Annotated Swadesh wordlists for the Yeniseian group (Yeniseian family).

Languages included: Ket [yen-ket], Yugh [yen-yug], Kott [yen-kot], Arin [yen-ari], Pumpokol [yen-pum].

Reconstruction: Proto-Yeniseian reconstruction available.

DATA SOURCES

I. General.

Main sources

Castrén 1858 = Castrén, M. A. Versuch einer jenissei-ostjakischen und kottischen Sprachlehre nebst Wörterverzeichnissen aus den genannten Sprachen. Sankt-Petersburg. // First systematic and detailed description of Ket and Kott grammar, accompanied by representative vocabularies for both languages. The Ket part is mostly obsolete in the light of newer data, but still contains important information on some phonetic peculiarities of XIXth century Ket. The Kott part is the most important source of data on that language.

Dulzon 1961 = Dulzon, A. P. Slovarnyje materialy XVIII v. po ketskim narechijam [XVIIIth century vocabularies of Ket idioms]. In: Uchenye zapiski Tomskogo gosudarstvennogo pedagogicheskogo instituta, Tomsk, pp. 152-189. // Transliterated and briefly annotated data collections, extracted from old field records and compiled sources. Besides containing valuable old data on Ket and Kott, this publication serves as the only source of data for the extinct Pumpokol language, and the primary source of data for the equally extinct Arin.


YED = Starostin, S. A. Yeniseian Etymological Database. // Computerized version of the Proto-Yeniseian corpus, available at http://starling.rinet.ru/cgi-bin/main.cgi?flags=eygtnnl. Includes some etymologies that have not been included in [S. Starostin 1995], for the most part, due to the author’s taking into account the new data that became available with the publication of [Werner 2002]. A significant number of old reconstructions has also been revised in this version.

II. Ket, Yugh.

Werner 1977 = Werner, G. K. Akcentirovannyje sravnitel'nyje slovarnyje materialy po sovremennym jenisejskim dialektam [Accentuated comparative lexical data on modern Yeniseian dialects]. In: Jazyki i toponimija [Languages and Toponymy], Tomsk, pp. 131-195. // First ever comparative vocabulary of Ket dialects that fully accounts for the suprasegmental features of all the words. Most of the data have been incorporated into [Werner 2002].

Werner 1993 = Werner, G. K. Ketsko-russkiy / russko-ketskiy slovar' [Ket-Russian, Russian-Ket dictionary]. Saint-Petersburg. // Large dictionary of Ket, based primarily on the South Imbatsk dialect. All data are given in “official” Ket Cyrillic orthography, since the dictionary’s primary purpose is educational.

Werner 2011 = Werner, Heinrich. Die Jugen (Sym-Jenissejer) im Lichte ihrer Sprache. München: Lincom Europa. // Large monograph on Yugh, most of which is occupied by an extensive German-Yugh dictionary. This latest source on Yugh lexicon is used as the default source for Yugh data, although it should be noted that most of the data are directly copied from [Werner 2002].
III. Kott.

Verner 1990 = Verner, G. K. Kottskij jazyk [The Kott Language]. Rostov-na-Donu. // A large monograph (in Russian) describing the phonetics, grammar, and available lexical data on Kott. In terms of data, it is generally dependent on [Castrén 1858], but it also adds valuable materials from earlier, less accurate sources on Kott.

NOTES

I. Ket.


The main entry, transliterated into UTS, is quoted after [Werner 2002], reflecting the Southern dialect. It is immediately followed by the standard Cyrillic orthographic representation of the word as presented in [Werner 1993]. Comments include:

(a) basic grammatical info on the words, such as gender and plural form for nouns, and information on conjugation, along with some paradigmatic evidence, for verbs. All of the info is also quoted from [Werner 2002];

(b) re-transliteration of the item's representation in [Werner 1977], along with all the dialectal data presented there. This information is useful to assess the dialectal variety of Ket. Abbreviated names of the dialects are: S.-Imb. = South Imbat; N.-Imb. = North Imbat; Bak. = Baklanikha; Sur. = Surgutikha; Kur. = Kureyka;

(c) re-transliteration of the item's representation in the early dictionary of M. Castrén [1858]. It should be noted that, although Castrén generally distinguishes between Ket (Imbat) and Sym (Yugh), forms from both dialects are frequently conflated in the dictionary without adequate differentiation. Forms specifically marked as "Sym" in Castrén's dictionary, or forms that specifically betray Sym phonetic features without being marked as such (e.g. entries beginning with f- as opposed to Imbat h-), are not entered in the notes on "Ket", but this does not necessarily mean that each single form quoted in the notes belongs to the Imbat variety of the language.
I.2. Transliteration.

<table>
<thead>
<tr>
<th>UTS</th>
<th>Werner 2002</th>
<th>Werner 1993</th>
<th>Castrén 1858</th>
</tr>
</thead>
<tbody>
<tr>
<td>p</td>
<td>p</td>
<td>P</td>
<td>p</td>
</tr>
<tr>
<td>b</td>
<td>b</td>
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<td>m</td>
<td>m</td>
<td>m</td>
</tr>
<tr>
<td>t</td>
<td>t</td>
<td>Г</td>
<td>t</td>
</tr>
<tr>
<td>d</td>
<td>d</td>
<td>Д</td>
<td>d</td>
</tr>
<tr>
<td>s</td>
<td>s</td>
<td>с</td>
<td>s</td>
</tr>
<tr>
<td>s'^</td>
<td>s'</td>
<td>сь</td>
<td>s with stroke</td>
</tr>
<tr>
<td>l</td>
<td>Ь</td>
<td>Л</td>
<td>l</td>
</tr>
<tr>
<td>l'^</td>
<td>ль</td>
<td>t</td>
<td></td>
</tr>
<tr>
<td>r</td>
<td>r</td>
<td>р</td>
<td>r</td>
</tr>
<tr>
<td>r'^</td>
<td>р'</td>
<td>р ~ рь</td>
<td></td>
</tr>
<tr>
<td>n</td>
<td>n</td>
<td>н</td>
<td>n</td>
</tr>
<tr>
<td>n'^</td>
<td>н’</td>
<td>нь</td>
<td>n with stroke</td>
</tr>
<tr>
<td>k</td>
<td>к</td>
<td>к</td>
<td>k</td>
</tr>
<tr>
<td>g</td>
<td>г</td>
<td>g</td>
<td>g</td>
</tr>
<tr>
<td>y</td>
<td>Ь</td>
<td>Г</td>
<td>g</td>
</tr>
<tr>
<td>q</td>
<td>к</td>
<td>к</td>
<td>k’</td>
</tr>
<tr>
<td>ø</td>
<td>О</td>
<td>О</td>
<td>ò ~ ò</td>
</tr>
<tr>
<td>h</td>
<td>h</td>
<td>х</td>
<td>h</td>
</tr>
<tr>
<td>y</td>
<td>Ь</td>
<td>Ь</td>
<td>-i ~ -j-</td>
</tr>
<tr>
<td>?</td>
<td>?</td>
<td>'</td>
<td>’ ~ not marked</td>
</tr>
<tr>
<td>a</td>
<td>a</td>
<td>a</td>
<td>a</td>
</tr>
<tr>
<td>ä</td>
<td>ä</td>
<td>я</td>
<td>ä ~ eä</td>
</tr>
<tr>
<td>e</td>
<td>e</td>
<td>е</td>
<td>e</td>
</tr>
<tr>
<td>e</td>
<td>е</td>
<td>о</td>
<td>ä ~ eä</td>
</tr>
<tr>
<td>i</td>
<td>i</td>
<td>и</td>
<td>i</td>
</tr>
<tr>
<td>o</td>
<td>o</td>
<td>о</td>
<td>o</td>
</tr>
</tbody>
</table>
Notes:

M. Castrén’s data are notably different from XXth century data and may represent both peculiarities of earlier phonetics and the author’s own mistranscriptions (the author does not distinguish between o and ɔ, or ɛ and ɨ; his g῾ should be graphically interpreted as voiced uvular affricate ɬ, but probably represented fricative ɾ, etc.).

Tones. [Werner 1977] and subsequent publications by the same author consistently mark four different tones, plus two more contour tones on polysyllabic forms. The numeric notation has been reproduced here in the notes section, next to the quoted variants of forms from [Werner 1977]. However, tonal notation as such is mainly superfluous in Ket words if the accompanying features are marked instead, such as:

(1) Tone 1 is automatically correlated with semi-long vowels (Vˑ);
(2) Tone 2 is automatically correlated with the presence of a glottal stop (ʔ);
(3) Tone 3 is automatically correlated with fully long vowels (Vː);
(4) Only Tone 4 in South Imbat dialects, with a falling contour (Ṽ), is fully phonologized as such. North Imbat dialects usually accompany this contour with additional vowel length and a reduced ə at the end of the word (cf. South Imbat tíy ‘snake’ vs. North Imbat tíyə id.), but, since the South Imbat form does not have this ə, it is important to mark the tone explicitly.

Tones 5 and 6 may be interpreted as different types of stress in a bisyllabic word: tone 5 = stress on the first syllable, tone 6 = stress on the second syllable. We mark stress
position according to the data in [Werner 2002] and list the numeric tonal notation for the corresponding entries in [Werner 1977].

II. Yugh.

II.1. General.

The default source for data on the now extinct Yugh (= Sym) dialect are fieldnotes collected by H. Werner and subsequently published in numerous sources, chief among them [Werner 1977, 2002, 2011]. Apart from that, Yugh data are consistently quoted from [Castrén 1858] where they are explicitly marked as such or betray usually archaic phonetic peculiarities that are specifically characteristic of the Yugh dialect (such as $f$ instead of Imbat $h$, $r$ instead of Imbat $l$, etc.).

Most of the grammatical and other types of notes are the same as for Ket proper (Imbat), to which Yugh is very closely related.

II.2. Transliteration.

Transliteration rules are mostly the same as for Ket (see above). Minor additions are as follows:

<table>
<thead>
<tr>
<th>UTS</th>
<th>Werner 2002/2011</th>
<th>Werner 1977</th>
<th>Castrén 1858</th>
</tr>
</thead>
<tbody>
<tr>
<td>$f$</td>
<td>$f$</td>
<td>$\phi$</td>
<td>$f$</td>
</tr>
<tr>
<td>$\chi$</td>
<td>$\chi$</td>
<td>$\chi$</td>
<td>$k'$</td>
</tr>
<tr>
<td>$\check{e}$</td>
<td>$\check{e}$</td>
<td>$\check{e}$</td>
<td>$t$ <em>with stroke</em></td>
</tr>
<tr>
<td>$d'$</td>
<td>$d'$</td>
<td>$d'$</td>
<td>$d$ <em>with stroke</em></td>
</tr>
</tbody>
</table>

Castrén’s transcriptions of $k'$ and stroked $t$ actually surmise phonetic values of $q$ and $t''$, which may have been the pronunciation norm in the XIXth century; in Werner’s transcriptions, these sounds consistently correspond to $\chi$ and $\check{e}$. 
Tones. The basic tonal system of Yugh is the same as in Ket, but the phonetic realization of particular tones may be slightly different. Namely, Tone 1 is correlated with short vowels (instead of semi-long in Ket); Tone 4 is correlated with long breathy vowels (as in some, but not all, subdialects of Ket); Tones 2 and 3 are essentially the same as in Ket.

Additionally, Yugh distinguishes between three degrees of vowel length (short, semi-long, long); cf. the difference between 'fish' (semi-long) and 'eye' (short) on the wordlist.


This field contains the intermediate reconstruction for Ket-Yugh. The forms are taken either from [S. Starostin 1995] (where the reconstructions, distribution-wise, are exclusively Ket-Yugh rather than Proto-Yeniseian) or constructed by G. Starostin based on S. Starostin's system of correspondences, with minor modifications.

III. Kott.

III.1. General.

The default source for data on the long-extinct Kott language is [Castrén 1858], a source that is fairly reliable, although hardly free of occasional phonetic and semantic inaccuracies.

Small selections of Kott data have also been recorded in earlier sources; all of them are summarized in [Verner 1990] and, where necessary, quoted in transliterated forms in the Notes section. These are marked as follows: (M.) = lexical data from G. F. Miller's records (collected in 1731); (Dict.) = lexical data from the anonymous "Dictionary of Five Arin Lects", supposedly from the mid-XVIIIth century; (Pal.) = data from P. S. Pallas' late-XVIIIth century collections, usually derived from (Dict.); (Kl.) = data from J. Klaproth's "Asia Polyglotta", for the most part, also derived from (Dict.); (Kh.) = XVIIIth century archival data, discovered and published by Ye. Khelimsky in 1986.
III.2. Transliteration.

Castrén's Kott data have been recorded according to the same principles as Ket-Yugh data; UTS transliteration issues are, therefore, mostly the same as already specified for Ket-Yugh. Data from earlier sources have already been retransliterated into "conventional" Latinized notation in [Verner 1990] and are, for the most part, left unchanged in the database (with the exception of standard UTS conventions, such as, e.g., changing j to y, etc.).

IV. Arin; Pumpokol.

IV.1. General.

Both the Arin and Pumpokol languages, unfortunately, became extinct before proper scholarly work, at least on M. Castrén's level of professionalism, could be done on both of them. Most of the available sources, dating from exploratory work performed in the XVIIIth century, were carefully assembled, transliterated, and reprinted by A. P. Dulzon in [Dulzon 1961], which remains the major source on Arin and Pumpokol data. The sources compiled in this work are the same ones that have already been listed above in the section on Kott (M., Dict., Pal., Kl.). The only notable source to be added to this are some records of Arin made in 1735 by A. Loskutov, found and published by Ye. Khelimskiy in 1986 and later reprinted in [Werner 2002] (Kh.).

It can be easily guessed that the majority of the lexical data was recorded with relatively poor transcriptional quality; semantic accuracy of the transcribed words can also be frequently put under doubt. In addition, the sources on Pumpokol are heavily flawed by regularly mixing "proper" Pumpokol words with words that, in reality, represent one of the Yugh dialects - this can be very easily established through a large number of "doublet" forms, where one of the two members of the "doublet" coincides with or is very close phonetically to the corresponding Yugh word. Most of these suspicious cases have been filtered out in the lexicostatistical list, but the status of a small handful of entries is still unclear. Nevertheless, it has been possible to fill in almost 60 positions in the Pumpokol list and close to 80 positions in the Arin list, which enables us to make important classificatory conclusions based on these results. (For Arin, it may be
assumed that Loskutov's and Miller et al.'s data come from more or less the same dialect, with minor variations possibly reflecting the inaccuracy of data collectors).

IV.2. Transliteration.

Transliteration from A. Dulzon's Cyrillic-based system into the Latin-based UTS system generally follows the same straightforward principles as adopted by H. Werner in [Werner 2002] and hardly needs detailed explanation. The only non-trivial convention employed by Dulzon is to mark velar $k$ as Cyrillic $к$ and uvular $q$ as Latin $k$. An entirely different question is how well XVIIIth century transcriptions actually convey all the phonological oppositions of Arin and Pumpokol; for a detailed discussion of the matter, see [Dulzon 1961].

V. Proto-Yeniseian.

V.1. General.

The first comprehensive attempt at a systematic reconstruction of the Proto-Yeniseian phonological system was published by Sergei A. Starostin in 1982 (Sergei Starostin. Prayaniseyskaya rekonstrukciya i vneshniye so’azi yeniseyskix yazykov /Proto-Yeniseian reconstruction and the external relations of Yeniseian languages/, in: Ketskiy sbornik. Antropologiya, etnografiya, mifologiya, lingvistika /The Ket Volume. Anthropology, ethnography, mythology, linguistics/, Leningrad, Nauka publishers, pp. 144-237.) A decade later, it was followed by a compact comparative-etymological dictionary of the Yeniseian family [S. Starostin 1995], which featured very minor "cosmetic" changes to the reconstruction. All of the Proto-Yeniseian etymologies were also computerized in the StarLing database format [YED]; the database was significantly expanded and updated by S. Starostin around 2003-2004, after the publication of H. Werner's comparative dictionary.

Alternate variants of the Proto-Yeniseian reconstruction have been offered by H. Werner and E. Vajda, although neither of the two specialists has published a separate, sufficiently detailed description. H. Werner's reconstructions for multiple Proto-Yeniseian lexical items have, however, been published in [Werner 2002]: many of
them are significantly different from S. Starostin's, and have often been criticized by the
latter in his 2003-2004 notes in [YED].

The present attempt at the reconstruction of a Swadesh wordlist for Proto-Yeniseian
takes S. Starostin's reconstruction as its starting point; however, Werner's alterations to
the reconstructions are considered on a regular basis, and some modifications to the
etymologies have also been suggested by G. Starostin (all such modifications are stated
and justified in the notes section).

The phonetic correspondences between Ket-Yugh, Kott, Arin, and Pumpokol are
relatively complex; for a detailed explanation, the user should probably refer to
[Starostin 1982]. In this introductory section, however, it is possible to summarize the
major correspondences in a short table.

