulen [von Kindern]', huburū 'hoch, groß', tāhī 'ängstlich', üölū 'gebraten, Brat-'. Cf. notes on haŋardī and ābī under the entry of -A.

sell' (GHJa §59); and Oyrot *suru* 'question' ← *sura*- 'to ask' (GOJa §9.1); in some Kipchak languages it is the dictionary form, such as Kazakh *qaynatu* 'to boil; to get angry, to lose patience', and Tatar *tötäü* 'to smoke (e.g. of fireplace)'.

#### **Examples:**

 $alt\bar{i}$  'collision, cohesion; eclipse (YakS)'  $\leftarrow al\bar{i}n$ -, altV- 'to eclipse', D  $alt\bar{i}$  (astron.) 'Finsternis';

batī 'persecution, driving off; fertilization' ← bat- 'to chase, to drive (off), to expel; to follow; to impregnate (of bull); to melt (metal)', D batī 'Verfolgung';

bilī 'knowledge, consciousness; feeling, presentiment, instinct' ← bil- 'to learn, to get to know, to recognize, to distinguish; to find out, to trace; to be introduced, to be mastered; to know, to understand, to decide, to note; to see, to feel', D bilī 'Wissen, Erkenntnis', cf. OT bil- 'to know';

 $\ddot{a}b\bar{\imath}$  'addition, increase; in addition'  $\leftarrow \ddot{a}p$ - 'to add, join', D  $\ddot{a}b\bar{\imath}$  'meht, zusätzlich', cf. OT  $s\ddot{a}p$ - 'to equip, fit out';

 $\ddot{a}rb\bar{\iota}$  '[the action described by the base verb]; saw'  $\leftarrow \ddot{a}rb\bar{\iota}$  'to saw (in two)', D  $\ddot{a}rb\bar{\iota}$  'Säge', cf. OT  $erb\ddot{a}$ - 'to saw';

 $\ddot{a}rd\bar{\iota}$  'rowing by oars; oar'  $\leftarrow \ddot{a}rt$ - 'to row by oar', D  $\ddot{a}rd\bar{\iota}$  'Ruder';

ätisī 'conversation; dispute, contest, quarrel' ← ätis- 'to speak simultaneously with someone, to talk, to be discussed; to compete, to argue, to quarrel', D ätihī 'Streit', cf. OT itiš- 'to push one another; to quarrel';

d'ulayi 'timidity, indecision, shyness, cowardice', julayi 'fear, indecision, shyness, cowardice'

← d'ulay- 'not to dare, to quail, to be afraid of, to experience the feeling of fear', julay- 'to
fear, to be scared, to be frightened, to be afraid of, to be troubled', cf. LM jiliy- 'to flee, take
flight; to go astray', jilu-, julu- 'to flee, run away; to avoid';

kiärgänī 'adornment, decoration, accoutrement (for women)' ← kiärgän- 'to be decorated, to ponce oneself up';

mani 'protection, guard; pasture; herd' ← manā- 'to watch, to protect, to guard; to graze', cf. LM mana- 'to keep vigil, hold night watch, safeguard, stand guard over, to make the rounds as guard during the night';

 $sab\bar{a}st\bar{i}$  'refusal, negation'  $\leftarrow sab\bar{a}st\bar{a}$ - 'to finish; to reject, to deny'.

#### -XAx

The suffix -XAx is originally a future participle, and also used as a future tense marker (GSJaLJa §412–421, 595–596). However, some participal forms have become lexicalized and thus appeared in the dictionaries as independent entries.

The standard form is -XAx,  $k\ddot{a}\dot{g}i\ddot{a}x$  'nod'  $\leftarrow k\ddot{a}giy$ - 'to nod or twist by the head',  $tard\ddot{a}x$ ,  $torduox^{61}$  'hook, wooden hook'  $\leftarrow tart$ - 'to pull, to drag, to draw; to draw off, to extend; to tighten, to twist; to place, to advance; to lengthen (snares); to smoke (e.g. tobacco); to grind; to

<sup>61</sup> Cf. the notes under the entry of  $-\bar{A}k$ .

plough; to be sat down (of material)'. The initial vowel of the suffix is dominant, cf. section 7.5 for the details.

-XAx forms substantives, e.g.  $t\ddot{o}r\ddot{u}\ddot{o}x$  'creation'  $\leftarrow t\ddot{o}r\ddot{o}$ -,  $t\ddot{o}r\ddot{u}\ddot{o}$ - 'to be born; to bear (not used for humans), to calve, to foal'.

StachDWb 51 discusses the Dolgan counterpart of -XAx, the cited examples being: itiak 'Zögling'  $\leftarrow it$ - 'ernähren; züchten (edba); erziehen',  $k\ddot{a}rsi\ddot{a}k$  'Koitus, Beischlaf'  $\leftarrow k\ddot{a}ris$ -'geschlechtlich verkehren, den Beischlaf ausüben',  $k\ddot{i}h\ddot{i}ak$  'Schaber, Schabeisen'  $\leftarrow k\ddot{i}h\ddot{i}y$ - 'ab-/schaben' or  $k\ddot{i}s$ - 'hobeln, schnitzen'. A notable difference between Dolgan and Yakut is that Dolgan has adjectival derivatives, too, i.e.  $kuttan\ddot{i}ak$  'erschreckend, furchtbar'  $\leftarrow kuttan$ - 'Angst bekommen' and  $k\ddot{u}l\ddot{u}\ddot{o}k$  'lustig, komisch, putzig'  $\leftarrow k\ddot{u}l$ - 'lachen'.

The etymology of -XAx is dubious, however most likely of Turkic origin. According to StachJFutS 5 the proto-form of -XAx is \*- $g\bar{O}k < -gO^{62}$  ok; other ideas and the problems behind this element is thoroughly discussed in op. cit.

There are some words belonging in this group only seemingly. For instance, Pekarskij derives  $s\ddot{u}s\ddot{u}\ddot{o}x$ ,  $s\ddot{o}s\ddot{u}\ddot{o}x$  'composition, joint; elbow; discharge of objects, generations; division, department; term; line (in book); article (law)' from the verb  $s\ddot{u}s\ddot{a}$ - 'to assort, divide into segments', however, it is maybe:  $s\ddot{u}s\ddot{u}\ddot{o}x < *y\ddot{u}zg\ddot{u}k \leftarrow *y\ddot{u}z \rightarrow *y\ddot{u}z\ddot{a} > s\ddot{u}s\ddot{a}$ - (StachGJV §8.6c, and OTWF §2.34 for +gAk).

## Examples:

 $k\ddot{a}si\ddot{a}x$  'grime, scum, sediment (on dish); scraper'  $\leftarrow k\ddot{a}si\ddot{a}$ - 'to clean grime, sediment from the wall of pots, boilers, to scrape off', cf. OT  $k\ddot{a}z$  'sediment';

mosuok, mosuox 'handicap, difficulty (on the road); mixing' ← mosuy- 'to complicate; to exasperate';

 $\ddot{u}r\ddot{u}\ddot{o}x$  'stooped, humpbacked; a kind of curved knife for scraping fur from leather'  $\leftarrow \ddot{u}r$ - 'to scrape (inner side of) leather'.

#### -XAxčA

 $-XAx\check{c}A$  is originally not a derivational element, but a converb. The only reason why discussed here is that Pekarskij cites many words in  $-XAx\check{c}A$  in separate entries as lexicalized forms.

The standard form is -XAxčA (GSJaLJa §696), e.g. bisiaxča 'being on the point of cutting off'  $\leftarrow$  bis- 'to cut (off); to harvest, to reap; to cut (dress); to harden'. The initial diphthong of the suffix is dominant, e.g. saniaxča 'being in the point of fancying, imagining'  $\leftarrow$  sanā- 'to think, to imagine, to reflect; to hope, to want, to plan; to decide; to consider; to understand', cf. section 7.5 for the details. According to GSJaLJa loc. cit. there are forms in -XAxtA (in negative sentences; no such forms in Pekarskij's dictionary), e.g. kinilär bariaxta barbattar 'not all of them have left yet'. 63

<sup>62</sup> Cf. -gU in GOT §3.284 for the Old Turkic parallels.

<sup>63</sup> Forms in -XAxtA do not seem to belong here etymologically. The second segment +tA may be a different ending (the partitive case marker?). A single derivative from PekSJ, i.e. batïaxxa 'pursuit' ← bat- 'to chase, to drive (off), to expel; to follow; to impregnate (of bull); to melt (metal)' also has to be mentioned here. The suffix

The general function of -XAxčA is to form adverbs designating action or state which is close to completion, e.g. uruok bütüöxčä buolla 'the lesson ends soon' (GSJaLJa loc. cit.).

This derivational element is not discussed in StachDWb.

The Yakut suffix  $-XAx\check{c}A$  is of Turkic origin, and can be parsed into two basis elements, namely -XA(x) and  $+\check{c}A$ . According to StachJFutS -XA(x) is of Turkic origin, cf. -XAx. Latter can be connected with the Turkic equative case marker  $+\check{c}A$ , cf.  $-BX\check{c}CA$  for the details.

## Examples:

 $\ddot{o}l\ddot{u}\ddot{o}x\ddot{c}\ddot{a}$  'being in the point of death'  $\leftarrow \ddot{o}l$ - 'to die, to perish; to die out; to be ill; to become numb', cf. OT  $\ddot{o}l$ - 'to die';

 $si\ddot{a}x\ddot{c}\ddot{a}$  'in the point of eating sg'  $\leftarrow$   $si\ddot{a}$ - 'to eat, to taste, to eat up, to corrode; to ruin, to destroy; to burn; to beat the cards, to take pawn or figure (in games like chess)', cf. OT ye- 'to eat'.

-(X)gAn -Ān

The standard form is -(X)gAn (GSJaLJa §265), e.g.  $b\ddot{a}rig\ddot{a}n$  'generous'  $\leftarrow b\ddot{a}rr$ - 'to give, to transfer, to render',  $k\ddot{a}ps\ddot{a}tig\ddot{a}n$  'talkative, being fond of talk; affable; compliant'  $\leftarrow k\ddot{a}ps\ddot{a}t$ - 'to cause to say; to speak, to talk, to converse, to negotiate; to arrange for, to betroth',  $k\ddot{o}g\ddot{u}y\ddot{u}g\ddot{a}n$  'imitative'  $\leftarrow k\ddot{o}g\ddot{u}y$ - 'to be fascinated by a strange example, to imitate, to make looking on others, to be tempted; to sympathize with'. The stem-final °y- usually remains intact, but there are exceptions, e.g.  $s\ddot{i}t\ddot{i}gan$ ,  $s\ddot{i}t\ddot{i}kan$  'rotten, decaying; smelly, fetid'  $\leftarrow s\ddot{i}t\ddot{i}y$ - 'to decay; to get spoiled (of meat, hay); to suppurate'. In an irregular case the suffix behaves as dominant, i.e.  $t\ddot{a}st\ddot{i}gan$  'rock load, tying; nonaqueous plummet'  $\leftarrow t\ddot{a}st\ddot{a}$ - 'to supply with stone'. Some very old petrified forms in  $-\bar{A}n$  have to be mentioned here, because they belong here etymologically, see below, e.g.  $kur\ddot{a}n^{65}$  'dryness, drought; bright (sky, weather)'  $\leftarrow k\bar{u}r$ - 'to dry' (KałMEJ 72) and  $bul\ddot{a}n^{66}$  (< \*bulgagan) 'dun, dead colour'  $\leftarrow bul\ddot{a}$ - 'to mix anything uniform, to stir slowly, to intermix, to mix up; to knead; to interfere (to disturb); to mix up (to lead into confusion)'.  $^{67}$ 

The general function of -(X)gAn is to form adjectives designating (1) the ability of doing an action marked by the base verb, e.g. batigan 'characterized by the ability of impregnation (of bull)'  $\leftarrow$  bat- 'to chase, to drive (off), to expel; to follow; to impregnate (of bull); to melt (metal)'; and (2) the sign or result of the action, e.g.  $\ddot{a}tig\ddot{a}n$  'ringing (of bell)'  $\leftarrow \ddot{a}t$ - 'to speak, to utter, to say, to pronounce; to call, name; to cuckoo; to thunder'. Words in  $-\ddot{A}n$  form abstract and concrete nouns, however it is not an active derivational element in the modern language, e.g.  $badar\bar{a}n$ ,  $bad\ddot{i}r\bar{a}n$  'swamp, mud; silt; clay' < \*batīrgan, cf. OT batur- 'to cause to sink' (StachGJV §24.3).

<sup>-</sup>AXxxA being a compound of the future participle -XAx, q.v., and the dative-locative case marker +KA also forms converbs (GSJaLJa §415).

<sup>64</sup> Cf. Dolgan hitigan 'verfault, faul, stinkend' ← hitiy-, sitiy- 'verfaulen'.

<sup>65</sup> Cf. Dolgan kurān 'dürr, trocken; Dürre, Trockenheit'.

<sup>66</sup> It is also plausible that StachGJV §35.8a is right and bulān has to be analysed as \*bul-gā-n.

There are examples in  $-\bar{A}n$  in GSJaLJa §274.1 without detailed description and etymological explanation. These derivatives belong here or to  $-\bar{A}n$ , q.v.

There are examples for both -(X)gAn and  $-\bar{A}n$  in Dolgan, e.g.  $hi\ddot{a}g\ddot{a}n$  'Vielfraß (zool.)'  $\leftarrow hi\ddot{a}$  'essen', and  $aks\bar{a}n$  'An-/Zahl',  $k\bar{a}lgan$  'Tür' (< \* $k\bar{a}y\ddot{a}lgan$ )  $\leftarrow k\bar{a}y$ - 'ab-/ver-schließen, ab-/ver-/sperren' (StachDWb 40, 42). An irregular word with long vowel is also mentioned, i.e.  $ti\ddot{a}rg\ddot{a}n$  'Hof'  $\leftarrow ti\ddot{a}r$ - 'die innere Seite herauskehren'.

The Yakut derivational element -(X)gAn and  $-\bar{A}n$  are of Turkic origin. In the Old Turkic period, used not so frequently, it formed subject from both intransitive and transitive verbs, with some exceptions, cf. -gAn in OTWF §3.324. In fact it is a participle and got lexicalized in many cases from the Old Turkic period on, cf. GOT §3.282. It is wide-spread in the contemporary Turkic languages, cf. Chuvash -kĂn,68 e.g. tarkăn 'fugitive; fluent' ← tar- 'to run', xïrkăn 'miser'  $\leftarrow$  xïr- 'to scrape, to rake up' (LevIMČJa 156), and the participle -AkAn, e.g.  $p\ddot{i}rakan \, s\ddot{i}n \, 'going \, person' \leftarrow p\ddot{i}r$ - 'to go' and  $t\ddot{a}r\ddot{a}sakan \, a\ddot{c}a \, 'diligent \, boy' \leftarrow t\ddot{a}r\ddot{a}s$ - 'to try; to work painstakingly' (LevIMČJa 93-94). Khakas also presents both forms, cf. the past participle -KAn, e.g.  $t\ddot{o}r\ddot{a}n$   $\ddot{o}sk\ddot{a}n$  'geboren und aufgewachsen', and the present participle - $IgAn^{69}$  (only with the verbs par- 'gehen' and kil- 'kommen'), e.g. tigi kiligän avtomobil' 'das Auto, das hierher fährt' (Pritsak 1959: §3222). In Yakut the unproductive element  $-\bar{A}n$  is directly related to the Old Turkic element -gAn. The long form in -(X)gAn goes back to a converbial construction \*-A  $\ddot{a}r$ -gAn, for the same phenomenon, cf. -(V)gAs and section 7.3, 7.6 for a detailed description. Suffixes etymologically related to the Old Turkic formative -gAn are wide-spread in other Turkic languages both as derivational element and participle. In case of the old petrified forms in  $-\bar{A}n$ , a regular sound change  $-gAn > -\bar{A}n$  can be seen, cf. section 7.6. There is a homophone suffix in Yakut, the origin of which is Mongolic, see  $-\bar{A}n$ .

#### **Examples:**

 $b\ddot{o}t\ddot{u}g\ddot{a}n$  'prone to hiccup'  $\leftarrow b\ddot{o}t$ - 'to hiccup';

istigän 'obedient; sensitive to the rumour'  $\leftarrow$  isit-, istV- 'to hear; to listen', D istigän 'artig, gehorsam', cf. OT ešit- 'to hear (something Acc.)';

ölörügän 'fatal' ← ölör- 'to kill, to ruin, to beat; to hurt; to spoil; to distress; to refute', cf. OT ölör- 'to kill';

sirigän 'grumbling, disdainful'  $\leftarrow sir$ - 'to despise, to reject, to disregard; to censure', cf. OT yer- 'to loathe (something, esp. food, Acc.); to criticize, or blame (someone Acc.)'.

#### -Xk

The standard form is -Xk (GSJaLJa §270), e.g.  $k\ddot{a}ps\ddot{a}t\bar{\imath}k$  'talkative'  $\leftarrow k\ddot{a}ps\ddot{a}t$ - 'to cause to say; to speak, to talk, to converse, to negotiate; to arrange for, to betroth'. The initial vowel behaves

<sup>68</sup> If Chuvash  $\check{A}$  and A in suffixes regularly correspond to \*X (the type \*Xg is excluded) and \*A, respectively, the derivational element  $-k\check{A}n$  does not belong here, but a modern counterpart of \*-gXn.

<sup>69</sup> Pritsak 1959: §3222 reconstructs a proto-form \*-A tur-gAn. Cf. Chuvash -atăran for this sort of construction (LevIMČJa 94–95).

<sup>70</sup> StachDWb 42 wrongly discusses the suffix -gAn as of Mongolic origin. In modern Yakut the suffix -gAn regularly contracted to  $-\bar{A}n$ , -XAn in intervocalic position, cf. KałMEJ 72.

dominant, e.g.  $\check{c}ulb\bar{u}k$  'wedge, axe, wood chopper'  $\leftarrow \check{c}ulbuy$ - 'to be sharp at the end', cf. section 7.5 for the details.

The suffix -Xk forms (1) adjectives designating habit or propensity for something, e.g.  $k\ddot{u}l\ddot{u}k$  'being laughed, risible; mocker, hunter of laugh'  $\leftarrow k\ddot{u}l$ - 'to laugh (loud)', and (2) nouns designating the characteristic attribute of person, animal, object, etc., e.g.  $m\ddot{o}g\ddot{u}k$  'prancing (of horse); horseman (of a man who powerful to keep sitting on any prancing horse)'  $\leftarrow m\ddot{o}k$ -,  $m\ddot{o}x$ - 'to struggle; to scold'.

There is no counterpart of this suffix in StachDWb.

This derivational element is of Turkic origin, cf. -gOk in OTWF §3.22 forming instruments, e.g. asgok 'banner, flag, awning'  $\leftarrow as$ - 'to hand, suspend (something Acc., on something Dat.)', kazgok 'a peg driven into the ground'  $\leftarrow kaz$ - 'to attach one's horse to something so that it can't wander away'. Although the Yakut suffix -Xk mostly forms adjectives, it is not a characteristic feature of OT -gOk; according to OTWF loc. cit.,  $si\eta oq ning$  'something broken' cannot be a derivative in -gOk because "it is an adjective qualifying the object, and not a noun referring to an instrument." The possible explanations for this contradiction being: (1) there where two homonym suffixes in Old Turkic, (2) the adjectival function in Yakut is a later development, or (3) OTWF loc. cit. is wrong, and -gOk could form adjectives even in the Old Turkic period. A thorough investigation is needed to give a definite answer for this question.

## Examples:

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si\ddot{a}l\ddot{i}k 'trotter; trotting' \leftarrow si\ddot{a}l- 'to trot', cf. OT y\ddot{a}l- 'to trot, amble (of a horse)'; tust\ddot{u}k 'champion' \leftarrow tusun-, tustV- 'to fight against sy; to flounder; to battle, to fight'; x\ddot{a}ms\ddot{i}k 'boastful' \leftarrow x\ddot{a}ms\ddot{i}y- 'to be proud, to put on airs'.
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#### -(X)m

The standard form is -(X)m (GSJaLJa §274.5), e.g.  $k\ddot{u}l\ddot{u}m$  'smile'  $\leftarrow k\ddot{u}l$ - 'to laugh (loud)', tutum 'inch, height of fist'  $\leftarrow tut$ - 'to hold, to retain; to observe; to use; to take, to catch; to be sufficient; to possess; to inherit; to stop'. It is an old suffix used rarely.

-(X)m has various functions forming (1) action nouns, e.g.  $\ddot{\imath}am$  'milking, yield of milk; time of milking of cows, mares; time of duplication; act and time of spawning of fish'  $\leftarrow \ddot{\imath}a$ - (tr.) 'to milk', (2) substantives, e.g.  $a\eta ardam$  'road along one side (of the river, valley)'  $\leftarrow a\eta ard\bar{a}$ -,  $a\eta \bar{a}rd\bar{a}$ - 'to half, divide in two, split in two, separate', (3) adjectives, e.g.  $k\ddot{u}sk\ddot{u}m$  'abundance; numerous; in abundance'  $\leftarrow k\ddot{u}sk\ddot{u}y$ - 'to swell (of fat person, of grain), to grow fat', and (4) even adverbs, see  $k\ddot{u}sk\ddot{u}m$ .

StachDWb 47–48 cites only one example for this suffix, i.e.  $k\ddot{o}r\ddot{u}m$  (in  $k\ddot{o}r\ddot{u}mn\ddot{a}k$  'stattlich')  $\leftarrow$   $k\ddot{o}r$ - 'sehen, schauen'.

The Yakut suffix -(X)m is of Turkic origin, cf. -(X)m in OTWF §3.106 forming action nouns and object/subject from transitive/intransitive verbs, e.g.  $\ddot{o}l\ddot{u}m$  'death'  $\leftarrow \ddot{o}l$ - 'to die',  $yar\ddot{u}m$  'a single act of splitting; a half'  $\leftarrow yar$ - 'to split, or cleave (with a sharp instrument)'. It is well-know in other Turkic languages, cf. Chuvash  $-(\breve{A})m$ , e.g.  $yux\breve{u}m$  'current; movement'  $\leftarrow yux$ - 'to

flow',  $vil\~em$  'death'  $\leftarrow vil$ - 'to die' (LevIMČJa 157–158); Tatar -(E)m, e.g.  $ag\~im$  'current'  $\leftarrow ak$ - 'to flow',  $s\~oyl\~am$  'utterance, speech'  $\leftarrow s\~oyl\~a$ - 'to talk' (PoppeTM §4.13.2), and Uzbek -(X)m, e.g.  $t\~arim$  'gathering'  $\leftarrow t\~ar$ - 'to collect', bo'oylam 'sheaf'  $\leftarrow bo\'oyla$ - 'to connect' (GUJa §136); in certain languages -(X)m is not productive, see e.g. Khakas (GHJa §97).

There is a homophone suffix of Mongolic origin in Yakut, see at -(A)m (the linking sound of which is very dubious because of the insufficient number of examples with stem-final consonant). Practically it is hardly possible to divide -(X)m/-(A)m formatives into two groups because of their similarities in function. The method I use here is etymological in nature: if the base is of Turkic origin the derivative is included here, otherwise in -(A)m. However, in some cases this method seems to be dubious or not exact.

#### **Examples:**

aġïrïm 'loss (of weight)' ← aġïrïy-, aġarïy- 'to be comforted, to be calmed, to pacify', cf. OT akru 'gently, quietly';

*igim* 'everything that presses' ← *ik*- 'to press, squeeze, compress; to restrict', cf. OT *sik*- 'to squeeze, press, compress';

talim 'riches (out of common), luxury' ← tal- 'to choose, select', cf. OT talu 'choice, select, chosen'.

#### -(X)n

The standard form is -(X)n, e.g. d'asan' supervision, care, organisational ability  $\leftarrow d'asay$ -'to look, to oversee, to manage'.

The function of this derivational element is to form (1) adjectives, e.g. maŋan 'white, whitish; grey'  $\leftarrow$  maŋay- 'to become white' and (2) substantives, e.g. ärgin 'environment; surrounding, all (a)round'  $\leftarrow$  ärgiy- 'to be twirled, turned, twisted; to turn around, to be turned, wrapped; to return home, to the native land'.

StachDWb 48 discusses this formative in two separate entries according to their functions: (1) forming adjectives, e.g.  $b\ddot{u}t\ddot{u}n^{71}$  'ganz, vollständig'  $\leftarrow b\ddot{u}t$ - 'beenden; enden',  $h\ddot{a}r\ddot{a}n$  'vorsichtig'  $\leftarrow h\ddot{a}r\ddot{a}y$ - 'erkennen, erraten; herausfühlen, verspüren'; and (2) forming substantives, e.g.  $\bar{a}g\ddot{i}n$  'das Lesen; Kunst/Kenntnis des Lesens'  $\leftarrow \bar{a}k$ - 'lesen', huruyan, huruyun 'das Schreiben; Kunst/Kenntnis des Schreibens'  $\leftarrow huruy$ - 'schreiben'. These forms can be handled together having the same origin.

The Yakut suffix -(X)n seems to be of Turkic origin, cf. -Xn in OTWF §3.107 forming object/subject from transitive/intransitive verbs, and some -Xn derivatives are used adjectivally, e.g.  $ak\ddot{i}n$  'flow, current; torrent'  $\leftarrow ak$ - 'to flow',  $yak\ddot{i}n$  'near (in place, time, or kin)'  $\leftarrow yak$ - 'to approach, or be near to (something Dat.)'. It is a well-known suffix in the contemporary Turkic languages, cf. Chuvash  $-(\check{A})m$ , e.g.  $t\check{e}t\check{e}m$  'smoke'  $\sim$  OT  $t\ddot{u}t\ddot{u}n$  id.  $\leftarrow t\ddot{u}t\ddot{a}$ -'to emit smoke, or steam',  $p\check{e}t\check{e}m$  'whole, all'  $\leftarrow p\check{e}t$ - 'to terminate, to end' (LevIMČJa 158–159);

<sup>71</sup> Cf. Yakut bütün 'entire, whole, indivisible, one-piece, complete; coagulated blood'.

<sup>72</sup> The Dolgan word käpsän 'Erzählung' does not belong here, but to -Ān, q.v.

Uzbek -(X)n, e.g. tugun 'knot'  $\leftarrow tug$ - 'to fasten',  $yi\dot{g}in$  'assembly, meeting'  $\leftarrow yi\dot{g}$ - 'to collect' (GUJa §143); and Turkish -(X)n, e.g. ekin zamanı 'seed-time'  $\leftarrow ek$ - 'to sow', talan 'pillage, plunder'  $\leftarrow tala$ - 'to pillage' (GSTLJa §195).

Although -(X)n is most likely of Turkic origin, note that there is a similar, but oblique derivational element in Mongolic, which can also be a counterpart, cf. Literary Mongol singen 'fluid'  $\leftarrow singe$ - 'to be absorbed' in PoppeGWM §175, and Buryat sengen 'liquid, fluid'  $\leftarrow senge$ - 'to be imbibed, to be absorbed', doxolon 'lame, limping'  $\leftarrow doxol(o)$ - 'to be lame, to limp' in PoppeBG §4.24.10. However, the existence of this suffix in Mongolic has to be proved first.

#### Examples:

dolgun 'wave; waves (of water), storm'  $\leftarrow$  dolguy- 'to sway, to rock, to move, to vary, to be disturbed, to wave (of water)';

salgin 'breeze, movement (jet) of air, atmosphere; warm air; temperatura of air in spring; wind'  $\leftarrow$  salgiy-'to winnow, to blow, to begin (of wind)';

 $t\ddot{a}y\ddot{g}$ an 'large, wide and (because of this) difficult to carry (e.g. bucket)'  $\leftarrow t\ddot{a}y\ddot{g}$ ay- 'to increase, to become large, to bulge';

xapsin' lean'  $\leftarrow xapsiy$ - 'to be compressed; to be empty'; cf. LM kabsi- 'to put together; to strike against one another; to press, squeeze; to censure; to bite (of fish)'.

#### $-(X)\eta$

The standard form is  $-(X)\eta$  (KałMEJ 94), e.g.  $kuru\eta$  'dry, dried (e.g. wood); dry wood, deadwood; fire-site in the forest, burnt-out place'  $\leftarrow k\bar{u}r$ - 'to dry'. This derivational element is not productive appearing only in some petrified forms.

The general function of  $-(X)\eta$  is to form (1) adjective, e.g.  $si\ddot{a}\eta$  'carnivorous, carnivorous animal; wolf; prey of predatory birds'  $\leftarrow si\ddot{a}$ - 'to eat, to taste, to eat up, to corrode; to ruin, to destroy; to burn; to beat the cards, to take pawn or figure (in games like chess)'; and (2) substantive, e.g.  $uga\eta^{73}$  'genital organ'  $\leftarrow uk$ - 'to pack, to put, to push (finger); to pass, (thread)'.

There is no counterpart of this suffix mentioned in StachDWb.

The Yakut derivational element  $-(X)\eta$  is of Turkic origin, cf. Old Turkic  $-(X)\eta$  in OTWF §3.116 forming adjectives and subject/object from intransitive/transitive bases. It is very rare in Old Turkic as well as in Yakut, e.g.  $\ddot{u}st\ddot{a}\eta$  'superior, excellent'  $\leftarrow \ddot{u}st\ddot{a}$ - (tr.) 'to increase', (y)iri $\eta$  'pus'  $\leftarrow iri$ - 'to decay, to rot'.

There is a homophone suffix in Yakut, the origin of which is Mongolic, see at  $-(V)\eta$ . Practically it is hardly possible to divide  $-(X)\eta/-(V)\eta$  formatives into two groups because of their similarities in function. The method we use here is etymological in nature: if the base is of Turkic origin the derivative is included here, otherwise in  $-(V)\eta$ . However, in some cases this method seems to be dubious or not exact.

<sup>73</sup> Note that the linking vowel here shows irregularity.

#### Examples:

 $k\ddot{o}r\ddot{u}\eta$  'exterior view, appearance; view, look'  $\leftarrow k\ddot{o}r$ - 'to see, to look, to consider', cf. OT  $k\ddot{o}r$ - 'to see (something Acc.)';

bïstïŋ 'a period of time, short time' ← bïsïn-, bïstV- 'to be separated, to be torn off, to be broken; to be bifurcated (cloud), to be torn, to burst open; to die', cf. OT bïčïn- 'to cut out (sg) for oneself'.

 $-\bar{\mathbf{X}}\mathbf{s}$  -XAs

The standard form is -Xs, e.g.  $k\ddot{a}rd\bar{\imath}s$  'notch, scar, strip, line; wrinkle; step, ledge; article'  $\leftarrow k\ddot{a}rt$ - 'to chop, to fell, to cut into two; to intersect'. There are derivatives in -XAs, e.g.  $tard\ddot{\imath}as$  'stutterer'  $\leftarrow tart$ - 'to pull, to drag, to draw; to draw off, to extend; to tighten, to twist; to place, to advance; to lengthen (snares); to smoke (e.g. tobacco); to grind; to plough; to be sat down (of material)'. For the dominacy of the initial vowel, see section 7.5. It is an old, unproductive element in Yakut.

It forms both (1) substantives, e.g.  $k\ddot{i}r\ddot{i}s$  'oath, curse; invocation'  $\leftarrow k\ddot{i}r\bar{a}$ - 'to curse, to adjure, to swear', and (2) adjectives, e.g.  $x\bar{o}sur\dot{g}uos$  'crackling, crunching'  $\leftarrow x\bar{o}sur\dot{g}\bar{a}$ - 'to emit hissing sound; to emit special sound; to crackle, to crunch'.

There is only one example for this element in StachDWb 52, i.e. komuos 'Schöpfkelle'.74

The derivational element -Xs goes back to the Old Turkic form  $-gU\check{c}$ , however, this formative did hardly leave traces in the Old Turkic manuscripts; there are only few examples from the Old Turkic period, see  $-gU\check{c}$  in OTWF §3.21 forming names of tools, e.g.  $b\ddot{i}\check{c}gu\check{c}$  'shears'  $\leftarrow b\ddot{i}\check{c}$ - 'to cut'. Similar forms can be found in various contemporary Turkic languages, cf. Chuvash  $-k\check{A}\acute{s}/-k\check{A}\acute{c}$ , 75 e.g.  $\check{a}sk\check{a}\acute{s}$ ,  $\check{a}sk\check{a}\acute{c}$  'scoop'  $\leftarrow \check{a}s$ - 'to scoop',  $u\acute{s}k\check{a}\acute{c}$  'wooden key'  $\leftarrow u\acute{s}$ - 'to open' (LevIMČJa 156–157); Tuvan  $-gX\check{s}$ , 76 e.g.  $\check{c}il\ddot{i}tk\ddot{i}\check{s}$  'heater'  $\leftarrow \check{c}il\ddot{i}t$ - 'to heat; to warm',  $\check{a}rg\bar{i}\check{s}$  'spindel'  $\leftarrow \check{a}r$ - 'to twist' (GTJa §189); and Uzbek  $-gX\check{c}$  (not productive), e.g.  $tomiz\dot{g}i\check{c}$  'pipette'  $\leftarrow tomiz$ - 'to drip',  $birkitki\check{c}$  'clip'  $\leftarrow birkit$ - 'to fasten' (GSULJa §129, 187). Similarly to -Xk, q.v., there is a semantic obscurity because  $-gU\check{c}$  has only formed instruments in Old Turkic.

Because of semantic problems, the status of  $oy\bar{o}s$ , oyuos (< \*oy-guč) 'small islet on the river, which stands separately; newly formed sandy island on the river'  $\leftarrow$  oy- 'to jump or leap, to skip; to jump over, to jump aside; to rise above the horizon (of the Sun)' is dubious.

## **Examples:**

 $t\ddot{a}bi\ddot{a}s$ ,  $c\ddot{a}bi\ddot{a}s$  'rebound, whim(sy)'  $\leftarrow t\ddot{a}p$ - 'to kick (by foot); to squeeze; to beat into the distance (of gun); to rest (on foot); to hesitate';

täxtäriäs 'being shuttered because of haste, or excited state' ← täxtäriy- 'to shutter because of haste, or excited state'.

<sup>74</sup> Accordingly, the Yakut xamïas, xomous 'ladle, scoop' also belongs in the group of -Xs, -XAs derivatives (< \*kamʒuč ← \*kam-).

<sup>75</sup> The latter form usually appears in recent loans from Kipchak languages.

<sup>76</sup> The vowel is short in some dialects, e.g. täpkīš ~ täpkīš ~ täpkīš 'step; pedal' (GTJa §189).

-XsAx -sAx

The standard form is -XsAx, e.g. boxtusax 'being a little inferior/lagged behind in value, growth, or mind'  $\leftarrow boxt\bar{o}$ -, boxtuo- 'to remain, not to follow, to lag (behind)'. In a single case it joins the base without the linking vowel, i.e.  $\ddot{a}ms\ddot{a}x$  'nipple, bottle (lit. horn) for feeding the baby with milk'  $\leftarrow \ddot{a}m$ - 'to suck (breast); to suck out', but cf.  $\ddot{a}mis\ddot{a}x$  id. It is an old, unproductive suffix.

The function of -XsAx is to form adjectives, e.g. namtisax 'low; flat; lowland; subdued; humbleness'  $\leftarrow namt\bar{a}$ - 'to be reduced, to fall, to set (of the Sun); to get down, to be inclined; to be subdued, to be degraded'.

There is a Dolgan counterpart of this suffix in StachDWb 49–50, forming nouns, e.g. *ilbirihäk* 'ein kleines Stück, Stückchen, Fetzen' ← \**ilbiriy*-.<sup>77</sup>

The derivational element -XsAx seems to be of Turkic origin, cf. Old Turkic +sAk, e.g. tapigsak 'dutiful'  $\leftarrow tapig$  'service' and  $k\ddot{a}ks\ddot{a}k$  'verhaßt'  $\leftarrow k\ddot{a}k$  'Haß' (GabAtG §79). I could find no examples for this element in OTWF. On the deverbalization of denominal nominals, cf. section 7.9. It is possible that the Mongolic suffix + $sAg^{78}$  had influence on the Yakut suffix in question.

#### **Examples:**

ïarïsax 'painful, sick' ← ïarïy-, ïalĵV- 'to fall ill, to be sick', cf. OT agrï- 'to be in pain or painful';
 nälbisäx 'extended downward' ← nälbiy- 'to throw open (hem of coat), to stretch out (wings)',
 cf. LM nele- 'to be wide, vast'.

#### -(X)skA

The standard form is -(X)skA, e.g.  $k\ddot{a}risk\ddot{a}$  (adj. and adv.) 'located under a number'  $\leftarrow k\ddot{a}riy$ - 'to come round, to go around, to travel about; to inspect'. It is a rarely used element in Yakut; there are only two derivatives belonging here.

It forms adverbs and adjectives, e.g.  $\ddot{a}misk\ddot{a}$  'unawares, suddenly, unexpectedly'  $\leftarrow$  \* $\ddot{a}miy$ -, cf. LM emiye- 'to fear, be afraid; to be shy or to feel embarrassed'.

There is no Dolgan counterpart of this suffix in StachDWb.79

The Yakut suffix -(X)skA is possibly of Turkic origin. It seems to be a compound of -(X)s, cf. -(V)s above, and the dative-locative case marker -KA, cf. GSJaLJa §220. The inflectional element +KA is frequently used in Yakut in the creation of converbial forms, see e.g. -BAkkA (< -BAt+KA) and -XAxxA (-XAx+KA) in GSJaLJa §455, 415.

<sup>77</sup> There is another example in Dolgan, the meaning of which is obscure, cf. \*ämsäk (in ämsäktän- 'sich ernähren') ← \*äm- 'saugen'.

<sup>78</sup> It forms nouns designating penchant for or fondness of something, e.g. eligeseg 'friendly to his relatives'  $\leftarrow$  eligen 'liver', mikasag 'fond of meat'  $\leftarrow$  mikan 'meat', arakisag 'drunkard'  $\leftarrow$  araki 'liquor' (PoppeGWM §135).