<table>
<thead>
<tr>
<th>Proto-Yeniseian</th>
<th>Ket</th>
<th>Yugh</th>
<th>Kott</th>
<th>Arin</th>
<th>Pumpokol</th>
</tr>
</thead>
<tbody>
<tr>
<td>*b</td>
<td>b / -b- / -p</td>
<td>b / -p</td>
<td>p</td>
<td>p</td>
<td>p</td>
</tr>
<tr>
<td>*m</td>
<td>m</td>
<td>m</td>
<td>m</td>
<td>m</td>
<td>m</td>
</tr>
<tr>
<td>*w</td>
<td>b- / -0- / -w</td>
<td>b- / -0- / -w</td>
<td>b- / -p- / -w</td>
<td>b / -w</td>
<td>w ~ m</td>
</tr>
<tr>
<td>*t</td>
<td>t</td>
<td>tʰ- / t</td>
<td>t- / -d- ~ t-</td>
<td>t / -d- ~ t-</td>
<td>t / -d- ~ t-</td>
</tr>
<tr>
<td>*d</td>
<td>d- / -d- ~ r- / -t</td>
<td>d / -t</td>
<td>t- / r</td>
<td>t- / -0- ~ y</td>
<td>d-</td>
</tr>
<tr>
<td>*n</td>
<td>n</td>
<td>n</td>
<td>n</td>
<td>n</td>
<td>n</td>
</tr>
<tr>
<td>*r</td>
<td>lʰ ~ 1</td>
<td>l ~ r</td>
<td>r</td>
<td>r</td>
<td>r</td>
</tr>
<tr>
<td>*l</td>
<td>lʰ ~ 1</td>
<td>l</td>
<td>l</td>
<td>l ~ r</td>
<td>l</td>
</tr>
<tr>
<td>*c</td>
<td>t</td>
<td>č- / tʰ</td>
<td>h- ~ t- / t</td>
<td>k- ~ t- / t</td>
<td>x- ~ c- / t</td>
</tr>
<tr>
<td>*ž</td>
<td>d- / -d- ~ r- / -t</td>
<td>d / -t</td>
<td>dʰ- / y</td>
<td>k- / y</td>
<td>k- / d</td>
</tr>
<tr>
<td>*ř</td>
<td>lʰ ~ 1</td>
<td>r</td>
<td>l</td>
<td>l</td>
<td>l</td>
</tr>
<tr>
<td>*s</td>
<td>sʰ ~ s</td>
<td>s</td>
<td>š- / -č- / -š ~ t</td>
<td>s ~ š ~ č / -š ~ š ~ t</td>
<td>t ~ c ~ s- / -č ~ š</td>
</tr>
<tr>
<td>*č</td>
<td>t</td>
<td>č- / tʰ</td>
<td>š- / -č-</td>
<td>s- ~ š ~ č- / -š ~ š ~ k-</td>
<td>x ~ k- ~ č</td>
</tr>
<tr>
<td>*ž</td>
<td>d- / -d- ~ r- / -t</td>
<td>dʰ- / tʰ</td>
<td>č- / y</td>
<td>s- ~ š- / y</td>
<td>č- / y- ~ -dʰ-</td>
</tr>
<tr>
<td>*њ</td>
<td>nʰ</td>
<td>n</td>
<td>n</td>
<td>n</td>
<td>n</td>
</tr>
</tbody>
</table>
Additionally, Ket-Yugh prosody, well studied and described by H. Werner (accurate data on the prosodic features of other, now extinct, Yeniseian languages are non-existent) is projected by S. Starostin onto the Proto-Yeniseian level as follows:

<table>
<thead>
<tr>
<th>Proto-Yeniseian</th>
<th>Ket</th>
<th>Yugh</th>
<th>Kott</th>
<th>Arin</th>
<th>Pumpokol</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>r⁰</em></td>
<td>ᵣ⁰</td>
<td>1- / r</td>
<td>ɟ⁰- / y</td>
<td>t- ~ d- / l</td>
<td>1</td>
</tr>
<tr>
<td><em>y</em></td>
<td>0- / y</td>
<td>0- / y</td>
<td>ɟ⁰- / y</td>
<td>0- ~ y- / y</td>
<td>d- ~ 0- / y</td>
</tr>
<tr>
<td><em>ₘ</em></td>
<td>ᵣ⁰</td>
<td>ᵣ⁰</td>
<td>ɟ⁰- / l</td>
<td>r ~ l</td>
<td>1</td>
</tr>
<tr>
<td><em>k</em></td>
<td>k- / -y-</td>
<td>k / -g-</td>
<td>h- / k ~ g ~ x</td>
<td>k- ~ x- / g ~ y ~ 0</td>
<td>k- ~ x- / -0- ~ -y- / -t ~ -č</td>
</tr>
<tr>
<td><em>g</em></td>
<td>k- / -g- / -η</td>
<td>k- / -g-</td>
<td>k- / -k- ~ -g-</td>
<td>k- / -g-</td>
<td>-k- ~ -g-</td>
</tr>
<tr>
<td><em>ŋ</em></td>
<td>ʊŋ</td>
<td>ʊŋ</td>
<td>ʊŋ ~ n</td>
<td>ʊŋ ~ g</td>
<td>ʊŋ</td>
</tr>
<tr>
<td><em>x</em></td>
<td>0- / -y-</td>
<td>0- / -g- / -k</td>
<td>0- / -y- ~ -0-</td>
<td>0- ~ k- / 0</td>
<td>0- ~ h-</td>
</tr>
<tr>
<td><em>q</em></td>
<td>q- / -x- ~ -0-</td>
<td>x- / -x- ~ -q</td>
<td>x- ~ kʰ / k ~ g ~ x</td>
<td>k- ~ q- / 0</td>
<td>k- ~ x- / -k</td>
</tr>
<tr>
<td><em>ɢ</em></td>
<td>q- / 0</td>
<td>x- / 0</td>
<td>k- / k ~ g ~ x</td>
<td>k- ~ q- / -0- ~ -g-</td>
<td>x- / -k- / -0</td>
</tr>
<tr>
<td><em>y</em></td>
<td>q- / -0- / -k</td>
<td>x- / -0- / -k</td>
<td>h- / -0- ~ -? ~ -y- / -k ~ -g ~ -x</td>
<td>k- ~ q- / -g- ~ -0- ~ -y- / -0</td>
<td>k- ~ x- / g ~ k</td>
</tr>
<tr>
<td><em>h</em></td>
<td>0-</td>
<td>0-</td>
<td>h-</td>
<td>0-</td>
<td>?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Proto-Yeniseian</th>
<th>Ket</th>
<th>Yugh</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>ČV</em></td>
<td>CV₁</td>
<td>CV₁</td>
</tr>
<tr>
<td><em>ČVʔ</em></td>
<td>CVʔ₁</td>
<td>CVʔ₁</td>
</tr>
<tr>
<td><em>ČVC</em></td>
<td>CV·C₁</td>
<td>CVC₁</td>
</tr>
</tbody>
</table>
Notes:

(1) In the table, the slash sign ( / ) separates positional reflexes; the tilde sign ( ~ ) separates "fluctuating" reflexes that are sometimes conditioned by phonetic context, sometimes by the dialectal affiliation of the form (especially in the case of Ket), and sometimes represent conflicting orthographies in old, phonetically inaccurate sources (especially true for Arin and Pumpokol, less so for Kott). More detailed information on all this may be found in S. Starostin's paper from 1982.

(2) S. Starostin's reconstruction model may be defined as "maximalist", assigning as many series of phonetic correspondences as possible to individual Proto-Yeniseian phonemes: this particularly concerns the affricates (*ç, *ʒ, *č, *ǯ), the uvular series (*ɢ, *ɣ), the velar fricative *χ, and some of the resonants (*r₁, *r₂), none of which are found as autonomous phonemes in attested languages. In comparison, H. Werner's reconstruction is more "cautious", trying to stick to actually attested phonetic inventories when reconstructing Proto-Yeniseian forms. Nevertheless, the extra series of correspondences, described by S. Starostin, do exist, and most of them cannot be easily explained away as unmotivated splits of reflexation. This does not necessarily mean that S. Starostin's system should be regarded as completely finalized and "waterproof", but it does mean that the phonological oppositions set up therein should be respected until one can come up with a suitable explanation for all the "extra" splitting of reflexes.

(3) In our reconstruction of the Swadesh wordlist, we have eliminated only one consonant from the Starostin model: Proto-Yeniseian uvular fricative *χ. In word-initial position, it is only distinguished from *q- because of a questionable reflex splitting in
Kott (*q- > x- ~ kʰ-, but *χ- > h-), which may at least partially be explained by contextual conditioning; in word-medial position, it is practically indistinguishable from *c, and in word-final position, from *k. On the other hand, the velar fricative *x is still necessary in order to account for Arin word-initial k- in such cases, as Ket usʰo, Kott uča = Arin kus 'birch tree', Ket in, Kott ina = Arin kina 'two', etc.

(4) Multiple questions with individual etymologies still remain unresolved - in particular, vocalism of the first and especially the second syllable still remains reconstructed very approximately. Unfortunately, this is at least partially caused by very poor transcription quality in the early sources on Arin and Pumpokol. In the table above, the most frequent ("default") vowel reflexes for Arin and Pumpokol are listed at the beginning, then all the alternate (statistically less frequent) representations are listed in parentheses; it is practically impossible to determine which of them represent real phonetic developments and which ones are simply the result of inadequate transcription.

Database compiled and annotated by: G. Starostin (last update: July 2013).
1. ALL
Ket *b'il'da ~ *b'il'de {оылыды} (1), Yugh *b'il'xa (1), Kott *bar ~ *bar (-1), Proto-Yeniseian *bĭl-# (1).

References and notes:

Ket: Werner 2002: I, 159; Werner 1993: 30. Quoted as *bildə, in [Werner 1977: 142]; as *bild's in [Castrén 1858: 190]. Not segmentable on the synchronic level, although Werner reasonably suggests that -da is an old suffix in Ket.
Yugh: Werner 2011: 60. Quoted as *bil'ə, in [Werner 1977: 142]. Derived by H. Werner from earlier *b'il'da.
Kott: Castrén 1858: 223. A rather transparent borrowing from a Turkic source (cf. Yakut *фена 'ashes'). Distinct from *actam 'all = whole, totus' (German ganz), with the same root as in 'full' q.v.
Arin: Not attested.
Pumpokol: Not attested.
Proto-Yeniseian: S. Starostin 1995: 211. Alternately transcribed as *бай- in [Werner 2002: I, 159]. Distribution: Not very reliable, since the form is properly reconstructible only on the Ket-Yugh level. The Kott form is a transparent borrowing from Turkic, and the Arin and Pumpokol equivalents are not attested. However, there is no internal explanation for the root on the Ket-Yugh level, either, so it could easily be archaic.

2. ASHES
Ket *q'ılin ~ *q'ılan ~ *q'ılan (қолан ~ қоллан) (1), Yugh *x'enti (2), Kott *fınaŋ ~ *fınəŋ ~ *funaŋ ~ *p'ənaŋ (3), Proto-Yeniseian *qol- [ *qor-] # (1).

References and notes:

Yugh: Werner 2011: 69. Quoted as xont, pl. xont-en-ej in [Castrén 1858: 172].
Arin: Not attested.
Pumpokol: Not attested.
Proto-Yeniseian: S. Starostin 1995: 263 (*qorVn / -q, -r, -l-). Distribution: The three attested forms (in Ket, Yugh, and Kott) are all etymologically different. The Kott word for 'ashes' (*funaŋ) corresponds to words with the meaning 'sand' q.v. in all other Yeniseian languages, and its meaning, according to the majority rule, should be acknowledged as secondary ('sand' > 'ashes'). The Yugh form is not particularly transparent, but has a certain chance of secondary formation from the verb 'to burn' (see notes on Ket-Yugh).

3. BARK
Ket *i'n (іун) (1), Yugh *i'n (1), Kott *farpaŋ ~ *farpaŋ ~ *p'arpaŋ (2), Proto-Yeniseian *tig- [ *xig-] # (1).
References and notes:

**Ket:** Werner 2002: II, 433; Werner 1993: 131. Feminine gender. Quoted as ēnu, in [Werner 1977: 195]; as ēgen in [Castrén 1858: 163] (reflecting the archaic bisyllabic stem with an intervocalic uvular). The latter source also has another phonetically similar, but etymologically different word in the same meaning of ‘tree bark’: ēŋ, pl. ēgen [Castrén 1858: 162], not confirmed in more modern sources.

**Yugh:** Werner 2002: II, 433. Quoted as ēnu in [Werner 1977: 195]. For some reason, not found in [Werner 2011].

**Kott:** Castrén 1858: 225. Plural form: farpak-an ~ farpag-an ~ farpak-ŋ. Clearly a compound, in which the second element could be *ax ‘trees, wood’ q.v., but the first root has no known individual semantics.

**Arin:** Not attested.

**Pumpokol:** Not attested.

**Proto-Yeniseian:** S. Starostin 1995: 196 (*ʔi an /~ x-,ʔ-,ʔ-†/). **Distribution:** The situation is somewhat difficult. Ket-Yugh *ʔi a ‘bark’ (for the isolation of this root from the complex stem *ʔi an see notes on Common Ket-Yugh) is opposed to the Kott form farpax, which is also clearly a polymorphemic formation, where only -ax (*trees, wood*) is reliably segmentable. S. Starostin [YED # 997] compares Kott farpax with the Kott form h3l’h ‘outer side; face’, reconstructing Proto-Yeniseian *pəx* with the same meaning. This is a possible etymology (correspondences are regular and the semantic matching is close), but does not account for -p- in Kott. One would have to assume, then, that Kott farpax < *far-ap + *ax ‘outer side of trees’, where -ap is the same suffix as in Kott fīt-ap ‘palm of hand’, pūl-ap ‘sole of foot’, i.e. denoting (among other things) the external parts or surface of the object, whereas in Ket the word is preserved without this suffix. There are some obvious problems with this explanation, but on the whole, it does constitute a strong case for the secondary origin of the word ‘bark’ in Kott. This leaves Ket-Yugh *ʔi e as the sole uncontested candidate for Proto-Yeniseian ‘bark’, lost in Kott and not attested in either Arin or Pumpokol. **Reconstruction shape:** Since the word is only attested in Ket-Yugh, there are multiple possibilities for the reconstruction of either of the two consonants; most importantly, initial */ʔ* could just as well have been */x-/*.

4. **BELLY**

**Ket** ĕ̄y {xɯj} (1), Yugh fiy (1), Kott tʰalo:x ~ tʰalok ~ talox (2), Arin pʰorga (3), Pumpokol kaŋ (4).

References and notes:


**Yugh:** Werner 2011: 83. Plural form: f3̄y. Quoted as fiy, pl. f3̄y in [Werner 1977: 193]; as fi, pl. fiy-ŋ in [Castrén 1858: 174].


**Arin:** Dulzon 1961: 159 (M., Dict., Pal., KL.).

**Pumpokol:** Dulzon 1961: 159 (Dict., Pal., KL.).

**Proto-Yeniseian:** The proper equivalent for Proto-Yeniseian ‘belly’ (= ‘external part of the body’) is not reconstructible based on available data.

The strongest etymology lies together Proto-Ket-Yugh *piy ‘belly’ and Kott fiit ~ p’ui ‘the inside (of smth.)’ [Castrén 1858: 226] < Proto-Yeniseian *piy. However, considering that the Ket-Yugh word also shows additional semantics that is close to the Kott meaning (e. g. may be used to form the postposition ‘in, inside’), there is no clear argument here that the original meaning was ‘belly’ or polysemous (’external/ belly; internal parts, inside’).

Kott tʰaye (tulok, tolak in alternate sources) is compared in [S. Starostin 1995: 290] with Proto-Yeniseian *tːuːks- ‘thin intestine’ (> Ket tʰiːl, Yugh tuːl, Kott tʰutli with suggested reduplication). If the comparison is correct, then tʰale (a derived form with a not particularly clear nominal suffix (*intestine-holder?)), although the vocalization -a- in Castrén’s
notation remains unclear. If it is incorrect, then the Kott word for 'belly' has no etymology and a CVCVC structure that still hints at the possibility of a derived (secondary) origin.

Arin *pɪiɡa* is compared in [S. Starostin 1995: 250] with Ket-Yugh *piɡaˈi* 'intestine' (more precisely, 'thick intestine' as opposed to *tiːa*- 'thin intestine'). The strange correspondence *-rg- : -ʌ*- seems reasonable, given additional examples (most notably, Kott *tˈempul* 'root' = Arin *tɛmbirga*-ŋ id. q.v.): the old transcription *-rg-* may, in fact, represent some specific manner of articulation of the palatal *-ʌ*-. However, if the etymology is correct, Arin 'belly' is once again analyzable as some sort of 'intestine-holder'.

Finally, Pumpokol *kɑɨ* 'intestines, belly' is compared in [YED # 404] (but not in the corresponding printed entry in [S. Starostin 1995: 239]) with Ket-Yugh *kəhʌ* 'belch (n.)', which is extremely dubious and seemingly unprecedented from the point of view of semantic typology. (Additionally, it is not even all that clear if *kɑɨ* was indeed the primary equivalent for 'belly (external)' in Pumpokol).

All things considered, we prefer to refrain from filling in this particular slot, although the root *piɡ* should probably be at least remembered for the purposes of further external comparison.

5. BIG


References and notes:


Pumpokol: Dulzon 1961: 158 (Dict.). Quoted as *xače* in (KL); as *xɛː* in (Pal.).

Proto-Yeniseian: S. Starostin 1995: 300 (*qeq*). Alternately reconstructed as *qeq* in [Werner 2002: II, 58]. Distribution: In its original form and meaning, the word is well preserved in Ket-Yugh, as well as Pumpokol (where *xaće* = Ket *qeː*; 'big'; chief /substantivized form/ [Werner 2002: II, 73]). It seems to be absent as such in Kott and Arin. However, it is also preserved as a fossilized component in several additional complex nominal stems, such as *qeː-b* 'grandfather' (< *qeʔ* + *tаб* 'father'), *qeː-ma* 'grandmother' (< *qeʔ* + *tama* 'mother'), both of which do have explicit reflexes in Kott (*hɪpa, hɪma*) and Arin (*kɪb*, *kɪma*) [S. Starostin 1995: 300]. It may, therefore, be quite safely assumed that Ket-Yugh here preserves the original situation. Replacements: (a) Kott *fačaː* is compared in [S. Starostin 1995: 245] with Pumpokol *bɑɾoŋ* 'high' < Proto-Yeniseian *pa(r)sa* (?) 'big', but the etymology is very weak, since the consonantal correspondences are irregular, so the word could just as well be considered an isolate with no suggested origins; (b) Arin *birka* is compared in [S. Starostin 1995: 213] with Ket *bʰaː* 'thick' < PY *bʰʔaː*; the word-medial consonantal correspondence would be the same as in the Arin word for 'belly' q.v., but the vocalism is again irregular. In any case, even if the etymology is correct, it would probably surmise the development 'thick' > 'big' (gen.) in Arin, judging by the situation in general. Reconstruction shape: Since we prefer not to distinguish between S. Starostin’s Proto-Yeniseian *qَا* and *χeʔ*, we reinterpret his reconstruction of *χeʔ* as *qeq* (more in line with H. Werner’s reconstruction).

6. BIRD

Ket kễ-ŋ-가*elŋ* (кенасель) (1), Yugh kёy-at-ачеː.r (1), Kott a=tuɁa # (2), Proto-Yeniseian *duma* (2).

References and notes:

A close quasi-synonym is dum, pl. dum-n ~ num-n, but its meaning is always glossed as 'small bird', 'youngling': 'kleiner Vogel', 'Vögelchen' [Werner 2002: I, 211], dum; 'тичка' [Werner 1977: 147], dum 'Vöglein, Sperling' [Castrén 1858: 197]. The item is, therefore, less eligible for the wordlist even if, as a simple root stem, it is obviously more archaic than the recent compound form in Ket.

Yugh: Werner 2011: 326. Literally analyzed as 'wing-animal' (< keŋ-ət 'wing' + aṭeːːr 'animal'). The quasi-synonymous form dil-tim [Werner 2011: 326], consisting of diːl 'child; little' and tim 'bird', is used to denote the meaning 'small bird'.

Kott: Castrén 1858: 197. Plural form: al=ticma-n. Questionable, since the meaning is given as 'little bird, youngling' ('Vöglein'), but no alternate Kott equivalent is known for the more generic meaning of 'bird'. The component al=, based on comparative evidence, may be safely analyzed as a fossilized prefix with an unknown meaning (see 'dog', etc.).

Arin: Not attested.

Pumpokol: Not attested.

Proto-Yeniseian: S. Starostin 1995: 225. Distribution: The word is found in both Ket-Yugh and Kott and is clearly of Proto-Yeniseian provenance, but see further notes on semantics. Replacements: In Ket-Yugh, replaced either on the proto-level or on the levels of independent dialects by an idiomatic formation: 'bird' < 'winged-animal'. Reconstruction shape: Correspondences are fairly regular and straightforward. In Kott, the word is only attested in conjunction with the old fossilized prefix al=, whose original function remains unclear (see 'dog', 'star', etc., for further examples). Semantics: In all the attested variants, the reflexes of Proto-Yeniseian *duma have always been glossed as either 'small bird' or 'youngling; chick'. This means that it should be primarily reconstructible in this particular meaning; however, there is no separate term for 'bird (gen.)' or 'large bird' that could be reconstructed in opposition to *duma 'small bird', which leaves the latter as the only generic term in the entire field to be projected onto a higher level.

7. BITE

Ket l'ap-t-aq ~ l'ap-t-əq {ланнак} (1), Yugh l'app-ɨŋ (1).

References and notes:

Ket: Werner 2002: II, 3; Werner 1993: 76. Composite verb, formed with the frequent compound verb formative -aq. Cf. individual forms: da=l'ap-t-aq 'she bites', past tense da=l'ap-t-c-n-aq; da=l'ap-ba-t-aq 'she bites me', past tense da=l'ap-ba-t-c-n-aq. In [Werner 1977: 168], quoted only for the Yugh dialect, but, as seen from other sources, clearly present in Ket proper as well. Quoted as laptok in [Castrén 1858: 174].

Potential synonyms include: (a) ərɔŋ 'to bite' [Werner 2002: I, 58] = [əpon] in [Werner 1993: 18], glossed as 'to bite /of dog'; the fact that the only derivative from this word is ərɔŋ-sː 'prone to bite /of dog' confirms that the word is primarily applicable to dogs, rather than the required human act; (b) hɪlʔaŋŋ [Werner 2002: I, 343], glossed with polysemy: 'to bite /to chew', and only in the meaning 'to chew', as [xamalɒŋŋ ~ xamalɒŋŋ], in [Werner 1993: 123]; primary semantics here, judging by the statistical frequency of examples and general presentation in sources, is 'to chew' rather than 'to bite'.

Yugh: Werner 2011: 85. Infinitive form. The finite verbal paradigm is formed in several different ways. The most archaic variant, parallel to the one in Ket, is probably a compound formation with ɛ=ąqŋ ~ ɛ=ąqŋ: di=l'ap-ɛ-a-qŋ ~ di=l'ap-ɛ-a-qŋ 'I bite', past tense di=l'ap-ɛ-c-n-ąŋ. Other variants are derived from the infinitive and include: di=l'appiŋ-ą-gety 'I bite', di=l'appiŋ-ą-y-ıty 'I bite him', etc. [Werner 2011: 86].

Potential synonyms include: (a) əqŋ-iŋ (də=ąqŋ-ą-gety 'he bites'), parallel to Ket ərɔŋ and possibly also with the primary meaning 'to bite /of dog'; (b) fil-dː-a (di=fil-dː-a-ą-y-a 'I bite him'), a verb whose primary meaning might be 'chew' rather than 'bite' [Werner 2011: 190].

Kott: Not attested.

Arin: Not attested.

Pumpokol: Not attested.
Proto-Yeniseian: Not reconstructible due to insufficient attestation (and the main Ket-Yugh equivalent is quite obviously of recent secondary origin as well).

8. BLACK

Ket tuṁ-s¹ {myumɕy} (1), Yugh tum (1), Kott tʰum (1), Arin tʰuːm-a (1), Pumpokol t’um-a (1), Proto-Yeniseian *tum- (1).

References and notes:

Ket: Werner 2002: II, 295; Werner 1993: 103. Plural form: t’um-ajŋ-in. The non-predicative form is simply t’um (e. g. t’um diŋl ‘black child’). Quoted as tum, in [Werner 1977: 185]; as tum ~ tuom in [Castrén 1858: 178].
Pumpokol: Dulzon 1961: 188 (Dict., Pal., KL). Predicative form (‘it is black’).

9. BLOOD

Ket sʰuːl¹ {сюль} (1), Yugh sur (1), Kott šur (1), Arin sur (1), Proto-Yeniseian *sur (1).

References and notes:

Pumpokol: Not attested.

10. BONE

Ket aʔt {a’m} (1), Yugh aʔt (1), Kott xagal ~ dakal ~ qagal (2), Proto-Yeniseian *ʔaʔd [ *xaʔd] (1).

References and notes:

Arin: Not attested.
Pumpokol: Not attested.

Proto-Yeniseian: S. Starostin 1995: 178. Alternately reconstructed as *aʔt in [Werner 2002: I, 86]. Distribution: Preserved in Ket-Yugh; not attested in Arin and Pumpokol. In Kott, the etymological parallel is ar-aj ~ ar-aj-an 'joint; limb', which may be analyzed as a former collective plural form ('limb' = '(a set of) bones'). This implies the semantic shift ['bone' > 'limb'] and, most likely, the archaicity of the Ket-Yugh semantics. Replacements: Ket xagal has no known parallels in other Yeniseian languages; its CVCVC sequence is the original Ket verb denoting 'burning' in the transitive sense. However, its current basic meaning seems to have shifted to 'to light'.

11. BREAST
Ket tšya [mрыа] (1), Yugh tšga (1), Kott fa ~ pʰa (2), Arin pʰi-an (2), Pumpokol t’ike (1), Proto-Yeniseian *taga # (1).

References and notes:


Kott: Castrén 1858: 224. Plural form: fa-yikn. This is the only word with the meaning 'breast' (Brust') attested in Castrén's data. Cf. in older sources: pfa (M., Dict., Kl.) [Werner 1990: 302]. Entirely different word, however, quoted in (Kh.): xant! [ibid.].

Arin: Dulzon 1961: 163 (M., Dict., Kl.). Quoted as apien (Kh.) in [Werner 2002: I, 348]. Final -an (en) seems to be detachable as a plural (plurale tantum?) suffix.

Pumpokol: Dulzon 1961: 163 (Dict.).

Proto-Yeniseian: S. Starostin 1995: 284. Alternately reconstructed as *taga in [Werner 2002: I, 300]. Distribution: Preserved in Ket-Yugh and in Pumpokol. Replacements: The Ket-Yugh / Pumpokol item is distinctly opposed to the Kott-Arin isogloss, reconstructible with difficulty (Kott pa and Arin pʰa are hard to reconcile; perhaps the vowel fluctuation is due to different ways of contractions of an earlier cluster, e.g. *paxV or *pixV). Which of the two should be considered the primary candidate for Proto-Yeniseian '(male)' breast', remains uncertain. We choose the Ket-Yugh / Pumpokol isogloss as the default candidate only because (a) it poses fewer phonetic difficulties as far as the phonetic shape of the reconstruction is concerned and (b) there is a vague chance that the Kott / Arin forms may in some way be related to the Proto-Yeniseian word for 'heart' q.v. and, perhaps, be historically derived from it (although no transparent scenario may be suggested at the present time).

12. BURN TR.
Ket =dut [duapom] (1), Yugh qɔt ~ qɔt-n (2), Kott č-augan-an (3), Proto-Yeniseian *qɔt (2).

References and notes:

Ket: Werner 2002: I, 209; Werner 1993: 36. The infinitive is not attested; known paradigmatic forms are di-v-rut 'I burn it / I light it', past tense d-b-i-i-l-dut 'I burned it / I lit it' [ibid.]. The same stem is also present in the composite verb dud...bet 'to fish at night (with lit lights)', literally 'to-lighting-make' [Werner 2002: I, 210].

A complicated case, as there are synonyms: (a) the composite verb in-q... da with the same polysemy 'to light / to burn': d'in-q-a-v-r'a 'I light/burn it', past tense d-in-q-a-v-i-i-l'-da [Werner 2002: I, 366]; the infinitive form is in-q-st ~ in-q-st; (b) in [Castrén 1858: 168], the verb 'to light (fire)' is rendered as kat-a-bit ~ kot-a-bit, which is probably a mistranscription for *qɔt-a-bet = Ket qɔt-a-veit 'to heat (the oven)', infinitive qɔt-t ~ qɔt-qat 'to put wood on the fire'. Considering the external parallels of this stem in Yugh (as well as its basic meaning 'fire' in Kott), it is quite likely that *qɔt is the original Ket verb denoting 'burning' in the transitive sense. However, its current basic meaning seems to have
narrowed down to a peripheral sphere ('put wood on the fire').

**Yugh:** Werner 2011: 315. An infinitive form. The finite forms of the verb usually feature this root as the first lexical stem within a compound formation, e. g.: di=cɪt-a-b-dɪł 'I burn it', past tense di=cɪt-x-a-b-ɪ-r-dɪł, or di=cɪt-a-b-ɚ-i-y-ɪł 'he burns her', past tense di=cɪt-a-ɪrɪ-dɪł.etc.

An additional synonym is an expressive, probably more recent formation: (a) b’k–d-iɾɪɪ ‘to burn’ [Werner 2011: 316], lit. ‘fire-gen.-to eat’, e. g. da=ba-g-d-iɾɪɪ–a-b-ɪ-dɪł ‘she burns it’.

**Kott:** Castrén 1858: 215. 1st person sg.; the stem consists of the verbal prefix ɛ=- and the root -augan-. The simple stem, without the verbal prefix, is attested with a different meaning: augan-ay ‘I am cooking’ [Castrén 1858: 195]. A less certain candidate is the composite expression hat afktɛŋ, glossed as ‘to burn’; to set fire (to)’ [Castrén 1858: 195, 234]. Since the expression consists of hat ‘fire’ q.v. and afktɛŋ ‘to set, establish’, it is much more likely that it refers to the inchoative situation of lighting a fire rather than to ‘burning down smth.’. Cf. in older sources: atəxpod ‘I burn’ (Kh.) [Verner 1990: 311] = hat afktɛŋ.

**Arin:** Not attested.

**Pumpokol:** Not attested.

**Proto-Yeniseian:** S. Starostin 1995: 304 (*ɡu! ‘to burn; fire’). Alternately reconstructed as *ɡu! ~ *ɡəl ‘fire; to burn’ in [Werner 2002: I, 305].

**Distribution:** In the Kott-Arin branch, this word is preserved only as a nominal stem (‘fire’), where it has wiped out the original root for ‘fire’ (*bołk q.v.), although the exact situation in Arin is actually unknown (no equivalent for the verb ‘to burn’ attested in that branch).

**Replacements:** (a) In Ket, the old verb seems to have become specialized {'to burn /smth./'}; (b) In Kott, provided Castrén’s semantic glossing is accurate, the old verbal stem is replaced by a combination of the old verbal root *ɡaŋ ‘to boil’ (= ‘to cook’) [S. Starostin 1995: 191] with a preverbal directional morpheme.

13. CLAW(NAIL)

*Ket* inʰ (инъ) (1), Yugh iʰ:nʰ (1), Kott halčɨɡ ~ halčɨ (2), Proto-Yeniseian *tʰiŋe [xɨŋe] (1).

**References and notes:**


**Arin:** Not attested.

**Pumpokol:** Not attested.


**Distribution:** Preserved only in Ket-Yugh.

**Replacements:** In Ket, merged with halčɨɡ ‘hoof’ = Ket qpl’es’, Arin kalis ‘hoof’ < Proto-Yeniseian *qplɛn i [S. Starostin 1995: 304]. Since there are no internal etymologies or areal explanations for Ket-Yugh *tʰiŋe as an innovation, the most economic solution is to assume this secondary semantic merger in Ket (‘hoof’ > ‘finger-nail’).

**Reconstruction shape:** Lack of Arin parallels means that the word-initial position, instead of the glottal stop, could have been occupied by the weak velar fricative *x*.

14. CLOUD

*Ket* ʼasʰpul⁴ (асьпулъ) (1), Yugh ʼasfîl (1), Kott aşpər ~ aşpɔr (1), Arin esper-əŋ (1), Proto-Yeniseian *tʰas=pur (1).
References and notes:


Secondary synonym: *es*ʔanaj [esʔən] ‘cloud, cloudy’ [Werner 2002: I, 248]; Werner 1993: 44. Quoted as esxəi, pl. esxənəy in [Castrén 1858: 160]. A compound form, literally: ‘sky’ + ‘mountain’ q.v.; clearly a more recent formation than *as*pulš, and not confirmed textually as a proper “basic” candidate for the slot.


Secondary synonym: *es*ʔanaj ‘cloud’ [Werner 2011: 343]; see the corresponding Ket entry for notes on this compound formation.


Arin: Dulzon 1961: 175 (M.). Final -ən is obviously the plural marker.

Pumpokol: Not attested.