<sup>79</sup> There is a denominal nominal element +skA (? +XskA) mentioned in StachDWb 29. The only example belonging here is äbīskä 'Ergänzung; [Adj.] Ergänzungs-', which StachDWb loc. cit. derives from äbī 'mehr, zusätzlich; Addieren', cf. Yakut äbīskä 'additive; additional; particle'. However, it is obscure what is the relation between the two formatives.

#### -(X)t

The standard form is -(X)t, e.g. torut 'protrusion'  $\leftarrow toruy$ - 'to stand before sg; to shut, to be covered, to shield'. In a single case the linking sound does not appear after the stem-final consonant, i.e.  $bult^{80}$  'shooting, hunting, fishing'  $\leftarrow bul$ - 'to find; to acquire, to obtain; to meet; to attend'. 81

-(X)t mostly forms nouns, e.g.  $t\ddot{o}r\ddot{u}t$  'species; ancestor, father; origin, beginning, source, root, basis; embryo; natural; basic, radical'  $\leftarrow t\ddot{o}r\ddot{o}$ -,  $t\ddot{o}r\ddot{u}\ddot{o}$ - 'to be born; to bear (not used for humans), to calve, to foal', but there are some adjectival derivatives, too, e.g.  $\acute{n}arg\ddot{u}t$  'loud-voiced'  $\leftarrow \acute{n}arg\ddot{u}y$ - 'to emit choked (vocal) sound with strong excitation (of man or dog)'.

Dolgan has a counterpart derivational element being similar in form and function, cf. buruolat 'Rauchabzug' 

\*buruolā- 'qualmen, rauchen' and ularīt 'Übergang [zu einem anderen Ort]' 

ularīy- 'sich ändern; wechseln' (StachDWb 50).

The Yakut suffix -(X)t is of Turkic origin, cf. -(U)t in OTWF §3.108 forming action nouns, object/subject from transitive/intransitive bases, place names and instruments, e.g. kurut 'cheese made from dried curds'  $\leftarrow kur\ddot{\imath}$ - (intr.) 'to dry',  $k\ddot{\imath}rt: k\ddot{\imath}rt \ ot$  'short grass'  $\leftarrow k\ddot{\imath}r$ - 'to scrape, strip (hair)'.

### **Examples:**

*bisit* 'stemming, fence arranged for catching fish in narrow, convenient places; weir'  $\leftarrow$  *bis-* 'to cut (off); to harvest, to reap; to cut (dress); to harden', cf. OT *bič-* 'to cut';

*xoljot* 'who tries to be a fine person, making look younger'  $\leftarrow$  *xoljoy*- 'to try to be a fine person, to make look younger'.

#### -(X)y

The standard form is -(X)y, e.g.  $kil\ddot{a}y$  'shining'  $\leftarrow kil\ddot{a}y$ - 'to be glossy, to shine by smoothness; to flood'

The primary function of -(X)y is to form adjectives and action nouns, e.g. ardirgay 'noisy, grumbling'  $\leftarrow ardirga$ - 'to make noise, to grumble', bargiy 'bubbling'  $\leftarrow bargiy$ - 'to bubble'. Derivatives can become substantives designating animals, e.g.  $d\bar{a}ginay$  'crow'  $\leftarrow d\bar{a}gina$ - 'to croak', kirbiy 'fighter; gray falcon; hobby, Falco subbuteo; hawk, Accipiter, Astur, sparrow hawk, Astur, Accipiter nisus'  $\leftarrow kirb\bar{a}$ - 'to beat, to strike, to fight; to divide into pieces, to chop; to crumble (e.g. tobacco)'.

There is only one example for this derivational element in StachDWb 44 forming both adjective and adverb, i.e. bütäy 'völlig, ganz, gänzlich; rund; geschlossen, noch nie geöffnet' ← büt- 'beenden, schließen; aufhören; enden, zu Ende kommen'. 82

<sup>80</sup> Cf. Dolgan bult 'Jagd; Wild' ← bul- 'finden'.

<sup>81</sup> According to StachDWb 50, it is possible that *bult* goes back to an original form \*bulk presuming a sound change lt < \*lk similarly to rt < \*rk. In this case bult does not belong here.

<sup>82</sup> It is also plausible that būtāy is a derivative from a verb \*būtāy-, cf. Yakut būtāy 'dense, continuous, integral, without interval, without output; deaf (person); silent' ← būtāy- 'to be locked, become isolated; to heal (of wound); to become deaf' and LM būte- 'to be[come] covered, closed, stopped up; to close or heal (of a wound); to be stuffy, close (of air); to choke, suffocate, be asphyxated'.

This derivational element is of Turkic origin, cf. -*I* in OTWF §3.118 forming both substantives and adjectives, e.g.  $t\ddot{o}gi$  'cleaned and/or crushed cereal'  $\leftarrow t\ddot{o}g$ - 'to pound, crush',  $ad\ddot{r}i$  'forked'  $\leftarrow ad\ddot{r}r$ - (tr.) 'to separate',  $yap\ddot{r}i$  'horse-blanket'  $\leftarrow yap$ - 'to cover'.

The old, petrified form  $k\ddot{o}n\ddot{o}$  'flat, smooth; truthful, right, correct, true; straightness; order; truthfulness, rightness'  $\leftarrow k\ddot{o}n$ - 'to become straight; to be corrected' also belongs this group etymologically, cf. Old Turkic  $k\ddot{o}ni$  'straight; upright'.

# Examples:

arday 'mould' ← ardā- 'to become rainy (of weather), to rain, to snow';

ballarġay, bïllïrġay 'inarticulate (of the pronunciation of words)' ← ballarġā-, bïllïrġā- 'to speak unclearly, mutter';

täligräy, täligräy mas 'weathercock' ← täligirä-, täligirä-, täligiräy- 'to be twirled and to buzz';

toηuy 'cold, chilly, frozen turf' ← toη- 'to shiver, to feel cold, to freeze', cf. OT toη- 'to be frozen, hard'.

# 6.2 Derivational suffixes of Mongolic origin

-XA, -KA

The standard form is  $-\bar{A}$  (KałMEJ 69; there are some etymologically unrelated words discussed in the same entry, cf. -XA for them), e.g.  $san\bar{a}$  'idea, thought, concept, sight, understanding; opinion; conscience'  $\leftarrow san\bar{a}$ - 'to think, to reflect'. There is a variant in -XA, e.g.  $k\ddot{a}lgi\ddot{a}$  'binding, linking, coordination'  $\leftarrow k\ddot{a}lgiy$ - 'to bind, to connect, to tie up, to tighten'.  $-\bar{A}$  is the result of contraction from an original segment AgA ( $san\bar{a} < *sanaga$ ), on the other hand -XA is from a segment XgA ( $k\ddot{a}lgi\ddot{a} < *k\ddot{a}lgig\ddot{a}$ ). The original sound /g/ has preserved if the base ends in /l/ or /r/, e.g.  $julur\dot{g}a$  'unremitting swift; zealous, stalwart; unremitting swiftness, zeal'  $\leftarrow juluruy$ - 'to go forward, to dash against sy, to strain excessively; to enter in spite of prohibition'; these forms are discussed in a separate entry in KałMEJ 75–76. There is only one example which shows that it is -kA after /s/, i.e.  $\ddot{o}r\ddot{u}sk\ddot{a}$  'greedy, insatiable; dissatisfied, selfish, egoist; adroit, quick; haste, hurry'  $\leftarrow \ddot{o}r\ddot{u}s\ddot{u}y$ - 'to anticipate, to forestall; to endeavour; to manage; to safeguard, to free someone from loss at the most critical moment; to want to take much, to be greedy'. For the same phenomenon, cf. the suffix  $-\bar{A}n$ . This suffix is not productive and appear only in some petrified forms.

 $-\bar{A}$  and its variants form substantives, adjectives and adverbs, e.g.  $ut\bar{a}$  'continuation; nearby, approximately'  $\leftarrow ut\bar{a}$ - 'to lag behind, to hesitate, to slow down; to continue' and  $xa\eta s\ddot{a}$ ,  $xo\eta suo$ ,  $xo\eta so$  'nasal; snuffler'  $\leftarrow xa\eta s\ddot{a}$ y- 'to snuffle'.

There is another word mentioned in StachDWb 44 as a derivative in -(X)y, i.e. bihiy 'schnell, rasch'  $\leftarrow bis$ 'schneiden'. The etymology given in KałMEJ 38, however, seems to be more plausible, cf. Mongolic busigu'prompt[ly], quick[ly], alert; diligent', bisigu 'intelligent, quick-minded; alert; quick, prompt'  $\leftarrow$  \*busi-, \*bisi- and Yakut bisiy 'fast (in run), fast, fast walker, quick; speed'  $\leftarrow$  \*bisiy-.

There is only one example in StachDWb 51 (under the head -ya) that clearly belongs to this group, i.e.  $b\ddot{u}\ddot{r}\ddot{u}\ddot{o}$  'Kissenbezug'  $\leftarrow b\ddot{u}\ddot{r}\ddot{u}y$ - 'zu-/bedecken, überziehen', cf. Yakut  $b\ddot{u}\ddot{r}\ddot{u}\ddot{o}$  'tire cover, covering, upholstery (door)'.

The Yakut derivational elements  $-\bar{A}$ , -XA and -KA are of Mongolic origin and go back to the formative -gA (more or less identical to -gAn, cf.  $-\bar{A}n$ ). It is an old, unproductive suffix in the Mongolic languages, cf. LM *kantarga* 'band or strap used for holding something to prevent it from bending or falling'  $\leftarrow$  *kantar*- 'to tie the bridle of a horse to the saddle; to pull the reins tight', sanaga(n) 'thought, thinking, idea, rflection, attention; opinion, conception, sentiment; frame of mind; intention, policy, aim'  $\leftarrow$  sana- 'to think, reflect, ponder; to hold an opinion; to intend, plan; to remember, keep in mind, to recall; to long for'. The contraction and the phenomenon that the sound /g/ remains intact after consonants /l/ and /r/ can be observed in the Mongolic languages, too, cf. section 7.6 and 7.8 for the details. A homophone suffix in -XA, q.v., can be observed in Yakut.

Some old and petrified words of Turkic origin draw similarities with the above-mentioned derivatives. In these cases the final segment of the words are also  ${}^{\circ}gA$  or  ${}^{\circ}XA$ , e.g. the word sasarġa, sïsarġa 'red radiance around the sun; yellowish reflection of the solar or lunar rays'  $\leftarrow$  sasar- 'to turn yellow; to redden; to suffer jaundice' can be connected to the Old Turkic verb yašar- 'to be, or become green; to be, or become moist' ( $\rightarrow$  \*yašarka) (cf. StachGJV §4.8), buruo 'Rauch, Qualm'  $\leftarrow$  \*bur- 'in Wirbeln aufsteigen' (cf. StachGJV §36.6b for Yakut buruo 'smoke, vapour, fume' < \*buragu). The Turkic suffix -(X)g is usually resulted in -X, q.v., in modern Yakut, however, in rare cases it is preserved as a diphthong, cf. kitī, kitīa 'coast, edge' being a regular correspondence of OT kidīg 'the edge; the sea shore; the frontier (of a country); the lip (of a cup)'  $\leftarrow$  kid(i)-.

#### Examples:

külgüö 'fastening, junction (of tubs)' ← külgüy- 'to bind, fasten with a joint (tub)', cf. LM küli- 'to bind, tie, tighten';

nämirgä 'lowering' ← nämiriy- 'to be lowered, to hang';

ninsiä, niksiä, nänsiä 'jerky; shaking, jerk' ← ninsiy-, nänsiy- 'to shake (of horse), to throb', cf. LM densi- 'to shake, jolt (as a vehicle); to go about doing nothing, loafing or gossiping'.

 $-(\bar{\mathbf{A}})\check{\mathbf{c}}\check{\mathbf{c}}\mathbf{X}$   $-(\bar{\mathbf{A}})\check{\mathbf{c}}\check{\mathbf{c}}\mathbf{X}\mathbf{k}$ ,  $-(\bar{\mathbf{A}})\check{\mathbf{t}}\check{\mathbf{c}}\mathbf{X}\mathbf{k}$ 

 $-(\bar{A})\check{c}\check{c}X$  is one of the most productive derivational element in Yakut.<sup>84</sup> In the literature it is referred to as *nomen agentis*.

<sup>83</sup> StachDWb 42, 51 cites further examples of Turkic origin, i.e. hötüö 'Schwimmen, Baden, Bad' (cf. Yakut sötüölä-, sütüölä- 'to plunge into the water; to bathe' ← \*söt-, süt- < OT yüz- 'to swim') and kurga 'aufgelockert, porös, mürbe, bröckelig' ← kur-, kūr- 'trocken werden', cf. Old Turkic kurï- 'to be, or become dry'. Ibid. tiŋa 'Lunge' is analysed as a derivative of tiŋ- 'atmen', according to KałTLw 268, it is a loan from Tungusic, cf. tiŋen 'breast', and the similarity between tiŋa and tin- is just a coincidence.

<sup>84</sup> In a vast number of cases Pekarskij does not give the meaning of -ĀččX nouns, only indicates the base verb, cf. abalāčči, ätāčči.

The standard form is  $-(\bar{A})\check{c}\check{c}X$  (GSJaLJa §176), e.g.  $at\bar{i}l\bar{a}\check{c}\check{c}i$  'salesman, merchant'  $\leftarrow at\bar{i}l\bar{a}$ - 'to sell; to trade',  $o\eta or\bar{o}\check{c}\check{c}u$  'making, creating; creator'  $\leftarrow o\eta or$ -,  $o\dot{g}or$ - 'to make, to work, to create; to fulfil, to accomplish; to act; to construct; to prepare; to manufacture; to conclude, to assume', however, in the dialects we can find forms in  $-(\bar{A})t\check{c}X$ , e.g.  $ay\bar{a}t\check{c}i$  'creator, founder'  $\leftarrow ay$ - 'to create, found; to erect; to produce; to indicate'. Sometimes an element /k is attached to the suffix, but it does not bear any characteristic function, e.g.  $at\bar{i}l\bar{a}\check{c}\check{c}ik$  'salesman, merchant'. These dialectal variants might be formed under the influence of the Russian nomen actoris in  $-u\mu u\kappa$  and  $-uu\kappa$ . So On the other hand, StachJFutS 5 suggests that  $-(\bar{A})\check{c}\check{c}Xk$  is a simple compound of  $-(\bar{A})\check{c}\check{c}X$  and the emphatic particle ok. In GSJaLJa §176 a short variant of  $-(\bar{A})\check{c}\check{c}X$  is presumed  $-(\bar{c}\check{c}X)$ , see the cited examples:  $\bar{a}a\check{c}\check{c}i$  'one who milks (a cow)'  $\leftarrow \bar{a}a$ - (tr.) 'to milk',  $a\check{c}i\check{c}i$  one who speaks, speaker'  $a\check{c}i$  'to speak',  $a\check{c}i\check{c}i$ ' one who eats'  $a\check{c}i$  'to eat'. Since the initial vowel of the suffix is not dominant, it is pointless to discuss the short form as a separate one.

The general function of  $-(\bar{A})\check{c}\check{c}X$  is to form nouns designating the person who acts frequently, habitually or with pleasure, the person who has the ability to do something, and the process of the action. It is also used to designate the names of vocations or, in some cases, the names of animals.

- $(\bar{A})\check{c}\check{c}X$  is used in Yakut as a participle, cf. GSJaLJa §429–430; in sentences it can be subject, object, attribute, and, with copula, predicate, <sup>87</sup> see e.g.  $\bar{u}$  bahāčči kis 'a girl who carries water', bu kis kinigani taptān āġāčči 'this girl reads books with pleasure'.

Dolgan shows the same forms and functions, e.g. *tuluyāččī* '[jemand,] der [etwas] aushalten/überstehen/schaffen kann' ← *tuluy*- 'aushalten, überstehen, schaffen', *huruyāččī* 'Schriftsteller' ← *huruy*- 'schreiben' (StachDWb 38–39).<sup>88</sup>

The Yakut suffix  $-(\bar{A})\check{c}\check{c}X$  can be originated from the Mongolic suffix  $-gA\check{c}i$ , which is mostly used to designate names of vocations, e.g.  $\check{j}iruga\check{c}i$  'painter'  $\leftarrow \check{j}iru$ - 'to paint',  $alaga\check{c}i$  'murderer, killer'  $\leftarrow ala$ - 'to kill',  $bi\check{c}ige\check{c}i$  'writer, clerk'  $\leftarrow bi\check{c}i$ - 'to write' (PoppeGWM §147, 269). <sup>89</sup> The gemination of  $\check{c}$  can be observed in another Yakut suffix of Mongolic origin, see  $-(X)\check{c}(\check{c})X$ . KałMEJ 70 rightly proves that the modern Yakut element  $-(\bar{A})\check{c}\check{c}X$  cannot go back to the Turkic forms  $-(X)g\check{c}I$  or  $-gU\check{c}I$  because of the low initial vowel of the suffix. This statement can be strengthened by another phonetic phenomenon: the original Turkic  $\check{c}$  is  $\check{c}$  in modern Yakut, thus Turkic  $-(X)g\check{c}I$  and  $-gU\check{c}I$  should result a form in \*-XsX or the like. The Mongolic suffix  $-gA\check{c}i$  went into other Turkic languages, such as Tuvan, e.g.  $bi\check{j}a\check{c}i$  'writer'  $\leftarrow bi\check{j}i$ - 'to write' (GTJa §200, 363), <sup>90</sup> and Oyrot, e.g.  $k\ddot{o}kt\ddot{o}\check{c}i$  'tailor'  $\leftarrow k\ddot{o}kt\ddot{o}$ - 'to sew' (GOJa §9.21).

<sup>85</sup> For further details, see RusGr §213, 286 and 331. These suffixes can be found in some Yakut words of Russian origin, e.g. ospuoččuk 'coachman' ← Russian u3803чиκ id.

<sup>86</sup> Cf. Dolgan hiäčči '[jemand,] der [etwas] üblicherweise/gern ißt'.

<sup>87</sup> It is likely that this wide spectrum of functions was developed by the influence of the Mongolic suffix -gči, see PoppeGWM §356.

<sup>88</sup> Further examples from Dolgan being: ialġāččī 'krank, Kranker', hītāččī 'der Liegende', oloŋkolōčču 'Olongko-Erzähler', ihīrāčči 'Lerche', tühärāčči : kumār tühärāčči 'Schnepfe'.

<sup>89</sup> Note that -gAči is not used as an attribute in Mongolic, cf. PoppeIntr §227.

<sup>90</sup> KałMEJ 70 cites the corresponding Tuvan suffix as -ĀččI because the sound /č/ is geminated in speech.

# Examples:

ayannāčči, ayannāččik 'traveller, passenger' ← ayannā- 'to travel, wander, go; to run', cf. M ayan 'travel, journey, expedition';

ämiydänäčči 'sucking; infant (breast sucker)' ← ämiydän- 'to suck (the breast)', cf. OT äm- 'to suck';

bultāčči, bultāččik 'catcher; hunter, fur-hunter; fisherman'  $\leftarrow$  bultā- 'to catch; to hunt; to fish';  $\bar{\imath}r\bar{a}$ čči 'falcon, Tinnunculus tinnunculus'  $\leftarrow$   $\bar{\imath}r$ - 'to be tangled, to be hooked; to be twirled, to turn (of head); to fly into a rage, to rage';

kïayāččī 'being powerful' ← kïay- 'to be able to do, to manage; to overcome; to trample'; tigāččī 'seamstress; wasp; gadfly; arm' ← tik- 'to sting (of bee, fly, etc.); to pummel; to sew', cf. OT tik- 'to insert (something Acc., in something else Dat.)'; tustāččī 'champion' ← tusun-, tustV- 'to fight against sy; to flounder; to battle, to fight'.

#### -(A)k

The standard form is -(A)k, e.g.  $bar\ddot{\imath}k$  'shadow, sign'  $\leftarrow bar\ddot{\imath}y$ - 'to grow old, to age; to rot; to turn black; to darken'. There are only two words where the stem end in consonant and the linking vowel can be observed in action, see e.g.  $\ddot{o}m\ddot{u}r\ddot{a}x$  'nervously sick person'  $\leftarrow \ddot{o}m\ddot{u}r$ - 'to suffer from a special form of hysteria'.

-(A)k forms (1) nouns designating the result of the action, e.g. mičik 'smile'  $\leftarrow mičiy$ - 'to smile, slightly', bolčox 'swelling on the body, on the tree; hammer, knob (its thick end)'  $\leftarrow bolčoy$ - 'to form a swelling' or abstract ideas, surax 'news, information, rumour; glory'  $\leftarrow sur\bar{a}$ - 'to find out'; and (2) adjectives, e.g.  $b\ddot{u}k\ddot{u}k$ ,  $b\ddot{u}lk\ddot{u}k$  'cloudy'  $\leftarrow b\ddot{u}kk\ddot{u}y$ - (tr.) 'to cloud', jadax 'wretched, poor'  $\leftarrow jaday$ - 'to become poor'.

There are some examples belonging to this category in Stach DWb 44–46 (under the head -k  $\sim -ak \sim -yk$ ); the rest are derivatives in -(V)k, q.v. The Dolgan examples being:  $him\ddot{a}k$  '(Fest-)Kleid; schön gekleidet'  $\leftarrow him\ddot{a}$ - 'schön kleiden; tragen, anhaben', cf. Yakut  $sim\ddot{a}x$  'adornment, attire, dress (for women), metallic dress made of gold and silver; necklace; rash on the body'  $\leftarrow sim\ddot{a}$ -,  $simi\ddot{a}$ - 'to decorate, to dress up handsomely; to hang on the clothes', \* $h\ddot{a}r\ddot{a}k$  (in  $h\ddot{a}r\ddot{a}kt\ddot{a}k$ ) 'Vorsicht'  $\leftarrow h\ddot{a}r\ddot{a}y$ - 'erkennen, erraten; herausfühlen, ver-/spüren', and  $\ddot{c}\ddot{u}\eta k\ddot{u}k$  'traurig'  $\leftarrow \ddot{c}\ddot{u}\eta k\ddot{u}y$ - 'traurig werden/sein'.

The Yakut suffix -(A)k is of Mongolic origin, cf. -g in PoppeGWM §146, e.g. jirug 'picture'  $\leftarrow$  jiru- 'to draw, to paint', jorig 'intention'  $\leftarrow$  jori- 'to intend', büjig 'dance'  $\leftarrow$  büji- 'to dance', ideg 'bribe'  $\leftarrow$  ide- 'to eat'. There is a similar suffix in -(V)k, g.v., the etymology of which is Turkic.

#### **Examples:**

kältäk 'one-sided' ← kältäy- 'to become slanted, to bend; to become assimetric, unequal; to be jagged', cf. LM kelteyi- 'to incline from the perpendicular, lean, be crooked';

<sup>91</sup> For the Mongolic counterparts, see *čimeg* 'decoration, ornament, embellishment, attire, finery' ← *čime-* 'to adorn, decorate, bedeck, dress up', *sere-*, *seri-* 'to awaken, revive; to recover consciousness; to become sober; to keep vigil; to learn, find out; to mistrust' and Khalkha *conxiy-* 'to become thin, emaciated, or pale'.

lägläk 'here and there gradually' ← lägläy- 'to droop', cf. LM legleyi- 'to become shabby or unkempt';

sïltax 'reason, occasion for sg, case; tail heaviness; competition, solicitation of anything' ← sïltā- 'to find reason or occasion for sg; to cause both quarrel and friendship', cf. LM siltag 'cause, motive; excuse, pretext; trick, ruse, stratagem' ← silta- 'to be a cause or reason, be caused by; to pretend, simulate, find a pretext';

toluk 'ransom, gain; compensation, completion' ← toluy- 'to redeem (pledge), to recompense; to compensate', cf. LM dolig 'exchange, barter; substitute; ransom' ← doli- 'to change, exchange, barter, trade; to ransom'.

-Āl

The standard form is  $-\bar{A}l$  (KałMEJ 71), e.g.  $xot\bar{o}l$  'deep; deepening, hollow place, valley'  $\leftarrow xotoy$ - 'to move downwards; to be curved'. There is only one example where the original suffix-initial /g/ has been preserved, i.e.  $isk\ddot{a}l$  'tumour'  $\leftarrow is$ - 'to swell, to become chubby'. It is a very rare and old suffix in Yakut.

 $-\bar{A}l$  forms nouns, e.g.  $xa\check{c}al$  'famine; bad weather; cold weather with wind in spring'  $\leftarrow xa\check{c}ay$ - 'to revenge'.

It has no counterpart in StachDWb.

The Yakut suffix  $-\bar{A}l$  is of Mongolic origin, cf. LM magtagal 'act of praising, eulogy, praise, hymn of praise'  $\leftarrow$  magta- 'to praise, eulogize, laud, extol, glorify' and bisilgal 'meditation, contemplation, prolonged spiritual exercise'  $\leftarrow$  bisil- 'to contemplate, meditate, reflect, think, imagine; to apply oneself with zeal, practice'.

For the word *bisāl*, *bāsāl* 'chip, rod for calculation', being a derivative of *bīs*- 'to cut (off), to fell; to harvest, to reap' (KałD 2: 75), StachGJV §8.6a reconstructs a proto-form \*bičgäl (cf. Old Turkic *bič*- 'to cut' and *bīčģīl* 'cracks in the ground'). Although there is no -*gAl* in Turkic that could be a possible candidate for this form, the reconstruction is correct.

The Yakut word *maxtaġal* 'praise, praising'  $\leftarrow$  *maxtay*- 'to glorify, to praise' also belongs here, but does not show the sound change  $AgA > \bar{A}$ ; "regularly" it should be \**maxtāl*. Maybe it is a petrified literary form used only in writing.

-(A)ttA

The standard form is -(A)ltA (KałMEJ 86–87), e.g. jasalta 'order; means; efficiency'  $\leftarrow$  jasay- 'to boss, to govern, to manage'. There is only one example with stem-final consonant showing the low type of linking vowel, i.e.  $i\eta\ddot{a}lt\ddot{a}$ ,  $i\eta\ddot{a}tt\ddot{a}$  'introduction, penetration; fruitfulness, benefit'  $\leftarrow$   $i\eta$ - 'to be sucked, to be absorbed, to penetrate, to pass through, to take root'. Due to assimilation variants can be found in -(A)ttA. It is an old and rare suffix.

-(A)ltA forms nouns, e.g. k¨alta 'possibility; victory'  $\leftarrow$  k¨ay- 'to be able to do, to manage; to overcome; to trample'.

<sup>92</sup> Cf. Buryat magtāl 'praising, praise' ← magta- 'to paise' (PoppeBG §4.13.4.a).

Dolgan shows the same form and function, e.g.  $t\ddot{a}hilt\ddot{a}$  'Geduld'  $\leftarrow t\ddot{a}hiy$ - 'sich gedulden' (StachDWb 47).

-(A)ltA is of Mongolic origin, cf. -ltA in PoppeGWM §163. It forms nouns designating process, e.g. kasalta 'substraction'  $\leftarrow$  kasu- 'to delete', bučalta 'return'  $\leftarrow$  buča- 'to return', nemelte 'addition'  $\leftarrow$  neme- 'to add'. Although it is a rare suffix in Yakut, derivatives from Turkic stems can be observed, see e.g.  $i\eta ilt\ddot{a}$  (see above) and OT  $si\eta$ - 'to sink into (something Dat.); to be absorbed, digested'.

# Examples:

*moŋolto* : *käsältä-moŋolto* 'warning' ← *moŋoy-* 'to renounce, to alienate', cf. LM *moko-* 'to be blunt or dull; to get tired, weaken, exhaust one's strength';

salalta, salatta 'direction' ← salay- 'to direct, to transfer, to displace, to guide, to lead', cf. LM jala- 'to straighten, correct; to steer, direct the course of; to drive cattle to the pasture ground';

täriltä 'equipment, device' ← täriy- 'to appoint, to equip, to prepare, to cause, to arrange, to start, to acquire; to venture, to devise', cf. Dolgan täriltä 'Ausrüstung; Baumaterial' ← täriy- 'vorbereiten, organisieren'.

### -(A)m

The standard form is -(A)m, e.g.  $d\ddot{a}g\ddot{a}m$  'a small quantity of sg (e.g. urine of child on the bed)'  $\leftarrow d\ddot{a}g\ddot{a}y$ - 'to touch slightly, to take or give gradually'. There are only some examples derived from verbs ending in consonant, but they clearly show the low type of the linking vowel, e.g. oydom 'separately, far; small grove'  $\leftarrow oyun$ -, oydV- 'to be separated; to tear off; to break off'. It is an old, rarely used suffix.

-(A)m forms verbal nouns, e.g. kilam 'shining'  $\leftarrow kilay$ -, kilay- 'to shine, to shine from the distance (of silver, the sun); to x-ray'. Sometimes adverbial meaning can be developed from the original nominal one, cf. oydom above.

There is no counterpart of this suffix in StachDWb.

-(A)m is of Mongolic origin, cf. -m in PoppeGWM §164 forming verbal nouns, e.g. tokom 'saddle cloth'  $\leftarrow$  toko- 'to saddle', sačum 'a distance one can throw grains'  $\leftarrow$  saču- 'to strew', karam 'avarice'  $\leftarrow$  kara- 'to look at'.

For a similar suffix and the problem of separation, see -(X)m.

### **Examples:**

bisiräm 'selected, best, having special designation, special' ← bisiriä-, bisirä- 'to have the right attitude to, to approve; to recognize, to realize', cf. LM bisire- 'to believe in, revere, worship; to adore, admire; to respect, esteem';

xorom 'unprofitable, prodigality, waste' ← xor- 'to cause expense; to spend', cf. OT kora- 'to suffer loss, be diminished', kor 'loss, damage', LM koro- 'to diminish, decrease; to become depleted; to wane, lessen; to die'.

-(A)mtA -(A)mšA, -(A)mšA

The standard form is -(A)mtA (KałMEJ 91), e.g. kïsamta 'effort, concern'  $\leftarrow$  kïsay- 'to trouble, to oppress (in need), to burden, to force', however there are derivatives in -(A)msA and -(A)mčA, cf. tögürümtä, tögürümčä 'roundabout, circuit, circle, hook; circumferential'  $\leftarrow$  tögürüy- 'to go around, to surround; to turn' and  $k\bar{u}jumsa$  'rakish (of woman)'  $\leftarrow$   $k\bar{u}juy$ - 'to lure, to implicate; to make fall in love'. The linking vowel of the suffix is of the low type, e.g. salġamta 'anything boring'  $\leftarrow$  salt-, salġV- 'to disgust, to tire, to bore; to be bored',  $i\eta\ddot{a}mt\ddot{a}$  'introduction, penetration; fruitfulness, benefit'  $\leftarrow$   $i\eta$ - 'to be sucked, to be absorbed, to penetrate, to pass through, to take root'. The base can be of Turkic or Mongolic origin. It is, as in Mongolic, not productive and appears only in few examples.

-(A)mtA forms both nouns and adjectives, e.g.  $bol\dot{g}omto$  'intelligence, foresight, caution; quickness'  $\leftarrow bol\dot{g}oy$ - 'to scrutinize, to look intently, to investigate; to be far-sighted, attentive, careful; to begin a matter carefully; to be paused, to become modest'.

There is no counterpart of this derivational element in StachDWb.

It is of Mongolic origin, cf. -mtA in PoppeGWM §174, e.g. bogomta 'fortification, barricade'  $\leftarrow$  bogo- 'to block', barimta 'matter of fact, evidence'  $\leftarrow$  bari- 'to seize, to keep'. In certain cases the corresponding Mongolic form is not a derivative in -mtA, but in -mji, see e.g. Yakut bolġomto and Literary Mongol bolgumji 'care, carefulness, caution, foresight, circumspection, consideration, precaution'  $\leftarrow$  bolgu- 'to let ripen or become mature; to cook until done; to cure, process; to refine, purify; to beware'.

### **Examples:**

ärgimtä '(outline of) circle; returning' ← ärgiy- 'to be twirled, turned, twisted; to turn around, to be turned, wrapped; to return home, to the native land', cf. LM ergi- 'to turn or move around, revolve; to circumambulate (as an act of devotion or worship); to surround, encompass, encircle; to return, turn back; to visit regularly or repeatedly';

särämtä 'caution, circumspection' ← säräy- 'to surmise, to guess, to assume, to understand', cf. LM sere-, seri- 'to awaken, revive; to recover consciousness; to become sober; to keep vigil; to learn, find out; to mistrust'.

-Ān -XAn, -KAn

The standard form is  $-\bar{A}n$  (KałMEJ 72)<sup>93</sup> appearing if the original base ends in vowel, e.g.  $jul\bar{a}n$  'terrible, dangerous; inaccessibility' (< \*jula-gan)  $\leftarrow julay$ - 'to fear, to be scared, to be frightened, to be afraid of, to be troubled', cf. Mongolic jilu-, julu- 'to flee, run away; to avoid'. There are derivatives in -XAn (only in  $i\ddot{a} < *ig\ddot{a}$  and  $\ddot{u}\ddot{o} < *\ddot{u}g\ddot{a}$ , cf.  $-\bar{A}sXn$  for the same phenomenon), e.g.  $\ddot{a}rgi\ddot{a}n$  'ingenuity, skilfulness; trade, turnover' (< \* $\ddot{a}rgi$ - $\ddot{g}an$ )  $\leftarrow \ddot{a}rgiy$ - 'to be twirled, turned, twisted; to turn around, to be turned, wrapped; to return home, to the native land', cf. Mongolic ergi- 'to turn or move around, revolve; to circumambulate (as an act of

<sup>73</sup> There are some examples in GSJaLJa §274.1 without detailed description and etymological explanation; these derivatives belong in both  $-\bar{A}n$  and -(X)gAn.

devotion or worship); to surround, encompass, encircle; to return, turn back; to visit regularly or repeatedly'. The initial vowel is dominant, cf. section 7.5 for the details. If the original base ends in /l r/ it is -gAn; or after /s/ it is -kAn, e.g. basirġan 'exaggeration'  $\leftarrow$  basiriy- 'to exaggerate; to exceed', jabjilġan 'fussiness, fuss'  $\leftarrow$  jabjiliy- 'to hurry, to fuss', and julusxan 'zealous, pushy'  $\leftarrow$  julusuy- 'to strive'.

It forms both adjectives and substantives in various functions such as, for example, sign, result or process of an action, e.g. dapsalġan 'hand-flailing because of gnats'  $\leftarrow$  dapsalÿ- 'to wave one's hands', budulġan 'sludge'  $\leftarrow$  buduluy- 'to be stirred up'; and the ability of doing an action marked by the base verb, e.g. julurġan 'swift'  $\leftarrow$  juluruy- 'to go forward, to dash against sy, to strain excessively; to enter in spite of prohibition'.

There are no examples for this derivational element in StachDWb. The words discussed under the head  $-gan \sim -g\bar{a}n$  belong to -(X)gAn, q.v.

The Yakut derivational element  $-\bar{A}n$  is of Mongolic origin, cf. -gAn in PoppeGWM §149 forming deverbal nouns, e.g. utagan 'smoke'  $\leftarrow uta$ - 'to smoke', bayildugan 'battle'  $\leftarrow bayildu$ - 'to fight',  $k\ddot{o}delgegen$  'movement'  $\leftarrow k\ddot{o}delge$ - 'to move'. The phenomenon that /g/ remains intact after special consonants can be observed in the Mongolic languages, too, cf. LM  $\ddot{c}akilgan$  'lightning; electricity; electric; telegraph; telegram; telegraphic', Khalkha caxilgan id., Buryat saxilgan '(summer) lightning; electricity; electrical', and Kalmuck tsaklyan 'Blitz'. There is a homophone suffix in Yakut, the origin of which is Turkic, cf. -(X)gAn.

### Examples:

burulġan 'swift current of water' ← buruluy- 'to flow describing circles (of fast-flowing river)';
dabān 'way to the mountain, steep rise (in a road); mountain, hillock' ← dabay- 'to climb up the mountain, or hill'; cf. LM dabagan 'mountain pass; mountain rage; difficulty, obstacle; victory in a contest' ← daba- 'to climb, climb over, cross over; to ascend; to transgress, violate, break (as a law); to overcome, surmount (as obstacles); to exceed, excel';

jalïsxan 'brisk, fidgety' ← jalïsïy- 'to twist by gesticulating head; to be disturbed, to disperse'; kädān 'bump, hollow' ← kädäy- 'to bend; to bend the back', cf. LM gedeyi- 'to bend backward, to throw back one's head high; leaning or bending backwards; obstinate, stubborn; arrogant, conceited';

 $k\ddot{u}r\ddot{a}n$  'discord, noise, uproar'  $\leftarrow k\ddot{u}r$ - 'to rise; to be excited';

mökküön 'dispute, contest, lawsuit, strife, discord' ← mökküy- 'to argue; to persist';

sïndalġan 'tiresomeness' ← sïndalïy- 'to get tired, to tire';

 $t\ddot{a}l\ddot{a}n$ :  $t\ddot{a}l\ddot{a}n$   $\ddot{u}r\ddot{a}x$  'wide gorge'  $\leftarrow t\ddot{a}l\ddot{a}y$ - 'to be opened; to scatter, to be thrown open; to open, to reveal', cf. LM dele-, deli- 'to stretch (as a hide or bow)'.

 $-\bar{\mathbf{A}}\mathbf{s}\mathbf{X}\mathbf{n}$  -XAsXn

The standard form is  $-\bar{A}sXn$  (GSJaLJa §175), however, derivatives in -XAsXn also can be seen (only in  $i\ddot{a} < *ig\ddot{a}$  and  $\ddot{u}\ddot{o} < *\ddot{u}g\ddot{a}$ , cf.  $-\bar{A}n$  for the same phenomenon), e.g.  $d\ddot{a}g\ddot{a}sin$  'small addition to the formerly obtained portion (e.g. fish)'  $\leftarrow d\ddot{a}g\ddot{a}y$ - 'to touch slightly, to take or give

gradually',  $b\ddot{u}r\ddot{u}\ddot{o}s\ddot{u}n$  'ferment, fermented milk'  $\leftarrow b\ddot{u}r\ddot{u}y$ - 'to ferment'. Since the initial vowel of the suffix  $-\bar{A}sXn$  is dominant, the stem-final vowel, or the segment  ${}^{\circ}Vy$ - is replaced by it, cf. section 7.5 for the details, e.g.  $k\ddot{a}r\ddot{c}\ddot{a}sin$  'a small cutting off'  $\leftarrow k\ddot{a}r\ddot{c}iy$ - 'to chop, to chip; to chop off little by little; to chip the surface',  $sur\bar{a}s\ddot{i}n$  'line, feature (of person); image, icon'  $\leftarrow suruy$ - 'to draw; to paint, to write', cf. LM  $j\ddot{i}rugasu(n)$  'line, feature; dash, hyphen' and  $j\ddot{i}ru$ - 'to draw (as a line or picture); to scratch; to strike (of a match)'.