Proto-Yeniseian: S. Starostin 1995: 255 (*ʔas, *ʔas-pW). Alternately reconstructed as *es*-p2l in [Werner 2002: I, 71]. Distribution: Preserved in all daughter languages (although not attested in Pumpokol). Reconstruction shape: Vocalic reconstruction is highly approximate, since correspondences show irregularities both in the first and second syllables. Structure-wise, the word is clearly a compound, in which the first part is the Proto-Yeniseian word for ‘sky’: Ket *es*, Yugh es, Kott čš, Arin es, Pumpokol eč < Proto-Yeniseian *ʔes [S. Starostin 1995: 188]. The protolanguage variant here, however, must have been *ʔas-* rather than *ʔas-s-, with a somewhat obscure, but recurrent, model of vowel gradation; in Arin, original *as-per probably changed to es-per through later analogy with simple es (Werner’s reconstruction of both ‘sky’ and ‘cloud’ with root vowel e is less satisfactory than Starostin’s in this respect). The second component is not encountered on its own, but it may be the same as -par in Kott ti-par ‘dog’ [Werner 2002: II, 265], i.e. the original word denoting all forms of cloudy condensation. The root vowel is tentatively identified as *t* based on the Ket form, since it is the hardest one to explain as secondary: Kott and Arin vowels duplicate the vocalism of the first syllable, and Yugh i represents the same development as in the word for ‘knee’ q.v.

15. COLD

Ket taʔy {ma’u} (1), Yugh taʔ (1), Kott čal (2), Arin s’olojə (2), Pumpokol kič-idin ~ kič-idin (3).

References and notes:


Pumpokol: Dulzon 1961: 187 (Dict., Pal., Kl.). A synonymous form, recorded for Pumpokol, is taʔem (Dict., Kl.); however, it is highly suspicious that this is in reality a Ket-Yugh form rather than proper Pumpokol.

Proto-Yeniseian: It is currently impossible to determine the optimal candidate for the meaning ‘cold’ in Proto-Yeniseian, since at least two choices have the exact same probability: Ket-Yugh *taʔy [S. Starostin 1995: 280] and Kott-Arin *ʔVrj- [S. Starostin 1995: 311] (the vocalism in the case of the latter is hard to recover due to morphological vowel gradation in the attested forms). Neither of the two forms finds any etymological parallels in the other branch, nor do they have any internal etymologies or identifiable sources of borrowing. According to S. Starostin, Ket-Yugh *taʔy has generally more reliable and semantically close parallels on the Sino-Caucasian level, but we currently prefer not to use this macrofamily-level connection as an argument, and leave the position open.
16. COME
Ket 'i-g-bes' {uxoecv} (1), Yugh 'i-g-bes (1), Kott i=to-y-an (2).

References and notes:

Ket: Werner 202: I, 351; Werner 1993: 45. Infinitive form; the word is a highly non-trivial composite verb consisting of the 1st stem ('modifier') i, the preverb k (phonetically g) and the "nuclear" stem bes'. That k (g) is formally a preverb and not part of the 1st root is proven by the paradigm: d=i-k-s+i-bes' 'I (will) come' vs. d=i-b'-s+i-bes' 'he brings me with him', literally 'he-with-me-comes' (in the latter form the preverb -k- is separated from the root -i- with the 1st p. indirect object marker -b>). On the other hand, the latter form is also attested in the dialectal variant d=ig-b'-s+i-bes' If this is not the result of analogical contamination with the infinitive, it might mean that the 1st root is, after all, -'ik-. As for the morpheme bes', it is encountered, albeit very rarely, in other Ket stems as well, cf. bd=b-bes' 'to become thick' [Werner 2002: I, 122], meaning that, as is usually the case with biradical verbs, it is probably -'i- ('ik') that carries the main original directional semantics of 'coming'.

Quoted as igbis', / iyvis' (S.Emb.) 'to bring in' in [Werner 1977: 150]; as di=ek-s-i-bes in [Castrén 1858: 181]. The latter source adds an extra synonym: d=aw=d;i [Castrén 1858: 181], but in most modern sources this verb is usually explicated with the slightly different meaning 'to reach', 'to arrive' (e. g. in [Werner 1993: 32]: d=aw=d;iy 'I will reach, arrive' = Russian 'i do y ili d').

Yugh: Werner 2011: 197. Infinitive form. See notes on the corresponding Ket entry for morphological analysis. Quoted as igbes' 'to bring in' in [Werner 1977: 150]. The quasi-synonymous form -d'i [Werner 2011: 196] rather means 'to reach, arrive at (one's final destination) than 'to come'.

Kott: Castrén 1858: 201. 1st p. sg. Cf. also past tense: ha=to-y-an, imperative: o=ha.

Arin: Not attested.

Pumpokol: Not attested.

Proto-Yeniseian: The Proto-Yeniseian form is not reconstructible, since the Ket-Yugh and Kott forms lack mutual etymologization; furthermore, the basic verb 'to come' in Ket is a composite verb, which makes its archaic nature quite dubious, and the morphophonology of the verbal root in Kott remains to be explored in more detail.

17. DIE
Ket q=qa'yan ~ q=qa'yen {qorayu ~ qoray} (1), Yugh q=qi: ~ qou (1), Kott d=a=xa-y-an (1), Arin =qa # (1), Pumpokol ka-# (1), Proto-Yeniseian *q= (1).

References and notes:

Ket: Werner 2002: II, 114, 124; Werner 1993: 69. Paradigm: 1st sg. d=wi=qi: ~ d=wi=q=i 'I (will) die', past tense d=i=n=i (< d=i=n=q=30). The added infinitive is a complex bimorphic form; the simple infinitive form q=xi; at (Werner 2002: II, 124; Werner 1993: 66]) is glossed as 'kill' rather than 'die', but this semantic gloss is actually quite dubious (see notes on 'kill'). Nevertheless, only the morpheme *q=xi; in different allomorphic variants, participates in the general verbal paradigm. Quoted as qa=qa'yin; / qa=deqi (Bak., Surt.) in [Werner 1977: 162]; as present tense d=wi=qi:, past tense d=wi=n=i in [Castrén 1858: 181].

Yugh: Werner 2011: 291. Paradigm: 1st sg. d=wi=q 'q=wi=q 'I (will) die', past tense d=wi=n (< *d=wi=n=q). A more complex variant of the same verb is attested as infinitive q=di'q 'to die', 1 sg. q=di'q-qi:di-gev 'I (will) die' [Werner 2011: 291]; the infinitive is also quoted as q=deqi in [Werner 1977: 162].


Arin: Dulzon 1961: 187 (M., Dict., Kl.). The root is attested as part of the form in=qo 'dead (person); cf. also in=ko-to (Kh.) 'death'
[Werner 2002: II, 124]. Technically speaking, none of these forms prove that *qo was the default root forming the basic verb 'to die' in Arin, but no alternatives are available, and external data confirm the Proto-Yeniseian status of the item anyway.

**Pumpokol**: Dulzon 1961: 187 (Dict.). Only attested as part of the form ku-don-du "he is dead", where -du is the 3rd p. m. suffix, but the component -don- remains grammatically and etymologically obscure. Dubious.

**Proto-Yeniseian**: S. Starostin 1995: 264 (‘qo‘). Alternately reconstructed as *qo a in [Werner 2002: II, 123]; in [S. Starostin 1995: 264], the reconstruction *qo d’ is reserved for the closely similar item with the meaning 'to hunt' (Ket qo, Yugh ye) - probably a near-homonymous, but etymologically different entry, although H. Werner confuses the two (unjustly, since the necessary intermediate meaning 'to kill' is not attested in Ket-Yugh). **Distribution**: Preserved in all daughter languages. **Reconstruction shape**: The vocalism *q is based on S. Starostin’s correspondence of "Ket-Yugh *q ~ *o : Kott a”.

18. **DOG**

Ket *tip (mun) (1), Yugh čip (1), Kott al=šip (1), Arin ‘il=čap (1), Pumpokol čip # (1), Proto-Yeniseian *či (1).

**References and notes:**


**Kott**: Castrén 1858: 196. Plural form (with vowel gradation): al=šap. The word contains the same fossilized prefix as 'bird' q.v. Cf. in older sources: *al=šip (M., Dict., Kl.), al=šib (F.) [Werner 1990: 369].

**Arin**: Dulzon 1961: 182 (M., Dict., Kl.). Quoted as il=čip (Kh.) in [Werner 2002: II, 269].

**Pumpokol**: Dulzon 1961: 182 (Kh.). Also attested as ci in (Kl., Dict.); it is not clear if this is the same word as čip, nor is it entirely clear that čip itself is not, in fact, a Yugh form.

**Proto-Yeniseian**: S. Starostin 1995: 217. Alternately reconstructed as *tip in [Werner 2002: II, 269]. **Distribution**: Preserved in all daughter languages. **Reconstruction shape**: Correspondences are generally regular, slightly disturbed by two factors: (a) a vowel gradation scheme between sg. and pl. forms - the Proto-Yeniseian paradigm was probably the same as Ket-Yugh, i.e. sg. "čip, pl. "čašp), but the vocalism of the plural variant may have become generalized in Arin; (b) the Kott-Arin forms are attested in conjunction with a desemanticized prefix (Kott al=, Arin il=, original vocalism unclear) that is also encountered in several other entries on the 100-word list ('bird', 'star'); this seems to have been a shared Kott-Arin innovation.

19. **DRINK**

Ket *u=r~ uŋ=r= d’ō {yро ~ yλdο} (1), Yugh dšp ~ dšf (1), Kott o=ʔaŋ (2), Arin t’agur (3), Pumpokol hokoy (4), Proto-Yeniseian *=ōp (2).

**References and notes:**

**Ket**: Werner 2002: II, 321, 337; Werner 1993: 110, 112. Quoted as ur‘ (Imb.) / ud‘ (Bak., Sur.) in [Werner 1977: 186]. Composite infinitive form, in which the first component = uŋ ‘water’ q.v. Of the two variants, the first one is more archaic, since it fuses together the final consonant of the first stem with the initial consonant of the second one (*xur-d> > ur>); the second variant more likely represents the 'reinstated' stem, based on regularized analogy with the word 'water'. Since the Yugh equivalent of this form shows final -p (*a=dšp ~ ur=dšp), it is reasonable to suppose irregular elimination of -p in Ket proper as well, possibly triggered by analogy with various complex verbal forms in which -p is lost for samdhi reasons (e.g. uŋ=dšx=šap=a=san "I begin to get drunk"), or with the plural forms of the simple paradigm in which -p regularly lost in the intervocalic position. The paradigm in question is: dš=ʔu=abdšp 'I drink it', past tense
Loss of final -p in the infinitive form also explains why the infinitive form is used in conjunction with utˈ 'water': to avoid homonymy with other verbal roots of the same form. However, the conjugated complex verb utˈ...dop 'to drink (water)' also exists per se, and is attested as early as in [Castrén 1858: 184]:

\[d=ut\rightarrow eup; d=a=ut=dop \text{ 'I drink', past tense } d=ut=e=dap\]

An even more complicated question is the relation between the Ket stems \(d=x(p)\) and \(=y\), also 'drink', as in: \(d=a=b=yp \text{ 'I drink it'}, \text{ past tense } d=\rightarrow b=\rightarrow i=q=op\) [Werner 2002: II, 44]. The semantic difference between \(d=a=b=dop\) and \(d=a=\rightarrow b=yp\) is unclear; it can only be seen from available texts that the latter is much more rare, possibly archaic in origin. Whether they are connected etymologically is quite debatable; to link them together, one would have to demonstrate that \(-d\) in \(d=\rightarrow a=b=dop\) is an old preverb, fused with the root. But apparently, this is impossible to do on available Ket material, since even the external parallels in Kott show that the two stems must have been differentiated already on the Proto-Yeniseian level (there is, however, some evidence for such segmentation in Yugh, see notes on the Yugh entry). In any case, at the moment it seems that \(yp\) has to be excluded from lexicostatistical calculations.

**Yugh:** Werner 2011: 306. Infinitive form; another variant of the infinitive is the complex formation \(u=dop \rightarrow u=daf\) (\(< ur=dop\), literally 'water-drink'); the form \(ur=dop\) itself is also attested, but is likely to be a back-formation through analogy, cf. the same situation in Ket). Quoted as \(u=d^\prime p\) in [Werner 1977: 186]. Both infinitives correspond to the same finite paradigm: 1 sg. \(d=ut\rightarrow b=\rightarrow i=q=op\), imperative \(a=q=op\) 'drink it!'. There is also a composite paradigm: 1 sg. \(d=\rightarrow ur\rightarrow a=dop \text{ 'I drink it'}, \text{ past tense } d=\rightarrow ur\rightarrow b=\rightarrow i=q=op\) [Castrén 1858: 185]. It is notable that in all these paradigms, the root has the form \(d=\) in the present tense, but \(op\) in the past tense and in the imperative mood. This suppletivism cannot be explained through regular Yugh morphophonology.

**Kott:** Castrén 1858: 202, 213. 1st p. sg. Cf. also past tense: \(a=\rightarrow i=q=op\), imperative: \(a=\rightarrow i=q=op\), infinitive: \(i=q=op\). The root is either \(op\)- or \(ap\), with the vowel sometimes deleted through contraction with preceding prefixes. Cf. in older sources: \(qnap\) (M., Dict., Pal., Kl.) [Verner 1990: 348].

**Arin:** Dulzon 1961: 177 (M., Dict., Pal., Kl.). Morphologically obscure; most likely, a complex stem with an adverbial prefix, but proper segmentation seems impossible.

**Pumpokol:** Dulzon 1961: 177 (Dict., Pal., Kl.). Morphologically obscure; as in Arin, probably a complex stem is involved, but segmentation is unclear. The form \(du-z-dop \text{ 'to drink'}, \text{ listed in (Pal.) and (KL) as a synonym, is most likely a corrupt transcription of Yugh (not proper Pumpokol) } d=ur=a=dop\) q.v.

**Proto-Yeniseian:** S. Starostin 1995: 202 (\(\sim BV\): superseded by the newer reconstruction \(\sim lo\)- in [YED # 173]). Also reconstructed as \(\sim op\) in [Werner 2002: II, 44]. Distribution: Best attested in Kott, as well as in a part of the Ket-Yugh paradigm. Replacements: (a) The forms in Arin and Pumpokol, as is common for most verbal forms attested in these languages, are very hard to interpret. S. Starostin [1995: 203] suggested that they are cognate, segmenting the Arin form as \(t=\rightarrow agur\), comparing the 'root' to \(h/ok\)- in Pumpokol and reconstructing a rather vague stem \(\sim WKV\)- 'to drink'. This reconstruction, however, depends on way too many unprovable assumptions, not to mention that any Arin or Pumpokol forms attested in XVIIth century sources without reliable external cognates in Ket or Kott are highly questionable to begin with. Provisionally, we treat them as independent replacements with obscure etymologies; (b) In Ket-Yugh, the old root \(\sim op\) has been confined to certain suppletive parts of the paradigm, being generally replaced by \(dop\). This latter stem is compared by S. Starostin to Kott \(lo\)- in \(lo\-a-k\-\-y \text{ 'I eat'}, \text{ etc. < Proto-Yeniseian \(dop\) 'to eat' [S. Starostin 1995: 223]. If this comparison is right, the Ket-Yugh meanings are probably innovative, appearing through frequent usage of the compound stem \(\sim ur\-\-dop\), literally 'to consume water', where \(dop\) would be a verb with originally vague semantics ('to consume, devour?'). Another possibility is that Ket-Yugh \(\sim dop\) (and maybe Kott \(lo\)- as well?) are historically fusions of the same old root \(\sim op\) with a directional prefix; however, it remains unprovable. Overall, the entire situation is beset with etymological problems, so the selection of \(\sim op\) as an optimal candidate for Proto-Yeniseian 'to drink' rests only on its position as the currently strongest isogloss between Ket-Yugh and a non-Ket-Yugh language (Kott) in the required meaning. Reconstruction shape: Correspondences between Ket-Yugh and Kott are regular and trivial.

**20. DRY**

Ket \(təxˈəw\-yn-\-s\) \(\sim təxˈəw\-yn-\-s\) \(\text{мовунъычь} (1), Yugh təxˈəw\-yn \sim təxˈəw\-yn (1), Kott ʃi=gal (2), Arin ɡo¼ya (1), Pumpokol ɨ=kˈoy- naï (1), Proto-Yeniseian \*qəy- [\*qəc-] (1).
References and notes:


**Yugh:** Werner 2011: 306. Quoted as ?x?iŋ in [Werner 1977: 181] (?x?iŋ may be a misprint). As in Ket, this complex adjectival / infinitive stem serves as the basis for verbs with the meaning 'to dry', e.g. ?x?iŋi-?iŋ [Werner 2011: 306].

**Kott:** Castrén 1858: 213. The prefix ?i- indicates that the form is really an infinitive, but the verb 'to dry' in Kott has only been preserved as compound formations: ?i-gal-ai-?e-jak-ŋ 'to dry out (intr.)', d?w=+i-?i-gal-?ŋ 'to dry (tr.)', etc. The older sources usually cite a different word in the meaning 'dry': xuiga (M., Dict., Kl.) [Verner 1990: 375].

**Arin:** Dulzon 1961: 185 (M., Dict., Kl.).

**Pumpokol:** Dulzon 1961: 185 (Dict.). The status of the prefixal component ?i- is unclear; if the form is really predicative ('it is dry'), it could be a sequence of auxiliary verbal morphemes (conjugation markers).

**Proto-Yeniseian:** S. Starostin 1995: 265 ("qV" ?)-. Alternately reconstructed as *qoy - *qoyiŋ in [Werner 2002: II, 283]. Distribution: Preserved in all daughter languages except for the Kott dialect described by M. Castrén. Replacements: In Kott, the old word for 'dry' (as in 'dry clothes', etc.) may have merged with the old word for 'dry, withered' (as in 'dry tree', etc.). Kott =gal- = Ket q?iŋ in q?iŋ-?iŋ ors? 'dry tree', etc. [Werner 2002: II, 101]. This is hard to ascertain due to the possibility of inaccurate semantic glossing in known sources on Kott, but may still be regarded as the optimal scenario under the present circumstances. Reconstruction shape: Correspondences are regular. Word-medial *-a, tentatively suggested by S. Starostin, is not very likely in this root (although the only form that explicitly contradicts such a reconstruction is Kott ku?i-qa), but its probability becomes higher if we decide to establish a further etymological link with Proto-Yeniseian *qoq-ante 'hunger' [S. Starostin 1995: 265]; the derivation 'dry' > 'hunger' is typologically possible, e.g. encountered in Burushaski.

**21. EAR**


References and notes:


**Kott:** Castrén 1858: 204. Plural form: kalox-?aŋ. Most likely, borrowed from a Turkic source (cf. Yakut kulgak, Tatar qolag, etc.), although the "vowel metathesis" remains unexplained. Cf. in older sources: kaloxam (M., Dict., Pal., Kl.), koloq (Kh.) [Verner 1990: 385].

**Arin:** Dulzon 1961: 187 (M., Dict., Kl.). quoted as utk?en-?ŋ in (Pal.). The form is marked as plural (Lat. aures), so -ŋ is most likely the plural marker. Cf. also utk?en 'ear' in (Kh.) [Werner 2002: II, 372].

**Pumpokol:** Dulzon 1961: 187 (Dict., Pal.).

**Proto-Yeniseian:** S. Starostin 1995: 198 ("?gde ~ "?qV"). Distribution: Preserved in all daughter languages except for Kott. Replacements: Kott kalox is most likely borrowed from a Turkic source (see notes on the Kott entry). Reconstruction shape: This issue is very problematic. H. Werner places under doubt the common etymologization of Ket-Yugh items, on one hand, and the Arin / Pumpokol forms, on the other. However, the only serious problem preventing such a comparison is the metathesized order of consonants, and it may be easily circumvented. Pace S. Starostin’s reconstruction, it seems more reasonable to view the Arin / Pumpokol consonantal sequence as original, since (a) Arin and Pumpokol belong to different primary branches of Yeniseian, with
metathesis in Proto-Ket-Yugh a more economic solution than independent metatheses in Arin and Pumpokol; (b) all other instances of *-KT-~*-QT-type sequences in Proto-Yeniseian generally yield assimilated -T(T)-type sequences in Arin. The somewhat tentative reconstruction ?ɑd e, despite the uniqueness of its medial cluster, accounts for all the resulting diversity, except for stem-final -n in Arin and Pumpokol, which is probably just the old plural marker, sometimes fused with the root (cf. the variation between the old singular uttyŋ and the plural-turned-singular uttyʔə:n- in Arin). Semantics and structure: The unusual stem structure ?ɑd e almost certainly implies a compound origin, but whatever it was, the fusion probably pre-dated the Proto-Yeniseian stage, and it is doubtful that this particular mystery will ever be resolved to general satisfaction.

22. EARTH
Ket baʔŋ {ðaʔŋ} (1), Yugh baʔŋ (1), Kott paŋ (1), Arin peŋ (1), Pumpokol biŋ (1), Proto-Yeniseian *baʔŋ (1).

References and notes:


**Yugh:** Werner 2011: 122. Neuter gender. Quoted as baʔŋ in [Werner 1977: 137].


**Arin:** Dulzon 1961: 168 (M., Dict., Pal., Kl.). Quoted as pem in (Kh.) [Werner 2002: I, 110].

**Pumpokol:** Dulzon 1961: 168 (Dict., Pal., Kl.).

**Proto-Yeniseian:** S. Starostin 1995: 205; Werner 2002: I, 110. Distribution: Preserved in all daughter languages. Reconstruction shape: Correspondences are generally regular, although the front row vocalism in Arin (peŋ) and Pumpokol (biŋ) remains unexplained. Based on some additional evidence, it is quite possible that this situation reflects a former bisyllabic structure (i.e. Proto-Yeniseian *baʔŋ‘ or *baʔŋ), with deletion of the final vowel after a glottal stop in Ket-Yugh and root vowel assimilation in Arin and Pumpokol; however, this hypothesis requires further verification.

23. EAT
Ket sʰŋ ~ sʰɨŋ {cuʔ} (1) / =a ~ =0 (2), Yugh siʰy (1) / =a =0 (2), Kott toŋ-ak-ŋ (3), Arin šau (1), Pumpokol sogo (1), Proto-Yeniseian *siː (1).

References and notes:

**Ket:** Werner 2002: II, 191; Werner 1993: 87. This form phonetically functions as the 1st/2nd/3rd m. p. sg. member of the intransitive verbal paradigm (‘I eat’, etc., without explicit marking of the object within the verbal form), but in reality, as seen in comparison with the rest of the paradigm as well as data from phonetically conservative dialects, is to be analyzed as *d=siː-a / *k=sìy-a etc., where the first morpheme is the subject marker, and sʔiː~a is a composite verbal stem (usually assimilated to siː~a in actual conjugation). Cf. the paradigmatic data in [Werner 2002: I, 359-360]: t=ʔŋi ~ t=ʔŋiy-a ~ t=ʔŋiy ‘I eat’, past tense t=ʔŋi-ʔ ~ t=ʔŋi-ʔ-e ~ t=ʔŋi-ʔ-ʔ ‘I ate’. Werner 2002: I, 359; Werner 1993: 36. This root is encountered in the transitive verbal paradigm (‘I eat smth.’, with the normally inanimate object of eating marked with the usual morpheme -b~ -v~ -v-), where it is phonetically preserved only in archaic dialects. Cf. diʔ=ŋ ~ di=ŋo ~ di=ŋa [dų n= du ʰi] ‘I eat it’, past tense dov=ɨl ~ dov=ɨl [dų l=ɨ] ‘I ate it’. It must be exactly the same root as in the intransitive verb sʔiː~a, and, since it is encountered in both paradigms, should be considered the main basic equivalent for the meaning ‘eat’ in Ket. However, we still include the morpheme sʔiː as a lexicostatistical synonym, since it is also encountered in basic usage, and neither internal nor external data show it to have ever possessed a meaning different from ‘eat’ or ‘food’.

Other peculiarities of the meaning ‘eat’ in Ket include: (1) the infinitive for both -a and sʔiː~a is ʔɨŋŋ ~ ʔiŋ [Werner
ly regular imperative form \( i^t=\text{eat} \) (\( *i^t=a \)), which could itself serve as the basis for this infinitive formation;

(2) An entirely different paradigm is available for situations that require multiple animated participants (e. g. ‘I eat him,’ ‘she eats me,’ etc.); in this case, the usual stem is \(-d\varphi \) [Werner 2002: I, 201]: \( d^i=\text{q}^\text{p}r=\text{q} \) ‘I eat him,’ \( d^i\text{=}\text{q}r=\text{q} < *d^i=\text{q}r=\text{q} \) ‘I eat her,’ etc. Since the meaning ‘to eat smbd. (people, animate creatures etc.)’ is less usual and basic than the meaning ‘to eat (food),’ we do not see this paradigm as eligible for inclusion. One old source (Dulzon 1968) also mentions the existence of the variant \(-d\varphi \) in addition to \(-d\varphi \), but this has not been confirmed.

Yugh: Werner 2011: 127. The paradigm of this formally intransitive (without explicit object marking within the paradigm) verb is structured exactly the same way as in Ket: 1sg. \( d=i^b=q \sim t=s\text{=}\text{y} \) ‘I eat,’ past tense \( d=i^b=\text{r} \sim t=s\text{=}\text{r} \) ‘I ate’ (reduced from earlier \( *d^i=\text{q}^\text{l}^-\text{y}^-a, *d^i=\text{q}^\text{l}^-\text{r}^-a, \) etc., where \( *-a \) is the same verbal root as in \( *d^i=\text{q}^\text{l}^-a \) ‘I eat it’, see below). Werner 2011: 127. As in Ket, this root is primarily encountered in the transitive verbal paradigm: 1 sg. \( d^i=\text{q} \) ‘I eat it’ (< \( *d^i=\text{q}^\text{a} \)), past tense \( d=i^b=i^r=\text{r} \) ‘I ate it’ (< \( *d^i=b=i^r=\text{r} \)). The original root is still seen in the plural form: 1 pl. \( d=b=a-n \) ‘we eat it’, past tense \( d=b+i^r=\text{q}=\text{a} \) ‘we ate it.’ The infinitive form is \( 'i=n \) Ket \( i^t=\text{q} \) (see notes on Ket). Also, as in Ket, the meaning ‘to eat (smbd. rather than smth.)’ is expressed by a separate verbal root, \( \text{q} \) [Werner 2011: 127].

Kott: Castrén 1858: 217. Past tense: \( \text{c}^\text{a}p \text{c}^\text{a}l \text{c}^\text{a}k \), imperative: \( \text{c}^\text{a}l \text{c}^\text{a}l \text{c}^\text{a}k \). Composite verb; the simple root \( \text{c} \) has either an indefinite meaning (‘to eat’) or a substantive one (‘food’). The older sources quote a different, not easily identifiable form: \( \text{b} \) (M. Dic., Pal., KL) [Verner 1990: 309], where \( b \) may be the 3rd p. inanimate object prefix, but the root remains unclear.

Arin: Dulzon 1961: 166 (M., Dc., Pal., KL); quoted as \( \text{s} \) in (KL).

Pumpokol: Dulzon 1961: 166 (Dc., Pal., KL). The forms \( d=i^a-n \) (KL), \( d=i^g^\text{a} \) (Pal.) are, in all likelihood, really Yugh in origin.

Proto-Yeniseian: S. Starostin 1995: 274 (\( *i^a; \) later amended to \( *i^g \)) in [YED 632]). Alternately reconstructed as \( *i^g \) in [Werner 2002: I, 360]. Distribution: Preserved as a verbal root with its original basic meaning in Ket-Yugh and possibly in Arin and Pumpokol, but only in derived stems in Kott. Replacements: In Kott, the old verbal root ‘to eat’ is still preserved in the nominal derivate \( i^g \) ‘food, meal’, but in the verbal paradigm, it has been replaced with a complex formation on the basis of the verbal root \( \text{c} \) = Ket-Yugh \( *d^q \) ‘to drink’. The semantic shift {‘to drink’ > ‘to eat’} seems strange, but the situation may have been more complex (see notes on ‘to drink’ for further details). Reconstruction shape: The reconstruction \( *i^g \) is essentially based on Ket-Yugh forms, as well as on Kott \( i^g \) if the velar element is detached as an old nominal suffix. Attested Arin and Pumpokol forms are more difficult to interpret as far as their morphemic constituency is concerned; in addition, initial \( i^- \) in Pumpokol \( i^g \) is irregular (normally, the standard development \( *i^- > \text{t} \) should be expected). Unfortunately, we know so little of Arin and Pumpokol verbal morphology that no satisfactory explanations can be foreseen; we have to rely on the initial consonant as the only significant piece of evidence for not suggesting lexical replacement in any of these languages. Semantics and structure: There is no way of telling if the complex, triform system of lexical roots used to express the meaning ‘to eat’ in Ket-Yugh, was an innovation or should be traced back to the Proto-Yeniseian stage. Currently, Ket-Yugh \( *i^g \) is the only root out of the three \( (*i^g, *\text{a}, *d\varphi) \) that finds more or less reliable external parallels, and for that reason, we choose it as the default equivalent for ‘to eat’ in Proto-Yeniseian.0

24. EGG
Ket \( e^q \) \( *s^i^u \) (1), Yugh \( e^q \) (1), Kott \( \text{suley} \) (2), Arin \( a^q \) (1), Pumpokol \( t\text{an}^\text{a}q \) (1), Proto-Yeniseian \( *\text{ye}^q \) (1).

References and notes:

Ket: Werner 2002: I, 256; Werner 1993: 131. Neuter gender. Plural form: \( e^q \sim e^q^\text{a} \) (\( e \)). Quoted as \( e^q \), pl. \( e^q; \) in [Werner 1977: 148]; as \( e^q \sim e^q \), pl. \( e^q\text{a} \) in [Castrén 1858: 236].

Yugh: Werner 2011: 112. Neuter gender. Plural form: \( e^q^\text{a} \sim e^q^\text{a} \) (\( e \)). Quoted as \( e^q \), pl. \( e^q^\text{a} \) in [Werner 1977: 148].

Kott: Castrén 1858: 215. Plural form: \( \text{suley}^\text{a} \). It has been suggested by Ye. Khelimskiy that the word is a borrowing from Samoyed.
(cf. Mator šl*ų' 'egg'), but the word has no Common Samoyed, let alone Uralic, etymology, so for the present moment it is not recommended to score it as an obvious loanword. Cf. in older sources: šuley (M., Dict., Kl.), šulep (Kh.) [Verner 1990: 394].

**Arin:** Dulzon 1961: 189 (M., Dict., Kl.). Quoted as ąg-en' 'eggs' in (Kh.) [Werner 2002: I, 256].

**Pumpokol:** Dulzon 1961: 189 (Dict., Kl.). Presumably a plural form, where -arj is the plural suffix. The alternate form eg (Kh.) is really Yugh (= ey q.v.).


**Distribution:** Preserved (often in a morphologically modified form) in most Yeniseian records, with the exception of Kott (probably).

**Replacements:** Kott šuley has no clear etymology. It is either (a) a borrowing from Samoyed (see notes on the Kott entry); or (b) a compound formation: šul- '7' + -ey 'egg'. If it were possible to prove the latter case, there would be no need to postulate lexical replacement; but since the origins and meaning of the mysterious component šul remain unclear, such a replacement has to be postulated, at least ‘technically’. **Reconstruction shape:** A very tricky situation here. In Ket-Yugh, apart from the general paradigm 'egg' (sg. *eʔy, pl. *e-ŋ), there is also a form ʧŋ, attested in the words for 'roe': Ket sg. ʧŋ-dis (where the second component = 'eye' q.v.), pl. ʧŋ-tও in. H. Werner regards 'egg' and 'roe' as two different etyma; S. Starostin suggests that the two may be etymologically linked if the vowel gradation reflects some sort of old 'Ablaut', as in certain other nominal stems (e. g. 'dog', etc.). The opposition between 'egg' and 'roe' is also not as well pronounced in the rest of the Yeniseian languages as it is in Ket-Yugh (cf. Arin anยก, but Kott d'anwan 'roe', Assan dialect many id.). One possible scenario is therefore to suggest this early paradigm: sg. *yeʔy (> Ket eʔy), pl. *ye-ŋ (> Ket-Yugh ʧŋ 'roe'; Arin an 'egg', with pl. > sg.) with various subsequent shifts: (a) in Yugh, plural ey has replaced singular eʔy; (b) in Arin, ʧŋ- 'eggs' > an 'egg', ʧŋ-ŋ > roe > my-num; (c) in Pumpokol, ʧŋ > ʧan (regularly, -č- should rather be expected, cf. 'leaf' q.v., but a transcriptional mistake is not out of the question); the old plural form becomes singular, and a new plural is formed: ʧan-ŋ > ʧan-ŋ with dissimilation. The vowel gradation between *yeʔy and *ŋ-ŋ would then date back to pre-Proto-Yeniseian (e. g. early *yɛʔy > *yɛʔy under the influence of two palatal glides?).

**References and notes:**


**Yugh:** Werner 2011: 77. Neuter gender. Plural form: des' (pair of eyes), but děš' ~ děš-ŋ (many eyes). Quoted as desši, pl. desši (pair), desš-eŋ, (many) in [Werner 1977: 143].

**Kott:** Castrén 1858: 217. Plural form: teč-ag-an (partial suppletion, formed from an unattested complex sg. stem *teč-aga/). Cf. in older sources: tečan (M., Dict., Kl.), tieŋ (Pal.) [Verner 1990: 298] (all of these forms are plural, but the one in (Pal.) must be more archaic than the rest).