The function of the suffix  $-\bar{A}sXn$  is similar to that of  $-\bar{X}$ , forming (1) action nouns, e.g.  $da\dot{g}\bar{a}sin$  'touching'  $\leftarrow da\dot{g}ay$ - 'to concern, to touch, to come into contact'; (2) abstract nouns, e.g.  $dal\bar{a}sin$  'dynamicness'  $\leftarrow dalay$ - 'to wave by hands or instrument; to raise one's hand to hit'; and (3) other nouns designating, for example, instruments or local formations, e.g.  $b\ddot{u}r\ddot{u}\ddot{o}s\ddot{u}n$  'upholstery, skin (on the door)'  $\leftarrow b\ddot{u}r\ddot{u}y$ - 'to cover, to shut, to muffle, to wrap; to cover (the door)'.

Dolgan shows the same form and function, e.g. bulkāhïn 'Unwetter, Schneesturm' ← bulkuy-'umrühren, wühlen', käpsāhin 'Darstellung, Beschreibung' ← käpsā- 'erzählen, sprechen' (StachDWb 39–40).<sup>94</sup>

Tha Yakut suffix  $-\bar{A}sXn$  is of Mongolic origin, cf. Literary Mongol -gAsUn in PoppeGWM §151, forming nouns designating objects undergoing the actions concerned, e.g. kadagasun 'nail'  $\leftarrow kada$ - 'to drive in (nails)',  $n\ddot{o}k\ddot{o}ges\ddot{u}n$  'patch-up'  $\leftarrow n\ddot{o}k\ddot{o}$ - 'to mend'. Before the socialist period it was a slightly productive suffix; there are relatively few instances in Pekarskij's dictionary. In many cases the Yakut speakers copied both the base verb and its derivative without actively using the suffix, however, there are derivatives from verbs of Turkic origin, e.g.  $kig\ddot{a}sin$ ,  $kigi\ddot{a}sin$  'instigation'  $\leftarrow kik$ - 'to incline, to tempt, to insist, to advice', cf. OT kik- 'to whet'. After the 1920s it gained ground and became popular in neologisms, e.g.  $xolbohukt\ddot{a}h\ddot{i}n$  'collectivization'  $\leftarrow xolbohukt\ddot{a}$ - 'to collectivize',  $agitaciyal\ddot{a}h\ddot{i}n$  'agitation'  $\leftarrow agitaciyal\ddot{a}$ - 'to agitate (for)' (GSJaLJa §175). 95

### Examples:

 $bul\bar{a}sin$  'the impulse of mixing'  $\leftarrow bul\bar{a}$ - 'to mix anything uniform, to stir slowly, to intermix, to mix up; to knead; to interfere (to disturb); to mix up (to lead into confusion)', cf. OT bulga- 'to stir (a liquid, etc.); to confuse, disturb (someone), produce a state of disorder';

köŋösün 'alienation, removal' ← köŋüö- 'to chase, to drive off, to move away, to reject, to deny'; salāsïn 'direction; adaptability, habit; quality, conscience' ← salay- 'to direct, to transfer, to displace, to guide, to lead', cf. LM jala- 'to straighten, correct; to steer, direct the course of; to drive cattle to the pasture ground';

 $s\bar{u}l\bar{a}s\bar{i}n$  'screwdriver'  $\leftarrow s\bar{u}l\bar{a}$ - 'to add together, to roll up into tube; to wrap, to muffle', cf. OT  $\check{c}ug$  'bundle';

<sup>94</sup> Further examples from Dolgan being: battāhin : ilī battāhin 'Unterschrift', hanārgāhin 'Trauer, Kummer, Betrübnis', hurāhin 'Strich, Linie; Streifen; Schramme, Kratzwunde', koyutāhin 'Verspätung', tīgānnāhin 'Stechen der Rentiere mit Speeren während der Fluß- oder Buchtüberquerung', iyāhin 'Gewicht; Waage', itāhin 'Weinen'.

<sup>95</sup> In a vast number of cases it substituted the Russian suffixes -ние and -ация, cf. RusGr §239, 256, 257 and 263.

tälgäsin 'rug spreading on the floor: carpets, mats, felts' ← tälgä-, tälgiä-, tilgä- 'to spread, to line, to cover', cf. LM *delge*- 'to spread, display, lay out, unroll, unwrap; to open; to extend, stretch, elongate; to propagate'.

-Āt -gAt

The suffix  $-\bar{A}t$  is originally not a derivational element. In Yakut it is usually used as a converb (*converbum perfecti*), cf. KałMEJ 112. GSJaLJa §462–464 discusses its function and usage lengthwise giving also some example sentences. However, Pekarskij cites some words in  $-\bar{A}t$  in separate entries as lexicalized elements thus it is handled here as a derivational element.

The standard form of this suffix is  $-\bar{A}t$ , e.g.  $maxt\bar{a}t$  'appreciation, goodwill; praise, honour'  $\leftarrow maxtay$ - 'to glorify, to praise'. In a single case, due to the original stem-final /l/, it is -gAt, i.e. jibilgät, d'ibilgät 'wisdom, craftiness; cuteness'  $\leftarrow$  jibiliy-, d'ibiliy- 'to alter, to change to sg'. For the same phenomenon, see  $-\bar{A}n$ , and section 7.6 for a detailed view. It is an old, unproductive suffix.

The general function of  $-\bar{A}t$  is to form abstract nouns and geographical terms, e.g.  $\ddot{o}\eta k\ddot{o}t$  'mountain along rivers or creeks (mountain ridge)'  $\leftarrow \ddot{o}\eta k\ddot{o}y$ - 'to be bent'.

This derivational element is not discussed in StachDWb.

### **Examples:**

nälät 'open flat space, gently sloping open slope' ← näläy- 'to be thrown open, to spread, to lie down by spreading', cf. LM neleyi- 'to be wide, vast'.

### -bXr

The standard form is -bXr (KałMEJ 73–74), e.g.  $kil\ddot{a}bir$  'shining; lustre, gloss'  $\leftarrow kil\ddot{a}y$ - 'to be glossy, to shine by smoothness; to flood'. In a single example -bXr seems to have a dominant linking sound, i.e. tolobur 'ransom, ransom money'  $\leftarrow toluy$ - 'to redeem (pledge), to recompense; to compensate'; it is likely just a progressive assimilation of the /o/ in the first syllable, cf. its Mongolic counterpart as  $*dolibur(i) \leftarrow doli$ - 'to change, exchange, barter, trade; to ransom'. It is an old, unproductive suffix, however derivatives can be found from verbs of Turkic origin, e.g. tillabir 'report, notice'  $\leftarrow till\bar{a}$ - 'to notify, to speak, to say, to reveal, to prove; to announce', cf. OT til 'the tongue'.

-bXr forms nouns designating the process of the action, e.g.  $t\ddot{o}l\ddot{o}b\ddot{u}r$  'pay, price, payment, ransom; recompense, reward, retribution'  $\leftarrow t\ddot{o}l\ddot{u}\ddot{o}$ - 'to pay, to pay out; to pay back'.

There are no traces of this derivational element in StachDWb.

-bXr is of Mongolic origin, cf. -bUri in PoppeGWM §141 forming nouns designating the process or the aim of an action, e.g. aburi 'manner, temper'  $\leftarrow$  a- 'to be', tayilburi 'comment, explanation'  $\leftarrow$  tayil- 'to explain', kötelbüri 'instruction'  $\leftarrow$  kötel- 'to guide, to lead'. If the stem ends in /l/ the initial sound of the suffix can change to /m/, e.g. ködelmüri 'work'  $\leftarrow$  ködel- 'to work'. The loss of the final vowel most likely has taken place in Mongolic, however, note that Buryat presents both forms, cf. -bAr and -bAri in PoppeBG §4.13.5.d, e.g. dālgabar(i) 'task'  $\leftarrow$  dālga- 'to commission, to charge with', hīlber(i) 'carving, ornament'  $\leftarrow$  hīl- 'to carve', tēber(i) 'load'  $\leftarrow$  tē- 'to load'.

### Examples:

olobur 'designation'  $\leftarrow$  olō- 'to follow, to trace; to collect grass from under the snow; to intend, to plan';

salġabïr 'lending, aid'  $\leftarrow$  salġā- 'to put, to add (on); to transfer; to support temporarily', cf. LM jalga- 'to connect, join, splice; to continue, lengthen, add; to meet, border, adjoin'.

#### -dAk

The standard form is -dAk, 6 e.g. käridäk 'vagabond; itinerant, wanderer'  $\leftarrow$  käriy- 'to come round, to go around, to travel about; to inspect'. It is an old, unproductive derivational element.

The function of -dAk is to form nouns, e.g. sarbidax 'stump of an object'  $\leftarrow sarbiy$ - 'to move away the excess (to chop off, to reduce); to shorten'.

There is no counterpart of this suffix in StachDWb.

The derivational element -dAk is of Mongolic origin, cf. the *nomen usus -dAg* in PoppeGWM §358 expressing a customary, habitual, or usual action, e.g. *yabudag* 'someone who usually goes, the usual goer, the usual act of going, he usually goes'.

### **Examples:**

sarïdax 'commission' ← sarïy- 'to give, or make any kind of commission to someone'; sorudax 'issue; free commission' ← soruy- 'to appoint in any purpose (order, commission), to assign, to determine sy'.

#### -dAsXn

The standard form is -dAsXn (KałMEJ 75), e.g.  $\ddot{a}rb\ddot{a}d\ddot{a}sin$  'sawing'  $\leftarrow \ddot{a}rb\ddot{a}\ddot{a}$  'to saw (in two)'. There is no example with stem-final consonant, thus the existence of a linking sound cannot be proved. It is unproductive in the modern language, but it was active in the past, because there are derivatives from verbs of Turkic origin, e.g.  $buladas\ddot{i}n$  'troubling (e.g. water for catching fish by net)'  $\leftarrow bul\ddot{a}$ - 'to mix anything uniform, to stir slowly, to intermix, to mix up; to knead; to interfere (to disturb); to mix up (to lead into confusion)', cf. Old Turkic bulga- 'to stir (a liquid, etc.); to confuse, disturb (someone), produce a state of disorder';  $s\ddot{u}ladas\ddot{i}n$ 

<sup>96</sup> This derivational element is mentioned but not discussed in KałMEJ, for the reasons, see op.cit. 68.

'screwdriver'  $\leftarrow s\bar{u}l\bar{a}$ - 'to add together, to roll up into tube; to wrap, to muffle', cf. Old Turkic čug 'bundle'.

The derivational element -dAsXn forms (1) action nouns, e.g.  $t\bar{a}rbadas\bar{i}n$  'trapping, tying by knots that cannot be untie fast'  $\leftarrow t\bar{a}rbay$ - 'to interlace, to confuse, to enmesh; to involve'; and (2) other verbal nouns, e.g.  $\ddot{o}y\ddot{u}\ddot{o}d\ddot{a}sin$  'support'  $\leftarrow \ddot{o}y\ddot{o}$ -,  $\ddot{o}y\ddot{u}\ddot{o}$ - 'to support, to prop up; to help, to contribute'.

There is no corresponding suffix in StachDWb.

The Yakut suffix -dAsXn is of Mongolic origin, cf. Literary Mongol -dAsUn in PoppeGWM §144 forming deverbal nouns, e.g. ugiyadasun 'swill, dirty water'  $\leftarrow ugiya$ - 'to wash', jarudasun 'servant'  $\leftarrow jaru$ - 'to employ'.

# Examples:

ärädäsin 'screw' ← äriy- 'to turn, twirl; to spin, wind; to screw (up); to implicate, involve in sg', cf. LM ere- 'to tie or wind around';

börödösün 'collection, composition' ← börüö- 'to roll up, to assemble, to put together';

kirïadasin 'trimming' ← kirïy- 'trimming; to cut, to cut off, to cut out; to cut (hair)';

suradasïn 'line, contour, outline' ← suruy- 'to draw; to paint, to write', cf. LM j̃iru- 'to draw (as a line or picture); to scratch; to strike (of a match)';

tuoradasïn 'intersection, passage'  $\leftarrow$  tuorā- 'to go aside, to be turned, to displace, to be averted; to pass, to intersect'.

### -KAy

The standard form is -KAy (GSJaLJa §266a, 267); the initial consonant of the suffix varies in conformity with the base verb: (1) -xay after velar stems, e.g. balārxay 'misty, turbīd, ashy'  $\leftarrow$  balār- 'to be dirty'; (2) -käy after palatal ones, e.g. ilbirkäy 'ripped, worn, tattered'  $\leftarrow$  ilbiriy- 'to be worn out, to be worn to rags'; and (3) -gAy<sup>97</sup> in intervocalic position, e.g. bīlaġay 'unclean; evil'  $\leftarrow$  bīlā- 'to mix up; to confuse, to lead into confusion'. The stem-final °y- is always dropped, e.g. kārčāgāy 'avaricious, accurate; stinginess'  $\leftarrow$  kārčāy- 'to be avaricious, accurate'.

-KAy usually forms adjectives designating the quality resulting from the action, e.g. borolxoy 'gray; dim'  $\leftarrow$  boroluy- 'to fade, to stirred up, to grow dark; to become white during cooking, to lose red colour (of meat)'. In addition, substantive derivatives also can be found, e.g.  $k\ddot{u}\ddot{o}r\ddot{a}g\ddot{a}y$  'hovering; lark, Alauda arvensis'  $\leftarrow$   $k\ddot{u}\ddot{o}r\ddot{a}y$ - 'to rise upward; to float; to hover'.

Its counterpart in Dolgan shows the same function (StachDWb 46), e.g. börölköy 'trüb, getrübt, nicht klar' ← \*bürül-, cf. OT bürül- 'to be twisted, folded'. However, Dolgan has no variant in -xay, cf. haharkay 'gelb' and its Yakut counterpart as sasarxay 'red; bay (of horse); light-brown (of the hair); hazel (of the eyes); yellow; orange'. 99

<sup>97</sup> In most of the cases it is -ġAy, however palatal stems may bear -gäy. For a detailed description, see section 7.2 and table 1.

<sup>98</sup> Unvoiced variants may appear in some cases, cf. nälägäy, näläkäy 'entirely open, spread' ← näläy- 'to be thrownopen, to spread, to lie down by spreading'.

The Yakut suffix -KAy is of Mongolic origin, cf. Literary Mongol -KAy, which is used to designate qualities resulting from the action, e.g. kajagay 'curved, oblique'  $\leftarrow kajayi$ - 'to bend', butarkay 'dismembered'  $\leftarrow butara$ - 'to fall to pieces' (PoppeGWM §148). Note the similarities in dropping of the stem-final segments, and cf. section 7.1 for the details.

## **Examples:**

*ajïrxay* 'tousled, brushy, curly' ← *ajïrïy*- 'to bristle (of hair, bristle); to flare up, bristle up', cf. LM *ajïgar* 'bushy; uneven, rough; uneven surface, roughness';

buj̃urxay 'curly; lock (of hair)' ← buj̃uruy- 'to grow curly-headed, to curl';

kilbärkäy 'shining, sparkling, radiating' ← kilbäriy-, kilbäriy- 'to shine', cf. LM gilbe- 'to flash or shine in the distance; to shine in iridescent colors; to look in askance, scowl';

kistäääy 'secret, concealed' ← kistä-, kistiä- 'to hide, to conceal, to cover; to bury';

ösögöy, ösögöy 'enemy, hostile' ← ösö-, ösüö- 'to quarrel, to take vengeance', cf. OT öčä- 'to feel hostile, desire revenge';

tätärkäy 'rosy, clear red' ← tätär- 'to redden (of sun)'.

**-kX** -VkX

The standard form is -kX, e.g.  $ad\bar{a}riki$  'quarrelsome, bad-tempered'  $\leftarrow ad\bar{a}riy$ - 'to be divided; to swell; to quarrel'. Sometimes the suffix joins to the base via a dominant vowel, e.g. attaki, attiki 'eunuch, castrated; unable to have sexual intercourse, impotent'  $\leftarrow att\bar{a}$ - 'to call the horse; to give sy a horse; to castrate'. It is an unproductive suffix in modern Yakut.

The suffix -kX forms adjectives designating quality, characteristic feature, e.g. kiynaxi' 'angry, irritable'  $\leftarrow kiyin$ -, kiynV-, kiynV- 'to be boiled, to be cooked; to be in passion'. In some cases, substantive or adverbial meaning can appear, e.g. säpsäki, säpčäki 'light; easily; cheap, cheapness'  $\leftarrow säpsiä$ - 'to become cheaper'.

Only the denominal counterpart of Yakut -kX is discussed in StachDWb 18, see e.g. ortoku, ortok $\bar{u}$  'mittlerer'  $\leftarrow$  orto 'Mitte'.

The Yakut suffix -kX is possibly of Mongolic origin being connected with the Mongolic suffix +kX, cf. +ki in PoppeGWM §184 forming adjectives from adverbs, e.g. degereki 'upper'  $\leftarrow$  degere 'on, above', edügeki 'present'  $\leftarrow$  edüge 'now'. There are only three suffixes in Yakut that clearly show the process of deverbalization, cf. section 7.9 for a detailed description. It does not seem to be likely that the Yakut suffix -kX is connected to the well-known Turkic converter +kI, cf. GOT §3.126. The Turkic formative +kI has been preserved both in Yakut (+KX) and Dolgan (+KX), cf. GSJaLJa §261 and StachDWb 13–14, showing the regular sound change /k/ > /g/ in intervocalic position, cf.  $+T\bar{A}\dot{g}X$  in GSJaLJa §260, and for the regular

<sup>99</sup> Further examples from Dolgan being: kögörköy 'blau; grün', kïtarkay 'rot; fuchsrot', tätärkäy 'gerötet, rot'; nijirkäy 'Schmutzfink, unordentlicher Mensch', toŋsogoy '(ornit.) Specht'.

<sup>100</sup> The problem of the possible connection between the Turkic and Mongolic formatives goes beyond our scope.

morphophonological variants and rule set in inflexion, cf. table 1 in section 7.2. <sup>101</sup> It is dubious but cannot be rejected that the Yakut suffix -kX, -XkX has been influenced by  $-(X)\eta X$ , q.v.

### Examples:

aydārīkī 'one who speak continuously, endlessly, chattersome' ← aydārīy- 'to make noise, shout';

ölbödükü 'sluggish, stunted' ← ölbödüy- 'to grow dim';

satiliki' 'walking on foot'  $\leftarrow satila$ - 'to walk (go) on foot; to get down; to (con)descend to the earth (of deity); to be shot (of bird)', cf. OT yadag 'on foot';

 $t\ddot{o}r\ddot{u}k\ddot{u}$ :  $t\ddot{o}r\ddot{u}k\ddot{u}tt\ddot{a}n$   $bil\ddot{a}bin$  'I know from the very beginning'  $\leftarrow t\ddot{o}r\ddot{o}$ -,  $t\ddot{o}r\ddot{u}\ddot{o}$ - 'to be born; to bear (not used for humans), to calve, to foal', cf. LM  $t\ddot{o}r\ddot{o}$ - 'to be born, come into being; to appear, arise, occur, to live, subsist' and OT  $t\ddot{o}r\ddot{o}$ - 'to come into existence, to be created'.

#### -1X

The standard form is -lX, e.g.  $tak\ddot{\imath}l\ddot{\imath}: tak\ddot{\imath}l\ddot{\imath}$  at 'a horse lifting his back legs up in a special way (in  $Xa\eta alas$ )'  $\leftarrow tak\ddot{\imath}y$ ,  $tax\ddot{\imath}y$ - 'to bend, to lift up feet; to bend the feet, the elbows; to writhe, to be bent'. It is an old, unproductive suffix in Yakut. There are only two examples in PekSJ.

-lX forms nouns, e.g. idali' putting out the stomach'  $\leftarrow iday$ - 'to put out the stomach'.

There is no counterpart of this derivational element in StachDWb.

The suffix -lX is of Mongolic origin, cf. -li in PoppeGWM §162, e.g. sačuli 'libation'  $\leftarrow saču$ 'to strew, to spurt', sagali 'milking'  $\leftarrow saga$ - 'to milk'.

-šA, -čAk

The standard form is -sA (KałMEJ 80–81), e.g. xadïsa, xodusa 'haymaking; place where hay is mown'  $\leftarrow$  xadïy-, xoduy- 'to mow'. It has an allomorph in -čA, 102 e.g. oborčo, oboččo, omoččo 'small pipe, pipe made of horn, or drilled out wood; sandy suction in the river, sucking swamp'  $\leftarrow$  obor- 'to suck (breast), to suck out, to swallow (mother's milk)'. Similarly to -( $\bar{A}$ )ččX, there is a form with an additional sound /k/, the etymology and function of which is uncertain, e.g.  $\acute{n}$ olbučak 'oblong, oval'  $\leftarrow$   $\acute{n}$ olboy- 'to take oval, elongated form'. 103 It is an old and unproductive suffix in Yakut.

-sA forms (1) nouns, e.g.  $t\ddot{a}l\ddot{g}\ddot{a}\ddot{s}\ddot{a}$  'a place cleared from snow before the yurt where forage is put/spread for the cattle; winter farmyard'  $\leftarrow t\ddot{a}lg\ddot{a}$ -,  $t\ddot{a}lg\ddot{a}$ -,  $t\ddot{a}lg\ddot{a}$ - 'to spread', (2) names of tools, e.g.  $\ddot{i}tar\ddot{c}a$ ,  $\ddot{i}tar\ddot{c}a$ ,  $\ddot{i}tar\ddot{c}a$  'vise (for metalwork, forge), pliers'  $\leftarrow \ddot{i}t\ddot{i}r$ - 'to bite; to wound; to pinch', and (3) adjectives, e.g.  $xatar\ddot{c}a$ ,  $xata\ddot{c}a$  'dried (up); exhausted; small fish boiled and dried above the smokestack of fireplace'  $\leftarrow xatar$ - 'to (make sg) dry'. In addition, there are two

<sup>101</sup> The morphophonological rule set of the Yakut and Dolgan suffixes +KX, i.e. the threefold /g k n/ system of the initial consonant suggests that some words traditionally handled as derivatives in +KX, cf. GSJaLJa §261, clearly belong to the group of +kX formatives, see e.g. anniki 'lower' \( \inp \align{align\*} \align{align\*} \text{alin 'lower part (of anything)', \( \text{urduku} \) 'upper' \( \in \text{urit} 'upper part (of anything)' \) and \( \text{ortoutle} \) 'middle' \( \inp \) orto 'middle, central part (of anything)'.

<sup>102</sup> There are 8 examples in  $-\dot{c}A(k)$  and only 3 in -sA.

<sup>103</sup> For this derivative, a special form in -XčAk should be defined, however, other derivatives do not show any linking vowel.

examples designating the actor, i.e. *olorčox* 'bartender, worker; sponger; ischium'  $\leftarrow$  *olor-* 'to sit (down); to give birth to; to be located, to stay; to live' and *kötčök* 'young autumnal duck that already flies'  $\leftarrow$  *köt-* 'to fly, to take off, to be raised; to jump (over)'.

Dolgan has a corresponding suffix in -sA (StachDWb 49), e.g. kistässä 'Versteckspiel'  $\leftarrow$  \*kistäs- 'einander/sich verstecken, verbergen' and tüŋähä, tüŋäsä 'ein Brauch, dem gemäß ein Jäger das Fleisch des von ihm erlegten Rentiers unter seinen Nachbarn verteilt'  $\leftarrow$  \*tüŋä- 'teilen'. Two examples in -čA are discussed in StachDWb 41, i.e.  $\"{i}t\"{i}r\'{c}a$  'Art Zange'  $\leftarrow$   $\"{i}t\"{i}r$ - 'beißen' and  $uop\'{c}a$  'Bissen, Happen'  $\leftarrow$  \*uop-.

The Yakut derivational element -sA is of Mongolic origin, cf. Literary Mongol -čA in PoppeGWM §142, e.g. jaruča 'servant'  $\leftarrow$  jaru- 'to employ', yabuča 'course'  $\leftarrow$  yabu- 'to go'. For the distribution of the allomorphs -sA and -čA, see section 7.6. StachDWb 49 compares the Dolgan suffix -sA with a Turkish deverbal suffix  $-\check{C}A$  citing the word sakınca 'Vorbehalt'  $\leftarrow$  sakın- 'nicht wagen; sich in acht nehmen' as an example. However, the Turkish word sakınca is clearly a neologism and thus cannot be used for proving any Yakut-Turkish relation of the given suffix. On the other hand, according to the literature, there is no deverbal nominal suffix in  $-\check{C}A$  in Turkish that had direct Old Turkic root. Nonetheless, it is also plausible that Dolgan and Yakut -sA are of different origin; for comparison, see the etymological background of the Yakut and Dolgan words in question:

- (1) xadïsa, xodusa, cf. LM kadu- 'to mow, harvest; to cut (as grass, grain)', B xadasa 'mowing, haying meadow' ← xada- 'to mow; to cut';
- (2) tälgäsä, cf. LM delgeče 'the act or process of delge-; a board for drying cottage cheese; tray for displaying merchandise' ← delge- 'to spread, display, lay out, unroll, unwrap; to open; to extend, stretch, elongate; to propagate';
- (3) *kistässä*, cf. OT *kizläš* reciprocal, co-operative form of *kizlä* 'to put (something) in a box or bag; to hide';
- (4) tüηähä, tüηäsä, maybe it is related to LM tüge- 'to spread, propagate; to distribute'.

# **Examples:**

 $k\ddot{u}\eta k\ddot{u}\ddot{c}\ddot{a}x$ ,  $k\ddot{u}\eta \ddot{u}\ddot{c}\ddot{a}k$  'a bag for kettle'  $\leftarrow k\ddot{u}\eta k\ddot{u}y$ - 'to boil with noise; to be warmed, to rot';  $lapp\ddot{c}ax$  'small, but thick (e.g. vessel)'  $\leftarrow lapp\ddot{c}y$ - 'to shorten proportionally'.

#### -sX

The standard form is -sX (KałMEJ 81), e.g.  $s\ddot{a}lt\ddot{a}si$  'pip on the tongue'  $\leftarrow s\ddot{a}lt\ddot{a}y$ - 'to be rounded, swollen, extremely inflated; to thicken, to be blown at the end'. Although it is the only example where the verbal base also can be observed in Yakut, the words  $id\ddot{a}si$  'cattle held only for consumption, usually killed in autumn' and  $s\ddot{u}\ddot{o}s\ddot{u}$  'livestock; animal' clearly belong in this group, cf. LM idesi 'food, nourishment; edibility'  $\leftarrow ide$ - 'to eat, consume; to gnaw, corrode; to exploit, to accept bribes, embezzle funds' and  $j\ddot{o}ge$ - 'to move something from one place to

<sup>104</sup> Further examples of this short, such as *çekince* 'tehlike', düşünce 'fikir, mülahaza, mütalaa', güvence 'garanti, teminat' can be found in Püsküllüoğlu 1976.

another, transport; to gather, collect; to acquire, possess (hist.)'. It is an old, unproductive suffix in Yakut.

-sX forms nouns designating the result or object of an action.

There is no counterpart in StachDWb.

-sX is of Mongolic origin, cf. -si in Poppe §181 forming nouns designating the result or object of an action, e.g. idesi 'food'  $\leftarrow ide$ - 'to eat' and bulasi 'grave, excavation'  $\leftarrow bula$ - 'to dig'.

#### -sXn

The standard form is -sXn (KałMEJ 81–82), e.g. kurusun 'grief, vexation'  $\leftarrow$  kuruy- 'to be sad, to be distressed; to regret about sg effected in the past'. There is no example with stem-final consonant. It is an old, unproductive derivational element.

-sXn forms both adjectives and substantives, e.g. nukarsin 'sluggish'  $\leftarrow nukariy$ - 'to fall asleep' and tuorasin 'turning, passage (across river)'  $\leftarrow tuor\bar{a}$ - 'to go aside, to be turned, to displace, to be averted; to pass, to intersect'.

There are no traces of this suffix in StachDWb.

-sXn is of Mongolic origin, cf. -sUn in PoppeGWM §180 forming nouns designating result or object of an action: nilbusun 'spittle'  $\leftarrow nilbu$ - 'to spit',  $k\ddot{o}ges\ddot{u}n$  'foam'  $\leftarrow k\ddot{o}ge$ - 'to foam, to rise'. -sXn has a denominal variant +sXn, for Yakut examples, see KałMEJ 81–82. It is also of Mongolic origin, cf. +sUn in Poppe §137 and for a general overview in RamEAS 2: §107.

#### -(V)bX1

The standard form is -(V)bXl (KałMEJ 72, GSJaLJa §177; discussed without the linking vowel). The linking vowel of this suffix can be seen through several examples, cf.  $\ddot{a}r\ddot{a}n\ddot{a}bil$  'hope'  $\leftarrow$   $\ddot{a}r\ddot{a}n$ - 'to place trust, to hope, to attach hopes',  $k\ddot{u}t\ddot{a}bil$  'expectation'  $\leftarrow$   $k\ddot{u}t$ - 'to await, to wait', and  $t\bar{a}yib\ddot{i}l$  'explanation'  $\leftarrow$   $t\bar{a}y$ - 'to surmise, to sense, to assume; to foresee, to realize; to guess; to interpret (sleep); to be revealed, to be manifested'. The verb-final 'y- usually disappears, e.g.  $maxtab\ddot{i}l$  'gratitude'  $\leftarrow$  maxtay- 'to glorify, to praise'.

The general function of -(V)bXl is to form (1) nouns designating abstract nouns or the object of an actions,  $ata\dot{g}astab\ddot{i}l$  'offence, insult'  $\leftarrow ata\dot{g}ast\bar{a}$ - 'to offend, to give offence; to attack; to oppress, to trouble; to tear to pieces', and, in rare cases, (2) names of occupations,  $jasab\ddot{i}l$  'manager; managing the polar tractor station; efficiency'  $\leftarrow jasay$ - 'to boss, to govern, to manage'. The base verb can be of both Mongolic and Turkic origin,  $ird\ddot{a}bil$  'study, search, research'  $\leftarrow ird\ddot{a}$ - 'to investigate, to experience, to search for, to examine; to claim (in court); to follow, to trace, to call on, to search for track (of dog)', cf. OT  $ird\ddot{a}$ - 'to seek, pursue (something Acc.)';  $sanab\ddot{i}l$  'thinking, reflection'  $\leftarrow san\bar{a}$ - 'to think, to imagine, to reflect; to hope, to want, to plan; to decide; to consider; to understand', cf. LM sana- 'to think, reflect, ponder; to hold an

<sup>105</sup> It is possible that the word  $k\ddot{a}lt\ddot{a}si$ ,  $s\ddot{a}lt\ddot{a}si$  'sore on the eyes, on the lips, in the mouth; pip on the tongue'  $\leftarrow$   $s\ddot{a}lt\ddot{a}y$ - 'to be rounded, swollen, extremely inflated; to thicken, to be blown at the end' also belongs in this group. The words  $k\ddot{a}lt\ddot{a}s\ddot{a}$ ,  $k\ddot{a}lt\ddot{a}sin$  (also describing certain diseases of the eyes and the tongue), on the other hand, may be derivatives in -sA and -sXn, q.v., respectively.

opinion; to intend, plan; to remember, keep in mind, to recall; to long for. Russian verbs are used in neologisms, e.g.  $dak\bar{a}stabil$  'proof'  $\leftarrow dak\bar{a}st\bar{a}$ - 'to prove', cf. Russian  $\partial o\kappa as$  'proving'.

Dolgan shows the same form and function, e.g.  $h\ddot{a}r\ddot{a}bil$  'Gefahr'  $\leftarrow h\ddot{a}r\ddot{a}y$ - 'erkennen, erraten; herausfühlen, verspüren' (StachDWb 41).

The Yakut suffix  $-(A)bXl^{106}$  is of Mongolic origin, see Literary Mongol -gUl ( $\rightarrow$  \*-(A) $\gamma Ul$  /-(A) $\beta Ul$  > \*-(A)bUl ) > Yakut -(A)bXl (KałMEJ 72). <sup>107</sup> In the Mongolistic literature -gUl is usually mentioned as a suffix for designating names of occupations, <sup>108</sup> however, examples belonging to other categories can be found, e.g. aldagul 'anything lost or gone astray'  $\leftarrow alda$ -'to lose; to let go, drop; to lose control of, be able to control; to do something by mistake or by accident, make a slip', kayigul 'reconnaissance, search; reconnaissance unit; prospecting (mining)'  $\leftarrow kayi$ - 'to seek, search, investigate; to look all around'. These derivatives in -gUl can strengthen the connection with the Yakut derivational element -(A)bXl.

### Examples:

kätäbil 'expectation, duration; guard; being stored; storage; watchman, guard' ← kätä-, kätiä'to await, to wait (until); to guard, to take care, to protect, to save, to store, to preserve', cf.

M gete- 'to stalk; to watch, spy; to lie in ambush, lie in wait';

kördöbül 'request, claim' ← kördö-, kördüö- 'to search for; to request; to claim', D kördöbül 'Wunsch, Bitte', cf. OT közlä- 'to keep under observation';

äräbil 'hope' ← äräy- 'to hope, to attach hopes, to place trust, to await the alms', cf. LM ere-, eri'to seek, to look for, search, to beg, request; to inquire (as after somebody's health); to
intercede on behalf of';

 $\ddot{o}y\ddot{o}b\ddot{u}l$  'support, back'  $\leftarrow \ddot{o}y\ddot{o}$ -,  $\ddot{o}y\ddot{u}\ddot{o}$ - 'to support, to prop up; to help, to contribute';

satabil, sitabil 'understanding; mind; sense; method, means, craftiness; ability, skill'  $\leftarrow$  satā-, sitā- 'to know how, to be able to', cf. LM čida- 'to be able, capable; to be able to overcome or vanquish';

taptabil 'love'  $\leftarrow tapt\bar{a}$ - 'to love; to caress', cf. OT tapla- 'to be pleased, satisfied (with something Acc.)'.

### -(V)gVr

The standard form is -(V)gAr or -(V)gXr depending on the verbal base (GSJaLJa §266), <sup>109</sup> e.g. ballaġar 'puffy, stout, fat'  $\leftarrow$  ballay- 'to be puffy, stout, fat', bīlġaġar 'swollen, bulged'  $\leftarrow$  bīlġay-, bīlxay- 'to bulge'; akīgīr 'bent'  $\leftarrow$  akīy- 'to be bent, curved (slightly)', kumugur 'compressed,

<sup>106</sup> RamEAS 2: §69, 77 had the idea that -bXl could be divided into an Altaic passive suffix -bu- and a deverbal nominal -l.

<sup>107</sup> Similar phenomenon can be observed in other Turkic languages, see e.g. Uzbeg qåråvul 'guard; watchman; sentinel; yard-keeper' and Kazakh qarawil 'guard, watch; sight (on a weapon or instrument)' — Mongolic karagul 'watchman, guard'.

<sup>108</sup> See the examples in PoppeGWM §153, e.g. karagul 'watchman, guard' ← kara- 'to look at', tursigul 'spy' ← tursi- 'to investigate, to reconnoitre', tannagul 'spy' ← tanna- 'to reconnoitre', managul 'watchman' ← mana- 'to watch', jasagul 'commander' ← jasa- 'to arrange'.

<sup>109</sup> In StachDWb 42–43, 44 the two forms are discussed in separated entries; KałMEJ 79–80 and GSJaLJa §266 handle them together.

shrivelled'  $\leftarrow$  kumuy-'to be compressed, to be shrivelled'. -(V)gAr is normally used with stems ending in °Ay-, and -(V)gXr usually with stems ending in °Xy-, however, there are exceptions, e.g.  $\ddot{a}kig\ddot{a}r$  'hollow (of stomach)'  $\leftarrow$   $\ddot{a}kiy$ - 'to become hollow (of stomach)',  $kilb\ddot{a}gir$ ,  $kilb\ddot{a}gir$  'shining, bright'  $\leftarrow$   $kilb\ddot{a}y$ - 'to shine, to sparkle; to celebrate'. Certain stems can take both forms, e.g.  $d\ddot{a}gda\ddot{g}ar$ ,  $d\ddot{a}gda\ddot{g}ar$  'inflated, shaken up, foamed; having strongly inflated belly'  $\leftarrow$   $d\ddot{a}gday$ - 'to swell (of belly), to be inflated, to shake up, to make foam'. There are only two examples with stems ending in consonant, i.e. simigir 'narrow (of eyes), weak-sighted'  $\leftarrow$  sim-'to squint, to blink, to wink one's eye',  $t\ddot{a}s\ddot{a}\ddot{g}\ddot{a}r$ : is  $t\ddot{a}s\ddot{a}\ddot{g}\ddot{a}r$  'hernia'  $\leftarrow$   $t\ddot{a}s$ - 'to break through, to hollow, to pierce, to bore, to split, to reveal (abscess); to make a hole'.

-(V)gVr forms adjectives designating qualities resulting from the action, e.g. kurtaġar 'swollen'  $\leftarrow kurtay$ - 'to be swollen, to bulge', boyboġor 'fat'  $\leftarrow boyboy$ - 'to be fat', jorjoġur 'inflated'  $\leftarrow jorjoy$ - 'to swell in its spinal part'. In rare cases semantic split from adjective to substantive can be observed, e.g.  $b\ddot{o}k\ddot{c}\ddot{o}\ddot{g}\ddot{o}r$ ,  $b\ddot{o}x\ddot{c}\ddot{o}\ddot{g}\ddot{o}r$  'humpbacked, with hump on the back, bent; hump'  $\leftarrow b\ddot{o}k\ddot{c}\ddot{o}y$ - 'to be bent'. According to KałMEJ 79–80, this formative is popular in the Yakut folk poetry. The base verb can be of both Mongolic and Turkic origin, baltaġar 'large sized, wide, chubby, plump'  $\leftarrow baltay$ - 'to have large form, to be large sized; to bulge', cf. LM baltayi- 'to be[come] flat; to stay down; to be stubby or thickset';  $t\ddot{a}s\ddot{a}\ddot{g}\ddot{a}r$  (see above), cf. OT  $t\ddot{a}s$ - 'to pierce, bore'.

In Dolgan the suffix -gAr and -gXr form only adjectives, e.g.  $\acute{n}imigir$  'schweigsam, wortkarg'  $\leftarrow$   $\acute{n}imiy$ - 'schweigen, zu schweigen beginnen',  $<code-block>g\"{i}lbagar$  'weiß; grau, ergraut, grauweiß'  $\leftarrow$   $g\"{i}lbay$ - 'blinken, glitzern, glänzen' (StachDWb 42–43, 44).</code>

The Yakut suffix -(V)gVr is of Mongolic origin, <sup>112</sup> see Literary Mongol -gAr in PoppeGWM §150. The alternation of the vowel in Yakut is also developed by Mongolic analogy, cf. the examples kabtagar 'flat'  $\leftarrow kabtayi$ - 'to become flat', serteger 'dishevelled'  $\leftarrow serteyi$ - 'to stand on end (of hair)', bujigir 'curly'  $\leftarrow bujiy$ - 'to curl', kamsigir, kamsigar 'compressed, flat, flattened'  $\leftarrow kamsiy$ - 'to be flattened, compressed', and the details under point 7.4.

The Mongolic suffix -gAr/-gXr has passed in other Turkic languages, see e.g. Oyrot -KXr: bilgir 'intelligent'  $\leftarrow bil$ - 'to understand, to know',  $s\ddot{a}skir$  'sensitive'  $\leftarrow s\ddot{a}s$ - 'to feel' (GOJa §9.25).

#### Examples:

arbaġar 'tattered, tousled (of hair); entangled (of plant); branchy (of tree)' ← arbay- 'to be tattered, to tousle; to come to disorder', cf. LM arbay- 'to spread (as the fingers); to become tousled or disheveled';

<sup>111</sup> Further examples from Dolgan being: ńijigir 'nachlässig, unordentlich, schlampig', tänigir 'glatt, eben'; haksagar 'aufgelockert, mürbe, porös, bröckelig', ökögör 'krumm, gebogen'.

<sup>112</sup> StachDWb 44 rightly proves that the Dolgan (and the Yakut, of course) suffix -gXr forming adjectives cannot be originated from the Mongolic derivational element -gUr forming instruments; for the latter cf. PoppeGWM §155.

bültäġir, bültäġär 'inflated, blown out, convex, swollen; small swelling' ← bültäy- 'to be inflated, to bulge, to be blown out, to swell', cf. LM bülteger 'bulging (of eyes); pop-eyed person';

jondoġor 'high and lean, lanky; majestic' ← jondoy- 'to be high and lean, to be lanky, to be drawn out; to call';

*kibigir* 'compressed, tight; well-proportioned' ← *kibiy*- 'to compress, to press anything between the feet';

kuoġaġar 'elongated, long and thin'  $\leftarrow kuoġay$ - 'to draw out the neck', cf. D kugagar 'einen dünnen, langen Hals habend', Kalmuck  $x\bar{o}x\bar{a}$ - 'sehr lang und langhalsig sein'.

### -(V)1

The standard form is -(V)l (KałMEJ 83–84), e.g. ataġastal 'offense, insult'  $\leftarrow ataġast\bar{a}$ - 'to offend, to give offense; to attack; to oppress, to trouble; to tear to pieces'. The stem-final  $^{\circ}y$ - is always dropped, e.g. d'asal 'supervision, care, organizational ability'  $\leftarrow d'asay$ - 'to look, to oversee, to manage'. There are relatively few derivatives where the base end in consonant. Moreover, these examples show inconsistency regarding the linking vowel of the suffix, so it is difficult to determine its quality, see e.g.  $\ddot{i}\ddot{g}\ddot{i}l^{113}$  'compulsion'  $\leftarrow \ddot{i}k$ - 'to press, to squeeze; to extrude; to crowd', and the only clear example with low linking vowel, i.e.  $s\ddot{o}\eta\ddot{o}l$  'sediment of any liquid (milk, koumiss)'  $\leftarrow s\ddot{o}\eta$ - 'to congeal, to subside (of milk)'.

The general function of -(V)l is to form both (1) substantives, e.g.  $\ddot{a}r\ddot{a}l$  'hope'  $\leftarrow \ddot{a}r\ddot{a}y$ - 'to hope, to attach hopes, to place trust, to await the alms',  $\check{j}a\eta sal$  'cry'  $\leftarrow \check{j}a\eta s\bar{a}$ - 'to shout, to roar'; and (2) adjectives, e.g.  $\ddot{o}nd\ddot{o}l$  'high, elevated'  $\leftarrow \ddot{o}nd\ddot{o}y$ - (intr.) 'to rise, to grow (up)', suodal 'high, heavy, awkward'  $\leftarrow suoday$ - 'to manifest high, clumsy and ridiculous figure in short dress (of tall, adult person)'. The base can be of both Turkic, e.g.  $b\ddot{i}stal$  'interruption'  $\leftarrow b\ddot{i}s\ddot{i}n$ -,  $b\ddot{i}stV$ - 'to be separated, to be torn off, to be broken; to be bifurcated (cloud), to be torn, to burst open; to die', cf. OT  $b\ddot{i}c\ddot{i}n$ - 'to cut out (sg) for oneself'; and Mongolic, e.g. kuttal 'fear, trembling, danger, horror, fright; frightening, threat'  $\leftarrow kutt\bar{a}$ - 'to frighten, to threaten; to amaze, to astonish', cf. LM guta-, gutu- 'to be(come) depressed or despondent'.

In Dolgan it forms substantives, e.g. taptal 'Liebkosung'  $\leftarrow tapt\bar{a}$ - 'möben, lieben; liebkosen' (StachGWb 46–47). As for the linking sound, there is only one example in Dolgan where the base may end in consonant, cf.  $h\ddot{o}t\ddot{o}l$  'Husten'  $\leftarrow *y\ddot{o}t$ -/ $y\ddot{o}t$ -. However, it is a very old, petrified form preserved in many Turkic languages and does hardly give help in the question of the linking sound. 115

Investigating the origin of the Yakut suffix -(V)l is beset with difficulties. It can be of both Turkic and Mongolic. Nonetheless it is accepted in the Turkological literature that the Yakut derivational element -(V)l usually goes back to Mongolic: (1) this suffix is more wide-spread in

<sup>113</sup> See its counterpart as igal id. ← igay- 'to constrain'.

<sup>114</sup> Further examples from Dolgan being: täril 'Ausstattung, Einrichtung; Vorbereitung(en); üktäl 'Treppe; überdachter Hauseingang'.

<sup>115</sup> For the Turkic data and the short description of the problems, see Károly 2005: §5.5.

Mongolic than in Turkic;<sup>116</sup> and (2) the base of the formations in question are mostly of Mongolic origin.

The Mongolic suffix -l forms nouns designating abstract ideas, cf. -l in PoppeGWM §159, e.g.  $\ddot{u}k\ddot{u}l$  'death'  $\leftarrow \ddot{u}k\ddot{u}$ - 'to die',  $\ddot{j}irgal$  'happiness'  $\leftarrow \ddot{j}irga$ - 'to be happy',  $t\ddot{o}r\ddot{o}l$  'birth'  $\leftarrow t\ddot{o}r\ddot{o}$ - 'to be born',  $a\eta karul$  'attention'  $\leftarrow a\eta kar$ - 'to pay attention, to notice'. The Turkic suffix -(X)l is discussed in detail in OTWF §3.113.

In spite of the fact that the Yakut suffix -(V)l seems to be of Mongolic origin, there are derivatives in small number, mostly petrified ones, going back to Turkic proto-forms, e.g.  $k\ddot{i}s\ddot{i}l^{117}$  'red'. The above-mentioned Dolgan  $h\ddot{o}t\ddot{o}l$  and Yakut  $s\ddot{o}t\ddot{o}l$  id. may belong in this category. GSJaLJa §274.1 discusses a non-productive suffix in -(X)l belonging to this latter category. The examples mentioned in this chapter being  $k\ddot{i}s\ddot{i}l$ ,  $na\dot{g}\ddot{i}l^{118}$  and  $s\ddot{i}sal$ . <sup>119</sup>

### Examples:

j'argil 'ringing, resonant' ← j'argiy- 'to emit sound';

käpsäl 'legend, story, rumour; speech' ← käpsä- 'to tell, to speak, to utter', D käpsäl 'Erzählung; Aussage';

satal 'skill' ← satā-, sïtā- 'to know how, to be able to', cf. LM čida- 'to be able, capable; to be able to overcome or vanquish';

*täygäl* 'big, large' ← *täygäy*- 'to increase, to become large, to bulge'.

### -(V)lgA(n)

The standard form is -(V)lgA(n) (KałMEJ 85–86; given, as in many other cases, without the linking vowel), e.g. bugulgan 'obstinate, inconstant, not definite'  $\leftarrow buguy$ - 'to be obstinate, to dig one's heel in; to rest; to behave capriciously; to be inconstant'. There is no rule for the initial vowel of the suffix, both variants can be applied to the same stem, e.g.  $si\ddot{a}tilg\ddot{a}$ ,  $s\ddot{a}t\ddot{a}lg\ddot{a}$  'ring (made of willow) in the nostrils of bull'  $\leftarrow si\ddot{a}t$ - 'to drive by hand, on rope; to conduct, to accompany',  $t\ddot{u}s\ddot{u}lg\ddot{a}$ ,  $t\ddot{u}s\ddot{u}lg\ddot{a}$ ,  $t\ddot{u}s\ddot{u}lg\ddot{a}$  'camp; vat, can'  $\leftarrow t\ddot{u}s$ - 'to fall down, to fall off, to lower; to get down'. The verbal base is usually Mongolic, e.g. sobulga, subulga 'exhausted'  $\leftarrow sob\bar{o}$ -, sobuo- 'to suffer; to be wasted (of forces), to be harassed; to grow thin, to spoil', cf. LM joba- 'to suffer, worry, grieve; to be tortured, tormented; to be in trouble', but in some cases derivatives from verbs of Turkic origin can also be found, e.g.  $t\ddot{u}s\ddot{u}lg\ddot{a}$  (see above), cf. OT  $t\ddot{u}s$ - 'to settle (somewhere); to dismount; to retire, withdraw (to somewhere); to fall (off something)'. In a single case the suffix shows the irregular form -(V)lxAy, i.e.  $n\ddot{u}ralxay$  'quiet, gentle'  $\leftarrow n\ddot{u}ray$ -

<sup>116</sup> The real equivalent of Mongolic -l in Turkic is not -(X)l, but -Xš.

<sup>117</sup> kïsïl is a very problematic word. There are two different etymologies can be found in the literature: (1) kïsïl 'red'

← kïs- 'to become red, redden' (GSJaLJa §274.1, cf. EDPT 683b–684a for its Old Turkic counterpart); and (2) kïsïl

< \*kïz+sI-(X)l (KałMJT 58 and OTWF §2.61). The second one is more plausible because of the intervocalic /s/ in

Yakut, cf. kïtar- 'to be or become red' < OT kïzar- id. After all it is a derivative in -(X)l.

<sup>118</sup> naģīl 'quiet, calm; clumsy; sluggish' seems to be a wrong example. It is of uncertain origin; it cannot be Turkic because of the initial sound /n/. KałD 7: 47 suggests Mongolic origin for naģīl connecting it to the Yakut words namīl id. and nam 'quiet, calm' ← M nam 'low; calmness, tranquility; quietness'.

<sup>119</sup> sïsal cannot be registered from Yakut dictionaries I have seen.

'to doze, to fill up; to have a little nap; to lie down for a while (of grass)', cf. Buryat dūralga 'catnap; langour'. 120

The function of -(V)lgA(n) is to form nouns designating (1) the object of the action, e.g.  $adal\dot{g}a$  'adze', cf. Mongolic atalga 'adze, carpentry tool'; and (2) the process of the action, e.g.  $j\ddot{a}rg\ddot{a}lg\ddot{a}n$  'fleeting rapid flashing; waft of warm air; mirage'  $\leftarrow j\ddot{a}rg\ddot{a}y$ - 'to flicker (from the rapidity of motion)'; or adjectives, e.g.  $\acute{n}imilg\ddot{a}n$  'solid, dense (of iron)'  $\leftarrow \acute{n}imiy$ -,  $\acute{n}ibiy$ - 'to be (com)pressed; to be shut; to shut, to clamp'.

There is only one example for this derivational element in Dolgan, namely kihalga 'Sorge' ← \*kihay-¹²¹ (StachDWb 47).

The Yakut suffix -(V)lgA(n) is of Mongolic origin, cf. the Literary Mongol examples for -lgA(n) in PoppeGWM §161, e.g. barilga 'building'  $\leftarrow$  bari- 'to build', uŋsilga 'reading'  $\leftarrow$  uŋsi- 'to read', bodolga 'opinion'  $\leftarrow$  bodo- 'to think', bosulga- 'uprising'  $\leftarrow$  bos- 'to rise'. In Mongolic it usually designates the object or process of the action (PoppeGWM §161, KałMEJ 85). The Mongolic suffix -lgA(n) is a compound of -l- and -gA(n) (KałMEJ 85, RamEAS 2: §66 (p. 137)).

### **Examples:**

d'aptalga' layers which consist of thin plates'  $\leftarrow d'aptay$ -'to put anything thin or flat to an even surface', cf. LM dabtalga 'repetition, review of work or lessons, reiteration, forging (of iron, etc.)'  $\leftarrow dabta$ -'to repeat, reiterate, to review a lesson; to forge, beat';

süpsülgän 'uneasiness' ← süpsüy- 'to worry, to be disturbed; to fuss';

tibilgän 'fidgeting by feet; large attendance' ← tibiy- 'to step forward repeating by feet, to fidget by feet'.

### -(V)mAl

The standard form is -mAl (KałMEJ 88–89), e.g. kičäm"al 'effort, care'  $\leftarrow ki\'c\"ay$ - 'to diligently start for, to oblige, to help, to worry, to be zealous; to save'. There is no example with stem-final consonant, thus the linking sound given in the head is only speculative. It is a considerably old suffix presenting only three petrified examples in the analysed corpus.

According to the examples found in PekSJ, -mAl seems to have formed only nouns, cf. xadamal, xajimal 'stubble; meadow'  $\leftarrow xadiy$ -, xoduy- 'to mow', and  $s\bar{a}mal$  'a kind of koumiss', cf. LM sagamal 'milch, milk-giving'  $\leftarrow saga$ - 'to milk'.

There are no traces of this suffix in StachDWb.

It is of Mongolic origin, cf. -mAl in PoppeGWM §168. This suffix in Mongolic generally forms nouns designating qualities, e.g. jirumal 'painted, multicolor'  $\leftarrow$  jiru- 'to paint', nekemel 'woven'  $\leftarrow$  neke- 'to weave' and sirimel 'quilted'  $\leftarrow$  siri- 'to quilt'.

<sup>120</sup> On the other hand, it is also plausible that *nāralxay* is a derivative in -(V)lxAy, cf. Mongolic -l- and -kAy.

<sup>121</sup> Cf. Yakut kïsalġa 'necessity, need; concern, effort, poverty, deprivation' ← kïsay- 'to trouble, to oppress (in need), to burden, to force'.

<sup>122</sup> KałMEJ 88 gives the following definition: "...deverbale Nomina, gewöhnlich mit der Bedeutung eines passiven Participium perfecti".

-(V)mAr -XAmAr, -MAr

The standard form is -(V)mAr (GSJaLJa §274.10; the linking vowel is not noted), e.g.  $k\ddot{a}r\ddot{c}im\ddot{a}r$  'vegetable-garden, fence'  $\leftarrow k\ddot{a}r\ddot{c}iy$ - 'to chop, to chip; to chop off little by little; to chip the surface',  $s\ddot{o}\ddot{g}\ddot{u}\ddot{m}\ddot{a}r$ ,  $s\ddot{o}\ddot{g}\ddot{u}m\ddot{a}r$  (YakS) 'extraordinary, excessive, surprising'  $\leftarrow s\ddot{o}x$ - 'to marvel, to be surprised, to amaze'. The linking vowel is usually high, but there is a single example with the low variant, i.e.  $k\ddot{u}ynamar$  'quick tempered, hot-headed'  $\leftarrow k\ddot{u}y\ddot{u}n$ -,  $k\ddot{u}ynV$ -,  $k\ddot{u}ynV$ - 'to boiled, to be cooked; to be in passion'. In some cases the suffix is used without any linking sound, e.g.  $s\ddot{u}m\ddot{a}r$  'free election, thorough selection'  $\leftarrow s\ddot{u}y$ - 'to win (in lawsuit, sport or game), to beat; to exceed, to overcome'. Nowadays it is not a productive suffix; in the past it was used with both Turkic and Mongolic stems (KałMEJ 89–90), e.g.  $t\ddot{u}s\ddot{u}m\ddot{a}r$  'camp, refuge'  $\leftarrow t\ddot{u}s$ - 'to fall down, to fall off, to lower; to get down', cf. OT  $t\ddot{u}s$ - 'to settle (somewhere); to dismount; to retire, withdraw (to somewhere); to fall (off something)'; sosumar 'unexpected, suddenly; rapidity'  $\leftarrow sosuy$ - 'to shudder from horror; to vacillate; to be frightened, to be surprised', cf. LM  $so\ddot{c}i$ -,  $t\ddot{c}o\ddot{c}i$ - 'to start in alarm, suffer a shock, become suddenly frightened or startled; to be surprised'.

The standard function of -(V)mAr is to form (1) substantives, e.g.  $k\overline{illimar}$  'vagabondage'  $\leftarrow$   $k\overline{illiy}$ - 'to become a beast', and (2) adjectives, e.g. tullumar 'separate'  $\leftarrow$  tulun-, tullV- 'to be separated, to be removed; to drop off, to push off'; sometimes simultaneously, e.g.  $xas\overline{imar}$  'persistent; persistence'  $\leftarrow$  xas- 'to dig, to pick; to hollow out (wood)'.

There is only one example in StachDWb 53, i.e.  $h\ddot{o}g\ddot{u}m\ddot{a}r$  'unüblich, ungewöhnlich, erstaunlich'  $\leftarrow h\ddot{o}k$ - 'sich wundern, erstaunt sein'.

The Yakut suffix -(V)mAr is of Mongolic origin, cf. -mAr in PoppeGWM §169 forming nouns designating suitableness, fitness, e.g. idemer 'edible'  $\leftarrow ide$ - 'to eat', ijemer 'worth seeing'  $\leftarrow ije$ - 'to see'.

# **Examples:**

iädämär 'vain; vanity, fuss, mutiny' ← iädäy- 'to fuss, to rush about, to hurry, to be disturbed; to be tangled, to be mixed; to be upset, to go crazy; to be scattered, to be entertained; to be corrupted', cf. LM egede- 'to turn sour, sour, curdle, set, coagulate';

*kïsamar* 'jealousy, zeal in the matter'  $\leftarrow$  *kïsay-* 'to trouble, to oppress (in need), to burden, to force';

*tillimär* 'reanimation' ← *tilin-*, *tillV-* 'to revive, to resuscitate, to rise again'.

#### -(V)mAy

The standard form is -(V)mAy (KałMEJ 87–88; as in many other cases, without the linking sound), e.g. alamay 'shining, clear (of sun); affectionate; tenderness'  $\leftarrow$  alay- 'to shine with full lustre'. It is difficult to say anything about the linking vowel, because the only example shows alternation, i.e. tullumay, tullamay 'wobbling, staggering'  $\leftarrow$  tulun-, tullV- 'to be separated, to be removed; to drop off, to push off'. The stem-final 'y- always disappears, cf. sūmäy, süömäy 'free election, thorough selection'  $\leftarrow$  sūy- 'to win (in lawsuit, sport or game), to beat; to exceed; 'mi 's

to overcome'. It is a rare, not productive derivational element in Yakut. KałMEJ 88 cites a denominal counterpart in +mAy, see e.g. barimay 'jeder, jedes, alle, alles'  $\leftarrow bari$  id.

It usually forms adjectives, e.g. tuppay 'tenacious'  $\leftarrow tut$ - 'to hold, to retain, to have, to contain; to take, to catch'. However, semantic shift can be observed in certain cases from adjective to substantive, cf. alamay above.

There in no counterpart in StachDWb.

The origin of -(V)mAy is of Mongolic, see Literary Mongol dagamay 'reliable, trustworthy; patient, enduring'  $\leftarrow$  daga- 'to follow, accompany, travel with; to submit oneself to, obey; to imitate; to observe, comply with' and kalčamay 'smooth and bare'  $\leftarrow$  kalči- 'to remove unevenness, level off, to remove hair from skin or fur, to scrape off'.

# Examples:

jaramay 'lean, meagre' ← jāray- 'to be wasted (physically); to become decrepit', cf. LM jagara- 'to come apart; to crack';

kičämäy 'being diligently started for' ← kičäy- 'to diligently start for, to oblige, to help, to worry, to be zealous; to save', cf. LM kičiye- 'to exert oneself, apply oneself to; to make an effort, endeavor, strive; to arrange; to take care, be cautious; to guard against, beware of'; sāmay : sāmay kïmïs 'fresh koumiss', cf. LM saga- 'to milk'.

# -(V)ŋ

The standard form is  $-(V)\eta$  (KałMEJ 94), e.g.  $k\ddot{a}lt\ddot{a}\eta$  'lame'  $\leftarrow k\ddot{a}lt\ddot{a}y$ - 'to become slanted, to bend; to become asymmetrical, unequal; to be jagged'. The linking sound varies, however, the number of examples with stem-final consonant is few, see e.g.  $s\ddot{i}sta\eta$  'sticky'  $\leftarrow s\ddot{i}s\ddot{i}n$ -,  $s\ddot{i}stV$ - 'to approach; to cling, to stick; to be inoculated (of tree); to be stuck; to be hitched; to belong' or  $\ddot{a}ti\eta$  'thunder; thunderstorm'  $\leftarrow \ddot{a}t$ - 'to speak, to utter, to say, to pronounce; to call, name; to cuckoo; to thunder'.

The general function of  $-(V)\eta$  is to form (1) adjectives, e.g.  $jappa\eta$  'large-mouthed; gawk, gawking'  $\leftarrow jappay$ - 'to open one's mouth'; and less frequently (2) substantives designating the result of the action, e.g.  $kilb\ddot{a}\eta$  'shining'  $\leftarrow kilb\ddot{a}y$ - 'to shine, to sparkle; to celebrate'.

There are only two examples belonging to this derivational element in Dolgan, i.e.  $kayi\eta$  'Schneehaufen (?)'  $\leftarrow$  \*kay- and  $hista\eta$  'klebrig'  $\leftarrow$  hihin-, histV- 'klebenbleiben' (StachDWb 38, 53; in two different entries:  $-a\eta$ ,  $-y\eta$ ).

The Yakut derivational element  $-(V)\eta$  is of Mongolic origin, cf.  $-\eta$  in PoppeGWM § 176 forming nouns designating the result of the action, e.g.  $kalda\eta$  'speck, stain'  $\leftarrow kalda$ - 'to adhere to, to infect',  $egede\eta$  'dough, sour paste'  $\leftarrow egede$ - 'to sour'.

There is a homophone suffix in Yakut, the origin of which is Turkic, see at  $-(X)\eta$ .

### **Examples:**

araŋ 'non enduring; unhealthy, feeble; chronic disease, ailment, infirmity; sickliness' ← aray'to waken from old age, to grow old';

 $d'\bar{a}rba\eta'$  free, idle; walking up and down; fair (trade)'  $\leftarrow d'\bar{a}rbay$ - 'to walk (about)';

*kiläŋ* 'shining, being glossy; lustre, gloss' ← *kiläy*- 'to be glossy, to shine by smoothness; to flood';

sarban : sarban gin- 'to spread wide suddenly' ← sarbay- 'to spread wide, to be enlarged';

söbüläŋ 'agreement, approval' ← söbülä-, söbülüö- 'to approve, to make it possible, to allow; to consider pleasant; to want'

tuollaŋ 'complete, weighty, portly' ← tuolun-, tuollV- 'to be in solid form';

# -(V)rkAy

The standard form is -(V)rkAy, e.g.  $a\eta arxay$ ,  $a\eta axxay$  'opening, gap'  $\leftarrow a\eta ay$ - 'to open (wide), be thrown open'. The linking vowel of the suffix shows variation, e.g.  $t\bar{t}arxay$  'torn, ripped',  $t\bar{t}trxay$  'constant touch'  $\leftarrow t\bar{t}t$ - 'to tear, to rip; to touch; to pummel, to stir'.

The Yakut suffix -(V)rkAy forms both adjectives and substantives, e.g.  $s\ddot{a}lt\ddot{a}rk\ddot{a}y$  'convex'  $\leftarrow$   $s\ddot{a}lt\ddot{a}y$ - 'to be rounded, swollen, extremely inflated; to thicken, to be blown at the end'.

There are no traces of this element in StachDWb.

-(V)rkAy, being a compound of -(V)r-kAy, is of Mongolic origin. The first part is a deverbal verbal suffix -rA-, cf. its modern Yakut counterpart in KałMEJ 106–109; for the second element, see Yakut -KAy. Cf. the following Literary Mongol examples: ebderkey 'scrap, fragments, debris; ruin, wreck; ruined, destroyed, broken, cracked'  $\leftarrow ebdere$ - 'to break down, fall into pieces, to fall down, decline, deteriorate, to be wrecked'  $\leftarrow ebde$ - 'to destroy (concrete or abstract objects), break, wreck, ruin, annihilate; to break up, rescind (as a resolution or agreement); to violate (as an oath, vow, rule, ethics); to transgress (as a law), to deprive (as of power, independence, or freedom); to disturb (as order or peace), to stir up (as a quarrel)' and  $\check{c}\check{o}m\ddot{u}rkey$  'indentation, depression; indented, depressed'  $\leftarrow \check{c}\check{o}m\ddot{u}re$ - 'to fall in, break down or through; to crumble, to crack, dent, develop holes, to collapse, fall down; to break into, commit burglary'  $\leftarrow \check{c}\check{o}m\ddot{u}$ - 'to pluck, pick (as fruits and flowers); to reap; to crack (as nuts); to remove the pits from fruit'.

### Examples:

ńälčärkäy, ńäččärkäy 'flat, small' ← ńälčäy-, ńäččäy- 'to flatten, to fall off';

samnarxay 'tend to drop, collapse, in the point of dropping; pulled down; worn down at the heels'  $\leftarrow$  samin-, samnV- 'to be brought down, to collapse; to fall off, to come into worse state; to perish';

saxsarxay, saxsaxay 'cracked, having bore holes; friable (earth), incompact' ← saxsay- 'to crack; to be dried; to be weakened, to shake loose (of teeth); to shake loose in the seams (of dishes)', cf. LM sagsayi- 'to be fluffy, tufty; to be disheveled, mussed up; to bristle, stand on end';

xorčorxoy, xarčarxay 'rigid, solid, tight, rough; hardness' ← xorčoy- 'to become rigid'.

#### -XA

The standard form is -XA (KałMEJ 69), e.g.  $\ddot{a}ndi\ddot{a}$  'error, danger'  $\leftarrow \ddot{a}nd\ddot{a}y$ - 'to make mistakes, to be in error; to enter rash, to make a misdeed; in negative sentences: to foresee, to find out'. It is an old, petrified suffix appearing only in some cases.

-XA forms substantives, e.g. *tatïa*, *totuo* 'scarcity, lack', cf. LM *tatagu* 'strained, stretched, taut; tight; careful; stingy; insufficient; deformed (of fingers)'.

There are no traces of this suffix in StachDWb.

The Yakut derivational elements -XA is of Mongolic origin going back to the suffix -gU. It forms nouns designating qualities resulting from the action, cf. PoppeGWM §152, e.g. katagu 'hard'  $\leftarrow kata$ - 'to dry, to become hard', sogtagu 'drunk, intoxicated'  $\leftarrow sogta$ - 'to become drunk', yadagu 'poor'  $\leftarrow yada$ - 'to be unable'.

Some old, petrified words of Turkic origin show the same phonetic changes, e.g. *bäliä* 'sign, note; mark; distinction; attribute; remarkable' goes back to a Turkic form *bälgü*, cf. OT *bälgü* 'sign, mark' the etymology of which is obscure.

-(X)č(č)X -(X)tčX

The standard form is  $-(X)\check{c}(\check{c})X$  (GSJaLJa §693), e.g.  $bati\check{c}\check{c}i$  'as much as there is, in abundance'  $\leftarrow bat$ - 'to enter, to pass, to be placed, to be accommodated; to occur, to be plotted; to get used/accustomed (mostly in negative forms)'. In the dialects special forms in  $-(X)t\check{c}X$  can be found, e.g.  $digdat\check{c}i$ ,  $digda\check{c}\check{c}i$  'strongly swelled'  $\leftarrow digday$ - 'to swell (of belly), to be inflated, to shake up, to make foam'. The alternation of  $-(X)t\check{c}X \sim -(X)\check{c}\check{c}X$  is similar to that of  $-(\bar{A})t\check{c}X \sim -(\bar{A})\check{c}\check{c}X$ . Short forms in  $-\check{c}X$  appear after stem-final /r/, e.g.  $kitar\check{c}i$ ,  $kitat\check{c}i$  'until it reddens, becomes red'  $\leftarrow kitar$ - 'to become red, to redden',  $olor\check{c}u$ ,  $olot\check{c}u$ ,  $olo\check{c}\check{c}u$  'constantly sitting; upright, downward by bottom (of dishes)'  $\leftarrow olor$ - 'to sit (down); to give birth to; to be located, to stay; to live'.

The suffix  $-(X)\check{c}(\check{c})X$  forms adverbs from (1) onomatopoeic, e.g. bakkiračči 'loudly, by loud voice'  $\leftarrow$  bakkirā- 'to cry loudly, to howl (of baby)'; (2) descriptive, e.g. ariličči : ariličči körön 'looking by large hazel-coloured eyes'  $\leftarrow$  ariliy- 'to turn yellow', and (3) other verbs: ärgičči 'all (a)round' : ärgičči kör- 'to look around'  $\leftarrow$  ärgiy- 'to be twirled, turned, twisted; to turn around, to be turned, wrapped; to return home, to the native land'.

StachDWb 41, 41–42 discusses the (1)  $-(X)\check{c}\check{c}X$  and (2)  $-\check{c}X$  forms in separate chapters suggesting a possible etymological connection between them. The form and function of these Dolgan counterparts are the same as in Yakut, e.g.  $kon\check{c}o\check{c}\check{c}u$  (Adv.) 'aufrecht'  $\leftarrow$  \* $kon\check{c}oy$ -,  $kar\bar{a}r\check{c}i:k.\ bar$ - 'dunkel/schwarz werden [eigentl.: zu werden beginnen]'  $\leftarrow$   $kar\bar{a}r$ - 'dunkel/schwarz werden."

The Yakut suffix  $-(X)\check{c}(\check{c})X$  can be originated from the Mongolic converbum imperfecti  $-\check{C}U$  expressing an action performed simultaneously with the main action, see e.g.  $ab\check{c}u$  'taking',  $\ddot{c}g\check{c}\ddot{u}$  'giving',  $kele\check{j}\ddot{u}$  'saying', etc. (PoppeGWM §372). The Mongolic  $\check{c} \to Yakut \, \check{c}\check{c} \sim t\check{c}$  sound

<sup>123</sup> Further examples from Dolgan being: tögürüččü (Adv.) 'um ... herum, rings(her)um'; kïtarčï : k. bar- 'rot/heiß werden, zu glühen beginnen', turuorču 'steil, fast senkrecht'.

change is thought to be a simple gemination (KałMEJ 112–113), see  $-(\bar{A})\check{c}\check{c}X(k)$ , the origin of which is also Mongolic, for the same phenomenon. On the other hand, scholars had an opinion formerly that the Yakut suffix  $-(X)\check{c}(\check{c})X/-(X)t\check{c}X$  could be interpreted as a compound of the Yakut causative suffix -(X)t-, originally being part of the base verb, and the Mongolic  $-\check{C}U$ . This idea does not seem to be acceptable, cf. KałMEJ 112 and StachDWb 41.

# Examples:

araččï 'with difficulty, barely' ← aray- 'to waken from old age, to grow old';

boybočču 'fatly' ← boyboy- 'to be fat';

bujuručču 'curly' ← bujuruy- 'to grow curly-headed, to curl', cf. LM bujiy- 'to curl';

basïččï 'excessively (to draw from)' ← basïy- 'to overcome, to overpower, to conquer, to exceed';

kältäčči 'one-sidedly, unevenly, slantwise' ← kältäy- 'to become slanted, to bend; to become assimetrical, unequal; to be jagged', cf. LM kelteyi- 'to incline from the perpendicular, lean, be crooked';

kurdurġačči 'so that crunches' ← kurdurġā- 'to crunch; to cluck', cf. LM xurd xard 'adverbial phrase used to express the noise of friction, sudden movement, etc.';

*ničiričči* 'thoroughly, diligently' ← *ničiriy*- 'to try, to endeavour';

sasarči, sasačči 'so that turns yellow' ← sasar- 'to turn yellow; to redden; to suffer jaundice', cf. OT yašar- 'to be, or become green; to be, or become moist'.

 $-XlA\eta$ ,  $-lA\eta$ 

The standard form is  $-(X)lA\eta$  (GSJaLJa §180), <sup>125</sup> e.g.  $b\bar{i}sala\eta$  'rescuing'  $\leftarrow b\bar{i}s\bar{a}$ - 'to free sy from sg; to throw out, to take away; to clean, to free, to rescue, to protect, to save, to preserve, to guard'. There is only one case where the suffix behaves dominant, see  $batt\bar{i}la\eta$ ,  $battala\eta$  'pressure, oppression; persecution; oppression'  $\leftarrow batt\bar{a}$ - 'to press, to suppress, to oppress; to chase, to banish, to offend; to burden'. The linking sound is not applied (or maybe disappeared?) in case of  $talla\eta$ , tallan 'perfect'  $\leftarrow tal$ - 'to choose, select' because of haplology.

-(X) $IA\eta$  forms action nouns, nouns designating abstract ideas and in rare cases adjectives. The base verb is usually of Turkic origin, e.g.  $taptala\eta$  'love'  $\leftarrow tapt\bar{a}$ - 'to love; to caress', cf. OT tapla- 'to be pleased, satisfied (with something Acc.)'; only one example can be found with Mongolic stem, i.e.  $sobolo\eta$  'pay, salary; labour, suffering'  $\leftarrow sob\bar{o}$ -, sobuo- 'to work, to suffer; to be wasted (of forces), to be harassed; to grow thin, to spoil', cf. LM joba- 'to suffer, worry, grieve; to be tortured, tormented; to be in trouble'.

There is only one example in Dolgan (StachDWb 47) belonging to this category, i.e. hinnalan 'Erholung', cf. OT inč 'Ruhe, Frieden'.

<sup>124</sup> For the details, see BöthlSJ §527 (an example for wrongly given (causative) base is äriličči 'mit rollenden Augen'
← ärilit- 'die Augen rollen', correctly it comes from äriliy- 'to rise above the others by attributes (mainly by large round eyes) (of young people); to be twirled (of the eyes)'), HarSJaJa §168.1 and JastrGJaJa §171.

<sup>125</sup> GSJaLJa §180 gives an allomorph in  $-\eta$  on the ground of  $s\ddot{o}b\ddot{u}l\ddot{a}\eta$  'agreement' ( $\leftarrow s\ddot{o}b\ddot{u}l\ddot{a}$ - 'to agree'). This formative clearly does not belong together with  $-lA\eta$ .

The Yakut formative  $-(X)lA\eta$  is of Mongolic origin, cf.  $-lA\eta$  in PoppeGWM §160 forming nouns designating abstract ideas, an object undergoing an action, e.g.  $kadula\eta$  'hayfield'  $\leftarrow kadu$ - 'to mow',  $jobala\eta$  'pain, suffering'  $\leftarrow joba$ - 'to suffer',  $jirgala\eta$  'happiness'  $\leftarrow jirga$ - 'to be happy'.

KałMEJ 84, on the base of RamEAS 2: §109, hesitates whether  $-(X)lA\eta$  is a loan element, or part of the heredity because the stems in the Yakut examples are of almost always Turkic origin. However, statements of KałMEJ *loc. cit.* are wrong: there is no such a formative in Turkic.

## Examples:

astilaŋ 'satisfactory; pleasant; satisfactoriness; pleasantness' ← astiy- 'to be stocked by edible products; to ripen, discharge, to rot (of abscess, wound)', cf. OT aš 'food';

 $kist\ddot{a}l\ddot{a}\eta$  'secret'  $\leftarrow kist\ddot{a}$ -,  $kisti\ddot{a}$ - 'to hide, to conceal, to cover; to bury';

 $s\ddot{i}st\ddot{i}la\eta$ :  $s\ddot{i}st\ddot{i}la\eta n\bar{a}x$  'sticky'  $\leftarrow s\ddot{i}s\ddot{i}n$ -,  $s\ddot{i}stV$ - 'to approach; to cling, to stick; to be inoculated (of tree); to be stuck; to be hitched; to belong'.

## -(X)ljXAr

The standard form of this suffix is -(X)ljXAr (KałMEJ 84–85), e.g. sukkuljuor, sukkul'uor, sukkul'uor opening (of mouth), end of throat'  $\leftarrow sukkuy$ - 'to strew, to douse; to pour out (grain); to flow, to fill, to pour, to scatter'. It is a very rare and old derivational element. There is no example where the base ends in consonant, thus the linking sound is only speculative. KałMEJ  $loc.\ cit.$  cites some data, the base of which cannot be observed in Yakut, i.e. mogoljuor, moguljuor 'stumpf' and soljuor 'Glitschigkeit'.