**Pumpokol:** Dulzon 1961: 162 (Dict., Kl., Pal.).

**Proto-Yeniseian:** S. Starostin 1995: 220. Alternately reconstructed as *detŋ ~ *des in [Werner 2002: I, 187]. **Distribution:** Preserved in all daughter languages. **Reconstruction shape:** Correspondences are quite regular (Pumpokol ʧ- is a regular reflexion of Proto-Yeniseian *e-s). **Semantics and structure:** In S. Starostin’s reconstruction, final *-s is interpreted as a fossilized singulative suffix, a fuller variant of which may also be seen in *xu-sa ‘one’ q.v. and several other archaic nominal stems (e. g. 'stone' q.v.). This argumentation is solidly supported by Arin tie-ŋ, which probably preserves a trace of the archaic paradigm: sg. *de-s, pl. *de-ŋ (the latter form shifted to *des-ŋ in Proto-Ket-Yugh by analogy).

**26. FAT N.**
Ket $ki\bar{t}$ \{\textit{kwim}\} (1), Yugh $ki\bar{t}$ (1), Kott $ki\bar{r}$ (1), Proto-Yeniseian \textit{*gi\textbar{d}} (1).

References and notes:

\textbf{Ket}: Werner 2002: I, 481; Werner 1993: 61. Neuter gender. Quoted as $ki\bar{t}i$ in [Werner 1977: 158]; as $kit \sim kiet$, pl. $kit-\eta \sim kiet-\eta$ in [Castrén 1858: 168].

\textbf{Yugh}: Werner 2011: 133. Quoted as $ki\bar{t}i$ in [Werner 1977: 158].

\textbf{Kott}: Castrén 1858: 205. Plural form: $k\varepsilon r$.

\textbf{Arin}: Not attested. Cf., however, $k$ \textit{‘it is’} fat’ in (Kh.) [Werner 2002: I, 481], which probably contains the same root.

\textbf{Pumpokol}: Not attested.

\textbf{Proto-Yeniseian}: S. Starostin 1995: 228. Alternately reconstructed as \textit{\textquoteleft k\textbar{il} \sim k\bar{t}i\bar{t}} in [Werner 2002: I, 481]. \textit{Distribution}: Preserved in all daughter languages where attested, but not found in Arin and Pumpokol. \textit{Reconstruction shape}: Correspondences are fully regular. \textit{Semantics and structure}: As in the attested language, the Proto-Yeniseian word was probably applicable to both hard ‘fat’ and liquid ‘oil’.

27. FEATHER

Ket $\dot{a}s^5$ \{\textit{ac\textbar{o}\textbar{t}}\} (1), Yugh $a^\#s$ (1), Kott $i\ddot{c}i \sim i\varepsilon c$ (1), Arin $i\varepsilon n$ (1), Proto-Yeniseian \textit{*\textbar{a}s\textbar{i}} (1).

References and notes:

\textbf{Ket}: Werner 2002: I, 66; Werner 1993: 19. Neuter gender. Plural form: $\dot{a}s^\varepsilon \eta$ \{\textit{a\textbar{e}\textbar{y}\textbar{t}}\}. Quoted as $as^\varepsilon$ (S.-Imb.) / $as^\varepsilon$ (Bak., Sur.), $as^\varepsilon$ \{\textit{a\textbar{e}\textbar{y}\textbar{t}}\} (Kur.), pl. $as^\varepsilon$ in [Werner 1977: 135]; as $as$, pl. $as$-\textbar{e}n in [Castrén 1858: 159].

\textbf{Yugh}: Werner 2011: 131. Neuter gender. Plural form: $as-\varepsilon n$. Quoted as $as^\varepsilon$ (S.-Imb.) / $as^\varepsilon$ (Bak., Sur.), $as^\varepsilon$ \{\textit{a\textbar{e}\textbar{y}\textbar{t}}\} (Kur.), pl. $as^\varepsilon$-\textbar{e}n in [Werner 1977: 135].

\textbf{Kott}: Castrén 1858: 201. Plural form: $\varepsilon a-\eta$. Cf. in older sources: $\varepsilon a$-\textbar{e}n (Kh.) [Verner 1990: 347] (the form is plural).

\textbf{Arin}: Werner 2002: I, 66. Attested only in (Kh.); the form is transparently plural (‘feathers’).

\textbf{Pumpokol}: Not attested.

\textbf{Proto-Yeniseian}: S. Starostin 1995: 205 (\textit{\textbar{a}s\textbar{i}}). Alternately reconstructed as \textit{*a\textbar{e}s\textbar{s}} in [Werner 2002: I, 66]. \textit{Distribution}: Preserved in all daughter languages (but not attested in Pumpokol). \textit{Reconstruction shape}: Consonantal correspondences are regular and transparent. Vocalic correspondences are unclear (S. Starostin does not reconstruct the root vowel), but the data suggest that, most likely, the stem-final \textit{*i} has influenced the root vocalism in the Kott-Arin branch (\textit{\textbar{a}s\textbar{i}} \sim \textit{\textbar{a}s\textbar{i}}).

28. FIRE

Ket $b\varepsilon k$ \{\textit{bo\textbar{c}\textbar{k}}\} (1), Yugh $b\varepsilon k$ (1), Kott $hat$ (2), Arin $qott$ (2), Pumpokol $bu\ddot{c}$ (1), Proto-Yeniseian \textit{*bo\textbar{k}} (1).

References and notes:

\textbf{Ket}: Werner 2002: I, 145; Werner 1993: 28. Neuter or feminine gender. Quoted as $b\varepsilon k$ in [Werner 1977: 140]; as $b\ddot{e}k$, pl. $b\ddot{e}k-\eta$ \sim $b\ddot{e}k-\eta$ in [Castrén 1858: 190].

\textbf{Yugh}: Werner 2011: 133. Neuter or feminine gender. Plural form: $b\ddot{e}k-\eta$ \sim $b\ddot{e}k$. Quoted as $b\varepsilon k$ in [Werner 1977: 140].

\textbf{Kott}: Castrén 1858: 208. Plural form: $h\ddot{a}t-\sim h\ddot{a}t-\eta$. Cf. in older sources: $qott$ (M., Dict., Kl.), $qot$ (Pal.), $xat$ (Kh.) [Verner 1990: 340-341].

\textbf{Arin}: Dulzon 1961: 75 (M., Dict., Kl.). Quoted as $qott$ in (Pal.); as $kot$ in (Kh.) [Werner 2002: I, 305].

\textbf{Pumpokol}: Dulzon 1961: 75 (Dict., Pal., Kl.).

(probably, in Proto-Kott-Arin), replaced by a nominalization of Proto-Yeniseian *ŋəʔ 'to burn' q.v.; the shift [‘to burn’ > ‘fire’] is typologically trivial. **Reconstruction shape:** Correspondences are regular and trivial except for the palatalization *k > -č* in Pumpokol (there are very few examples on final *-k* in Pumpokol altogether); it is possible that this palatalization reflects traces of an original second syllable vowel, i.e. the reconstruction could be amended to *ʔoʔke* or *ʔoʔki*.

29. FISH

Ket *isʰ* {uco} (1), Yugh *is* (1), Kott *teːg ~ tex* (2), Arin *iːl=ti* (2), Pumpokol *h’ite* (2), Proto-Yeniseian *ciːk* (2).

**References and notes:**

**Ket:** Werner 2002: I, 396; Werner 1993: 49. Feminine gender. Singular and plural forms are identical. Same word as ‘meat’ q.v.; in the meaning ‘fish’, the idiomatic expression *utʰ-i*sʰ (literally ‘water’s meat’) may be used if necessary. Quoted as *isʰ*; ‘fish / meat’ in [Werner 1977: 151]; as *isʰ* ‘fish’ in [Castrén 1858: 162].

**Yugh:** Werner 2011: 134. Feminine gender. Singular and plural forms are identical. Same word as ‘meat’ q.v. Quoted as *isʰ*; ‘fish / meat’ in [Werner 1977: 151].


**Arin:** Dulzon 1961: 180 (M., Dict., Pal., Kl.). Initial *il* is most likely a fossilized prefix, same as in ‘dog’ q.v. Quoted as *il-ta* in (Kh.) [Werner 2002: II, 267].

**Pumpokol:** Dulzon 1961: 180 (Dict.). Quoted as *g’ite* in (Pal., Kl.).

**Proto-Yeniseian:** S. Starostin 1995: 214. Alternately reconstructed as *tʰiʔaɡo* in [Werner 2002: II, 267]. **Distribution:** Preserved in the original meaning in Kott-Arin and in Pumpokol. **Replacements:** In Ket-Yugh, replaced in the meaning ‘fish’ with *ʔis* ‘meat’ and only preserved in the meaning ‘snake’: Ket *fly*, Yugh *čiːk* (see under ‘snake’). The shift chain [‘meat’ > ‘fish / meat’], [‘snake’ > ‘fish’] is, overall, the most economic solution, given the distribution of cognates in daughter languages. **Reconstruction shape:** The correspondence “Kott-Arin *tʰ* - Pumpokol *h* - *x*” is regular and reflects Proto-Yeniseian *c* (see ‘hair’), although the proper phonetic interpretation of this phoneme is questionable. Likewise, Pumpokol -*t* is known to at least occasionally reflect Proto-Yeniseian *k* (cf. *ʔok ‘sterlet’ > Pumpokol ot*), so this correspondence is also regular.

30. FLY V.

Ket *dɔq {doq} (1), Yugh *dɔʰkʰ* (1), Kott *f=a-ta-g-a iːnaq* (2), Proto-Yeniseian *doːq ≠(1).*

**References and notes:**

**Ket:** Werner 2002: I, 200. In Ket proper, this verbal root participates in several paradigms with very close meanings: (a) simple verb, cf.: *dʰ=i=q ‘I fly’, past tense *dʰ=i=n=dɔq*; (b) with directional preverb -*t*, cf.: *da=tʰ=a=q=dɔq ‘she flies’, past tense *da=tʰ=i=l=dɔq* (possibly in the meaning ‘to fly (around)’ rather than ‘to fly (somewhere)’).


Still another option is a verb for ‘flying’ that usually appears in the form -*k* or -*sk* in several paradigms, such as: *di=q=sk ~ di=q=sk* ‘I (will) fly (forth)’ [Werner 2002: I, 201, 482]; cf. also, with the preverb *ko*, *da=kʰ=a=q=sk* ‘she flies forth’, past tense *da=kʰ=a=q=sk*. (It is this paradigm that is probably surmised in Castrén’s present tense *koq=gaq*, past tense *koq=naq* ‘to fly’ [Castrén 1858: 168], although his final uvular is quite out of place). Overall, the situation here is very complex, possibly with several contaminated stems. For the most basic entry, we choose the form that appears to be the least marked in terms of specifying the direction of flight.

**Yugh:** Werner 2011: 137. Infinitive form; quoted as *dɔʰkʰ* in [Werner 1977: 145]. As in Ket, this verbal root has two different paradigms: (a) simple, cf. *di=q=sk ‘I fly’, past tense *di=q=n=dɔq ~ di=i=n=dɔq*; (b) with directional preverb *ko*, cf.
Possible secondary synonyms are also the same as in Ket: (a) ki₃ŋ ‘to fly’ in da=ki₅ŋ-α=t=get₉ ‘she flies’, etc. [Werner 2011: 138]; (b) q₅k to ‘fly (forth, away)’ in d¼g=α=g₅k ‘I fly away’, etc. [ibid.].

**Castrén:** Castrén 1858: 225. An idiomatic expression, consisting of an auxiliary verb and the nominalized stem f=a-ta-ɡ₁g-ŋ ‘to stand up, rise’ (directional preverb f= + root =ta-).

**Arin:** Not attested.

**Pumpokol:** Not attested.

**Proto-Yeniseian:** S. Starostin 1995: 223. Alternately reconstructed as *doʔaŋ* in [Werner 2002: I, 200]. **Distribution:** Preserved in Ket-Yugh, but not in Kott; not attested in either Arin or Pumpokol. **Replacements:** In Kott, the word may have been replaced by an idiomatic expression, derived from the verbal root ‘to rise’, provided that the semantic notation of M. Castrén (‘to fly’) and not ‘to fly up, to soar’, etc., was correct. The root *=doq*, nevertheless, is still attested in Kott in the meaning ‘to jump’; a=š=tack-ŋ, past tense a=t=tack-ŋ. **Reconstruction shape:** Correspondences between Ket and Yugh are regular and trivial. **Semantics and structure:** Based on the Kott parallels, the verb may have been polysemous in Proto-Yeniseian: ‘to jump / to fly’ (although the situation could also reflect a semantic shift from ‘fly’ to ‘jump’ in Kott). S. Starostin suggests analyzing the verbal stem *=doq* as composite, with a fused directional prefix, based on the occurrence of semantically similar verbs with different initial consonants, e.g. Kott i=t=ak-ŋ ‘jump’ (? < *t=ŋ-) and Ket-Yugh *k=ɛŋj ‘to fly (forth)’ (see notes on Ket-Yugh). However, there is no firm Yeniseian-internal evidence to justify this conclusion: all of these verbs might just as well represent different roots (note also the significant differences in vocalism between all the three). More systematic research on this issue is necessary to clarify the situation; for now, it is premature to confidently segment out *=d=* as a separate morphological element.

31. **FOOT**

**Ket** bu₁l⁹ {ʔljₕl} (1), **Yugh** bul (1), **Kott** pul (1), **Arin** pil (1), **Pumpokol** an-ŋ # (2), **Proto-Yeniseian** *bul* (1).

**References and notes:**


**Kott:** Castrén 1858: 222. Plural form: *pu₁l·ŋj*. There is no indication of any lexical opposition between ‘foot’ and ‘leg’ in Castrén’s materials. Cf. in older sources: *pu₁l* (Kh.) [Verner 1990: 338].

**Arin:** Dulzon 1961: 174 (M., Dict., Pal., Kl.). Quoted as *a=pil* in (Kh.) [Werner 2002: I, 153]; status of initial a= is unclear - it may be a fossilized possessive prefix.

**Pumpokol:** Dulzon 1961: 174 (Dict., Pal., Kl.). The form is most likely plural in origin (‘feet’). Actually, the meaning ‘feet’ is somewhat dubious in the light of external evidence - ‘legs’ seems to would have been a more accurate semantic equivalent, but, since the original language of the dictionary is Latin (‘pedes’), the semantics remains ambiguous.

**Proto-Yeniseian:** S. Starostin 1995: 213; Werner 2002: I, 153. **Distribution:** Preserved everywhere except for Pumpokol, but even there the attested “replacement” is somewhat dubious. **Replacements:** In Pumpokol, Proto-Yeniseian *bul* ‘foot’ may have been replaced with an- = Arin an ‘thigh’, Kott an-ár ‘thigh’ id. [S. Starostin 1995: 181]. The semantic development ‘thigh’ > ‘foot’ is, however, more dubious than the development ‘thigh’ > ‘leg’, so there is a probability that Pumpokol an-ŋ really means ‘legs’, whereas the proper word for ‘feet’ was not recorded. **Reconstruction shape:** Correspondences are regular except for the enigmatic i instead of n in all Arin sources.
32. FULL
Ket ut {ym} (1), Yugh ut (1), Kott ut:ti (1), Proto-Yeniseian *ʔute (1).

References and notes:

Ket: Werner 2002: II, 381-382. Predicative form: ut-sː. Plural form: 'ut-iŋ - 'ut-iŋ-sː-in. In [Werner 1993: 115], listed only in the derived form 'ut-al [ŋə]; it may be so that in Ket proper it is this derived stem that has a more frequent usage, unlike in Yugh. Quoted as ut - ut-əl - ut-al 'voll, ganz' in [Castrén 1858: 165]. Secondary synonym: ʔa ([Werner 2002: II, 93; Werner 1993: 66]), more frequently used in idiomatic expressions (such as sːiʔe-ʔa “all summer”, ʔiʔ-ʔa “full moon”, etc.).

Yugh: Werner 2011: 326. Plural form: ut-iŋ. Predicative form: ‘ut-si ‘it is full’. Quoted as ut-t, pl. ut-ŋŋj in [Werner 1977: 189]. As in Ket, also attested as a derivative form with an additional suffix: ‘ut-al ‘full’ [Werner 2011: 326]. Secondary synonyms also include (a) ʔa ~ ʔq ‘whole, full, complete’ (usually in idiomatic expressions such as ʔɛp-ʔa “full moon”, etc.); (b) pʰm- in pʰm-ʔa ‘it becomes full’ (borrowed from Russian мно́го ‘full’).

Kott: Castrén 1858: 204. Cf. also ut-am ‘all, whole’ [ibid.].

Arin: Not attested.

Pumpokol: Not attested.

Proto-Yeniseian: S. Starostin 1995: 201. Distribution: Preserved in all daughter languages where attested, but not found in Arin or Pumpokol. Reconstruction shape: Correspondences are regular and generally trivial (the vowel in the second syllable could probably have been *-i as well).

33. GIVE
Ket n=...=o (1) / aŋ {aŋ} (2), Yugh n=...=o ~ n=...=u (1) / =aʰ:χ (2), Kott hi=pe:n-aŋ (2), Arin koyα=penʰ-a # (2), Proto-Yeniseian *n=...=o # (1).