It forms both adjectives and substantives, cf. the examples above.

There is no corresponding suffix discussed in StachDWb.

The origin of -(X)ljXAr is Mongolic. It is a compound of -ljA- and -gUr. The first is a deverbal verbal suffix expressing durativeness, cf. PoppeGWM §239, e.g. nayigulja- 'to bob up and down'  $\leftarrow$  nayigu- 'swing', gaŋkulja- 'to rock'  $\leftarrow$  gaŋku- 'to swing'. The second is similar in form to the Literary Mongol suffix -gUr forming names of tools (cf. in -Xr), but they are surely not identical because of the differences in semantics, see e.g. LM gilbaljagur 'chestnut with spackles (of the color of horses)'  $\leftarrow$  gilbalja- 'to flash, shine, beam, glitter'  $\leftarrow$  gilbay- 'to glitter, glimmer; to dazzle' and darbaljagur 'one who usually opens his mouth wide when speaking or laughing'  $\leftarrow$  darbalja- 'to float, billow, flutter (of a flag, sail, or garment), to move (of something wide-open or gaping)'  $\leftarrow$  darbay- 'to be wide, stay open, gape (of mouth)'.

<sup>126</sup> It can be observed in Yakut as an independent suffix, see e.g. kilbäljiy- 'to shine' ← kilbäy- 'to shine, to sparkle; to celebrate'.

# **Examples:**

namiljiar 'fatty part of meat on the back'  $\leftarrow$  namiy- 'to bend limpy, to hang down limpy, fall down', <sup>127</sup> cf. LM namulja- 'to be agitated; to tremble, shake; to move up and down'.

 $\check{coguljuor}$  'top of the head; tip'  $\leftarrow \check{coguy}$ - 'to nod the head fast; to speak briskly nodding the head; to speak loudly'.

### -(X)mAġAy

The standard form is  $-mA\dot{g}Ay$  (KałMEJ 87), e.g. alama $\dot{g}ay$  'dear, amiable; affectionate, affable, gracious'  $\leftarrow$  alay- 'to shine with full lustre'. It is a very rare, unproductive suffix. There is no example with stem-final consonant, thus the linking sound cannot be investigated.

- $(X)mA\dot{g}Ay$  forms adjectives, e.g.  $k\ddot{a}d\ddot{a}m\ddot{a}\dot{g}\ddot{a}y$  'intractable, irresolute, obstinate',  $k\ddot{a}t\ddot{a}m\ddot{a}\dot{g}\ddot{a}y$  'being waited until, inclined to wait until; irresolute in behaviour; prudent'  $\leftarrow k\ddot{a}t\ddot{a}$ -,  $k\ddot{a}t\ddot{a}$ - 'to await, to wait (until); to guard, to take care, to protect, to save, to store, to preserve'.

There are no traces of this suffix in StachDWb.

-(X) $mA\dot{g}Ay$  is of Mongolic origin, cf. -mAgAy and -mkAy in PoppeGWM §167 forming nouns designating inclination or ability to act, e.g. surumagay 'gifted'  $\leftarrow sur$ - 'to learn', umtamkay 'sleepy'  $\leftarrow umta$ - 'to sleep', idemkey 'voracious'  $\leftarrow ide$ - 'to eat'.

# Examples:

küčümä $\dot{g}$ ä $\dot{g}$ y'difficult, burdensome; burden; trouble, misfortune'  $\leftarrow$  \*küčüy-; usuruma $\dot{g}$ a $\dot{g}$ y : usuruma $\dot{g}$ a $\dot{g}$ y mas 'rather bad tree'  $\leftarrow$  \*usuruy-.

-(X)m $\acute{n}X$  -(X)m $\acute{p}X$ , -(X)m $\acute{p}X$ 

The standard form is  $-(X)m\acute{n}X$  (GSJaLJa §197), e.g.  $asam\acute{n}\ddot{i}$  'the ability of consuming a large quantity of food'  $\leftarrow as\ddot{a}$ - 'to eat; to drink; to feed'. Allomorphs in  $-(X)m\check{j}X$  and  $-(X)m\check{c}X$  can also be found in the dictionaries, e.g.  $b\ddot{a}rim\check{j}i$ ,  $b\ddot{a}rim\acute{n}i$  'gift; donation, sacrifice'  $\leftarrow bi\ddot{a}r$ - 'to give, to transfer, to render',  $\ddot{o}s\ddot{u}\ddot{o}m\breve{c}\ddot{u}$  'vengeance, spite'  $\leftarrow \ddot{o}s\ddot{o}$ -,  $\ddot{o}s\ddot{u}\ddot{o}$ - 'to quarrel, to take vengeance'. The base can be of both Turkic and Mongolic origin, e.g.  $bulum\check{j}u$ ,  $bulum\acute{n}u$  'illegitimate child, child born out of wedlock'  $\leftarrow bul$ - 'to find; to acquire, to obtain; to meet; to attend', cf. OT bul- 'to find; to obtain';  $t\ddot{o}g\ddot{u}r\ddot{u}m\acute{n}\ddot{u}$  'circle'  $\leftarrow t\ddot{o}g\ddot{u}r\ddot{u}y$ - 'to go around, to surround; to turn', cf. LM  $t\ddot{o}g\ddot{u}ri$ - 'to be lost, miss one's way; to fall into disorder, be at a loss; to be confused, be mistaken; to wander astray'. The stem final  $^{\circ}n$ - is always dropped in derivation, e.g.  $satam\ddot{j}i$ ,  $satam\acute{n}i$ ,  $s\ddot{i}tam\ddot{j}i$  'fitness, convenience'  $\leftarrow satan$ -,  $s\ddot{i}tan$ - 'to take place, to succeed'. This rule implies the question whether the Yakut word  $xorom\breve{j}u$ , xoromd'u,  $xorom\acute{n}u$ ,  $xorom\acute{n$ 

The standard function of -(X)mnX is to form (1) abstract nouns, e.g.  $\ddot{a}r\ddot{a}mni$ ,  $\ddot{a}r\ddot{a}mji$  'hope'  $\leftarrow$   $\ddot{a}r\ddot{a}y$ - 'to hope, to attach hopes, to place trust, to await the alms'; and (2) concrete nouns, e.g.

<sup>127</sup> Sometimes the -ljXy- derivative of the base is also presented in Yakut, see e.g. namiljiy- 'to sway'.

bürümjü 'cap' ← bürün- 'to be covered, to be clothed, to be muffled in, to be wrapped; to dress'.

There are no examples in StachDWb for this derivational element.

The origin of the Yakut suffix  $-(X)m\acute{n}X$  is of Mongolic. Cf.  $-m\~{j}i$  in PoppeGWM §171 forming nouns designating abstract ideas, e.g.  $serem\~{j}i$  'vigilance'  $\leftarrow sere$ - 'to be awaken',  $ilgam\~{j}i$  'difference'  $\leftarrow ilga$ - 'to distinguish',  $bolgom\~{j}i$  'precaution'  $\leftarrow bolgo$ - 'to be cautious, to take care',  $ukam\~{j}i$  'understanding'  $\leftarrow uka$ - 'to understand'. This Mongolic suffix has passed in Tuvan as  $-m\~{c}A$ , e.g.  $\~{c}\"{a}dim\~{c}\~{a}$  'success; reaching'  $\leftarrow \~{c}\~{a}t$ - 'to reach' (GTJa §195). For the distribution of the allomorphs, cf. section 7.6.

### Examples:

bulāmńi<sup>128</sup> 'mixture (e.g. of good and bad meat)' ← bulā- 'to mix anything uniform, to stir slowly, to intermix, to mix up; to knead; to interfere (to disturb); to mix up (to lead into confusion)', cf. OT bulga- 'to stir (a liquid, etc.); to confuse, disturb (someone), produce a state of disorder':

öyömjü 'support' ← öyön- 'to be supported, to be propped up';

tokurumču 'bend' ← tokuruy- 'to bend, to get crooked, to be bent; to turn aside', cf. LM dokiy- 'to become bent, crooked, or stooping'.

-(X)msAx -(X)mtAx, -(X)msXk

The standard form is -(X)msAx (GSJaLJa §259), and there is a variant in -(X)msXk, which is very rare, e.g.  $a\tilde{y}\tilde{i}r\dot{g}amsax$ ,  $a\tilde{y}\tilde{i}r\dot{g}amsik$  'one who fears to do against the rules'  $\leftarrow a\tilde{y}\tilde{i}r\dot{g}a\bar{a}$ - 'to do not make up ones mind to do against the rules, rites; to fear sin, to be warned to sin'. There are only few examples in -(X)mtAx, see  $k\bar{i}rimt\ddot{a}x$  'easily seduceable'  $\leftarrow k\bar{i}r$ - 'to enter',  $sirg\ddot{a}mt\ddot{a}x$ ,  $s\bar{i}rg\ddot{a}mt\ddot{a}x$  'squeamish; fearful; kicking (of horse)'  $\leftarrow sirg\ddot{a}n$ -,  $s\bar{i}rg\ddot{a}n$ - 'to despise, to find contrary; to be frightened, to fear'. The stem-final segment  $^{\circ}Vy$ - usually remains intact, e.g.  $d'ulay\ddot{i}msax$  'coward, timid'  $\leftarrow d'ulay$ - 'not to dare, to quail, to be afraid of, to experience the feeling of fear', however, there are exceptions, e.g.  $kirbigims\ddot{a}x$  'timid, bashful'  $\leftarrow kirbigiy$ - 'to quail, to be flustered, to be shamed'. The stem-final  $^{\circ}n$ - is always dropped, e.g.  $sirg\ddot{a}ms\ddot{a}x$  'squeamish'  $\leftarrow sirg\ddot{a}n$ -,  $s\bar{i}rg\ddot{a}n$ - 'to despise, to find contrary; to be frightened, to fear', cf. -(X)mnX for the same phenomenon.

The general function of -(X)msAx is to form adjectives designating special feature, behaviour, or habit of a person, e.g.  $kirbigims\ddot{a}x$  'timid, bashful'  $\leftarrow kirbigiy$ - 'to quail, to be flustered, to be shamed'. It can also be used for animals, e.g.  $i\check{c}\check{c}itims\ddot{a}x$  'getting very accustomed to the owner (of bull)'  $\leftarrow i\check{c}\check{c}itiy$ - 'to begin to resemble the owner; to get accustomed to the owner (of horse, bull)'.

Only the denominal variant of this suffix can be found in Dolgan, e.g. bilīmsäk 'wißbegierig' bilī 'Wissen, Erkenntnis', ogomsok 'Kinder liebend' ogo 'Kind' (StachDWb 25–26). Dolgan

<sup>128</sup> The preservation of the stem-final long vowel is an irregular behaviour.

also presents the denominal variant of Yakut -(X)msXk, e.g. kihimsik '[jemand,] der sich für einen richtigen Menschen hält'  $\leftarrow kihi$  'Mensch; Mann' (StachDWb 26).

The derivational element -(X)msAx is of Mongolic origin, see Buryat +msAg in PoppeBG §4.21.2.d forming adjectives, e.g. yexemseg 'haughty'  $\leftarrow$  yexe 'big, great', goyomsog 'dressy'  $\leftarrow$  goyo 'pretty, handsome'. The question of deverbalization of denominal nominals is discussed in details in section 7.9. The variant -(X)msXk is related to the Mongolic suffix -msig(tAy) discussed in PoppeGWM §173 that forms nouns designating ability to evoke someone's action, e.g. gayikamsigtay 'wonderful, amazing'  $\leftarrow$  gayika- 'to be astonished', ayumsig(tay) 'dreadful, horrible'  $\leftarrow$  ayu- 'to be frightened', cf. the Buryat counterpart in -mšAg(tAy) in PoppeBG §4.24.9. In Yakut both suffixes have denominal pair, see +(X)msAx forming adjectives, e.g. atamsax 'one who loves his/her father'  $\leftarrow$  ata 'father'; and +(X)msXk also forming adjectives, e.g.  $\ddot{u}t\ddot{u}\ddot{o}ms\ddot{u}k$  'benevolent, swaggering'  $\leftarrow$   $\ddot{u}t\ddot{u}\ddot{o}$  'good' (GSJaLJa §259). GSJaLJa loc. cit. suggests, without details, that the Yakut suffix  $\pm(X)msAx$  is a compound of  $\pm(X)m$  and  $\pm sAx$ . To complicate the matter even further, see StachDWb 26 who broaches some seriously difficult questions on the origin of the suffixes in question.

## Examples:

baġarïmsax 'being envious, one who is envy' ← baġar- 'to want, to desire, to envy; to fall in love', cf. LM bakara- 'to be pleased, have pleasure, to be excited with joy, to be content, feel satisfaction';

kördömsöx 'petitioner, beggar, bigot' ← kördö-, kördüö- 'to search for; to request; to claim', cf. OT közlä- 'to keep under observation';

sosuyumtax 'fearful' ← sosuy- 'to shudder from horror; to vacillate; to be frightened, to be surprised', cf. LM čoči-, soči- 'to start in alarm, suffer a shock, become suddenly frightened or startled; to be surprised;

tiritimsäx 'readily perspiring' ← tirit- 'to sweat', cf. OT tärit- 'to sweat'.

-(X)mtAġAy -XmtAġAs

The standard form is  $-(X)mtA\dot{g}Ay$  (GSJaLJa §268), e.g. abarïmtaġay 'fretful, grumpy'  $\leftarrow$  abar- 'to be angry; to be furious'. The stem-final °y- is usually dropped, however, it can remain intact, e.g. bugumtaġay, buguyumtaġay 'obstinate, inconstant, not definite'  $\leftarrow$  buguy- 'to be obstinate, to dig one's heel in; to rest; to behave capriciously; to be inconstant'. A variant in -XmtAġAs, with dominant vowel, can be registered, e.g. barïllïmtaġas 'timorous, a bit coward'  $\leftarrow$  barïllā- 'to be afraid, to quail'. The stem final consonant /n/, usually the deverbal verbal suffix -(X)n-, can be dropped, e.g. kuttamtaġay 'timid, cowardly, coward'  $\leftarrow$  kuttan- 'to fear, to be afraid of, to frighten; to burn (of building, of church)'; in some cases both forms can be registered, e.g.

<sup>129</sup> Although it is unclear how the two suffixes -(X)msAx and -(X)msXk are related to each other, it would be logic to handle them in two separate entries, however, there are only two examples for -(X)msXk, i.e. ayı̃rġamsik, see above, and xayġamsik, xayaġamsik 'praiseworthy, creditable' ← xayġan-, xayaġan- 'to be praised, famous', and I have left them together.

kičigilamtaģay 'ticklish', kičigilanimtaģay id. ← kičigilan- 'to undergo ticklish' (GSJaLJa §268, KałMEJ 92).

The function of -(X)mtAgAy is to form adjectives designating tendency, habitualness, special capability for action or state, e.g. *itirimtägäy* 'becoming intoxicated (soon)'  $\leftarrow$  *itir-* 'to become intoxicated, to overindulge'; in rare cases semantic split from adjective to substantive can be observed, e.g. *asïnïmtagay* 'merciful, pitiful, lenient; mercy, pity'  $\leftarrow$  *asïn-* 'to feel sorry, to grieve, to regret, to commiserate; to take care of, to fondle; to regret (one's failure)'. The base verb can be of Mongolic, or even Russian origin, but in most cases it is of Turkic, see e.g. *sosumtagay* 'fearful; one who has glandular swelling'  $\leftarrow$  *sosuy-* 'to shudder from horror; to vacillate; to be frightened, to be surprised', cf. LM *čoči-*, *soči-* 'to start in alarm, suffer a shock, become suddenly frightened or startled; to be surprised'; *basībalīmtagay*  $\sim$  *basībamtagay* 'dankbar'  $\leftarrow$  *basībalā-* 'to thank for sg', cf. Russian *cnacu6o* 'thanks'; and *bulumtagay* 'resourceful'  $\leftarrow$  *bul-* 'to find; to acquire, to obtain; to meet; to attend', cf. OT *bul-* 'to find; to obtain' (KałMEJ 92).

There is no corresponding suffix in StachDWb.

The suffix  $-(X)mtA\dot{g}Ay$  is of Mongolic origin (KałMEJ 92), cf. *ijemtegey* 'shy, bashful'  $\leftarrow$  *ije* 'to be or feel ashamed', *orumtagay* 'inclined or tending to enter, join, etc.'  $\leftarrow$  *oru*- 'to enter, go or come into a place, ...'. <sup>131</sup>  $-XmtA\dot{g}As$  seems to be a compound suffix of  $-(X)mtA\dot{g}Ay$  and an uncertain element in +(V)s, or it may be the influence of a certain suffix ending in °gAs. There are only two examples in this category; semantic differences cannot be demonstrated, the main difference between the two forms is morphophonological in nature:  $-XmtA\dot{g}As$  has a dominant vowel.

### Examples:

julurumtaġay 'zealous, without restraint, that is striven forward' ← juluruy- 'to go forward, to dash against sy, to strain excessively; to enter in spite of prohibition';

 $k\bar{l}s\bar{l}r\bar{l}mtagay$  'irascible'  $\leftarrow k\bar{l}s\bar{l}r$ - 'to be angry, to be annoyed, to be indignant, to fly into a rage, to be irritated';

 $ma\eta \ddot{i} ram ta \dot{g} ay$  'lower (of cow)'  $\leftarrow ma\eta \ddot{i} r \ddot{a}$ - 'to low, to roar (of livestock)';

tuluyumtaġay 'patient' ← tuluy- 'to suffer, to undergo; to abstain';

xobugunamtaġay, xobuŋnamtaġay 'grumbling, grumbler'  $\leftarrow$  xobugunay-, xobugnay-, xobuŋnay- 'to slander; to grumble'.

-XmtXA -XmsXA

The standard form is -XmtXA (GSJaLJa §269), however we can find words in -XmsXA, e.g. būtārimtiā 'executive'  $\leftarrow$  būtār- 'to end, to finish, to conclude; to work off; to manage, to succeed; to help to do a service; to destroy; to strike, to conquer', kātirimsiā 'sufficiently wide'  $\leftarrow$  kātirā-, kātiriā- 'to be enlarged'. The initial vowel of the suffix is dominant, see barīllīmtīa

<sup>130</sup> In KałMEJ 92 these data are cited from PekSJ (Wrtb. 540), which I could not find anywhere.

<sup>131</sup> It is not discussed in PoppeGWM.

'coward, timid'  $\leftarrow$  barillā- 'to be afraid, to quail'; for dominancy, see section 7.5. The stem-final 'y- usually remains intact, e.g. käntäyimtiä 'inclined to wait for tip'  $\leftarrow$  käntäy- 'to greedy wait, to expect tip'.

The general function of -XmtXA is to form adjectives designating special tendency, inclination, ability to fulfil an action characterized by the base verb, <sup>132</sup> e.g. batimtia 'easily accommodating, entering'  $\leftarrow$  bat- 'to enter, to pass, to be placed, to be accommodated; to occur, to be plotted; to get used/accustomed (mostly in negative forms)', käpsätimtiä 'talkative'  $\leftarrow$  käpsät- 'to cause to say; to speak, to talk, to converse, to negotiate; to arrange for, to betroth'. The base verb can be of Mongolic origin, but in most cases it is of Turkic, see e.g. barimtia 'ready to leave (to go); being well made (of tea)'  $\leftarrow$  bar- 'to go, to leave, to fly away; to descent; to walk', cf. OT bar- 'to go (away)', baġarimtia 'being envious'  $\leftarrow$  baġar- 'to want, to desire, to envy; to fall in love', cf. LM bakara- 'to be pleased, have pleasure; to be excited with joy; to be content, feel satisfaction'.

There are no traces of this suffix in StachDWb.

-XmtXA is of Mongolic origin (KałMEJ 93–94), cf. -mtAģU/-mdAģU<sup>133</sup> forming adjectives, e.g. nayramdagu 'harmonious, peaceable, gentle, friendly'  $\leftarrow$  nayra- 'to be in harmony, agreement, order', takimdagu 'filial piety, respect for one's parents and elders'  $\leftarrow$  taki- 'to sacrifice, make an offering; to revere, worship'.

### Examples:

kïtarïmsïa, kïtarïmtïa 'reddish' ← kïtar- 'to become red, to redden', cf. OT kïzar- 'to be, or become red';

ölörümtüö 'inclined to kill' ← ölör- 'to kill, to ruin, to beat; to hurt; to spoil; to distress; to refute', cf. OT ölör- 'to kill';

tiritimtiä 'readily perspiring' ← tirit- 'to sweat', cf. OT tärit- 'to sweat';

toηumtuo 'cold, chilly, one who fears the cold, frozen turf'  $\leftarrow$  toη- 'to shiver, to feel cold, to freeze', cf. OT toη- 'to be frozen hard';

*ülüyümtüö* 'chilly' ← *ülüy*- 'to be chilly, to freeze'.

### -X̄n

The standard form is -Xn (GSJaLJa §274.8), e.g.  $im\bar{\imath}n$  'tepid; tepidly'  $\leftarrow imiy$ - 'to become soft, to become soft or warm (weather), to be warmed'. It is an old, unproductive suffix.

-Xn mainly forms adjectives and, secondarily, adverbs, e.g.  $m\ddot{u}l\ddot{u}n$  'comparatively quiet (of weather); tepid; quietly, modestly'  $\leftarrow m\ddot{u}l\ddot{u}y$ - 'to calm down (of weather); to soften'. In some cases substantivized forms appear, e.g.  $\acute{n}ul\ddot{u}n$ ,  $\acute{n}ulun$  'fresh; unleavened bread'  $\leftarrow \acute{n}uluy$ - 'to become fresh'.

There is no example for this element in StachDWb.

<sup>132</sup> KałMEJ 93 gives the following definition: "bereitwillig etwas tun, etwas gern (leicht, usw.) tuend (werdend), eine Neigung zu ... habend".

<sup>133</sup> It is most likely a compound of -m+tA/dA-gU, see in PoppeGWM respectively.

The Yakut derivational element  $-\bar{X}n$  is of Mongolic origin going back to the proto-form -gXn, cf. Literary Mongol -gUn forming nouns designating qualities or abstract nouns, e.g. kalagun 'hot'  $\leftarrow kala$ - 'to become warm' and  $medegdeg\ddot{u}n$  'object of study'  $\leftarrow medegde$ - 'to be known'.

There is a similar suffix in Turkic, cf. -gXn in OTWF §3.112 denoting the agent or the object, e.g. turkun 'stationary; (of water) stagnant'  $\leftarrow tur$ - 'to stand (upright)', tutgun 'prisoner'  $\leftarrow tut$ - 'to hold, grasp, seize'. The only derivative that may belong here is the Yakut word  $oy\bar{u}n$ , oyun 'Shaman'  $\leftarrow oy$ - 'to jump or leap, to skip; to jump over, to jump aside; to rise above the horizon (of the Sun)'. Although the etymology is dubious, it seems to be a derivative of an uncertain verb \*oy-, cf. Old Turkic oyuk 'mirage, landmark'.

# Examples:

kösün 'rigid (of material, of skin), inflexible (of tree); clumsy, heavy; rough, dry; clumsiness' ← kösüy- 'to become numb, to grow torpid, to harden, to freeze', cf. LM kösigün 'hard, uneven, rough; stubborn, obstinate; rude, impolite' ← kösi- 'to harden, stiffen, become stiff (body, tongue, etc.); to fall asleep (of a limb); to become torpid or numb; to be[come] petrified; to coagulate; to contradict, object; to be[come] obstinate';

kötün 'useless, vain; in vain, unnecessarily' ← köt- 'to sew loosely; to do sg hastily'; särīn, sörūn 'cool' ← siäriy- 'to shiver, to freeze' does not belong here; cf. LM serigün 'cool, fresh', seregün 'awaken; vigilant' ← sere-, seri- 'to awaken, revive; to recover consciousness;

 $-(X)\eta X$   $-(X)gX, -(X)\eta A$ 

to become sober; to keep vigil; to learn, find out; to mistrust'.

The standard form is  $-(X)\eta X$  (KałMEJ 95), e.g. jägjiŋi 'clear, cloudless (day)'  $\leftarrow$  jägjiy- 'to be cleaned from clouds, to clear (of the sky); to be encouraged, to be moderated, to be calmed, to rest; to get better'. This suffix is discussed in the literature as  $-\eta X$ , however, a linking sound can be clearly detected in certain derivatives, see e.g. täyiŋi 'distant'  $\leftarrow$  täy- 'to avoid, to be moved away, to be removed, to reject'. There is an irregular form where the suffix has denasalized, i.e. soyugu, soyuŋu 'cool'  $\leftarrow$  soy- 'to cool, chill (of tea), to be cooled, chilled'. There is a sub-phonemic variant in  $-(X)\eta A$ , e.g. sāraŋa, sāraŋi 'fluctuation; fluctuating'  $\leftarrow$  sārā- 'to think over, to meditate, to vary; to slow down, to stop; to remain', these forms might appear due to the influence of words ending in  ${}^{\circ}\eta A$ , see e.g. xaraŋa 'dark; darkness; haze'.

 $-(X)\eta X$  mostly forms adjectives, but in some cases semantic split from adjective to substantive may take place, e.g.  $jada\eta i$ ,  $jaja\eta i$  'pauper, poor, wretched; poverty, wretchedness'  $\leftarrow jad\bar{a}$ -,  $jaj\bar{a}$ - 'to weaken'.

There is no counterpart of this suffix in StachDWb.

The Yakut suffix  $-(X)\eta X$  is of Mongolic origin, cf. Buryat  $-\eta i$  in PoppeBG §4.24.11 forming adjectives, e.g. sesegle $\eta i$  'blossoming, flourishing'  $\leftarrow$  sesegle- 'to blossom', xata $\eta i$  'dry, emaciated'  $\leftarrow$  xata- 'to dry up, to become lean'. According to KałMEJ 95, the Mongolic suffix

<sup>134</sup> Cf. Dolgan oyūn 'Schamane' ← oy- 'hüpfen, springen' (StachDWb 54–55).

- $\eta gi$  can be analysed as a compound of - $\eta$  and +ki. For the details of these elements, see -(V) $\eta$  and -kX respectively. KałMEJ 95 rightly says that the Yakut suffix -(X) $\eta X$  has no connection with the Mongolic one - $\eta gUy$  forming nouns designating the result of the action, cf. PoppeGWM §177.

### Examples:

čočoŋo 'adolescent' ← čočoy- 'to project; to stick out, to swell, to reveal', cf. LM čoči- 'to swell (of glands)';

öküηü 'gotten dry on its surface' ← öküy- 'to get dry on its surface; to rise';

 $s\bar{a}ra\eta\ddot{i}$  'fluctuation; awkward; fluctuating'  $\leftarrow s\bar{a}r\bar{a}$ - 'to think over, to meditate, to vary; to slow down, to stop; to remain', cf. LM sagara- 'to come apart, come undone (as a knot); to break up; to fail, to weaken, diminish, lessen';

sïrdaŋa 'radiance (of the Sun, Moon or lightning), glittering, bright light; the dawn' ← sïrdā- 'to brighten, to become clear (sky), to dawn, to shine, to illuminate; to justify; to get better' tüläŋi (adj.) 'fur (being moulted)' ← tūlā- 'to fade, to moult one's fur; to remove one's fur', cf. OT tülā- 'to moult, shed feathers of hair'.

### -(X)pčX

The standard form is  $-(X)p\check{c}X$  (KałMEJ 96), e.g. barïpči 'eye-net made of black horse's hair' barïy- 'to grow old, to age; to rot; to turn black; to darken'. Being an old, unproductive suffix, only some petrified forms can be found in the dictionaries. That is why almost nothing can be stated about the morphophonological behaviour, for instance, the linking sound given in the standard form cannot be proved in the lack of base verbs with stem-final consonant. KałMEJ 96 cites some further examples where the base cannot be found in Yakut, i.e. bäläpči 'eine besondere lederne Schürze, zwei Ledentücher' and čurupču, čurapči 'Ring in der Nase eines Ochsen, Nasering'.

The derivational element  $-(X)p\check{c}X$  forms names of tools, e.g.  $suoxap\check{c}i$ ,  $s\bar{u}xap\check{c}i$  'iron plate with holes for puncturing holes or for making cap'  $\leftarrow suoxay$ - 'to trash grain in mortar; to rivet'. <sup>136</sup>

There is no parallel for this suffix in StachDWb.

This is of Mongolic origin. In Literary Mongol there is only a denominal  $+b\check{c}i$  designating covers of objects, e.g.  $\check{c}ikib\check{c}in$  'cover for ears'  $\leftarrow \check{c}ikin$  'ear',  $dalub\check{c}i$  'wing'  $\leftarrow dalu$  'scapula', etc. (PoppeGWM §108), however, Buryat presents its deverbal variant in  $-b\check{s}A$  that forms (1) nouns designating the result of the action, and (2) names of tools, e.g.  $z\bar{u}b\check{s}e$  'suspension brackets, ornaments'  $\leftarrow z\bar{u}$ - 'to hang up, to fasten',  $\check{u}rgeb\check{s}e$  'knapsack; haversack; burden'  $\leftarrow \check{u}rge$ - 'to lift (upwards)',  $x\check{u}teleb\check{s}e$  'trailer (for agricultural machine)'  $\leftarrow x\check{u}tel$ - 'to lead (e.g. a horse); to conduct by hand'.

<sup>135 &#</sup>x27;Schneebrille', cf. čarapča, čarapči, čurapča id. and LM sarabči(n) 'projecting part of a roof; roof; visor; shelter or shed for cattle'.

<sup>136</sup> Cf. suoxalča 'blacksmith's tool for drilling holes'.

#### -(X)r

The standard form is -(X)r (GSJaLJa §274), e.g. bokur 'bent, curved'  $\leftarrow$  bokuy- 'to be bent (of feet); to bow (squatting)'. It is an old, unproductive suffix.

There is no example in StachDWb for this suffix.

It forms adjectives more or less similarly to -(V)gVr (GSJaLJa §274), e.g. bakir 'curved, bent; hook'  $\leftarrow bakiy$ - 'to bend in knee, to be made by bent, to be bent because of the old age; to form a curve by one's legs', cf. bäkigir 'high and humped backed (of man)'.

-(X)r is of Mongolic origin, cf. Literary Mongol -r in PoppeGWM §178. According to the literature, -r forms nouns, e.g. amur 'rest, peace'  $\leftarrow$  amu- 'to rest',  $bel\ddot{c}ir$  'embouchure, conflux'  $\leftarrow$   $bel\ddot{c}i$ - 'to inundate',  $bel\ddot{c}iger$  'pasturage'  $\leftarrow$   $bel\ddot{c}ige$ - 'to pasture'. The Buryat suffix -r also has the same function, e.g.  $e\ddot{s}er$  'shame'  $\leftarrow$   $e\ddot{s}e$ - 'to be ashamed', xabdar 'swelling'  $\leftarrow$  xabda- 'to swell, to be swollen' (PoppeGWM §4.13.5.m). However, adjectival derivatives can be found in the dictionaries of the Mongolic languages, see e.g. LM takir 'crippled, maimed (of limbs); crooked; a cripple; invective addressed to a person who has lost the use of an arm or hand'  $\leftarrow$  takiy- 'to become crippled, bent, oblique', cf. Yakut takir 'bent, curved'  $\leftarrow$  takiy-, taxiy- 'to bend, to lift up feet; to bend the feet, the elbows; to writhe, to be bent'. In certain cases Mongolic only presents the derivatives, e.g. LM  $\check{c}e\eta kir$  'light blue, bluish', cf. Yakut  $\check{j}a\eta kir$  'bright, transparent, clean; being translucent, gleaming, purified'  $\leftarrow$   $\check{j}a\eta kiy$ - 'to become bright, transparent, clear; to be cleaned'.

# Examples:

butur : butur kisi 'a man who gibbers, splutters' ← butuy- 'to mix up, to shake up, to confuse, to distort';

nolur 'long, long-skirted, drawing close to the earth' ← noluy- 'to spread, to be dragged'; salj̃ir 'inclined' ← salj̃iy- 'to be inclined sideways', cf. LM salj̃iy- 'to bend to the side, incline, lean'.

### -Ār

The standard form is  $-\bar{X}r$  (GSJaLJa §198), e.g.  $dalb\bar{u}r$  'large shelf; bend sticks on the wall, on which matchwood is dried', cf. LM talbigur 'stand, rest; hanger; low table; board to put things on'. It is an old, unproductive suffix in Yakut.

The general function of -Xr is to form *nomen instrumenti*, e.g.  $ilb\bar{\imath}r$  'broom'  $\leftarrow$  ilbiy- 'to sweep, to clear out; to fondle, to rub (body); to cure, to treat'.

There are no examples in StachDWb for this derivational element. However, cf. note 30 for a possible candidate.

The suffix -Xr is of Mongolic origin (KałMEJ 82). The Literary Mongol counterpart is -gUr forming names of tools, cf. PoppeGWM §155, e.g. kanagur 'lancet'  $\leftarrow kana$ - 'to bleed someone', kadugur 'sickle'  $\leftarrow kadu$ - 'to mow',  $\ddot{o}l\ddot{g}\ddot{u}\ddot{g}\ddot{u}r$  'clothes-peg'  $\leftarrow \ddot{o}l\ddot{g}\ddot{u}$ - 'to hang up'.

There is a homophone suffix in  $-\bar{X}r$  forming action nouns, see -(A)r. Two words discussed in GSJaLJa *loc. cit.*, i.e. *bulkūr* 'mixing, shaking; admixture; confusion'  $\leftarrow$  *bulkuy-*, *bukkuy-* 'to

mix, to stir, to shake (up)' and balir 'slander, calumny' ← baliy- 'to slander, to calumniate' do not belong here, but to -(A)r/-Xr, q.v. KałMEJ 82 hesitates whether the two homomorph elements forming nomen instrumenti and nomen actionis belong together or not. These forms can be separated without difficulties. The resemblance between words, such as tutūr 'holding in the hands; obstacle, stop, delay; capture, arrest' and tut- 'to hold, to retain; to observe; to use; to take, to catch; to be sufficient; to possess; to inherit; to stop' mentioned in KałMEJ loc. cit. as an example, is only the result of contamination. The Yakut word tutūr is a loan from Mongolic, cf. todxar, todxor 'obstacle, obstruction, impediment; evil, calamity; demon, evil spirit', and the meaning 'holding in the hands' has developed due to the influence of the verb tut-. On the other hand, the "regular" derivative in nomen actionis should be \*tutar. Another representative example from PekSJ is olūr meaning 'wooden stanchion for door, or window; bolt' and 'difficult situation' (both are handled in the same entry) from the verb oluy- 'to displace, to carry with difficulty; to dig; to interweave; to prop up (door); to lock by wooden bolt; to prevent'. The first one (< \*olugur) is a counterpart of Mongolic \*oligur, cf. Kalmuck ol'ūr 'Stange zum Heben' ← olı- 'mit der Hebestange heben (und drehen); mit den Hörhern stossen'; the second one (< \*oluyur) is a derivative in nomen action is -(A)r/-Xr from the same verb.

### Examples:

 $n\ddot{u}\eta s\ddot{u}r$  'wooden clapper with knob, similar to pestle, used for frightening off of fish under the ice'  $\leftarrow n\ddot{u}\eta s\ddot{u}y$ - 'to knock on the ice by a wooden beater for catching of fish by seine';

sippīr 'broom' ← sippiy- 'to clean out, to sweep', cf. LM sirbigür 'broom, whisk, fly whisk made of hair; fan' ← sirbi-, sirbe- 'to sweep; to dust';

 $xat\bar{i}r$ ,  $xot\bar{u}r$  'scythe; sickle'  $\leftarrow xad\bar{i}y$ -, xoduy- 'to mow', cf. LM kadugur 'scythe, sickle'  $\leftarrow kadu$ - 'to mow, to harvest; to cut (as grass, grain)'.

-(X)rgA(n) -(X)rkA

The standard form is -(X)rgA(n) (KałMEJ 96), e.g. oxsurġa 'lashing out, strapping (horse); shingles'  $\leftarrow oġus$ -, oxsV- 'to strike, to beat; to chop; to forge'. The suffix-final /n/ only appears in one case, i.e. tomtorġo, tomtorġon 'ring-shaped (round) fold (on the throat); rim, border, board, edge'  $\leftarrow tomtoy$ - 'to be raised, to rise, to be chased, to swell, to reveal'. The base can be of both Turkic and Mongolic, cf. OT sokuš- 'to beat, crush one another; to meet, encounter one another' and Khalkha tontoy- (< toutous- 'to be round, thick and protruding'. The word toutous- 'to treat, addition, increase; giving new hay-field on the occasion of bad harvest' toutous- 'to treat, to doctor; to correct, to supplement' may also belong here.

-(X)rgA(n) is to form (1) adjectives, e.g. čalčirga, čaččirga, čatčirga 'frisky, brisk, adroit, fast, quick; eccentric', cf. LM čalči- 'to talk nonsense or drivel; to talk deliriously', and (2) nouns, e.g.  $t\ddot{u}s\ddot{u}rg\ddot{u}$  'camp; vat, can'  $\leftarrow t\ddot{u}s$ - 'to fall down, to fall off, to lower; to get down'.

There is no example for this derivational element in StachDWb.

The Yakut suffix -(X)rgA(n) is of Mongolic origin and can be analysed as a compound of -rA- and -gA(n), cf. the modern Yakut counterparts -rXy- (KałMEJ 106–109) and  $-\bar{A}n$ . Cf. the following Literary Mongol examples: gedergen 'backwards, to the rear, back, in the opposite or reverse direction'  $\leftarrow gedeyi$ - 'to bend backwards; to throw back one's head; to pose, give oneself airs; to show off; to swagger; to be obstinate',  $\check{c}ib\check{c}irga$ , sibsirga 'stick or rod used in punishment'  $\leftarrow \check{c}ab\check{c}i$ - 'to hew, chop; to blink; to kick with a forefoot or forefeet (of a horse)'. For a similar compound, cf. -(V)lgA(n). 137

### Examples:

 $olur\dot{g}a$  'difficult situation'  $\leftarrow oluy$ - 'to displace, to carry with difficulty; to dig; to interweave; to prop up (door); to lock by wooden bolt; to prevent', cf. LM oliy- 'to depart from the road, to take the wrong road, to give somebody an angry or distrustful look'.

# 6.3 Derivational suffixes of uncertain etymological status 138

### -(Ā)sXt

The standard form is  $-(\bar{A})sXt$ , e.g.  $bigi\ddot{a}sit$  'master of feeling, perceiving; knowing how to feel, perceive'  $\leftarrow bigi\ddot{a}$ - 'to feel, to perceive; to aim, to look fixedly'. It is an old, unproductive element in Yakut being altogether three examples in PekSJ.

 $-(\bar{A})sXt$ , similarly to  $-(\bar{A})\check{c}\check{c}X$ , is a *nomen actoris* forming nouns designating the person who acts frequently, habitually or with pleasure, the person who has the ability to do something, and the process of the action. It is also used to designate the names of vocations.

Dolgan has a similar suffix in -sXt, see e.g. atilahit 'Kaufmann, Händler'  $\leftarrow atila-$ 'verkaufen', bulkuyuhut 'jemand, der umrührt/gräbt/wühlt'  $\leftarrow bulkuy-$  'umrühren, graben, wühlen' (StachDWb 50).

The Yakut derivational element  $-(\bar{A})sXt$  is a compound of  $-\bar{A}$  and +SXt. The first constituent is of Mongolic origin and the same as the Yakut suffix  $-\bar{A}$ , q.v. The second one is of uncertain origin, however clearly related to the Turkic and Mongolic *nomen actoris* in +cI and  $+\check{c}i(n)$ , cf. GSJaLJa §155 and Károly 2007. Accordingly, it is plausible that the Dolgan suffix in question is not a simple deverbalized variant of +sXt, cf. StachDWb 29–30, but a greatly contacted or modified variant of the original form  $*-(\bar{A})sXt < *-gAsXt$ , and thus has to be defined as -(V)sXt. The Yakut suffix  $-(\bar{A})sXt$  is etymologically identical to the very productive element  $-(\bar{A})\check{c}\check{c}X$ . In addition, see -XAxsXt as another *nomen actoris* in Yakut.

The status of the words  $xal\bar{a}\acute{n}\ddot{i}t$  'robber'  $\leftarrow xal\bar{a}$ - 'to take away violently, to plunder' and  $tal\bar{a}\acute{n}\ddot{i}t$ ,  $tal\bar{a}\acute{n}\ddot{i}k$  'robber'  $\leftarrow tal\bar{a}$ - 'to take away violently, to plunder, to abduct; to rob' is unclear. The allomorph  $+\acute{n}Xt$  of the *nomen actoris* should only appear after nasals, and this fact suggests

<sup>137</sup> Although the segment -l- is a standalone suffix in Mongolic, -r- appears only in compounds, cf. KałMEJ 96.

<sup>138</sup> The derivational suffixes discussed here are of uncertain status because the second part of them, i.e. the denominal nominal element +SXt, is of uncertain origin. It can be of both Turkic and Mongolic.

another etymology for such derivatives:  $-(\bar{A})\acute{n}Xt < *-gAn\acute{n}Xt < *-gAn+SXt$ . The sound /k/ in  $tal \ddot{a}\acute{n}ik$  is possibly due to the influence of  $-(\bar{A})\check{c}\check{c}X(k)$ .

-XAxsXt -XAxčXt

The standard form is -XAxsXt, e.g.  $\ddot{o}l\ddot{u}\ddot{o}xs\ddot{u}t$  'dead (man)'  $\leftarrow \ddot{o}l$ - 'to die, to perish; to die out; to be ill; to become numb'. There are relatively few examples in PekSJ, however, according to GSJaLJa §155, it seems to be a productive and relatively frequent element in modern Yakut.

-XAxsXt is a nomen actoris forming nouns designating the person who acts frequently, habitually or with pleasure, the person who has the ability to do something, and the process of the action, e.g.  $si\ddot{a}xsit$ ,  $si\ddot{a}x\ddot{c}it$  'eater, greedy, glutton'  $\leftarrow si\ddot{a}$ - 'to eat, to taste, to eat up, to corrode; to ruin, to destroy; to burn; to beat the cards, to take pawn or figure (in games like chess)'.

StachDWb 51 has only one example for this element, i.e.  $ab\ddot{i}r\ddot{a}ks\ddot{i}t$  'Retter; jemand, der sich nützlich machen kann'  $\leftarrow ab\ddot{i}r\ddot{a}$ - 'retten; nützlich sein, zustatten kommen'.

The Yakut derivational element -XAxsXt is a compound of -XAx and +SXt. The first constituent is of Turkic origin, cf. -XAx for a detailed description. For the second one, cf.  $-(\bar{A})sXt$ . In addition, see  $-(\bar{A})\check{c}\check{c}X$  as another *nomen actoris* in Yakut.

## 6.4 Derivational suffixes of unknown origin 139

### -ĀkX

The standard form is  $-\bar{A}kX$  (KałM 2: 23–26), e.g.  $j\ddot{u}j\ddot{a}ki$  'neglected in every respect (of man or cattle)'  $\leftarrow j\ddot{u}j\ddot{a}y$ - 'to grow thin; to spoil; to perish'. The initial vowel of the suffix is dominant, cf. section 7.5 for the details. It is not productive in contemporary Yakut.

The general function of  $-\bar{A}kX$  is to form adjectives (result of an action, having special property), e.g.  $\bar{\imath}r\bar{a}ki$  'reckless'  $\leftarrow \bar{\imath}r$ - 'to be tangled, to be hooked; to be twirled, to turn (of head); to fly into a rage, to rage',  $sut\bar{a}k\bar{\imath}$  'thin (of cattle)'  $\leftarrow sut\bar{a}$ - 'to starve, to undergo calamity because of hunger, to perish by the dearth of fodder'. Semantic split from adjective to substantive can also be observed, e.g.  $ors\bar{o}xu$  'water rat'  $\leftarrow orsoy$ - 'to show one's teeth, to grin'.

There is no counterpart of this suffix discussed in StachDWb.

According to KałM 2: 29, it is a special Yakut suffix having no traces in other Turkic languages. It has a denominal pair in  $+\bar{A}kX$ , cf. KałM 2 loc. cit.

### Examples:

ballāxï 'burbot, Lota lota' ← ballay- 'to swell, to get fat', cf. LM baltayi- 'to be[come] flat; to stay down; to be stubby or thickset';

<sup>139</sup> The derivational elements discussed under this section are of unknown origin. Some of them thought to be of inner Yakut suffixes, but I could not find any linguistic criteria for such a classification.

 $k\ddot{a}r\ddot{a}ki$  'irresolute; avaricious, thrifty'  $\leftarrow k\ddot{a}r\ddot{a}y$ - 'to stint'; cf. LM kire- 'to be stingy or miserly';  $tur\dot{a}k\ddot{a}$  'absolutely'  $\leftarrow t\bar{u}r$ - 'to pull out'.

-ĀnA

The standard form is  $-\bar{A}nA$ , e.g.  $joroy\bar{o}no$  'straight bodied'  $\leftarrow joroy$ - 'to have straight body, to become proportional'. The stem-final  $^{\circ}y$ - is always preserved with the only exception of  $sij\bar{a}na$  'smart, quick [provornyj]'  $\leftarrow sijay$ -, sijay-, sijay-, sijay-, sijay- 'to make anything diligently, to be zealous'. In three cases it shows the form -gAnA, e.g. jondogono 'proportional built, slender'  $\leftarrow jondoy$ - 'to be high and lean, to be lanky, to be drawn out; to call'. The derivative  $arb\bar{a}nay$  'a kind of horsetail, Equisetum arvense, encountered near Yakutsk'  $\leftarrow arbay$ - 'to be tattered, to tousle; to come to disorder' can be interpreted as a metathetic form of \* $arbay\bar{a}na$ .

 $-\bar{A}nA$  forms adjectives designating quality, attribute, characteristic feature, etc., e.g.  $tuttay\bar{a}na$  'white-faced'  $\leftarrow turtay$ -, tuttay-, tuttay-, tuktay- 'to become white (of face, skin); to be whitened; to turn grey; to shine'. Substantivized forms may appear, cf.  $arb\bar{a}nay$  above.

There is no counterpart for this element in StachDWb.

 $-\bar{A}nA$  is maybe a weakened form of -gAnA. However, there is no such distribution ( $Vy\bar{A}$ : VgA) in case of other derivational elements.

## Examples:

joroģono : joroģono uŋuoxtāx 'straight bodied' ← joroy- 'to have straight body, to become proportional';

 $ma\eta ay\bar{a}na$  'white'  $\leftarrow ma\eta ay$ - 'to become white'.

 $-\bar{\mathbf{A}}\mathbf{y}\mathbf{A}\mathbf{x}$ 

The standard form is  $-\bar{A}yAx$ , e.g.  $bul\bar{a}yax$  'wooden shovel for turning over the potter's clay in the trough; a small blade for making the wall of pot; shaman's rattle'  $\leftarrow bul\bar{a}$ - 'to mix anything uniform, to stir slowly, to intermix, to mix up; to knead; to interfere (to disturb); to mix up (to lead into confusion)'. It is an old, unproductive element; there are only three examples in PekSI.

 $-\bar{A}yAx$  forms (1) object from transitive base, e.g.  $b\bar{i}l\bar{a}yax$  'a small blade for making the wall of pot; shaman's rattle'  $\leftarrow b\bar{i}l\bar{a}$ - 'to mix up; to confuse, to lead into confusion', and (2) subject from intransitive base, e.g.  $k\bar{u}r\bar{a}y\bar{a}x$ ,  $k\bar{u}r\bar{u}\bar{o}y\bar{a}x$  'run away, fugitive, quick, tramp'  $\leftarrow k\bar{u}r\bar{a}$ -,  $k\bar{u}r\bar{u}\bar{o}$ - 'to run away, to depart; to run away secretly, to be hidden'.

There is no similar suffix mentioned in StachDWb.

## -ĀvX

The standard form is  $-\bar{A}yX$  (GSJaLJa §274.6, KałM 2: 19–23), e.g.  $o\eta\bar{o}yu$  'gnat, fly'  $\leftarrow o\eta$ - 'to pull out, to dig (up), to take out',  $k\ddot{u}d\bar{a}y\ddot{u}$  'greater (of size)' :  $k\ddot{u}d\bar{a}y\ddot{u}$  b $\ddot{u}$ sax 'great knife'  $\leftarrow k\ddot{u}d\ddot{u}y$ - 'to cut; to mow'. GSJaLJa loc. cit. discusses  $-\bar{A}yX$  as an old, unproductive suffix. On the contrary, KałM 2: 23 states that it has preserved productivity in certain cases.

The suffix  $-\bar{A}yX$  has a lot in common with  $-(\bar{A})\check{c}\check{c}X$ , q.v., regarding their function:  $-\bar{A}yX$  forms (1) participles, e.g.  $ul\bar{a}y\ddot{i}$ ,  $\bar{u}l\bar{a}y\ddot{i}$  'tree that recently begun to dry':  $ul\bar{a}y\ddot{i}$ ,  $\bar{u}l\bar{a}y\ddot{i}$  mas 'alder tree'  $\leftarrow \bar{u}l$ - 'to thaw, to be melted, to be lit; to be dissolved'; (2) names of animals, or objects, e.g.  $tig\bar{a}yi$  'gadfly; wasp'  $\leftarrow tik$ - 'to sting (of bee, fly, etc.); to pummel; to sew'; and (3) names of action, or result, e.g.  $t\ddot{i}t\bar{a}y\ddot{i}$ ,  $t\ddot{i}t\bar{a}y\ddot{i}$  'touch'  $\leftarrow t\ddot{i}t$ - 'to tear, to rip; to touch; to pummel, to stir'.

There is no corresponding element in StachDWb.

According to KałM 2: 23, it is a special Yakut suffix having no traces in other Turkic languages. It has a denominal counterpart in  $+\bar{A}yX$ , cf. KałM *loc. cit*.

## **Examples:**

 $k\ddot{a}b\ddot{a}yi$  'chipping instrument, battering-ram'  $\leftarrow k\ddot{a}p$ - 'to push by dull object; to push (slightly); to trample; to push off, to repulse, to reject';

surulāyï : timir surulāyï xatat 'jingling iron flint' ← surulā- 'to rustle, to ripple; to move rapidly to one direction';

 $tot\bar{o}yu$  'substantial, nutritious; nutritive power'  $\leftarrow tot$ - 'to be sated, to eat full, to be saturated, to satiate; to be satisfied'.

#### -čXk

The standard form is  $-\check{c}Xk$ , e.g.  $\bar{\imath}r\check{c}ik$ :  $\bar{\imath}r\check{c}ik$ -bar $\check{c}ik$  'entangled, intricate, complex'  $\leftarrow \bar{\imath}r$ - 'to be tangled, to be hooked; to be twirled, to turn (of head); to fly into a rage, to rage', bar $\bar{\imath}y$ - 'to screw up the face slightly'. It is an unproductive element used only in few cases.

The function of  $-\check{c}Xk$  is to form adjectives, e.g.  $\check{a}r\check{c}ik$ -bur $\check{c}uk$ ,  $\check{a}l\check{j}ik$ -bul $\check{j}uk$  'twisting, twisted in every possible way'  $\leftarrow$   $\check{a}riy$ - 'to turn, twist; to spin, wind; to screw (up); to implicate, to involve into the matter; to interlace', buruy- ' $\check{a}riy$ -buruy- 'to twin in every possible way, to turn, to twirl'.

There are no traces of this element in StachDWb.

Although the following comparison is dubious, mostly because of the phonetic side, has to be mentioned here as a possible explanation: some Turkic languages present a deverbal nominal suffix in  $-\check{c}XK$ , cf. Khakas  $-\check{C}Ik$ , e.g.  $xon\check{j}ix$  'neighbour'  $\leftarrow xon$ - 'to spend the night',  $\check{c}ar\check{j}ix$  'kindlings'  $\leftarrow \check{c}ar$ - 'to prick; to split' (GHJa §59); and Chuvash  $-\check{c}\check{A}k$ , e.g.  $v\check{a}tan\check{c}\check{a}k$  'bashful'  $\leftarrow v\check{a}tan$ - 'to be ashamed',  $yuntar\check{c}\check{a}k$  'capricious, stubborn fellow'  $\leftarrow yuntar$ - 'to be capricious' (LevIMČJa 164–165).

#### -kA

The standard form is -kA, e.g. butuka, buduka 'not thoroughly heated oil'  $\leftarrow butuy$ - 'to mix up, to shake up, to confuse, to distort',  $\ddot{a}mti\ddot{a}\ddot{k}\ddot{a}$  'benefit, addition, increase; giving new hay-field on the occasion of bad harvest'  $\leftarrow \ddot{a}mti\ddot{a}$ - 'to treat, to doctor; to correct, to supplement'. It is an old, unproductive derivational element.

-kA forms (1) adjectives, e.g.  $m\ddot{a}t\ddot{a}k\ddot{a}$  'having the breast sticked out'  $\leftarrow$   $m\ddot{a}t\ddot{a}y$ - 'to bulk (forward); to bulge', and (2) substantives, e.g. dabdaka 'backside of the human body'  $\leftarrow$  dabday- 'to be enlarged, to grow fat in its upper part; to crouch down'.

There are no traces of this element in StachDWb.

### -mĀn

The standard form is  $-m\bar{A}n$ , e.g.  $arjam\bar{a}n$  'rare toothed'  $\leftarrow arjay$ - 'to put out a large-holed net; to bare one's rare and large teeth'. It is an old, rarely used derivational element.

 $-m\bar{A}n$  forms adjectives, e.g.  $kilbarim\bar{a}n$  'shining'  $\leftarrow kilbariy$ - 'to shine'.

There is no counterpart of this suffix in StachDWb.

### -rAŋ

The standard form is  $-rA\eta$ , e.g.  $m\ddot{a}l\ddot{c}ir\ddot{a}\eta$  'pasture'  $\leftarrow m\ddot{a}l\ddot{c}iy$ - 'to wander, to be loose, to rush; to be grazed, to go for a walk, to take a leave'. It is an old, unproductive element.

- $rA\eta$  forms both (1) substantives, e.g.  $m\"{o}lb\"{o}r\"{o}\eta$  'oil'  $\leftarrow m\"{o}lb\"{o}y$ - 'to be rounded off by fat (of large-bodied, thick man); to go smoothly', and (2) adjectives, e.g.  $xaps\"{i}ra\eta$  'compressed; lean; empty'  $\leftarrow xaps\"{i}y$ - 'to be compressed; to be empty'.

There is no counterpart of this suffix in StachDWb.

The suffix  $-rA\eta$  in mälčirä $\eta$  draws similarities to the Buryat derivational element -rAn designating the actor, e.g. zayran 'loiterer, roamer'  $\leftarrow$  zay- 'to loitre, roam', guyran 'beggar'  $\leftarrow$  guy- 'to beg' (PoppeBG §4.13.1.b). In the other examples,  $-rA\eta$  has a lot in common with the Literary Mongol suffix  $-lA\eta$  forming nouns designating abstract ideas, an object undergoing an action, e.g. kadula $\eta$  'hayfield'  $\leftarrow$  kadu- 'to mow', jobala $\eta$  'pain, suffering'  $\leftarrow$  joba- 'to suffer', jirgala $\eta$  'happiness'  $\leftarrow$  jirga- 'to be happy'.

-VńA $\eta$  -(V)ńA $\eta$ 

The standard form is  $-V\acute{n}A\eta$  (GSJaLJa §272), e.g.  $k\ddot{a}ps\ddot{a}\acute{n}\ddot{a}\eta$  'eager to tell  $sg' \leftarrow k\ddot{a}ps\ddot{a}$ - 'to tell, to speak, to utter',  $siri\acute{n}\ddot{a}\eta$  'squeamish'  $\leftarrow sir$ - 'to despise, to reject, to disregard; to censure'. In the modern orthography it is represented as  $-Vn\acute{n}A\eta$ , see e.g.  $k\ddot{a}ps\ddot{a}n\acute{n}\ddot{a}\eta$  in YakS. For the same phenomenon, see  $-V\acute{n}Vk$ . It is productive in contemporary Yakut.

The general function of  $-V\acute{n}A\eta$  is to form adjectives designating ability or propensity, e.g.  $itiri\acute{n}\ddot{a}\eta$  'becoming intoxicated (soon)'  $\leftarrow itir$ - 'to become intoxicated, to overindulge'.

There is no corresponding suffix in StachDWb.

#### **Examples:**

 $k\"om\"ol\"os \ddot{u}\'n\ddot{a}\eta$  'help' ← k"om"ol"os- 'to help, to support';

similtanan 'well layer (of hen)'  $\leftarrow similta$ - 'to lay; to nest';

soluyuńaŋ 'inclined to be moved away, be distracted, break the habit; removed' ← soluy- 'to be moved away, to be distracted, to break the habit', cf. LM salu- 'to separate, branch off, part

with, take leave or become free from; to be detached, isolated, parted from; to divorce, dissolve a marriage';

 $tapta\'na\eta$  'cherishing (with love)'  $\leftarrow tapt\bar{a}$ - 'to love; to caress', cf. OT tapla- 'to be pleased, satisfied (with something Acc.)'.

 $-V\acute{n}Vk$   $-(V)\acute{n}Vk$ 

The standard form is  $-(V)\acute{n}Vk$ , e.g. asati\'nax 'hospitable (man)'  $\leftarrow$  asat- 'to feed; to whet sy's appetite; to entertain'. The linking sound varies even with the same stem, e.g. asasańax, asasińax, ačasańax 'hanger-on, sponger; an outsider who appears on feast or wedding in order to eat'  $\leftarrow$  asas-, ačas- 'to drink together with sy; to sip (tea) with sy, somewhere, at someone's place', and may disappear after stems ending in consonant, e.g. ämnik, ämńik 'a cub released with its mother for freely sucking it, a sucking cub'  $\leftarrow$  äm- 'to suck (breast); to suck out'. In a single case the stem-final long vowel remained intact, i.e. biljāńik 'robber'  $\leftarrow$  biljā- 'to take away, to withdraw, to take forcibly, to steal; to wash off (of water), to inundate; to diminish'. Although the semantic side of uoruyax 'thief, pilferer, swindler; stealing, theft, embezzlement'  $\leftarrow$  uor- 'to steal' is correct, it is dubious whether it belongs here as a denasalized form. In the modern orthography it is represented as  $-Vn\acute{n}Vk$ , cf. äminńäk, kirbanńik, etc. in YakS and the Dolgan form  $\ddot{u}$  below. For the same phenomenon, see  $-V\acute{n}A\eta$ .

The Yakut suffix  $-V\acute{n}Vk$  forms (1) nouns designating the person who acts habitually or with pleasure, e.g.  $k\ddot{a}ps\ddot{a}\acute{n}\ddot{a}x$  'gossiper'  $\leftarrow k\ddot{a}ps\ddot{a}$ - 'to tell, to speak, to utter', and (2) adjectives, e.g.  $sal\dot{g}\ddot{i}\acute{n}ax$  'boring'  $\leftarrow salt$ -,  $sal\dot{g}V$ - 'to disgust, to tire, to bore; to be bored'. Sometimes semantic change from adjective to substantive can be observed, e.g.  $k\ddot{i}rba\acute{n}\ddot{i}k$  '(meat) chopped into small pieces'  $\leftarrow k\ddot{i}rban$ - 'to beat (to strike) oneself, to be beaten; to be crumbled (of tobacco)'.

StachDWb 48 handles this suffix in two separate entries as subphonemic variants  $(-\acute{n}ak, -\acute{n}yk)$ . While  $-\acute{n}Ak$  in Dolgan forms adjectives, i.e.  $kutan\acute{n}ak$  'angstlich' < \* $kuttan\acute{n}ak \leftarrow kuttan$ 'Angst bekommen',  $k\ddot{i}han\acute{n}ak$  'fürsorglich'  $\leftarrow k\ddot{i}han$ - 'sich sorgen' and  $\ddot{i}tan\acute{n}ak$  'weinerlich'  $\leftarrow \ddot{i}t\bar{a}$ - 'weiden', the only example for  $-\acute{n}Xk$  is substantive, i.e.  $\ddot{o}l\ddot{u}n\acute{n}\ddot{u}k^{143}$  'Totenhemd'  $\leftarrow \ddot{o}l\ddot{u}n$ - 'sterben'.

### **Examples:**

 $ita\acute{n}ax$  'whining (child); crybaby'  $\leftarrow it\bar{a}$ - 'to cry, to sob', cf. OT sigta- 'to mourn, to weil, to lament';

sarbinax 'a cut forming teeth'  $\leftarrow sarbiy$ - 'to move away the excess (to chop off, to reduce); to shorten'.

<sup>140</sup> This long vowel can be interpreted as a modern reflex of the Mongolic sound group /iya/, cf. LM buliya- 'to take away by force, seize, grab, rob, pillage, captivate, ravish'.

<sup>141</sup> StachDWb 52 discusses Dolgan *uoruyak*, *ūruyak* 'Dieb' ← *uor*- 'stehlen' as a derivative in -XyAk, however, it does not seem to be plausible, cf. section 7.10.

<sup>142</sup> There is also a denominal derivative mentioned in StachDWb 27, i.e. albinńak 'Betrüger, Lügner' ← albin 'Betrug, Lügner'.

<sup>143</sup> Cf. Yakut ölüńük, ölüńük, ölünnük 'shroud, burial gown'.

#### -XAnAx

The standard form is -XAnAx, e.g.  $b\ddot{o}s\ddot{u}\ddot{o}n\ddot{a}x$  'slightly softened, being warmed but even frozen'  $\leftarrow b\ddot{o}s\ddot{u}y$ - 'to become soft, to warm'. In a single example it is  $-\bar{A}nAx$ , i. e.  $kur\bar{a}nax^{144}$  ( $k\bar{u}ranax$  in BöhtlSJ) 'dry; empty; dry place; land'  $\leftarrow k\bar{u}r$ - 'to dry'. It is an old, unproductive derivational element.

-XAnAx forms adjectives, e.g. iriänäx, iriänäx 'thawed, melted'  $\leftarrow ir$ - 'speaking on Yakut, complaint, warm; to become thawed, to melt, thaw; to be warmed'.

There is no corresponding Dolgan suffix in StachDWb.

### -XgXy

The standard form is -XgXy (BöhtlSJ §300), e.g. kutčuguy 'small; smallness; low increase; youth'  $\leftarrow kutč\bar{a}$ -,  $kučc\bar{a}$ - 'to diminish, to decrease'. The initial vowel of the suffix always behaves as dominant, e.g. kočcuguy 'small'  $\leftarrow kočc\bar{c}$ - 'to become small'. It is not productive.

The Yakut suffix -XgXy only forms adjectives generally meaning 'small, few' from verbs 'to diminish; to become small', e.g.  $k\ddot{i}c\ddot{c}\ddot{i}g\ddot{i}y$  'small'  $\leftarrow k\ddot{i}c\ddot{c}\ddot{a}$ - 'to decrease (e.g. in growing)'.

There is no counterpart in StachDWb.

## **Examples:**

aččigiy, otčuguy, oččuguy, utčuguy, uččuguy 'small, few; smallness' ← aččā-, oččō-, utčā-, aččiy- 'to decrease, diminish'.

### -(X)IbA

The standard form is -(X)lbA, e.g. suodalba 'wearing short dress; clumsy'  $\leftarrow suoday$ - 'to show oneself high, clumsy and ridiculous figure in short dress (of tall, adult person)'. There is only one example with stem-final consonant showing the high type of the linking sound, i.e.  $t\bar{t}t\bar{t}lba$ :  $t\bar{t}\eta\bar{t}raxt\bar{t}ax$   $t\bar{t}t\bar{t}lba$  'one who claws (with claws)'  $\leftarrow t\bar{t}t$ - 'to tear, to rip; to touch; to pummel, to stir'. This is an old, unproductive element.

-(X)lbA forms both substantives and adjectives, e.g.  $i\ddot{a}\dot{g}\ddot{a}lb\ddot{a}$  'bent'  $\leftarrow i\ddot{a}\dot{g}\ddot{a}y$ - 'to be bent (sideways); to be inclined by pillar', maxtalba 'appreciation'  $\leftarrow$  maxtay- 'to glorify, to praise'. 145

There is no counterpart in StachDWb.

It is similar to the suffixes -(A)ltA and -(V)lgA(n) in form, but there is no known example for the sound change lt or lg > lb.

## -(X)lgX

The standard form is -(X)lgX, e.g. k"inalg" 'arched'  $\leftarrow k"inay$ - 'to stick the chest out; to turn the head down'. It is an old, unproductive derivational element in Yakut.

<sup>144</sup> It is obscure how the Yakut words kurānax and kurān 'dryness, drought; bright (sky, weather)' are related to each other.

<sup>145</sup> Cf. Literary Mongol magtalta 'the act of praising' and magtalga 'the act of praising; praise, eulogy' ← magta- 'to praise, eulogize, laud, extol, glorify'.

-(X)lgX forms (1) adjectives, e.g. kijilgi: kijilgi: maygilāx (sigililāx) 'unsociable'  $\leftarrow kijiy$ - 'to stand aside (of cattle)', and (2) substantives, e.g. ayilgi, oyulgu, uyulgu 'physiognomy, appearance; disposition, nature; good, wealth'  $\leftarrow ay$ - 'to create, found; to erect; to produce; to indicate'.

There is no corresponding Dolgan suffix in StachDWb.

### -(X)nčA

The standard form is  $-(X)n\check{c}A$ , e.g. arbanča 'shock-head'  $\leftarrow$  arbay- 'to be tattered, to tousle; to come to disorder'. It is an old, unproductive element in Yakut.

-(X) $n\check{c}A$  forms both (1) substantives, e.g.  $k\ddot{a}tin\check{c}\ddot{a}$  'stocking (cloth or fur); puttee, wrapping; belt'  $\leftarrow k\ddot{a}t$ - 'to put on one's clothes, to get dressed; to bear; to collide, to encounter', and (2) adjectives, cf.  $arban\check{c}a$  above.

There is no counterpart in StachDWb.

# 6.5 "Hapax" derivational suffixes 146

#### -AkkA

ämäkkä 'bottle (lit. horn) for feeding the baby with milk' ← äm- 'to suck (breast); to suck out'

## -ĀŋkX

 $k\ddot{\imath}as\bar{a}\eta k\ddot{\imath}$  'any obstacle that hinder someone to creep away, e.g. a wall made of logs'  $\leftarrow k\ddot{\imath}as\bar{a}$ - 'to hold; to confuse'

#### -kĀx

sarkāx, sarxāx 'crevice, breach on a tree, trunk' ← \*sar-, cf. Dolgan sarkāk 'zersplittert' ← \*sar- < \*yar- 'spalten' in StachDWb 46.

## -kĀy

butukāy 'mixed character' ← butuy- 'to mix up, to shake up, to confuse, to distort'

#### -lĀn

tibilān, tigilān 'fuss' ← tibiy- 'to step forward repeating by feet, to fidget by feet'

#### -mĀt

 $t\ddot{a}l\ddot{a}m\ddot{a}t$  'a split rag, patch'  $\leftarrow t\ddot{a}l\ddot{a}y$ - 'to be opened; to scatter, to be thrown open; to open, to reveal'

<sup>146</sup> The derivational elements discussed under this section appear only once in PekSJ and have no parallels, that makes impossible to say anything serious about them. Further findings and resources may give more exact status for them.

#### -nA

küdārinā 'cursory, perfunctory' ← küdāriy- 'to rice (of dust); to be rised'

#### -Xm

kärīm '(circular) tour; turn' ← käriy- 'to come round, to go around, to travel about; to inspect'

### -XnXAx, -XnAx

aġïnïax, aŋïnïax, aġïnax, aŋïnax 'ointment, lubricant'  $\leftarrow$  aġā- 'to smear, to grease, to lubricate'

#### -(X)rXk

busuruk 'undercooked; rotten; sultry' ← bus- (intr.) 'to steam, to bake, to cook; to ripen'

## 7 Common features and tendencies of deverbal nominal suffixes

## 7.1 The verb-final segment °Vy- in derivation

The verb-final segment in Yakut is a strongly restricted position: a verb can only end in  ${}^{\circ}C_{-}$ ,  ${}^{147}$   ${}^{\circ}\bar{A}_{-}$  or  ${}^{\circ}XA_{-}$ . Verbs originally ending in short vowel get an anorganic element /y/ (or become diphthongic/long), see e.g.  $utuy_{-}$  'to sleep; to become lame, to stiffen (of bodily parts); dial. to decay; to die away'  ${}^{\circ}OT$   $udi_{-}$  'to sleep' and  $xamiy_{-}$ ,  $xomuy_{-}$  'to collect, to gather'  ${}^{\circ}LM$   $kamu_{-}$  'to gather together; to sweep together, scrape up, rake up'. From a pure phonological point of view, verbs ending in  ${}^{\circ}Vy_{-}$  belong in the class of consonant-final verbs, however, they can behave completely different in inflexion and derivation. Under certain conditions the sound /y/ is dropped and the verb behaves as an open syllabled one. Here the rule set of the verb-final segment  ${}^{\circ}Vy_{-}$  in morphology will not be discussed in details,  ${}^{148}$  instead only the rules applied in derivation will be investigated. Basically there are three possibilities: (1) the segment  ${}^{\circ}Vy_{-}$  remains intact, (2) the sound /y/ is dropped, or (3) the full segment  ${}^{\circ}Xy_{-}$  is dropped. See the following examples:

- (1) üräybä 'disorder' ← üräy- 'to separate, to interrupt communication; to ruin; to exterminate, to exhaust',
   öŋöybütčä 'once have glanced' ← öŋöy- 'to look out; to look';
- (2) lappičax 'small, but thick (e.g. vessel)' ← lappiy- 'to shorten proportionally', dabdaka 'backside of the human body' ← dabday- 'to be enlarged, to grow fat in its upper part; to crouch down', juraġay 'straight-legged and, at the same time, unstable' ← juray- 'to be drawn out, to be straightened';

<sup>147</sup> Consonant-final stems are also restricted to /y r n s t x l/.

<sup>148</sup> This phenomenon of Yakut was thoroughly discussed in GrigJ where several rules were defined and illustrated with examples, however, GrigJ does not take some diachronic aspects into account making the analysis incomplete. For further details on the question of stem-final /y/, see GSJaLJa §138–145.

(3) bujurxay 'curly; lock (of hair)' ← bujuruy- 'to grow curly-headed, to curl', borolxoy 'gray; dim' ← boroluy- 'to fade, to stirred up, to grow dark; to become white during cooking, to lose red colour (of meat)', jabjīlġan 'fussiness, fuss' ← jabjīlïy- 'to hurry, to fuss', čaġalġan 'lightning' ← čaġalïy- 'to shine; to sparkle', julusxan 'zealous, pushy' ← julusuy- 'to strive'.

Examples under point (1) and (2) represent the "normal" way: certain rules (determined by e.g. the structure of the stem and the suffix) predict whether /y/ has to be dropped or not, cf. GrigJ 82 for the details. There are only two derivational elements which show "irregularity" by the replacement of the entire segment °Xy-, those are -KAy and -KAn, cf. point (3). -KAy is of Mongolic origin and its rule set in Literary Mongol defined by PoppeGWM §148 is the following: "Suffix -yai/-gei on stems ending in -yi- with the latter dropped; -qai/-kei on stems ending in -ra-/-re- with the final a/e dropped." The cited examples being: kajagay 'curved, oblique'  $\leftarrow$  kajayi- 'to bend', kabtagay 'flat'  $\leftarrow$  kabtayi- 'become flat', keltegey 'oblique'  $\leftarrow$  kelteyi-'to wry', butarkay 'dismembered'  $\leftarrow$  butara- 'to fall to pieces', tasurkay 'rent, torn'  $\leftarrow$  tasura- 'to rend'. In Yakut the following rule set can be defined: a)  ${}^{\circ}C_{-} \rightarrow {}^{\circ}CkAy$ , e.g. k"tarxay, k"taxxay, kïtaxay 'red, rosy'  $\leftarrow$  kïtar- 'to become red, to redden', b)  ${}^{\circ}\bar{A}$ -/ ${}^{\circ}XA$ -/ ${}^{\circ}Ay$ -  $\rightarrow$   ${}^{\circ}AgAy$ , e.g. bulaġay 'evil, any accident, any interference, any evil (spirit)'  $\leftarrow bul\bar{a}$ - 'to mix anything uniform, to stir slowly, to intermix, to mix up; to knead; to interfere (to disturb); to mix up (to lead into confusion)', c) °rXy- → °rkAy, e.g. köbdörköy 'friable, incompact' ← köbdörüy- 'to become friable', and d)  ${}^{\circ}lXy \rightarrow {}^{\circ}lkAy$ , e.g. torolxoy 'large increase'  $\leftarrow$  toroluy- 'to grow up; to grow stout, to grow fat'. Accordingly, it is visible that the Yakut suffix in question has preserved the morphophonological rules of the original Mongolic suffix.

The derivational element -KAn is also a suffix of Mongolic origin, cf. - $\bar{A}n$  in section 6.2 and -gAn in PoppeGWM §149. Although -gAn in Mongolic does not show the same morphophonological rules as -KAy, the Yakut suffix -KAn behaves the same, and as an extra rule replaces the stem-final °Xy- not only of verbs ending in °IXy- or °IXy-, but °IXy- or °IXy- or

It is, however, dubious what is the relation between the modern verbs ending in  ${}^{\circ}lXy$ -,  ${}^{\circ}rXy$ - or  ${}^{\circ}sXy$ - and the derivatives in  ${}^{-}KAy$  or  ${}^{-}KAn$ . It seems to be highly plausible that the derivatives in question were formed in an older stratum of the Yakut language when the stem-final segments were  ${}^{*\circ}lV$ -,  ${}^{*\circ}rV$ - or  ${}^{*\circ}sV$ -, thus e.g. bujurxay 'curly; lock (of hair)' and julusxan 'zealous, pushy' are derivatives of OY \*bujurV- and \*julusV- from which the modern verbs bujuruy- 'to grow curly-headed, to curl' and julusuy- 'to strive' could regularly develop; this fact indicates that the relation between the cited words under point (3), c) and d) cannot be symbolized by the sign  $\leftarrow$ , but  $\sim$ .

<sup>149</sup> The stem-final segment °rXy-, °lXy- and °sXy- behave morphophonologically the same in Yakut, and they are in most cases derivational elements of Mongolic origin, cf. ±lXy-, ±rXy- and ±sXy- in KalMEJ 103–104, 106–109, 109–110.

## 7.2 Allophony in derivation

	high vowel	low vowel	lyr	voiceless	nasal	X
K in inflexion 150	8	ġ	8	k	η	x
$K \text{ in } -KAy^{151} \text{ and } -KAn^{152}$	$g^{153}$	k, x, g, ģ	k, x	k, x	Ø	ø

Table 1: Morphophonological rule sets of K

As can be seen from table 1, rule set of K in the domain of inflexion is regular, and can be fit to the general system of Yakut morphophonology. While virtually every noun has inflected dative-locative form in +KA, (and this is of course true for almost every inflectional suffix) the morphophonological changes have to be predictable by strict rules. In case of derivation is no need for such a strict pattern: the "irregularly" derived forms are in the individual's mental lexicon and not determined by active rules. Nonetheless these "irregular" derivatives can be interpreted by diachronic analysis. Although the palatal-velar opposition between k: x and  $g: \dot{g}$  ceased to be valid in modern Yakut, derivatives in -KAy and -KAn treasured the original system: after stem-final /l y r/ 100%, in intervocalic position (cf. the row of low vowel in table 1) 85% of the examples fit to the palatal-velar harmony (note that -KAn is more regular than -KAy). In addition, as -KAy is of Mongolic origin, the preservation of this phenomenon is partially due to the Mongolic side where palatal-velar harmony of  $k: x, g: \dot{g}$  is strong.