References and notes:

Ket: Werner 2002: II, 23. A complicated verb, used only with the rare preverb n= and with the obligatory inanimate object marker =b. Specific forms include d=ŋ=ŋ=bd= ‘he gives (to) him’, past tense d=ŋ=ŋ=bi=ŋ=bd, d=ŋ=ŋ=bd= ‘he gives (to) her’, past tense d=ŋ=ŋ=bi=ŋ=bd, etc. Werner 2002: I, 49; Werner 1993: 32. Cf. specific forms: d=ŋ=ŋ=bd= ‘he gives (to) him’, past tense d=ŋ=ŋ=bi=ŋ=bd, d=ŋ=ŋ=bd ‘he gives (to) her’, past tense d=ŋ=ŋ=bi=ŋ=bd. The same forms are quoted as d=ŋ=ŋ=bd=, past tense d=ŋ=ŋ=bi=ŋ=bd in [Castrén 1858: 180]. Like n=...=o, this verb is always used with the inanimate object marker =b, although, when the indirect object is expressed by the 1st or 2nd p., the object marker inexplicably migrates to the position preceding the indirect object (as in: d=ŋ=ŋ=bd= ‘he gives to you’, past tense d=ŋ=ŋ=bd= ‘he gives to me’, past tense d=ŋ=ŋ=bd=). This may only be explained through a suppletive paradigm, where forms with the 3rd p. obj. follow a different model from those with the 1st/2nd p. object. In these forms, =b(i)= should be judged as an independent root (“modifier”), derived from biʔ ‘thing’, rather than a grammatical marker. Hence, the complete paradigm would be aŋ / biʔ=...=aŋ.

The semantic difference between n=...=o and (bi...)-aŋ is not entirely clear, although the latter verb is usually suspected of denoting momentary action, contrasting with the "prolonged" (habitual) semantics of the former. The issue is not entirely resolved, and in any case, even if this is correct, we have to include both verbs as synonyms.

Yugh: Werner 2011: 148. See notes on Ket. Specific forms include d=ŋ=ŋ=bd= ‘he gives (to him)’, past tense d=ŋ=ŋ=bi=ŋ=bd, d=ŋ=ŋ=bd= ‘he gives (to) her’, past tense d=ŋ=ŋ=bi=ŋ=bd, etc. Werner 2011: 147. Cf. specific forms: d=ŋ=ŋ=bd= ‘he gives (to) him’, past tense d=ŋ=ŋ=bi=ŋ=bd, d=ŋ=ŋ=bd= ‘he gives (to) her’, past tense d=ŋ=ŋ=bi=ŋ=bd. The same irregular inversion of the object marker =b as in Ket happens here as well: d=ŋ=ŋ=bi=ŋ=bd= ‘he gives (to) you’, etc. The verb is also encountered in compound formations, e. g. with us= ‘away’: d=ŋ=ŋ=bd= ‘he gives him’ (literally 'gives away to him'), etc.

Kott: Castrén 1858: 130, 210. 1st p. sg.; cf. also past tense hi=bi=pe:n-aŋ, imperative hi=lo:n. This complex verb consists of the root *pe:n- (although the fact that p disappears in the imperative could hint at its original affixal status) and an unclear prefixal
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...component *kiw* or *kw*—The strange form *furak* 'I give' (Kh.) in one of the older sources is unclear [Verner 1990: 302].

Arin: Werner 2002: I, 438. Attested only in (Kh.). The first two syllables are unclear (separate lexical stem in a compound verb? a string of adverbial prefixes and conjugation markers?), but *pen*- is segmentable as a root and comparable with Kott *pcn*- q.v.

**Pumapoko:** Not attested.

**Proto-Yeniseian:** No previously postulated reconstructions. **Distribution:** Only attested in Ket-Yugh. **Replacements:** There are altogether three different roots / stems attested with the meaning 'to give' in various Yeniseian languages. Of these: (a) Kott-Arin *pen-* (always functions as the second root in a composite stem, with differing first elements) is compared by S. Starostin in [YED # 962] with Yugh *fin* in the composite verbal stem *χ’α’d’in-fin ~ χ’α’d’in-fan* 'to give back; to give away' (also attested as *χ’α’d’in-ft’* with unclear consonantal mutation). However, external Ket evidence shows that it is Yugh *χ’α’d’in-, not *fin*, that carries the main lexical meaning of 'give back, give away' (= Ket *q’š-ram ~ q’š-an* id. [Werner 2002: II, 146]). Considering that in Kott and Arin, *pen-* is also not found on its own, it is more likely that the verb was a general 'directional' auxiliary in Proto-Yeniseian rather than an original 'to give'; (b) Ket-Yugh *awq-, likewise, is a verbal root with much broader semantics than 'to give'. Consequently, the only verbal stem that is attested exclusively in the meaning 'to give' is Ket-Yugh *n=...=o*. Furthermore, its highly unusual shape (monovocalic root + very rare directional prefix) is an additional indirect hint at archaicty. We very tentatively set it up as the optimal candidate for the Swadesh meaning 'to give' in Proto-Yeniseian. **Reconstruction shape:** Since the stem *n=...=o* is only attested in Ket-Yugh, the Proto-Yeniseian equivalent could be slightly different, but at least it is not highly likely that the monovocalic root could have contained additional consonants (in this position, most of them would have yielded traces in modern dialects).

34. GOOD

Kot *‘aqta-s* (əқтамаcy) (1), Yugh *əc’ta* (1), Kott *hag-ši* (1), Arin =*ktu # (1), Proto-Yeniseian *‘haq*- (1).

**References and notes:**

**Kot:** Werner 2002: I, 54; Werner 1993: 14. Predicative form; cf. *‘aqta kət’* 'good man' without the suffix. Quoted as *‘aqta ~ aqta* 'good, fresh' in [Castrén 1858: 157]. Cf. *‘aqta-mu* 'good' (adverbial form) in [Werner 1977: 183].

**Yugh:** Werner 2011: 161. Quoted as *‘aqta*, in [Werner 1977: 183].

**Kott:** Castrén 1858: 207. The root is *hag-; -ši* is an infrequent adjectival suffix. Synonymous form: *hama* 'good' [Castrén 1858: 209], cf. also *hano* 'better'. It is not clear if the two words are related through some morphological model, or belong to different etymologies. Cf. in older sources: *xamagit* 'good' (Kh.) [Werner 1990: 386] (probably *xama-xit* 'good person').

**Arin:** Werner 2002: I, 52. Attested only in (Kh.), as part of the compound *bergar=iktu*, probably = 'very good' (where *bergar* = 'big' q.v.).

**Pumapoko:** Not attested properly. The recorded forms ekte-ket 'it is good' [Dulzon 1961: 170], ekte-m 'good' (German gut) [Dulzon 1961: 187] are only present in (Pal.), where Yugh forms are frequently recorded as "Pumapoko", and these particular ones definitely look Yugh rather than "proper" Pumapoko.

**Proto-Yeniseian:** S. Starostin 1995: 230. Alternately reconstructed as *‘aqta* in [Werner 2002: I, 54]. **Distribution:** Preserved in all daughter languages (but not attested in Pumapoko). **Reconstruction shape:** Proto-Ket-Yugh *‘aqta* is segmentable into the original root morpheme *‘a* + the same suffix as in *in-da* ‘small’ q.v. (with phonetic assimilation). This allows for an easy and direct comparison with Kott *hag-*, where all the correspondences are regular. If Arin =*ik-tu* belongs here as well, -tu is the predicative suffix, i.e. Arin would be preserving the original root without any further derivational suffixes, unlike Ket and Kott.

35. GREEN

Ket *sʰən*-{qьньсьь} (1), Yugh *silʰəna* (-1), Arin *itt’ima* (2), Pumapoko *komul-si # (3).
References and notes:

**Ket:** Werner 2002: II, 221. With the predicative suffix -s; cf. also sʰⁿʷʰ-iy 'to become green' [ibid.]. Meaning glossed as 'blue / green / brown' (although 'brown' is very suspicious: it is only confirmed by North Ket sʰⁿʷʰ qyxе 'brown bear', quoted by Werner without justification; note also the glottal stop, lacking in other examples - the expression should be verified). Quoted as sʰor 'blue' in [Castrén 1858: 188]; this source attributes the meaning 'green' to xa al-ey 'blue / green', derived from xa al 'gall' [Castrén 1858: 171], but this is a Yugh form, not Ket proper, and the gloss is not confirmed in more recent sources.

**Yugh:** Werner 2011: 161. Transparent borrowing from Russian зелёный 'green'. Werner also lists the form xaxal-ey (= xa al-ey) from [Castrén 1858: 171], but it is not attested in his own Yugh records (see notes on Ket for etymology).

**Kott:** Not attested. Cf., however, the form šapkan 'it is green' (Russ. зелёный (Kh.) in one of the older sources [Werner 1990: 314].

**Arin:** Dulzon 1961: 167 (M., Dict., Kl.). Polysemy: 'green / yellow'. Quoted as iti'ma in (Pal). Attested as iti'ma 'blue', iti'ma-ko 'green' in (Kh.) [Werner 2002: I, 385].


**Proto-Yeniseian:** Not reconstructible. The item is poorly attested in all extinct languages; not a single isogloss between two different languages can be detected; and there are reasons to assume that the meaning 'green' was not lexically distinct even in Proto-Ket-Yugh.

36. HAIR

**Ket** тəɾə {məɾə} (1), Yugh ʨəɾə (1), Kott heŋ-ay (1), Arin qʰaga-ȵ (1), Pumpokol xiŋa (1), Proto-Yeniseian *ʨәɾə(1).

References and notes:

**Ket:** Werner 2002: II, 304; Werner 1993: 105. Plural (collective) form only. Quoted as təɾə (N.-Imb.) / brəŋ (S.-Imb.) in [Werner 1977: 184]; as tʰəɾə ~ təɾə ~ tʰəŋ, pl. tʰəɾə-ən in [Castrén 1858: 178].

**Yugh:** Werner 2011: 161. Quoted as ʨəɾə in [Werner 1977: 184].

**Kott:** Castrén 1858: 209. Plural form: heŋay-ay. Synonym: ek 'hair' [Castrén 1858: 200]. Although the semantic difference is not indicated in Castrén's dictionary, external comparanda make it very probable that heŋai meant 'head hair', whereas ek would rather mean 'body hair', 'fur', etc. The suffix -ay is a frequent body part suffix in Kott (cf. 'head', etc.). Cf. in older sources: kiŋay-an (M., Kl., Pal., Dict.), inągaq (Kh.) [Kerner 1990: 294].

**Arin:** Dulzon 1961: 161 (M., Dict., Pal., KL). Also quoted as qigaŋ in (Dict.); as keŋun in (Kh.) [Werner 2002: I, 313].

**Pumpokol:** Dulzon 1961: 161 (Dict., Pal.). Quoted as qiŋa in (KL). Distinct from liimen 'hair (on body)' [ibid.]

**Proto-Yeniseian:** S. Starostin 1995: 213. Alternately reconstructed as ʨəŋa in [Werner 2002: II, 304] and analyzed as a compound form (head' q.v. + 'skin' q.v.). Distribution: Preserved in all daughter languages. Reconstruction shape: The correspondence *Ket-Yugh* ʨʰ : Kott h- : Arin q- or k- : Pumpokol x- is recurrent and, in S. Starostin's system, is interpreted as reflecting Proto-Yeniseian *ʨʰ-. Such an interpretation is open to debate - in particular, due to the typologically unlikely velarization of affricates in Arin and Pumpokol, and also because of the comparable rarity of Proto-Yeniseian *ʨʰ-, which would rather imply some non-trivial cluster or contextual development (cf. especially the transcription qʰ- in Arin), but there is little doubt that all the listed items do indeed belong together.

37. HAND

**Ket** хəɾə {хəɾə} (1) / lʰaŋ {lʰaŋ} (2), Yugh bɨŋ (3), Kott keːgər ~ keʔər (4), Arin pʰyaga (1), Pumpokol ton # (5).
References and notes:

**Ket:** Werner 2002: I, 339; Werner 1993: 124. Neuter gender. Plural form: *h‰yn*-en [хъйн]. Quoted as *h‰ynu*, pl. *h‰yn-en* in [Werner 1977: 193]; as *h‰yney* in [Castrén 1858: 174] (where this word, quite clearly plural in form, is still translated as 'Hand (von der Wurzel an)'). The stem also forms a large number of compound forms, e. g. *h‰yn-tey* 'to touch', *h‰yn-tei* 'to move (with the hand)', *h‰yn-an*-es* "handless", etc.Werner 2002: II, 9. More frequently encountered as *Penn-at* (< *Paŋ* < *at* 'bone' q.v.). In [Werner 1993: 78] only this compound form *Paŋat* [қыъран] is translated as 'hand' ('пъд'); *Paŋ* [қыъры] is glossed only as 'part of hand close to the wrist' ('ав астан ку ил ип'). In [Castrén 1858: 175], the form *Paŋ-at* is translated as 'Arm mit der Hand'.

The exact difference between *h‰yn* and *Paŋ*-at is hard to define. On one hand, dictionary glosses and derivatives speak in favor of a basic distinction between *h‰yn* as 'hand (with fingers)' and *Paŋ*-at as 'hand + arm'. However, *Paŋ* is not 'arm' per se (in this meaning Ket uses the word *ел* [Werner 2002: II, 434]). Also, published texts (such as collected by Kreynovich, Dulzon, and others) seem to regularly feature the word *Paŋat* in contexts like "take with the hand", etc., whereas *h‰yn* is encountered quite rarely, if ever. For the time being, we propose treating the two words as synonymous; however, it seems that *h‰yn* is the more "marked" member of the opposition, referring specifically to 'hand' as 'the fingers and the part of the hand closest to the fingers', used for 'touching', 'groping', etc., rather than 'taking'. If this explanation is proven to be correct, then *h‰yn* has to be eliminated from the wordlist.


**Arin:** Dulzon 1961: 180 (M., Dict., Pal., Kl.). Quoted as *upega* in (Kh.) [Werner 2002: I, 338]; *u* may be an obscure prefix, as in *wpusir* (Kh.) 'forehead', *u=kurî* (Kh.) 'throat' etc.

**Pumpokol:** Dulzon 1961: 180 (Dict., Pal., Kl.). Glossed as both 'hand' (manus) and 'arm' (brachium). This actually looks like a reasonable plural form from *tok* (Dict., Pal., Kl.) 'finger' [Dulzon 1961: 176], so the accuracy of the semantics 'hand' is somewhat questionable.

**Proto-Yeniseian:** Not reconstructible. The meaning 'hand' is notoriously unstable in Yeniseian languages: almost every language has its own etymological equivalent (sometimes two!), and most of the etymological connections are problematic. In the order of increasing probability of representing the Proto-Yeniseian equivalent for 'hand', here is what may be said about the individual candidates:

1. Pumpokol *lo-n* is, in all likelihood, historically a plural from *tok* 'finger' = Ket *lãlq*, etc. < Proto-Yeniseian *tãlq* 'finger' [S. Starostin 1995: 283]; the fact that it has turned out to have been much more stable in Yeniseian than 'hand';
2. Yugh *bið* 'hand', despite phonetic similarity with Ket *h‰yn*, does not regularly correspond to this word, and has no other parallels whatsoever;
3. The only etymological parallel for Ket *Paŋ* 'hand' is in Arin: *lan-ńguy* (M., Kl.), *læŋ-puy* (Kh.) 'wing' [YED # 936], and it is not very clear e. g. both forms are clearly compounds, but their second halves remain unetymologized); nevertheless, the semantic shift 'hand' > 'wing' is theoretically possible;
4. Kott *kegâr* is compared in [YED # 341] with Yugh *kãd*-at 'arm', and also, possibly, with Arin *koro-nun* (Kh.) 'mittens'. The Arin parallel is dubious, but the Yugh form is a good match that allows to reconstruct Proto-Yeniseian *kãd*-tãlq, where *tãlq* = 'bone' q.v., possibly with the meaning 'arm' or 'armbone', but less probably 'hand' (it must be noted that Kott, apparently, does not distinguish between 'hand' and 'arm');
5. The best "chances" lie with the pairing of Ket *h‰yn* and Arin *pʰyaga* (= *pega*), which allows S. Starostin to reconstruct the protoform as *pʰyg*- [S. Starostin 1995: 254]. The semantic matching is exact, and the correspondences are generally reconcilable. However, there is some doubt as to whether the Ket word is indeed the primary equivalent for 'hand' (see notes on Ket), and, subsequently, this would influence Proto-Yeniseian semantics.

Given this very complicated situation, we currently prefer to leave the Proto-Yeniseian spot empty, even if the Ket and Arin forms may, at least technically, be counted as lexicostatistical matches (without any serious semantic or phonetic obstacles).0
Ket $k\text{̄}yga$ (қыңға́) (1), Yugh $čɪʔ$ (2), Kott $təg\text{ά} \sim tək\text{ά}$ (2), Arin $k'ol\text{̄}k'a$: # (3), Pumpokol $k'ol\text{̄}ka$ # (3), Proto-Yeniseian *$cɪʔe$* (2).