<sup>150</sup> Examples for the dative-locative case marker:  $silgiga \leftarrow silgi$  'horse',  $\ddot{a}y\ddot{a}\ddot{g}\ddot{a} \leftarrow \ddot{a}y\ddot{a}$  'peace',  $ostuolga \leftarrow ostuol$  'table',  $k\ddot{i}ska \leftarrow k\ddot{i}s$  'girl',  $\bar{a}\eta\eta\eta a \leftarrow \bar{a}n$  'door',  $\ddot{i}naxxa \leftarrow \ddot{i}nax$  'cow'.

<sup>151</sup> See e.g. ämtägäy, ämtäkäy 'nicked, jagged, having broken edge, broken (off); break, fracture, cut' ← ämtäy- 'to get blunt, to be jagged, to break off on the edge', bujurxay 'curly; lock (of hair)' ← bujuruy- 'to grow curly-headed, to curl', torolxoy 'large increase' ← toroluy- 'to grow up; to grow stout, to grow fat'.

<sup>152</sup> See e.g. tamalġan 'speech (in philosophical sense)' ← tamalïy- 'to tell', änälgän 'moan' ← änäliy- 'to beg, entreat, to request persistently, to sob and lament', julusxan 'zealous, pushy' ← julusuy- 'to strive'.

<sup>153</sup> ø indicates that there are no examples for the given conditions.

<sup>154</sup> For other rule sets, see StachY 420. Note that K in present work is identical to G in StachY.

The rather archaic features of -*KAy* and -*KAn* presented here and in section 7.1 implies that these derivational elements belong to an older (or maybe the oldest) stratum of the Mongolic loan suffixes.

In other cases, elements belonging to the domain of derivation may present different morphophonological rule sets even if their ancestors could predict the same result. Although the contemporary Yakut suffixes -MAx, -MA and -MAs go back to the Turkic suffixes -mAk, -mA and -mAz respectively, and fit to the rule sets of M, the Yakut suffix  $-BX\check{c}\check{c}A^{155}$  (< \*- $mX\check{s}+\check{c}A$ ) also representing the same phonological background in initial position does not fit to the rule set of M, but B, cf. table 2. The structural differences between the two groups of suffixes are that while -MAx, -MA and -MAs have a low vowel A following the suffix-initial M, and they are monosyllabic,  $-BX\check{c}\check{c}A$  has a high vowel X, and bisyllabic. A rule that  ${}^{\circ}VmX{}^{\circ}$  is not valid in Yakut, however, cannot be attested. The number of syllables also should not imply any discrepancy.

	high vowel low vowel	1 y r	voiceless	nasal	x
$M^{^{156}}$	m	b	p	m	p
$B^{157}$	b	b	p	m	р

Table 2: Morphophonological rule sets of M and B

## 7.3 Homomorphy in derivation

In the life of a language diachronic processes may result homonyms from different pre-forms. To complicate the matter even further, these mostly phonological similarities may associate with semantic ones. In such extreme cases the separation of derivatives into different classes according to their origin is almost impossible. In Yakut there has been a tendency due to the strong Mongolic influence that led to a relatively great number of homonyms.

For instance, the Mongolic suffix -g and the Turkic one  $-(O)k^{158}$  have resulted in modern Yakut two more or less identical suffixes as -(A)k and -(V)k, q.v., respectively. The semantic side of these suffixes shows no differences, the only distinct feature is phonetic in nature and can be observed only under special conditions. Focusing to the phonetic side, the word  $\ddot{o}l\ddot{u}k$  'corpse; meat of cattle died in exhaustion; weak (horse, bull), sleepy, lazy; phlegmatic person;

<sup>155</sup> The Yakut suffix -BXt (~ OT -mXš), which is etymologically related to -BXččA, cannot be taken into the investigation of this problem, because there is only one example for this derivational element in PekSJ, i.e.  $\ddot{o}lb\ddot{u}t$  'deceased, dead person, corpse; death'  $\leftarrow \ddot{o}l$ - 'to die, to perish; to die out; to be ill; to become numb'.

<sup>156</sup> See e.g. butumax 'mixed'  $\leftarrow$  butuy- 'to mix up, to shake up, to confuse, to distort', xarārbax 'black'  $\leftarrow$  xarār- 'to blacken, darken', xaspax 'rut, hollow, hole'  $\leftarrow$  xas- 'to dig, to pick; to hollow out (wood)'.

<sup>157</sup> See e.g. sanābičča 'directly following the fact as it was thought; rashly'  $\leftarrow$  sanā- 'to think, to imagine, to reflect; to hope, to want, to plan; to decide; to consider; to understand', kīsirbičča 'once had been angry, had been angered'  $\leftarrow$  kīsir- 'to be angry, to be annoyed, to be indignant, to fly into a rage, to be irritated', köppüččä 'once who took off...'  $\leftarrow$  köt- 'to fly, to take off, to be raised; to jump (over)', kürämmitča 'once that ran away'  $\leftarrow$  kürän- 'to run away, to be hidden, to disappear'.

<sup>158</sup> The question whether a proto-form can be reconstructed for the Turkic and Mongolic suffixes, or how they are related to each other is beyond the scope of my work. Other similar cases also will not be investigated.

sleepiness; old cloud'  $\leftarrow \ddot{o}l$ - 'to die, to perish; to die out; to be ill; to become numb' belongs to the group of derivatives in -(V)k. <sup>159</sup> There is a huge group of words left, however, the status of which cannot be judged by any synchronic methods. The etymological method is useful in cases if the given words have exact parallels from Mongolic or Turkic, e.g. the Yakut word suruk 'tracing, pattern, figure; characters, letter; writing; message; paper; periodical; subscription; inscription, receipt; book'160 

survy-'to draw; to paint, to write' is a derivative in -(A)k because Literary Mongol presents its counterpart as jirug 'drawing, painting, illustration, picture, sketch; photograph'. A certain group of derivatives, however, does not present such parallels. For example, it is impossible to determine whether bültäx 'convexity, bulge'  $\leftarrow$  bültäy- 'to be inflated, to bulge, to be blown out, to swell' is a derivative in -(A)k or -(V)k. Although bültäy- is a loan from Mongolic, cf. LM bülteyi- 'to be pop-eyed; to bulge (of eyes); to pen one's eyes wide, stare', this fact does not postulate that bültäx is a derivative in -(A)k. Despite of this fact, in the separation of derivatives into classes this simple and practical method, being aware of its questionability, has been used: if the base is Turkic/Mongolic, the derivational suffix on it is also handled as of Turkic/Mongolic origin, respectively. In case of inner Yakut words, or words of uncertain origin the situation is even worse.

The above stated sentences are true for  $-(V)\eta$  (~ Mongolic  $-\eta$ ) and  $-(X)\eta$  (~ Turkic  $-(X)\eta$ ), or -(X)r (~ Mongolic -r) and  $-(A)r/-(\bar{X})r$  (~ Turkic -Ar, -Ir, -Ur, -yUr and -r), q.v.

In certain cases, the Mongolic suffix only has semantic influence. The Yakut suffix -MA, q.v., is of Turkic origin that forms only substantives in Turkic, cf. OT -mA in OTWF §3.109. The adjectival derivatives took place in Yakut due to the influence of the Mongolic suffix -mA; cf. the examples under the entry of -MA.

Sometimes chronological criteria provide further information on the development of seemingly identical, but etymologically different forms. For instance, the Mongolic suffix -gAn has been changed to  $-\bar{A}n$ , q.v., (for the detailed description of this process, see section 7.6) in intervocalic position in modern Yakut, e.g.  $m\ddot{a}ril\ddot{a}n$ ,  $m\ddot{a}ril\ddot{a}n$  'chatterer, grouchy' ~  $m\ddot{a}ril\ddot{a}$ -,  $m\ddot{a}ril\ddot{a}-$ ' to chatter, to blab; to hallucinate, to be delirious'; in other positions the suffixinitial consonant remained intact (-KAn), see e.g. julurgan 'swift'  $\leftarrow juluruy$ - 'to go forward, to dash against sy, to strain excessively; to enter in spite of prohibition'. On the other hand, the Turkic suffix -gAn shows a two-fold development: (1) in old, petrified derivatives it is  $-\bar{A}n$ , e.g.  $kur\bar{a}n$  'dryness, drought; bright (sky, weather)'  $\leftarrow k\bar{u}r$ - 'to dry'; and (2) in another group of derivatives it appears as -(X)gAn and is being productive, see e.g.  $\ddot{u}tig\ddot{u}n$  'ringing (of bell)'  $\leftarrow \ddot{u}t$ - 'to speak, to utter, to say, to pronounce; to call, name; to cuckoo; to thunder'. The derivatives in  $-\bar{A}n$  ( $\sim$  Turkic -gAn) belong to an older stratum of Yakut, clearly before the Mongolic influence, where the original Turkic segment \*C-GA could develop to  $C\bar{A}$ , cf. StachGJV §2.6, 38.4.  $-\bar{A}n$  ( $\sim$  Mongolic -gAn) words belong to a newer stratum where the weakening of \*GA >  $\bar{A}$  only could take place in intervocalic position, and has preserved after

<sup>159</sup> It is, on the other hand, undoubtedly a word of Turkic origin, see e.g. OT \*ölök ← öl- 'to die' and Kirghiz ölük 'dead, corpse' ← öl- 'to die'.

<sup>160</sup> According to the meanings, it is highly possible that the Mongolic word *surug* 'news, rumor, information' also had influence on *suruk*.

consonant-final stems. -XgAn is a strongly contracted form of the proto-form \*-A  $\ddot{a}r$ -gAn, <sup>161</sup> and its derivatives belong in the newest, active stratum of Yakut, cf. section 7.6.

# 7.4 The so called linking vowel<sup>162</sup>

Being a standard behaviour in Turkic, certain suffixes join the consonant-final stem via a linking sound, see e.g.  $k\ddot{u}l\ddot{u}m$  'smile'  $\leftarrow k\ddot{u}l$ - 'to laugh (loud)' + -(X)m (~ Turkic -(X)m). These linking sounds in Yakut can be divided into the following two classes: the low A type, and the high X type. However, it is worth noting that only a very small group of words provides information on the question of the linking sound, because most of the verbs end in  $^{\circ}A$ -,  $^{\circ}XA$ - or  $^{\circ}Vy$ -. Furthermore, some suffixes provide no examples with consonant-final stems at all, thus the linking vowels in the detailed description of these suffixes are defined by analogies and, because of this, have hypothetical character.

The low type A is in minority and mostly characteristic to the suffixes of Mongolic origin, cf. -(A)k (1), -(A)tA (1), -(A)tA (2) and -(A)tA (2), q.v. The only suffix of Turkic origin belonging to the low type is the aorist in -(A)tA (21). The A type being more typical in Yakut shows a more or less equal distribution between the suffixes of Turkic and Mongolic origin, cf. Turkic -(X)tA0, -(X0)tA1, -(X1)tA2, -(X1)tA3, -(X1)tA3, -(X2)tA3, -(X3)tA4, -(X3)tA4, -(X4)tA5, -(X4)tA5, -(X4)tA5, -(X4)tA6, -(X4)tA6, -(X4)tA7, -(X4)tA7, -(X4)tA7, -(X4)tA8, -(X4)tA8, -(X4)tA9, -(X4)tA9,

The six significant examples of the low type being:

- (1) ömüräx 'nervously sick person' ← ömür- 'to suffer from a special form of hysteria', cf. LM üyme- 'to become disturbed; to bustle; to be excited', Kh üyme- 'to become disturbed; to bustle; to be excited; to fidget', B uymar- (< OB \*üymer-) 'west. to be confused; to go mad';</p>
- (2) *iŋältä, iŋättä* 'introduction, penetration; fruitfulness, benefit' ← *iη* 'to be sucked, to be absorbed, to penetrate, to pass through, to take root', cf. Old Turkic *siη* 'to sink into (something *Dat*.); to be absorbed, digested';
- (3) oydom 'separately, far; small grove'  $\leftarrow$  oyun-, oydV- 'to be separated; to tear off; to break off'  $\leftarrow$  oy- 'to skip; to jump (aside)' + -(X)n-, cf. LM oyi- 'to be rebound, ricochet, glance off; to gallop; to fly aside; to fall down; to avoid; to run, go away, flee';

<sup>161</sup> The converb can be not only -A, but -I, -U or -yU.

<sup>162</sup> The term "linking vowel" has considerably misleading character implying that the sound in question is not an organic part of the suffix, which is not true for native Turkic elements, but only in certain cases for loaned ones. Despite of this ambiguity, this term perfectly describe the function of this sound (bounds the suffix to the stem) and will be used throughout my work. Cf. GOT §2.51 for further notes.

In the literature "linking vowel" is also referred to as "union vowel".

<sup>163</sup> Here only the primary short types are being discussed. The long or diphthongic suffix-initial vowels (developed from a former segment \*CV or \*VC in most cases) will be analysed in section 7.5 and 7.6.

<sup>164</sup> In brackets the number of significant examples is indicated.

<sup>165</sup> This form appears only in conditional positions: after °C- and °Ay- type of stems. This is etymologically related to the Old Turkic suffix -Ar and thus no need to discuss here lengthwise. In other positions -Xr is applied, cf. section 7.5 for the details.

<sup>166</sup> KałD 7: 50 derives *oydom* from the verb *oyut-* 'to break away, to beat off', which is impossible because *oyut*-does not have an oblique stem \**oydV-*.

- (4) *xorom* 'unprofitable, prodigality, waste' ← *xor* 'to cause expense, to spend', cf. OT *kora* 'to suffer loss, be diminished', *kor* 'loss, damage', LM *koro* 'to diminish, decrease; to become depleted; to wane, lessen; to die';
- (5)  $i\eta\ddot{a}mt\ddot{a}$  'introduction, penetration; fruitfulness, benefit'  $\leftarrow i\eta$  'to be sucked, to be absorbed, to penetrate, to pass through, to take root', cf. point (2);
- (6)  $sal\dot{g}amta$  'anything boring'  $\leftarrow salt$ -,  $sal\dot{g}V$  'to disgust, to tire, to bore; to be bored'.

The only example where the appearance of the low linking vowel can be interpreted somehow is *xorom* under point (4). Although it is unclear how the Yakut verb *xor*- is related to Turkic *kora*- and Mongolic *koro*-, the low vowel of the suffix might appear because of the influence of the Mongolic verb. On the other hand, it is also plausible the *xorom* is not a derivative of *xor*-, but \**xoro*-, cf. Yakut *xoron*- 'to suffer loss, to be spent'.

The *X* type provides enough examples for a detailed analysis, however, it is the common type being the "standard" behaviour in Yakut, see e.g.:

- (7) bärigän 'generous' ← biär- 'to give, to transfer, to render', cf. OT ber- 'to give';
- (8) oydugan 'break'  $\leftarrow$  oyun-, oydV- 'to be separated; to tear off; to break off', cf. point (3);
- (9) baġarïmsax 'being envious, one who is envy' ← baġar- 'to want, to desire, to envy; to fall in love', cf. LM bakara- 'to be pleased, have pleasure; to be excited with joy; to be content, feel satisfaction';
- (10) tiritimsäx 'readily perspiring' ← tirit- 'to sweat', cf. OT tärit- id.

Besides the clear A and X type, a great number of derivational elements allow to join the base via both types. This type of the linking sounds is signed by V. According to their etymology, they can be divided into the following three groups: Turkic -(V)gAs (50, 79),  $^{167}$  -(V)k (14, 28), -(V)s (3, 8); Mongolic -(V)bXl (2, 1), -(V)gVr (2, 1), -(V)lgA(n) (3, 7), -(V)l (2, 3), -(V)mAr (2, 6), -(V)mAy (1, 1),  $-(V)\eta$  (3, 2), -(V)rkAy (2, 1), and uncertain derivational elements  $-V\acute{n}A\eta$  (1, 13),  $-V\acute{n}Vk$  (2, 5).

The duality of -Vk can be interpreted historically: the low and high derivatives of the suffix -(V)k being related to the OT suffix -(O)k might have appeared in the following way:  $-(X)k \leftarrow -(O)k \rightarrow -(A)k$ .  $k\ddot{u}r\ddot{j}\ddot{u}k$  'heap of snow, rubbish raked off by shovel; snowdrift; toilet' and  $k\ddot{u}r\ddot{j}\ddot{u}x$  'shovel; wide shovel for raking up the snow'  $\leftarrow k\ddot{u}rt$ -,  $k\ddot{u}r\ddot{j}V$ - 'to rake up; to rake away by shovel; to remove' show the two different forms derived from the same base.

The twofold system of the linking sound is a characteristic feature of certain suffixes of Mongolic origin. Because suffixes in Mongolic, with some exceptions, have practically no linking vowel, speakers of Yakut could not adopt the Mongolic system directly, but had to transform it to the morphophonological system of Yakut. Because indigenous suffixes, belonging to both types, and their rule sets do not give any strict rule for the application of foreign elements, in the process of borrowing both types were allowed and applied. In extreme cases both alternatives can be registered in the same meaning, see e.g.:

<sup>167</sup> Numbers in brackets represent the distribution of the low and high type of the examples.

- (11)siätilgä, sätälgä 'ring (made of willow) in the nostrils of bull' ← siät- 'to drive by hand, on rope; to conduct, to accompany', cf. OT yet- 'to lead (a horse)';
- (12) $t\bar{t}tarxay$  'torn, ripped',  $t\bar{t}trxay$  'constant touch'  $\leftarrow t\bar{t}t$  'to tear, to rip; to touch; to pummel, to stir'.

This "mixed" system of suffixes of Mongolic origin might cause changes in the original system, too. For example, the Yakut suffix -(V)s should belong clearly to the high X type, cf. OT -Xš in OTWF §3.103, but three examples present the low variant of the linking sound:

- (13) tiäräs 'somersault' ← tiär- 'to turn, to turn up (dress), to reverse, to turn over', cf. OT \*tägir- (StachGJV §7.10);
- (14)tolos: tolos ïy 'full moon' ← tuol- 'to become full, to grow stout, to be filled', cf. OT tol- 'to be filled, or full';
- (15)  $\ddot{i}$  illus 'bifurcation'  $\leftarrow \ddot{i}$   $\ddot{i}$   $\ddot{i}$   $\ddot{i}$  'to be separated, to be broken off; to extend'.

For a more precise and clear description of this process, however, further researches are needed.

Although the followings are not closely related to the linking vowels themselves, can be discussed under this section: certain suffixes render the same twofold system of vowels in other than initial position. For instance, see the second syllable of -(V)gVr (190, 65)<sup>168</sup> and  $-V\acute{n}Vk$  (9, 4). The mixed character of  $-V\acute{n}Vk$  cannot be analysed because of its uncertain origin. The suffix -(V)gVr is of Mongolic origin and the alternation of the second vowel is due to Mongolic. The counterpart of Yakut -(V)gVr also shows the same duality: the base form in Mongolic is -gAr, but in conditional position, after stems ending in  $\circ iy$ -, an allomorphic variant in -gir is used. This system of Mongolic was adopted by the speakers of Yakut, however, not entirely preserving the original morphophonological rules. Accordingly, after low stem-final vowels the suffix is also of the low type, and after high vowels it is of the high type, see e.g.:

- (16)äńäġär 'having a long jawbone' ← äńäy- 'to have a long jawbone', bösköġör 'pot-bellied (of crucian)' ← bösköy- 'to be visible, massive, fat, puffy';
- (17)bäkigir 'high and humped backed (of man)' ← bäkiy- 'to be high and humped backed', kibigir 'compressed, tight; well-proportioned' ← kibiy- 'to compress, to press anything between the feet'.

However, there are exceptions, or some verbs provide both derivatives, see e.g.:

(18)kilaġir 'shining' ← kilay- 'to shine, to shine from the distance (of silver, the sun); to x-ray', biltaġir 'physically developed and beautiful (of young woman, or girl)' ← biltay- 'to show its convex side, to jump up, to stuck out; to develop physically (of young woman, or girl)';

<sup>168</sup> Low type, high type.

(19)äkigir, äkigär 'hollow (of stomach)' ← äkiy- 'to become hollow (of stomach)', bültäġär, bültäġir 'inflated, blown out, convex, swollen; small swelling' ← bültäy- 'to be inflated, to bulge, to be blown out, to swell'.

As for the status of the extremely problematic suffixes -(X)msAx and -(X)msXk, cf. -(X)msAx in section 6.2.

## 7.5 Dominancy in derivation

A great number of Yakut derivational elements also represent this phenomenon, see e.g.  $-\bar{A}k$  (11),  $^{170}$  -XAx (5),  $-\bar{X}k$  (4),  $-\bar{X}r$  (45; see at -Ar),  $-\bar{X}$  (178),  $-\bar{X}s$  (2) of Turkic origin;  $-\bar{A}l$  (2),  $-\bar{A}n$  (30),  $-\bar{A}sXn$  (22),  $-\bar{A}t$  (4),  $-\bar{X}n$  (9),  $-\bar{X}r$  (10) of Mongolic origin, etc. On the basis of a simple synchronic analysis, the dominancy of these elements can be clearly observed:

- (1) tarāx 'pampered, spoil' ← taray- 'to stretch out, to be enlarged; to put on airs, to jeer';
- (2) käġiäx 'nod' ← kägiy- 'to nod or twist by the head', cf. LM geki-, gekü- 'to nod one's head (in affirmation or when signaling somebody)';
- (3) čulbūk 'wedge, axe, wood chopper' ← čulbuy- 'to be sharp at the end';
- (4) *tuorūr* 'designation of sand', *tuorūr* sir 'transportation' ← *tuorā* 'to go aside, to be turned, to displace, to be averted; to pass, to intersect';
- (5) *albïnnî* 'flattery; deceit, cheat, trick' ← *albïnnā* 'to flatter; to deceive, to swindle', cf. LM *albin* 'demon, devil, evil spirit, sprite';
- (6) *kirīs* 'oath, curse; invocation' ← *kirā* 'to curse, to adjure, to swear';
- (7) *xotōl* 'deep; deepening, hollow place, valley' ← *xotoy* 'to move downwards; to be curved', cf. LM *kotoyi* 'to be[come] concave; to cave in; to sag';
- (8) iädän 'fuss, haste, anxiety, uneasiness, agitation, confusion, disturbance, mutiny, disorder, noise' ← iädäy- 'to fuss, to rush about, to hurry, to be disturbed; to be tangled, to be mixed; to be upset, to go crazy; to be scattered, to be entertained; to be corrupted', cf. LM egede- 'to turn sour, sour, curdle, set, coagulate';

<sup>169</sup> This term was firstly introduced by Clauson in EDPT xxxix. Later on it was adapted by some scholars, see e.g. Erdal 1979: 87 (applying this term for the cases of bounding consonants, too) and OTWF §3.103, 3.107, however, it could not gain ground in Turcology for its importance.

<sup>170</sup> In brackets the number of examples showing dominancy is indicated.

- (9) salāsīn 'direction; adaptability, habit; quality, conscience' ← salay- 'to direct, to transfer, to displace, to guide, to lead', cf. LM jala- 'to straighten, correct; to steer, direct the course of; to drive cattle to the pasture ground';
- (10)nälāt 'open flat space, gently sloping open slope' ← näläy- 'to be thrown open, to spread, to lie down by spreading', cf. LM neleyi- 'to be wide, vast';
- (11) $k\ddot{o}s\ddot{u}n$  'rigid (of material, of skin), inflexible (of tree); clumsy, heavy; rough, dry; clumsiness'  $\leftarrow k\ddot{o}s\ddot{u}y$  'to become numb, to grow torpid, to harden, to freeze';
- (12)*ilbīr* 'broom' ← *ilbiy* 'to sweep, to clear out; to fondle, to rub (body); to cure, to treat', cf. LM *ilbi* 'to smooth with the hand, stroke, caress; to appease' and *ilbigür* 'flattery; artfulness, ruse; seduction'.

Although the synchronic comparison of the base verbs and their derivatives show the phenomenon of dominancy, a detailed diachronic analysis can point out that these derivatives are only virtually dominant. The contemporary appearance of this behaviour is the result of a special diachronic process, that is the weakening, or contraction of certain sound groups.

Of the above mentioned suffixes ten show the same sound change: the original suffix-initial segment  $-gV^\circ$  has weakened  $^{171}$  to a long vowel, cf.  $-\bar{A}k < -gAk$ , -XAx < \*-gOok,  $^{172} - Xk < -gOk$ ,  $-\bar{X}s < -gU\check{c}$  and  $-\bar{A}l < -gAl$ ,  $-\bar{A}n < -gAn$ ,  $-\bar{A}sXn < -gAsUn$ ,  $-\bar{A}t < -gAt$ ,  $-\bar{X}n < -gUn$ ,  $-\bar{X}r < -gUr$ ; for a detailed description of their etymology, see the relevant entries in section 6. This fact means that the words belonging to this group are not real derivatives of the above mentioned formatives. For instance, the Yakut word  $\ddot{a}l\ddot{a}n$  'white strip(e)' is not a direct derivative of  $\ddot{a}l\ddot{a}y$ - 'to decrease the volume, to be rubbed (of skin), to be erased, to be worn out, to be worn to rags, to be dulled', but a modern, contracted form of OY \* $\ddot{a}l\ddot{a}\ddot{g}\ddot{a}n \leftarrow$  OY \* $\ddot{a}l\ddot{a}$ - (>  $\ddot{a}l\ddot{a}y$ -), cf. LM ele- 'to wear out (as by attrition)', ele-, ile-, ili- 'to caress, stroke with one's hand; to rub, massage'. It is also true for the formatives of Turkic origin, see e.g.  $\ddot{k}ir\ddot{s}$  'oath, curse; invocation' < OY \* $\ddot{k}irgagu\ddot{c} \leftarrow$  OY \* $\ddot{k}irga$ - >  $\ddot{k}ir\ddot{a}$ - 'to curse, to adjure, to swear', cf. OT  $\ddot{k}irga$ -,  $\ddot{k}arga$ - 'to curse' and StachGJV §5.3a. The virtual dominancy of the above mentioned ten suffixes has developed in the same way.

Focusing to the suffixes of Mongolic origin, it is worth noting that not every derivational element having the original sound group  $-gV^{\circ}$  in suffix-initial position shows dominancy. For instance, the Yakut suffix  $-(\bar{A})\check{c}(\check{c})X \leftarrow \text{Mongolic } -gA\check{c}i$  does not behave the same way as  $-\bar{A}sXn \leftarrow \text{Mongolic } -gAsUn$ :

<sup>171</sup> The process of weakening has happened almost always after stem-final vowels ( $\bar{V} < V - gV$ ). It is the standard way of development after stem-final consonants, too, however, it can remain intact in newer derivations after /l r s/, see e.g.  $\ddot{o}r\ddot{g}o$  'woven belt; rope, lasso'  $\leftarrow \ddot{o}r$ - 'to braid, to interlace; to weave; to twist (rope), to wind' for  $-\ddot{A}n$ , q.v.

<sup>172</sup> According to the etymology given in StachJFutS 5, i.e.  $-XAx < *-g\bar{O}k < *-gO ok$  and -XA < \*-gO. Cf. -gU in GOT §3.284 for the Old Turkic parallels.

<sup>173</sup> As it has already been stated in section 7.1, in cases when there is no direct connection between the cited words, to be more accurate, the sign  $\sim$  should be used instead of  $\leftarrow$ .

<sup>174</sup> Accordingly, the used symbols for these formatives ( $-\bar{A}n$ ,  $-\bar{X}s$ , etc.) have misleading character, nevertheless, this method makes the analysis and classification of the suffixes more perspicuous from synchronic point of view.

(13)salayāčči 'manager, instructor' ← salay- 'to direct, to transfer, to displace, to guide, to lead', cf. LM jala- 'to straighten, correct; to steer, direct the course of; to drive cattle to the pasture ground',

suruyāčči, suruyātčik 'drawer; painter, writer' ← suruy- 'to draw; to paint, to write', cf. LM j̃iru- 'to draw (as a line or picture); to scratch; to strike (of a match)' and j̃irugači(n) 'painter, artist, draftsman',

 $da\dot{g}ay\bar{a}\check{c}\check{c}i$  'one who touches; concerning'  $\leftarrow da\dot{g}ay$ - 'to concern, to touch, to come into contact';

(14) $sal\bar{a}s\ddot{i}n$  'direction; adaptability, habit; quality, conscience'  $\leftarrow salay$ - 'to direct, to transfer, to displace, to guide, to lead',

 $sur\bar{a}sin$  'line, feature (of person); image, icon'  $\leftarrow suruy$ - 'to draw; to paint, to write', cf. LM jirugasu(n) 'line, feature, dash, hyphen',

 $da\dot{g}a\ddot{s}\ddot{i}n$  'touching'  $\leftarrow da\dot{g}ay$ - 'to concern, to touch, to come into contact', cf. LM daga- 'to follow, accompany, travel with; to submit oneself to, obey; to imitate; to observe, comply with'.

The difference between the bounding rules of  $-(\bar{A})\check{c}\check{c}X$  and  $-\bar{A}sXn$  also can be explained from a diachronic point of view: while  $salay\tilde{a}\check{c}\check{c}i$  is a new derivative  $(-(\bar{A})\check{c}(\check{c})X)$  is a productive suffix in modern Yakut; there are 607 examples in the database),  $sal\bar{a}sin$  is the modern form of the old derivative \*salagasun (according to PekSJ,  $-\bar{A}sXn$  was not a frequently used element before the socialist period; there are only 62 examples in the database). On the other hand, it is also possible that the base verb (salay- < OY \*sala-  $\leftarrow$  LM  $\check{j}ala$ - 'to straighten, correct; to steer, direct the course of; to drive cattle to the pasture ground') and its derivative ( $sal\bar{a}sin$  < OY \*salagasun) were borrowed from Mongolic independently, and  $sal\bar{a}sin$  is not a Yakut derivative, but a simple loan. These statements are valid for  $-\bar{A}l$ ,  $-\bar{A}n$ ,  $-\bar{A}t$  and  $-\bar{X}r$ , too.

Similarly to the above mentioned elements showing the weakening of  $-\bar{A}^{\circ} < -gA^{\circ}$ , the modern Yakut suffix  $-\bar{X} < -(X)g$ , cf. the original Turkic form -(X)g in OTWF §3.101, also developed due to contraction. The phenomenon of dominancy appears after stem-final segments  $^{\circ}\bar{A}$ - and  $^{\circ}XA$ -, see e.g.  $ayg\ddot{i}r\ddot{i}$  'sound, tone, clang; boasting'  $\leftarrow ayg\ddot{i}r\bar{a}$ - 'to sound, clang; to boast; to shake loose' and  $\ddot{a}rb\bar{i}$  '[the action described by the base verb]; saw'  $\leftarrow \ddot{a}rbi\ddot{a}$ - 'to saw (in two)'. The homomorph converb in  $-\bar{X}$ , cf. -A in section 6.2 and the Old Turkic parallels -A, -I, -U and -yU in GOT §3.286, also behaves dominant after stem-final  $^{\circ}\bar{A}$ - and  $^{\circ}XA$ -, see e.g.  $xolb\bar{u}$  'together, in general; as a group; connection, linkage, communication'  $\leftarrow xolb\bar{o}$ -, xolbuo-'to connect, to attach; to connect; to inform; to include, to contain; to interface'.

<sup>175</sup> On the revival of old, unproductive derivational elements in neologisms, such as  $-\bar{A}sXn$ , see below.

<sup>176</sup> Note that some words in  $-\bar{A}sXn$  stand alone in the dictionaries and cannot present their base, see e.g.  $simd\bar{a}sin$ ,  $simd\bar{a}sin$ ,  $simd\bar{a}sin$ ,  $simd\bar{a}sin$ ,  $thin stringy animals; thin as the horse hair' <math>\leftarrow *simd\bar{a}$ -, B  $sind\bar{a}ha\eta$  (< \*sindagasun) 'Fusssehne' (KałMEJ 21). However, it cannot be said that these suffixes have never been active in Yakut, because there are derivatives from Turkic stems, see e.g.  $kig\bar{a}sin$ ,  $kigi\bar{a}sin$  'instigation'  $\leftarrow kik$ - 'to incline, to tempt, to insist, to advice'  $\sim$  OT kik- 'to whet'.

The so called aorist in  $-\bar{X}r$ , cf. Old Turkic -(V)r and -yUr in GOT §3.233, 3.282, also behaves similarly, dominancy takes place after stem-final  ${}^{\circ}Xy$ -,  ${}^{177}{}^{\circ}\bar{A}$ - and  ${}^{\circ}XA$ -, see e.g.  $bulk\bar{u}r$  'mixing, shaking; admixture; confusion'  $\leftarrow bulkuy$ -, bukkuy- 'to mix, to stir, to shake (up)',  $mu\eta ut\bar{u}r$  'outstanding, splendid, selected; excellently, extremely'  $\leftarrow mu\eta ut\bar{u}$ - 'to reach limit, degree; to increase in size' and  $t\ddot{o}l\ddot{u}r$  'payment, tribute; vengeance'  $\leftarrow t\ddot{o}l\ddot{u}\ddot{o}$ - 'to pay, to pay out; to pay back'.

In the following table the possible bounding situations of the above mentioned three suffixes of Turkic origin are summed up:

	aorist	-X̄	-A/-X̄ converb
°C-	°CAr	°CĀ	°CA
°Xy-	°Ār	°XyX̄	°XyA
°Ay-	°Ar	°AyX̄	°AyA
°Ā-	°Ār	°Ā	°Ā
°XA-	°Ār	٥Ž	٥Ž

Table 3: Bounding rules of the agrist, the element  $-\bar{X}$  and the  $-A/\bar{X}$  converb

A problematic and not thoroughly analysed question of Yakut morphology is the twofold distribution of certain derivational and inflectional elements. In this system the suffixes in question have two completely different allomorphs:  $-A^{\circ}$  and  $-\bar{X}^{\circ}$ , cf. the aorist in  $-Ar/-\bar{X}r$  and the converb in  $-A/\bar{X}$ . As for the aorist, it would be a normal Turkic behaviour to join the short form of the aorist in -r to every stem ending in vowels, however, such proto-forms as  $*^{\circ}\bar{A}r$  or  $*^{\circ}XAr$  never yield  ${}^{\circ}\bar{X}r$  in modern Yakut. Here I suppose that to stems ending in  ${}^{\circ}\bar{A}$ - or  ${}^{\circ}XA$ - not the short, but the long variant of the aorist (cf. Old Turkic -yUr) was bounded, where the sound group  $*^{\circ}\bar{A}yXr$  or  $*^{\circ}XAyXr$  might result  ${}^{\circ}\bar{X}r$  in a good chance.  $^{178}$  Accordingly, a protoform \*bulku-yur can be reconstructed for the modern Yakut word  $bulk\bar{u}r$  'mixing, shaking; admixture; confusion'. A similar process of weakening can be observed in case of the converb  $-A/-\bar{X}$ , cf. the corresponding Old Turkic forms -A, -I, -U and -yU. The proto-forms  $*^{\circ}\bar{A}yX$  and

<sup>177</sup> In such cases -X is not dominant, see e.g.  $di\ddot{a}liy\bar{i}$  'inoffensive mockery, smile'  $\leftarrow di\ddot{a}liy$ - 'to mock inoffensively, to smile'.

<sup>178</sup> According to StachDWb 55, the long type of the aorist appears only after stem-types °Ā-, °XA- and °Vy- < \*°V-, and this stem-final vowel "bei der Suffigierung wegfällt". However, this explanation leaves some cases unsolved. For instance, the long type of the aorist is also applied for stems where original long vowels cannot be reconstructed, see e.g. the verbs ending in °rXy- or °lXy-: ämtäriy- (aorist: ämtärīr) 'to be jagged (of earthenware), to brake off, to be cut' ~ LM emtere- 'to be chipped, nicked, to be [heart] broken'. On the other hand, why does appear the high-long type X, instead of the low-short type A as a linking vowel of the aorist-in such cases?

\*°XAyX has changed to °X in modern Yakut, as it was seen in case of the aorist. The same process of contraction can be seen in Khakas, cf. -A and -Ar for the details.

It is worth noting that the influence of neighbouring Mongolic languages, especially Buryat, had a key role in developing or strengthening the system of dominancy in modern Yakut. The strong contraction and weakening in modern Buryat have resulted similar phenomena, cf. the morphophonological rules of Buryat in PoppeBG §1.16 and the examples a)  $hon\bar{i}n$  (~ LM sono-yin) 'of the gadfly'  $\leftarrow hono$  'gadfly' and the genitive in  $+\bar{i}n$  (~ LM +yin), where the long vowel of the genitive case developed from  $^{\circ}yV$ ; and b)  $xar\bar{u}l$  'sentry, watchman' (~ LM karagul) ~ xara- 'to look' +  $-\bar{U}l$  (~ LM -gUl), where the long vowel developed from  $^{\circ}gV$  (PoppeBG 4.13).

original form	contracted form
°A-gA	°Ā
°A-gX	°Ā
°XA-gA	°XA/Ā
°XA-gX	°XA/X̄
°X-gA	°XA/X̄
°X-gX	°Ā
°A-g	°Ā
°XA-g	°Ā
°X-yX	°Ā
°XA-yX	°Ā
°X-yX	°X̄

Table 4: The development of dominancy in Jakut

Finally another problem related to dominancy has to be discussed in this section, that is the question of revival and reinterpretation of the old, unproductive suffixes. For instance, the old, not frequently productive suffix  $-\bar{A}sXn$  came into use in neologisms in the socialist period in the meaning of the Russian suffixes  $-\mu ue$  and  $-a\mu u\pi$  (Cf. RusGr §239, 256, 257 and 263). According to the synchronic analysis of the derivatives in  $-\bar{A}sXn$ , it is absolutely logical that the speakers of Yakut, namely the reinterpreters of the suffix in question, applied the rules of dominancy, which are in fact only virtual in old derivatives. On the other hand, after the contraction of \*° $\bar{A}yVr$ , \*°XAyVr > °Xr and \*° $\bar{A}yV$ , \*°XAyVr > °Xr the newly formed words

Note that there is a third type of converb belonging to this group etymologically: the converb in -X is related to the Old Turkic suffixes -I and -yU, see e.g.  $b\ddot{u}t\ddot{a}r\dot{r}$  to the end'  $\leftarrow b\ddot{u}t\ddot{a}r\dot{r}$  to end, to finish, to conclude; to work off; to manage, to succeed; to help to do a service; to destroy; to strike, to conquer' and  $b\dot{u}\dot{c}igil\dot{u}$  'separately' (< \* $b\dot{u}\dot{c}igil\ddot{u}$  < \* $b\dot{u}\dot{c}igil\ddot{u}$  is not productive in modern Yakut, and can be found only in petrified forms. The difference between -X and -X (if both come from -yU) are diachronic in nature: the older derivatives show the shortening of the word final \* $^\circ$ X to  $^\circ$ X.

accepted the virtual dominancy of the old derivatives (it is also valid for the inflexional forms of -Xr and -X).

## 7.6 Sound changes in derivational elements

The most frequent sound change in derivational elements is the weakening of /g/. Nine suffixes of Turkic and eight of Mongolic origin represent this sound change. It mostly takes place as  $-\bar{V} < -gV^{\circ}$ , see e.g.  $-\bar{A}k \sim \text{OT} -gAk$ ,  $-\bar{X}k \sim \text{OT} -gOk$ ;  $-\bar{A}l \sim \text{LM} -gAl$ ,  $-\bar{A} \sim \text{LM} -gA$ ,  $-\bar{A}n \sim \text{LM} -gAn$ ,  $-\bar{X}n \sim \text{LM} -gUn$ . After stem-final /l r s/ the suffix-initial /g/ may remain intact. Cf. the following examples in  $-\bar{A}n$  and  $-\bar{A}k$ :

- (1) kädän 'bump, hollow' ← kädäy- 'to bend; to bend the back', cf. LM gedeyi- 'to bend backwards; to throw back one's head high; leaning or bending backwards; obstinate, stubborn; arrogant, conceited', "iğān 'squeezing, coercion; haste' ← ïġay- 'to constrain', "änälgän 'moan' ← änäliy- 'to beg, entreat, to request persistently, to sob and lament', cf. LM enel- 'to suffer pain of body or mind; to grieve, lament, be distressed', basirġan 'exaggeration' ← basiriy- 'to exaggerate; to exceed';
- (2) olōx 'superficial person' ← oloy- 'to stare the eyes; to show foolish face', munāx 'lascivious [incorrect]' ← mun- 'to stray, to be in error; to be dazzled', cf. OT bun- 'to be mentally deranged or disturbed', adīlġax 'place between the lake and the forest encumbered with fallen trees' ← atīlīn-, atīllV- 'to run into; to be pricked, to prick oneself', uyuskax, uyusxax 'being alienated' ← uyusuy- 'to be separated, to alienate, to be cooled completely by spirits'.

The preservation of /g/ can also be seen in compound suffixes such as  $-(V)rkAy \sim LM -r-kAy$ ,  $-(V)lgA(n) \sim LM -l-gA(n)$  and  $-(X)rgA(n) \sim LM -r-gA(n)$ .

Sometimes the process of weakening stops on half-way, see for instance, the proto-form of the future participle/tens marker in -XA(x) reconstructed as \*- $gO \sim -g\bar{O}k < *-gO$  (ok) in StachJFutS. The same can be seen in certain suffixes of Mongolic origin:  $-(X)ljXAr \sim LM$  -ljA-gUr,  $-(X)mtXA \sim LM$  -mtA-gU. Suffixes showing the contraction of  $-gV^{\circ} > -\bar{V}^{\circ}$  as a standard behaviour also can render diphthongic variants in special morphophonological positions. For instance,  $-\bar{A}sXn$  can be -XAsXn in cases such as \* $i-g\ddot{a} > i\ddot{a}$  or \* $\ddot{u}-g\ddot{a} > \ddot{u}\ddot{o}$ , see e.g.  $b\ddot{u}r\ddot{u}\ddot{o}\ddot{s}\ddot{u}n$  (< \* $b\ddot{u}r\ddot{u}-g\ddot{a}\ddot{s}\ddot{u}n$ ) 'ferment, fermented milk'  $\leftarrow b\ddot{u}r\ddot{u}y$ - 'to ferment'. The suffix -(V)bXl ( $\sim LM$  -gUl) also representing a special way of development can be interpreted as  $-(V)bXl < *-(V)\beta Ul$ /\* $-(V)\gamma Ul < -gUl$ .

In a single case the sound change of  $-Vg > -\bar{V}$  can be observed that is the suffix  $-\bar{X}$  (~ OT -(X)g). For a detailed description, see section 7.5.

In spite of the strong tendency of the contraction of  $-gV^\circ$  or -Vg to long vowel, there are suffixes showing the preservation of /g/. In derivational elements of Mongolic origin the suffix-final /g/ is represented as /k/ in modern Yakut, cf.  $-(A)k \sim LM - g$ ,  $-(X)msAx \sim LM - msAg$ .

This phenomenon is related to the phonetic system of Buryat where the word-final /g/ is [G] in speech (cf. PoppeBG §1.3), and this sound were adopted by the Yakut speakers as /k/.

The soung /g/ has preserved in the following suffixes: -(V)gVr (~ LM -gAr/-gir), -(V)gAs (~ OT  $-gA\tilde{c}$ ), -(X)gAn (~ OT -gAn),  $-(X)mA\dot{g}Ay$  (~ LM -mAgAy/-mkAy) and -(X)mtAgAy (~ LM -mtAgAy). As the initial sound /g/ of LM suffix -gAr/-gir remained intact in modern Buryat, cf. PoppeBG §4.24.2, Yakut also preserved it, see e.g.:

- (1) Y arbaġar 'tattered, tousled (of hair); entangled (of plant); branchy (of tree)' ← arbay- 'to be tattered, to tousle; to come to disorder',
   LM \*arbaġar ← arbayi- 'to spread (as the fingers); to become tousled or disheveled',
   B arbaġar 'being widespread; shaggy; fluffy (of snow)' ← arbay- 'To be widespread; to be jumbled, ruffled';
- (2) Y baltaġar 'large sized, wide, chubby, plump' ← baltay- 'to have large form, to be large sized; to bulge',
  - LM *baltagar* 'flattened; thickset, squat, stocky'  $\leftarrow$  *baltayi* 'to be[come] flat; to stay down; to be stubby or thickset',
  - B baltagar 'thick and clumsy; being widespread', baldagar 'thick and stocky (of man)' ← balday- 'to become thick, to grow fat'.

The Mongolic suffixes -mAgAy/-mkAy and -mtAgAy also show stability, the intervocalic VgV did not undergo the weakening process. For instance, the sound /g/ has preserved in Buryat because the first vowel of the suffix has fallen off, cf. -mgAy and -mxAy in PoppeBG §4.24.7, e.g. edimxey 'voracious, gluttonous'  $\leftarrow edi$ - 'to eat', martamxay 'forgetful'  $\leftarrow marta$ - 'to forget' and oromgoy:  $\ddot{u}dege$  oromgoy 'compliant with sy'  $\leftarrow$  oro- 'to enter'. Accordingly, the weakening of VGV in suffixes of Mongolic origin only took place if the process of sound change had been started in Mongolic being an "inspiration" for Yakut, cf. section 7.8 and table 5.  $^{181}$ 

Although the modern Yakut elements -(V)gAs and  $-(X)gAn^{182}$  closely related to the Turkic suffixes  $-gA\check{c}$  and -gAn, respectively, they are not identical. Proto-forms in  $-gA\check{c}$  and -gAn should have regularly resulted in  $-\bar{A}s$  and  $-\bar{A}n$  in modern Yakut. The forms -(V)gAs and -(X)gAn can be interpreted as the contracted forms of the converbial constructions \*- $A\ddot{a}r$ -

<sup>180</sup> Cf. Literary Mongol *idemegey*, *idemekey* 'gluttonous, voracious; venal, mercenary' ← *ide*- 'to eat, consume; to gnaw, corrode; to exploit; to accept bribes, embezzle funds' and *umartamtagay* 'forgetful' ← *marta*-, *umarta*- 'to forget'.

<sup>181</sup> Discussing the word *kältägäy* 'curved, crooked', StachChY 196 supposes that the sound group *ägä* has remained intact and not changed to *iä* because "WMo. *kelteji*- 'to be curved' (+ Mo. -*gaj* > Mo. *keltegej* 'curved') > Yak. *kältäj*- id. (+ Yak. [< Mo.] -*gaj* > Yak. *kältägäj* 'curved'). This version seems quite likely since the Mo. suffix is productive and very active in Yak.". This explanation, however, does not give answer for the problem. The sound change *ägä* > *iä*, which StachChY *loc. cit*. would have expected, has nothing to do with production, c.f. -(Ā)ččX which is also productive in modern Yakut but shows the weakening of -*gV*° > -V°. The preservation of *VgV* happens in Yakut only if the Mongolic parallels also show the same phenomenon, namely Yakut follows the Mongolic way of development. Cf. KałMEJ 29 for stems.

<sup>182</sup> Etymologically related forms can be found in other Turkic languages, cf. the corresponding entries in section 6.1 and TenM 459–460.

 $gAn^{183}$  and \*-A  $\ddot{a}r$ - $gA\ddot{c}$  answering the question why the original sound g/ has preserved in modern Yakut.

Similarly to the sound changes in primary stems of Turkic origin,  $\check{s}$  and  $\check{c}$  have regularly developed to s in suffixes, see e.g.  $-(V)s \sim OT -X\check{s}$ ,  $-X\check{s} \sim OT -gU\check{c}$ ,  $-MAs \sim OT -mA+\check{c}$ ; the sporadic sound change  $\check{s} > t$  also can be seen in suffixes, see e.g.  $-BXt \sim OT -mX\check{s}$ . Although in Turkic words  $\check{c} > s$  is a strong rule in Yakut, there is a suffix in which the sound  $\check{c}$  could be preserved, cf. the element  $+\check{c}A^{184}$  in  $-BXt\check{c}A/-BX\check{c}\check{c}A$  ( $\sim OT -mX\check{s}+\check{c}A$ ) and  $XAx\check{c}A$  ( $\sim OT *-g\bar{O}k+\check{c}A$ ) being related to the Old Turkic equative case marker  $+\check{c}A$ , cf. GOT §3.124.

In suffixes of Mongolic origin, similarly to stems, both the preservation of  $\check{c}$ , and its change to s due to the strong Buryat influence, can be observed, see e.g. -sA,  $-\check{c}A \sim LM + \check{c}A$ . While in an older stratum the sound  $\check{c}$  has remained intact, in newer loan elements from Buryat the sound change  $\check{c} > s$  could take place, cf. the modern Buryat counterpart -sA in PoppeBG §4.13.5.0. The preservation of the original sound  $\check{c}$  is more common to Yakut, see e.g.  $-(\bar{A})\check{c}\check{c}X^{185} \sim LM - gA\check{c}i$ ,  $-(X)\check{c}(\check{c})X \sim LM - \check{C}U$ ,  $-(X)p\check{c}X \sim LM - b\check{c}i$ , etc.

The original sound group mj regularly developed to mn in -(X)mnX (~ LM -mji),  $^{186}$  however, in a newer stratum it has been preserved as -(X)mjX, -(X)mcX also due to the Buryat influence, cf. modern Buryat -mzA in PoppeBG §4.13.4.i. According to these phonetic criteria ( $c \sim s$ ,  $mn \sim mj$ ), certain suffixes were borrowed from Mongolic twice.

Since modern Yakut language only allows the vowel types A, X or  $XA^{187}$  in suffixes, loan elements belonging to other types have been adopted to this system, see e.g.  $-\bar{A}sXn \sim LM - gAsUn$ ,  $-\bar{X}k \sim OT - gOk$ ,  $-(X)p\check{c}X \sim LM - b\check{c}i$ .

## 7.7 The origin of the derivational elements

It goes without saying that Mongolic influence is very strong in Yakut. According to the analysis made by Radloff 1908: 2, approximately 26% of the word stock is of Mongolic origin. In recent times the absolute number of lexical roots copied from Mongolic is estimated around 2000–2500 (Popov 1986: 8, Rassadin 1980: 65), thus the words of Mongolic origin approximately amount to the 30% of the Yakut vocabulary. This simple statistic rate of the Mongolic elements in Yakut can be fine-tuned by the classification of these loans: according to Rassadin (1980: 66–70), not only easily borrowable cultural words but other parts of the lexicon, such as the kinship terminology, or the body parts were copied, which clearly

<sup>183</sup> This explanation was proposed by Johanson 2000. Another, but less probable etymology can be found in TenM 459: modern Turkic derivational elements of the type -AgAn/-XgAn are from the iterative element \*-A- + -kAn (an allophonic variant of -gAn).

<sup>184</sup> It has been preserved in modern Yakut in some petrified forms, cf. the examples cited under the entry of -BXččA in section 6.1.

<sup>185</sup> The non-dominant behaviour of the suffix-initial long vowel also indicates that  $-(\bar{A})\ddot{c}\ddot{c}X$  is a relatively new suffix in Yakut, cf. section 7.5.

<sup>186</sup> For similar phenomena of Yakut, see Stachowski 1994.

<sup>187</sup> The quantity of vowels has no effect in these replacement.

<sup>188 32.5%</sup> of Turkic, 25.9% of Mongolic and 41.6% of unknown origin. Although this work of Radloff has no scientific value in present time and his conclusion on the position of Yakut among the other Turkic languages has proved to be false, this statistical information made on the Yakut word stock seems not to be very far from the reality.

points to an even higher degree of language contact between Mongols and Yakuts. Other aspects of Mongolic influence regarding phonetics and morphology were analysed and presented in depth by KałMEJ. However, a systematic comparison of the heredity with the loan elements has not yet been done that means there is no exact information on the question how strong the Mongolic influence was. Here I can only present some statistical information of a relatively small field of Yakut–Mongol contact. The distribution of the deverbal nominal elements according to their origin being: 26 of Turkic, 43 of Mongolic, 2 of uncertain and 25 of unknown origin.

This high rate of suffixes of Mongolic origin shows a greater influence than the lexical analysis presented above, and than that of can be drawn from the literature. It is also worth noting that the second and forth most productive deverbal nominal derivational suffixes are of Mongolic origin. <sup>190</sup>

## 7.8 Common features of suffixes of Turkic and Mongolic origin

Since Mongolic influence has reached Yakut in the greatest degree via Buryat, here I will give a Yakut–Buryat comparision of the derivational elements.

The most common feature of Yakut and Buryat is the propensity to the contraction of suffix-initial  $-gV^{\circ}$  to  $-\bar{V}$ , see e.g. Y  $-\bar{A}$ , B  $-\bar{A} \sim LM - gA$ , Y  $-\bar{A}l$ , B  $-\bar{A}l \sim LM - gAl$ , Y  $-\bar{X}r$ , B  $-\bar{U}r \sim LM - gUr$ . Another similarity regarding the sound group -gV is that contraction does not take place after /l/ and /r/, see e.g. Y -(V)lgAn, B  $-lgA(n) \sim LM - lgA(n)$ .

- (1) Y xatīr, xotūr 'scythe; sickle' ← xadīy-, xoduy- 'to mow',
   B xadūr 'sickle' ← xada- 'to mow; to cut',
   LM kadugur 'scythe, sickle' ← kadu- 'to mow, to harvest; to cut (as grass, grain)';
- (2) Y d'aptalġa 'layers which consist of thin plates', japtalġa, japtilġa 'layer; flat laminar stone, flagstone' ← d'aptay-, japtay- 'to put anything thin or flat to an even surface', B dabtalga 'repetition; refrain; forging' ← dabta- 'to forge, to fasten; to flatten (metal); to repeat; to duplicate',
  - LM *dabtalga* 'repetition, review of work or lessons, reiteration, forging (of iron, etc.)'  $\leftarrow$  *dabta-* 'to repeat, reiterate, to review a lesson; to forge, beat'.

If the original Mongolic g/ has not weakened in Buryat, it is also preserved in Yakut, see e.g. Y -(A)k, B -g ~ LM -g, Y -(V)gVr, B -gAr ~ LM -gAr, -gir.

(3) Y soruk 'order, matter, necessity, purpose, commission; issue, reason' ← soruy- 'to appoint in any purpose (order, commission), to assign, to determine sy', B zorig 'bravery, willpower; aspiration, intention, desire' ← zori- 'to aspire; to intend',

<sup>189</sup> Despite of the detailed analysis on the Mongolic influence on the phonetic and morphological system of Yakut, there is practically no comprehensive study on the domain of syntax. Note that, however, some minor notes on this question can be found in the literature, see e.g. KałMEJ 114–116 on the verbal constructions -(V)s/-(V)k gin-(kin-) and Schönig 2005: 154 on the negation with the postponed suox 'not existing'.

<sup>190 3253</sup> examples for  $-\bar{X}$  (Turkic), 607 for  $-(\bar{A})\bar{c}\bar{c}X$  (Mongolic), 375 for -(V)s (Turkic) and 250 for -(V)gVr (Mongolic).

- LM *jorig* 'aim, intention, wish, striving, will, volition; decisiveness; courage, fortitude; will power' ← *jori* 'to move in the direction of; to strive, intend, plan; to be resolved';
- (4) Y baltaġar 'large sized, wide, chubby' ← baltay- 'to have large form; to bulge', B baltagar 'thick and clumsy; spred wide', baldagar 'thick and stocky (of man)' ← balday- 'to become thick, to grow fat', LM baltagar 'flattened; thickset, squat, stocky' ← baltayi- 'to be[come] flat; to stay down, to be stubby or thickset'.

On the other hand, Yakut differs from Buryat in certain points. While the LM suffix -gUl regularly weakened to  $-\bar{U}l$  in Buryat, Yakut has the form -(V)bXl. This derivational element had to be copied from Mongolic earlier than suffixes those of showing the sound change  $VgV > \bar{V}$ . <sup>191</sup>

(5) Y j̃asabil 'manager; managing the polar tractor station; efficiency' ← j̃asay- 'to boss, to govern, to manage',

B  $zah\bar{u}l$  'hist. captain'  $\leftarrow zaha$ - 'to be corrected, to recover; to repair; to maintain (horse); to castrate; to care',

LM jasagul 'arbitrator, referee, umpire, judge; sentry, guard'  $\leftarrow$  jasa- 'to put in order, fix, repair, correct, make correction[s], to improve, to decorate; to castrate'.

Contrary to the Buirat way of development, the original Mongolic segment A-gU is in half-way to the long vowel in cases such as: Y -XA, B - $\bar{U}$  ~ LM -gU and Y -XmtXA, B - $mt\bar{U}$  ~ LM -mtAgU.

- (6) Y ändiä 'error, danger' ← ändäy- 'to make mistakes, to be in error; to enter rash, to make a misdeed; in negative sentences: to forsee, to find out', B endü 'mistake' ← ende- 'dial. to be mistaken', LM endegüü 'mistake, error, fault, blunder; wrong, erroneous' ← ende- 'to err, fall into error, be mistaken, blunder, to go astray; to die';
- (7) Y baġarïmtïa 'being envious' ← baġar- 'to want, to desire, to envy; to fall in love', B sošomtū 'timid, easily frightened' ← sošo- 'to startle', LM čočimtagu 'easily frightened, timid, suddenly' ← čoči-, soči- 'to start in alarm, suffer a shock, become suddenly frightened or startled; to be surprised'.¹9²

In table 5, as follows, the possible ways of development of the sound segment \*VgV, and the relative chronological strata in which the corresponding suffixes might be borrowed are summed up:



<sup>191</sup> It is also possible that -(X)bVl was taken from another Mongolic language.
192 I found no corresponding data for -XmtXA.

·	stratum 1	stratum 2		stratum 3	
corresponding sounds	OT Vg(V) ~ Y V	LM VgV ~ Y VbV	LM VgV ~ Y V	LM AgV ~ Y XA	LM <i>Vg(V)</i> ~ Y <i>VgV, Vk</i>
landing forms	*VgV, *VγV	*VβV	*VγV, *V′V	*AyV, *A'V	*VgV, *Vk, *VG
example suffixes	OT $-gAk \sim Y - \bar{A}k$ OT $-(X)g \sim Y - \bar{X}$	LM -gUl ~ Y -(V)bXl	LM -gA ~ Y -Ā LM -gUr ~ Y -Xr	LM -gU ~ Y -XA LM -mtAgU ~ Y -XmtXA	LM -gAr, -gir ~ Y -(V)gVr LM -g ~ Y -(A)k

Table 5: Strata of Yakut according to the development of /g/ in suffixes

In certain cases the Literary Mongol U in suffixes corresponds to A in modern Buryat. Yakut, however, renders regular parallels of the LM forms, cf. e.g. Y -dAsXn, B  $-dAhAn \sim LM -dAsUn$ , Y  $-\bar{A}sXn$ , B  $-\bar{A}hAn \sim LM -gAsUn$ .

- (8) Y suradasïn 'line, contour, outline' ← suruy- 'to draw; to paint, to write', B zurāduhan 'contour, line' ← zura- 'to draw; to strike (matches); to plough; to write', LM jirudasu(n), jirugadasu(n) 'line; hyphen, dash, stroke' ← jiru- 'to draw (as a line or picture); to scratch; to strike (of a match)';
- (9) Y xatāsīn 'stud, bolt, hook; small iron nail' ← xatā- 'to strengthen; to close with key; to shut',

B  $xad\bar{a}ha(n)$  'nail,  $pin' \leftarrow xada$ - 'to beat, to nail, to drive in, to fill; to sew', LM kadagasun 'nail, peg,  $spike' \leftarrow kada$ - 'to drive in, knock in, to nail; to inscribe or enter one's name on a register; to insert something in a text; to get stuck'.

## 7.9 Deverbalization of denominal nominals

There are only three denominal nominal derivational elements in the analysed corpus showing the phenomenon of deverbalization. One of them is -kX being related to the Mongolic suffix +ki, cf. PoppeGWM §184, PoppeBG §4.12, 4.21.3, 4.22.b and the entry of -kX in section 6.2. See the following examples of Yakut: sinaliki 'moaning'  $\leftarrow sinaliy$ - 'to moan', kiynaxi 'angry, irritable'  $\leftarrow kiyin$ -, kiynV-, kiyin-, kiynV- 'to be boiled, to be cooked; to be in passion', attaki, attiki 'eunuch, castrated; unable to have sexual intercourse, impotent'  $\leftarrow att\bar{a}$ -'to call the horse; to give sy a horse; to castrate', etc. Since deverbalization is not a frequent change in derivational morphology, I presume here that -kX is not directly related to Mongolic +ki, but a contracted form of \*-X+kX, where \*-X is a deverbal nominal element being invisible in most of the cases. Only the dominant allomorph -XkX gives some evidence for the original form, see e.g. attiki above and satiliki 'walking on foot'  $\leftarrow satilia$ - 'to walk (go) on foot; to get down; to (con)descend to the earth (of deity); to be shot (of bird)'.

The second one is -XsAx being related to the Turkic suffix +sAk. See the following Yakut derivatives: boxtusax 'being a little inferior/lagged behind in value, growth, or mind'  $\leftarrow boxt\bar{o}$ -, boxtuo- 'to remain, not to follow, to lag (behind)', namtisax 'low; flat; lowland; subdued; humbleness'  $\leftarrow namt\bar{a}$ - 'to be reduced, to fall, to set (of the Sun); to get down, to be inclined; to be subdued, to be degraded' and  $\ddot{i}ar\ddot{i}sax$  'painful,  $sick' \leftarrow \ddot{i}ar\ddot{i}y$ -,  $\ddot{i}al\ddot{j}V$ - 'to fall ill, to be sick'. Similarly to -XkX, but even more visibly, the suffix joins the stem via a dominant vowel. This initial sound originally might be an uncertain deverbal nominal element, thus -XsAx can be analysed as \*-X+sAk.

The third deverbalized element of Yakut is -(X)msAx, see e.g. sirgämtäx,  $s\bar{\imath}rgämtäx$  'squeamish; fearful; kicking (of horse)'  $\leftarrow sirgän$ -,  $s\bar{\imath}rgän$ - 'to despise, to find contrary; to be frightened, to fear', being related to the Mongolic suffix +msAg. In Mongolic this derivational element has a counterpart, i.e. -msig, being similar in form and function; in Buryat the similarity is even higher, cf. +msAg and  $-m\bar{s}Ag$ , respectively. For the Mongolic side, see PoppeGWM §173, PoppeBG §4.24.9, 4.21.2.d and the entry of -(X)msAx under section 6.2. This resemblance might lead to the deverbalization of the Mongolic suffix +msAg in Yakut. In the reverse, the process of denominalization of the Mongolic suffix -msig has resulted a fourfold system in Yakut, i.e.  $\pm(X)msAx/\pm(X)msXk$ . Although latter is not frequent in Yakut, they can be used simultaneously, cf.  $a\tilde{y}\tilde{i}r\dot{g}amsax$ ,  $a\tilde{y}\tilde{i}r\dot{g}amsik$  'one who fears to do against the rules'  $\leftarrow a\tilde{y}\tilde{i}r\dot{g}a$ - 'to do not make up ones mind to do against the rules, rites; to fear sin, to be warned to sin'.

### 7.10 Pseudo derivational suffixes

Due to the wrong analysis of certain Yakut data, pseudo derivational elements also can be found in the former literature of Yakutology. Here I present the most important and most frequently cited ones with arguments that can refute the existence of them.

It is suggested and later maintained in some works dealing with Yakut morphology that the denominal nominal suffix +LXk, cf. GSJaLJa §192, has a deverbal counterpart in -LXk, cf. GSJaLJa loc. cit., Antonov 1952: 6 and HarSJaJa §59.2. This phenomenon was illustrated with the following examples:

- (1) asilik 'food, fodder; portion of food; grass; grazing ground'. According to PekSJ, it is a derivative of asā- 'to eat; to drink; to feed' (GSJaLJa loc. cit. derives from as 'food'). The Old Turkic parallel of modern Yakut asilik is \*ašag-lik, cf. OT ašag 'eating, food';
- (2) samalik, samilik 'patch' is wrongly derived from samā- 'to chop off seams; to sew ornaments (to the top of a female cap)' by Antonov 1952: loc. cit. Its Old Turkic counterpart is yamaglik (← yamag 'a patch' ← yama- 'to patch (something Acc.');
- (3) sittik 'pillow, bed-head'. According to PekSJ, it is a derivative of sittā- 'to place sg under the head; to place the pillows', others connected to sit- 'to lay'. Its Old Turkic counterpart is yastok, yastuk 'pillow' ← yasta- 'to prop up on a pillow', on the morphophonological problems, however, see OTWF §3.102 (p. 255);

- (4) *umatik* 'fuel' is derived from *umay-*, *ubay-* (intr.) 'to burn (out, down), flare; to flare up, to light up, to inflame' by HarSJaJa *loc. cit.*, It cannot be a derivative neither of +LXk, nor of -LXk simple because of morphophonological reasons (it should be \**umalik*). <sup>193</sup>
- (5) xabïalīk, xabïlīk 'something sensible; sticks, kindlings'. The first form was connected to xabïalā- 'to bite' and the latter to xabī 'feeding' by PekSJ. HasSJaJa loc. cit. derived from xap- 'to catch'.

Accordingly, there is no any clear example which could postulate a deverbal variant of +LXk.

It is difficult to determine whether there exists a deverbal nominal suffix -XyA. In the literature there can be seen two different standpoints. According to StachDWb 52, the Dolgan words batiya 'Jagdspeer' ← bat- 'hineingehen' and kolbuya 'Schachtel, Kästchen; Kiste, Truhe' ← kolbō- 'verbinden' are derivatives in -XyA. 194 On the contrary, KałM 2: 26–34 (and GSJaLJa §159, 193 without the details) suggests that the corresponding Yakut words batiya, batia 'a kind of spear; jail; knife' ← batas 'old military arms, knife', xolbuya 'box, casket' ← xolbo 'pack; coffin' and arbiya 'iron tool for carving' ← YakD arbax : arbax sügä 'wide axe' are derivatives in a denominal nominal element +XyA. KałM loc. cit. cites many other examples for this suffix sorting them into eight different classes. Accordingly, +XyA forms nouns designating diminutives, e.g. kölüyä 'small lake' ← küöl 'lake', tiliya 'clitoris' ← til 'tongue', but in many cases it does not bear any characteristic function, e.g. YakD lörüyä 'butterfly' ← YakD lörüö id. The morphophonological behaviour of +XyA is unique, it replaces not only the stem-final vowel °V, but the entire segment °VC, e.g.  $k\ddot{u}r\ddot{j}\ddot{u}y\ddot{a}$  'shovel'  $\leftarrow k\ddot{u}r\ddot{j}\ddot{a}k$  id. and  $\ddot{u}a\ddot{g}\ddot{u}ya$  'small birch bark bucket, tidy' ← ïaġas, ïyaġas 'birch bark bucket'. Although the suffix +XyA shows this strange, non-standard morphophonological behaviour, the sufficient number of examples cited by KałM loc. cit. suggests that there exists a dominant denominal nominal suffix +XyA and the Dolgan words batiya, kolbuya and arbiya are not derivatives from bat-, kolbō- and \*arbay-, but from \*batas, kolbo 'Sarg' and \*arbax.

The suffix +XyA is of unknown origin. It does not seem to be acceptable that +XyA is a modern counterpart of the Old Turkic diminutive suffix  $+kI\acute{n}A$ , cf. OTWF §2.13, because of phonetic reasons. The Selkup suffix +l'a,  $+ya^{196}$  cited by StachDWb 35 has a lot in common with the Yakut element +XyA, however, it is difficult to determine if they are related to each other, mostly because of geographical and historical reasons, or it is just a coincidence.

<sup>193</sup> A possible candidate for its base is ubat-, umat- (tr.) 'to burn (down, out), to kindle, to scorch'.

<sup>194</sup> Cf. the Yakut parallels as *batiya*, *batia* 'a kind of spear; jail; knife', *bat-* 'to enter, to pass, to get on' and *xolbuya* 'box, casket', *xolbō-*, *xolbuo-* 'to connect, to attach; to collect'.

A third example is mentioned in StachDWsch, i.e. *arbiya* 'Gerät zum Aushöhlen von Baumstämmen, aus denen Boote gemacht werden sollen; Gerät zum groben Aushöhlen von Holzstücken, aus denen Haushaltsgeschirr hergestellt werden soll', cf. Yakut *arbiya* 'iron tool for carving'.

<sup>195</sup> KałM 2: 34 does not reject the possibility of this etymology.

<sup>196</sup> See e.g. qutïya 'doll' ← qut 'person'. For further notes, cf. Kuznecova et al. 1980: 336.

# **Statistics**

-A		96	-КАу		121
-Ā		9° 29	-kĀy		1
-(Ā)ččX		607	-kX		20
-(Ā)ččXk	$\rightarrow$ - $(\bar{A})\check{c}\check{c}X$	•	-l $ar{A}$ n		1
-(A)k		96	-lAŋ	$\rightarrow$ -(X) $lA\eta$	
-Āk		26	-lX	·	2
-AkkA		1	-MA		30
-ĀkX		13	-MAn		6
-Āl		5	-m $ar{A}$ n		2
-(A)ltA		10	-MAr	$\rightarrow$ -(V)mAr	
-(A)m		14	-MAs		11
-(A)mčA	$\rightarrow$ -(A)mtA		-M $ar{A}t$		1
-(A)msA	$\rightarrow$ -(A)mtA		-MAx		15
-(A)mtA		15	-nA		1
$-ar{A}n$		107	$-rA\eta$		5
$-ar{A}n$	$\rightarrow$ -XgAn		-sA		11
-ĀnA		11	-sAx	$\rightarrow$ -XsAx	
-ĀŋkX		1	-sX		3
-(A)r		105	-sXn		4
-Ās	$\rightarrow -(V)gAs$		-(V)bXl		37
-ĀsXn		62	-(V)gAs		173
-(Ā)SXt		3	-(V)gVr		250
-Āt	. <del>-</del>	4	-(V)k		119
$-(\bar{A})t\check{c}X(k)$	$\rightarrow$ - $(\bar{A})\check{c}\check{c}X$		-Vk	$\rightarrow -(V)k$	
-(A)ttA	$\rightarrow$ -(A)ltA		-(V)l		85
-ĀxsX		3	-(V)lgA(n)		26
-ĀyAx		4	-(V)mAl		3
-ĀyX		27	-(V)mAr		17
-BAt	$\rightarrow$ -(A)r		-VmAs	$\rightarrow$ -MAs	_
-BXččA		25	-(V)mAy	/.	8
-bXr		8	-(V)ńAŋ	→ -VńAη	
-BXt	DILYVA	1	-VńAŋ	**/**	25
-BXtčA	→ -BXččA		-(V)ńVk	→-VńVk	
-čA	$\rightarrow$ -sA		-VńVk		13
-čAk	$\rightarrow$ -sA		$-(V)\eta$		41
-čXk		4	-(V)rkAy		16
-dAk		4	-(V)s		375
-dAsXn	ā . A	28	-X	<i>→-A</i>	
-gAnA	$\rightarrow -\bar{A}nA$		-X	Á	3253
-gAt	$\rightarrow -\bar{A}t$	_	-X	$\rightarrow -A$	_
-kA VA	$ ightarrow$ - $ar{A}$	5	-XA	$ ightarrow$ - $ar{A}$	3
-KA			-XA		
-KAk -kĀk	$\rightarrow -\bar{A}k$	_	-XA	$\rightarrow -\vec{X}$	
	. Ā1	1	-XAmAr	$\rightarrow -(V)mAr$	
-KAl	→ -Āl → -Ān		-XAn XAnAx	$\rightarrow -\bar{A}n$	_
-KAn			-XAnAx	. (4)-	3
-kAs	$\rightarrow -(V)gAs$		-XAr	$\rightarrow$ -(A)r	

-XAs	$\rightarrow -\vec{X}s$		-XmsXA	$\rightarrow$ -XmtXA	
-XAsXn	$\rightarrow$ - $\bar{A}sXn$		-(X)msXk	$\rightarrow$ -(X)msAx	
-XAx		11	-(X)mtAģAs	$\rightarrow$ -(X) $mtA\dot{g}Ay$	
-XAxčA		9	-(X)mtAġAy	ŭ <b>ŭ</b>	46
-XAxčXt	$\rightarrow$ -XAxsXt		-(X)mtAx	$\rightarrow$ -(X)msAk	
-XAxsXt		5	-XmtXA		48
-XAyAx	$\rightarrow -\bar{A}yAx$		-(X)n		16
-(X)ččX		339	-Xn		12
-(X)gAn		70	-XnAx	$\rightarrow$ -XnXAx	
-(X)gX	$\rightarrow -(X)\eta X$		-(X)nčA		2
-XgXy		4	-XnXAx		1
-Xk		22	$-(X)\eta$		7
-XkX	$\rightarrow -kX$		$-(X)\eta A$	$\rightarrow -(X)\eta X$	
(X)lAη		9	$-(X)\eta X$	•	19
-XlAŋ	$\rightarrow -(X)lA\eta$		-(X)pčX		2
-(X)lbA		4	-(X)r		22
-(X)ljXAr		6	-Xr		14
-(X)lgX		3	-Xr	$\rightarrow$ -(A)r	
-(X)m		19	-(X)rgA(n)		7
$-\dot{X}m$		1	-(X)rkA	$\rightarrow -(X)rgA(n)$	
-XmA	$\rightarrow$ -MA		-(X)rXk		1
-(X)mAģAy		6	$-\dot{X}s$		8
-XmAx	$\rightarrow$ -MAx		-XsAx		5
$-(X)m\check{c}X$	$\rightarrow$ -(X)m $\acute{n}$ X		-(X)skA		2
-(X)mjX	$\rightarrow$ -(X)m $\acute{n}$ X		-(X)t		10
-(X)mnX		18	-(X)tčX	$\rightarrow$ -(X)ččX	
-(X)msAx		27	-(X)y		22

## **Abbreviations**

B Buryat, see PoppeBG, Čeremisov 1951

Chuvash see LevIMČJa, Skvorcov 1982

D Dolgan, see StachDWsch, StachDWb

Kalmuck see Ramstedt 1935

Kāš Kāšġarī, see Dankoff–Kelly 1982–1985

Kazakh see Shnitnikov 1966 Khalkha see Hangin 1986

Khakas see GHJa, Baskakov 1953

Kirghiz see Judahin 1965

LM Literary Mongol, see PoppeGWM, Lessing 1960, Kowalewski 1844–1849

OB Old Buryat, reconstructed forms
OT Old Turkic, see OTWF, GOT, EDPT
OY Old Yakut, reconstructed forms

Oyrot see GOJa, Baskakov–Toščakova 1947 PT Proto Turkic, reconstructed forms

Tatar see PoppeTM, Golovkina 1966

Tungusic see SSTM
Turkish see GSTLJa

Tuvan see GTJa, Tenišev 1968

Uzbek see GSULJa

Y Yakut, see GSJaLJa, PekSJ, YakS

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OTWF Erdal, M. (1991) Old Turkic Word Formation: A Functional Approach to the Lexicon 1–2, Wiesbaden: Harrassowitz.

PekSJ Pekarskij, Ė. K. (1907–1930) *Slovar' jakutskogo jazyka* 1–3, St. Peterburg–Leningrad: Akademija Nauk".

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PoppeGWM Poppe, N. (1954) *Grammar of Written Mongolian*, Porta Linguarum Orientalium Neue Serie 1, Wiesbaden: Harrassowitz.

PoppeIA Poppe, N. (1965) *Introduction to Altaic linguistics*, Ural-Altaische Bibliothek 14, Wiesbaden: Harrassowitz.

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PoppeJ Poppe, N. (1959) Das Jakutische, in J. Deny et al. (eds) Philologiae Turcicae Fundamenta 1, Wiesbaden: Steiner, 671–684.

PoppeJE Poppe, N. (1961) Jakutische Etymologien, *Ural-Altaische Jahrbücher* 33: 1–2, 136–141.

PoppeNM Poppe, N. (1923–1927) Die Nominalstammbildungsuffixe im Mongolischen, Keleti Szemle 20, Budapest, 89–126.

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