**References and notes:**

**Ket:** Werner 2002: I, 460; Werner 1993: 58. Neuter gender. Plural form: $k'\text{̄}ygg\text{-en}^t \sim k'\text{̄}ygg\text{-an}^s$-in (қыңғың). Quoted as $k'\text{̄}yga$, pl. $k'\text{̄}ygg\text{-en}$s 'head' in [Werner 1977: 155]. There is also a clearly related dialectal word $k'yge$ (қың), pl. $k'ygen^t \sim k'ygen^s$-in [Werner 2002: I, 460], glossed as 'head / chief'.

This is a relatively recent Ket innovation in the meaning 'head'. The old word (whose antiquity is proven by cognates in Yugh and Kott) is still attested in [Castrén 1858: 178] as $t'\text{̄}rɛ$, pl. $t'\text{̄}r-s$-an; was also attested by K. Donner as $t\text{̄}r\text{̄}r$ [Werner 2002: II, 312]; and attested by Werner in the Kur. dialect as $t\text{̄}r\text{̄}n \sim t\text{̄}n\text{̄}l$ [Werner 1977: 185], possibly as an archaism.

**Yugh:** Werner 2011: 198. Neuter gender. Plural form: $ɛ\text{̄}r\text{-en}$. Quoted as $ɛ\text{̄}r\text{-en}$ in [Werner 1977: 185].

**Kott:** Castrén 1858: 216. Plural form: $t\text{̄}g\text{-an} \sim t\text{̄}g\text{-an}$. Cf. in older sources: $t\text{̄}g\text{ý}$ (M., Dict., Pal., Kl.), $t\text{̄}g\text{á}$ (Kh.) [Verner 1990: 299].

**Arin:** Dulzon 1961: 162 (M., Dict., Pal., Kl.). Also transcribed as $olkä$ in P. Strahlenberg’s short wordlist. Questionable; in (Kh.), there is also a clearly related dialectal word $k'yge$ (қың), pl. $k'ygen^t \sim k'ygen^s$-in [Werner 2002: I, 167], where $k\text{\¬}$ could, perhaps, be the possessive prefix (‘your’), and $d\text{\¬}ke$ is a perfect match for Kott $t\text{\¬}g\text{á}$-i ‘head’. If both forms were indeed present in the same Arin dialects, this could hint at inaccurate semantic notation.

**Pumpokol:** Dulzon 1961: 162 (Dict., Pal., Kl.).

**Proto-Yeniseian:** S. Starostin 1995: 214 (*$či\text{̄}t\text{̄}s*$). Alternately reconstructed as *$t'\text{̄}r\text{-}g\text{á}$* in [Werner 2002: I, 167]. **Distribution:** Preserved in Ket-Yugh (although mostly replaced in modern Ket), Kott, and possibly Arin (at least one of the Arin dialects).

**Replacements:** S. Starostin [1995: 237] reconstructs Proto-Yeniseian *$k[\text{̄}l\text{r\¬}g\text{á}$ and Pumpokol $k'\text{ol\¬}ka$. This is a difficult etymological decision, since it surmises two ‘heads’ for Proto-Yeniseian: *$k[l\text{r\¬}g\text{á}$ and *$či\text{\¬}a$, with severely criss-crossed (“non-tree-like”) distribution and no well-defined semantic difference. However, there are phonetic reasons to doubt the validity of *$k[l\text{r\¬}g\text{á}$; namely, Ket *$\text{\¬}g\text{á}$ does not correspond to Arin or Pumpokol *$\text{\¬}$-, and explaining it as the result of a specific development in a cluster does not work well, since (i) this is the only example of such a cluster and (2) in no other instances, regardless of the phonetic context, do Yeniseian liquid resonants yield a palatal glide in Ket. Considering that attested historical evidence clearly shows that Ket $k\text{̄}yga$ in the meaning ‘head’ is a recent innovation, it makes more sense to analyze it as a derivative from older $k\text{\¬}yge$ ‘top’ (see notes on Ket-Yugh).

As for the Arin and Pumpokol forms, they, too, present some problems. First, this is the only genuine exclusive isogloss between the two languages on the Swadesh list, which is already suspicious (on the whole, lexicostatistics shows that Arin and Pumpokol belong to different primary branches). Second, Arin data are contradictory: Loskutov's recordings feature $k\text{\¬}d\text{\¬}ke$, cognate with Kott $t\text{\¬}g\text{á}$, in the meaning ‘head’. This can be explained in several ways: (a) the normal Arin word for ‘head’ was $d\text{\¬}ke$, whereas $k\text{\¬}l\text{r\¬}ka$ is a Pumpokol borrowing in some of the Arin dialects (not very likely, since ascertained lexical contacts between Arin and Pumpokol are non-existent); (b) the very presence of Arin $k\text{\¬}l\text{r\¬}ka$ in XVIIth century sources is a mistake (e. g. a Pumpokol word was accidentally glossed as Arin - also not very likely, since the transcriptions for Arin and Pumpokol items are slightly different); (c) the most likely solution is that $k\text{\¬}l\text{r\¬}ka$ ‘head’ was a local “Southern” areal isogloss, possibly of non-Yeniseian origin, that managed to get diffused in the Arin/Pumpokol area. This is a provisional solution, and its confirmation or rejection will depend on the further study of areal connections between Yeniseian and “Ural-Altaic” languages. Nevertheless, since the suggestion is conjectural and no exact source of borrowing can be pinned down at the moment, we still count Arin and Pumpokol forms as a lexicostatistical match (but not cognate with Ket).

**Reconstruction shape:** Initial *$č*$- is reconstructed, following S. Starostin, on the basis of the correspondence "Ket-Yugh $č\text{-}$: Kott $t\text{-}$" (same as in ‘fish’ q.v.). Word-medial uvular reflects the correspondence of Kott velar *$k\text{-}$ to absolute zero in Ket-Yugh. Reconstruction of the vocalism is somewhat less certain; the current scheme rests on the assumption of archaicty of Ket-Yugh vocalism in the first syllable and of a front vowel in the original second syllable, as per Kott and Arin evidence.
Ket =da {=dә} (1), Yugh =de (1), Kott h=ɔ=ti (1), Arin ut'ay'ut'u-m (1), Proto-Yeniseian *=ta (1).

References and notes:

Ket: Werner 2002: I, 287 (listed as =g...=da); Werner 1993: 21. Cf. actual forms such as ba=qwa=b=da ~ ba=gwa=b=da [ðә[wә=ðә)] 'I hear it', past tense ba=qwą=ni=da, a=qwa=b=da 'he hears it', etc. The proper root is =da; =gwa ~ wą (~ =kwa) is the obligatory preverb following the indirect object prefixes. (The verb has no "proper" subject markers and may be formally analyzed as impersonal: 'for-me-it-is-heard', 'for-him-it-is-heard', etc.). Quoted as ba=qwa=p=ti, past tense ba=gwa=b=li=di in [Castrén 1858: 186]. The strange vocalic variation (=da ==de ~=di) probably has to do with the occasional suffixation of the intransitive/passive suffix -i, contracting with the root vowel. Not to be confused with 'eq-saq, eq-tiy' 'to listen' [Werner 2002: I, 237].

Yugh: Werner 2011: 181. Cf. actual forms such as ba=qwa=b=de 'I hear it', past tense ba=qwa=b=di=r=de, a=qwa=b=de 'he hears it', etc. The proper root is =de; =gwa is the obligatory preverb following the indirect object prefixes. (As in Ket, the verb has no "proper" subject markers and may be formally analyzed as impersonal: 'for-me-it-is-heard', 'for-him-it-is-heard', etc.).

Kott: Castrén 1858: 211. Impersonal form (literally 'it is heard'). Past tense: ho=ɔ=b-a-ti. Cf. in older sources: golot 'I hear' (Kh.) [Verner 1990: 368] (actually =hukat) 'it was heard'.

Arin: Werner 2002: I, 326. Attested only in (Kh.); the form is glossed as 1st p. sg. 'I hear'; final -m possibly represents the personal ending; the rest of the form is hard to segment (looks like a reduplication, but that would be fairly strange for a form with the meaning 'I hear').

Pumpokol: Not attested.

Proto-Yeniseian: S. Starostin 1995: 291 (*IV). Distribution: Preserved in all daughter languages (not attested in Pumpokol, but the root may be present in the form hiti-fun 'to be silent', literally 'without hearing'). The Arin form is also somewhat dubious: it is formally possible to see traces of *=ta in it, but a complete and transparent morphological analysis is implausible. Reconstruction shape: Of the two encountered variants of the verbal stem (*=ta and *=ti), the second is explicable as the result of replacement of the original root vowel with the Proto-Yeniseian passive / intransitive marker *-i. Both variants of the stem may have already been present in Proto-Yeniseian, but *=ta is the better choice for the original form of the root. Semantics and structure: The basic semantics of the root must have been impersonal/passive ('to be heard').

40. HEART
Ket hu {xyym ~ xy} (1), Yugh fu (1), Kott šitap (2), Arin šen'ougbu (2), Pumpokol pfu (1), Proto-Yeniseian *pu (1).

References and notes:


Proto-Yeniseian: S. Starostin 1995: 251 (*p[u]-). Alternately reconstructed as *p'u in [Werner 2002: I, 332]. Distribution: Preserved in Ket-Yugh and Pumpokol. Replacements: Kott šitap ~ šitabu and Arin šen'ougbu ~ šenebu are forms that are quite probably etymologically connected, even if the second consonant in this complex structure remains indecipherable. They are, furthermore, phonetically similar to Ket s'etad 'spleen; pancreas' [Werner 2002: II, 186], and also correspond well enough except for the second
consonant. It is possible that all of these forms reflect an original compound structure with a non-trivial consonant cluster (on a morphemic boundary?), which is why the resulting correspondences are relatively unique. If the Arin form, in particular, may be interpreted as an obscure way of transcribing something like "semy-bu, it could be seen as a historical collocation of "sery/Vn⟩ 'liver' [S. Starostin 1995: 272] + 'pu 'heart'. But this analysis is not so well applicable to the Kott form, since it does not explain denasalization of the word-medial resonant. Altogether, evidence for the presence of the original 'pu 'heart' somewhere within this stem is scarce. Reconstruction shape: Correspondences are generally regular. Semantics and structure: It is not a certified fact, despite the confidence in [S. Starostin 1995: 251], that Ket-Yugh / Pumpokol 'pu 'heart' is etymologically connected with 'priy 'belly' q.v., despite phonetic similarity and semantic proximity. For the time being, it is preferable to judge it as an individual root with a precise Swadesh meaning 'heart' and not a member of any Proto-Yeniseian "word-family".

41. HORN
Ket qɔʔ [kɔʔ] (1), Yugh ɣ̣ə (1), Kott hau (1), Proto-Yeniseian *qɔʔ(1).

References and notes:


Yugh: Werner 2011: 181. Neuter gender. Dual form: ɣ̣ə-ŋ, plural form: ɣ̣ə-ŋ-n. It is interesting that in [Werner 1977: 162], the form ɣ̣ə-n is actually listed as singular 'horn', and the form ɣ̣ə-ŋ-n as plural 'horns' (with no distinction between "proper" plural and dual); neither is there any mention of Yugh sg. ɣ̣ə in [Werner 2002: II, 122].


Arin: Not attested.

Pumpokol: Not attested.

Proto-Yeniseian: S. Starostin 1995: 303 (*qɔʔ). Alternately reconstructed as *qɔʔ in [Werner 2002: II, 122]. Distribution: Preserved in all daughter languages where attested, but not found in Arin or Pumpokol. Reconstruction shape: Correspondences are generally regular, although the diphthong -au in Kott is somewhat strange.

42. I
Ket at [am] (1), Yugh at ʔ ~ ad (1), Kott ay (1), Arin ay (1), Pumpokol ad (1), Proto-Yeniseian *ʔaṣ (1).

References and notes:

Ket: Werner 2002: I, 72; Werner 1993: 20. Positional variants include ar ʔ ~ ad ~ ā. Declinable personal pronoun with the same root throughout the paradigm. The possessive pronoun, represented by an etymologically different stem ab (~ ap ~ aw) [Werner 2002: I, 11], is not eligible for inclusion. Quoted as a1 in [Werner 1977: 136]; as ad in [Castrén 1858: 159].

Yugh: Werner 2011: 183. Declinable personal pronoun with the same root throughout the paradigm. The possessive pronoun, represented by an etymologically different stem ab (~ ap) [Werner 2011: 183], is not eligible for inclusion. Quoted as a1 in [Werner 1977: 136].

Kott: Castrén 1858: 195. Cf. a-n-šo 'my(own)' [Castrén 1858: 198]; m-in-šo 'my' (formed from m-, an entirely different stem).

Arin: Dulzon 1961: 189 (M., Dict., Kl.). Also quoted as ā in (Kl.).

Pumpokol: Dulzon 1961: 189 (Kl.).

Proto-Yeniseian: S. Starostin 1995: 185. Alternately reconstructed as *ad̥al ʔ ~ *ad̥al in [Werner 2002: I, 72]. Distribution: Preserved in all daughter languages. Reconstruction shape: Reconstruction of the final consonant is questionable. The correspondence "Ket-Yugh + Pumpokol "d : Kott-Arin "q" is interpreted by S. Starostin as a reflexation of the rare Proto-Yeniseian phoneme *q in word-final position, but in reality it is practically indistinguishable from word-final *s, so that the reconstruction might ultimately be amended.
to *kəj. **Semantics and structure:** The protoform *kəj (or *kəj) reflects the direct stem of the Proto-Yeniseian 1st p. sg. pronoun, and it also serves as the basis for certain series of subject and object verbal markers. It is opposed to the indirect (possessive) stem that was, already on the Proto-Yeniseian level, represented by two allomorphs in complementary distribution: 'b- (word-initially) vs. *-ŋ (word-finally); for more details, see [S. Starostin 1995: 205].

43. KILL

References and notes:

**Ket:** Werner 2002: I, 226; Werner 1993: 131. Cf. such forms as d=ŋŋ=ɛ-y ‘he kills them’, past tense d=ŋŋ=ɛy; t=ʁ=øy ‘he kills me’, past tense t=q=ʁ=øy. Quoted as ɬy (S.-Imb.) / ɛy (Kur.) / çye(4) (Sut.) in [Werner 1977: 148].

Contrary to [Werner 2002: II, 123], there is no verb q= ‘to kill’ in Ket that could be related to q= ‘to die’ q.v.: the verbal stem q= means ‘to hunt’, ‘to procure game’, etc., but never ‘to kill’ as such, and there is no internal evidence (and, in fact, very shaky external evidence) that this verb could have ever meant ‘to kill’. It is interesting that the morpheme =q= (~ = a) is encountered in the past tense paradigm of ɬy, but in this case, it occupies the slot of the past tense marker, and is better treated as a very archaic, “relict” grammatical morpheme. (But even if it can be equated with q= ‘to die’, after an old hypothesis of Ye. Kreynovich, there is still no evidence of it meaning ‘kill’ per se: the past stem of the verb would simply be interpreted as ‘die-kill’).


**Kott:** Castrén 1858: 202. 1st p. sg. Cf. the past tense: oɡa-ʔaː-čex, imperative: oɡa-ća-čex, infinitive: ok-ćex. A compound formation: the second stem (-ćex) is a frequentative form in verbs denoting forceful action with a sharp object (‘to stick’, ‘to shave’, etc.), the first one (oɡa(ʔaː)) carries the main meaning of ‘killing’. Cf. in older sources: okə git ‘killer’ (Kh.) [Werner 1990: 382] (where git = ‘person’ q.v.).

**Arin:** Not attested.

**Pumpokol:** Not attested.

**Proto-Yeniseian:** S. Starostin 1995: 190. Alternately reconstructed as *θeːy in [Werner 2002: I, 226]. **Distribution:** Attested only in Ket-Yugh; not attested in either Arin or Pumpokol, and most likely replaced in Kott. **Replacements:** Although formal proof of the Kott equivalent for ‘to kill’ being less archaic than the one in Ket-Yugh is missing, this scenario is nevertheless more probable than the opposite one, since the Ket-Yugh verb paradigm is simple (not a compound formation) and beset with unique irregularities, whereas in Kott the verb is fully regular and belongs to the ‘newer’ stock of compound formations. If S. Starostin is right in equating Kott oga- with Ket q=, Yugh ɛy: ‘to hunt’ < Proto-Yeniseian *q= [YED # 569] (phonetically, the comparison is dubious because of the deletion of the initial consonant in Kott; S. Starostin suggests the possibility of dissimilation), then the Kott compound verb may literally be interpreted as ‘to-hunt-pierce’. **Reconstruction shape:** The word is attested only in Ket-Yugh, so the word-initial zero could just as well have been *x-.

44. KNEE
Ket bət-pul⁰ [ðammy.ɫb] (1), Yugh bət-pil ~ bət-pul (1), Kott arša ~ aršən ~ aranšən (2), Arin pat-as (1), Proto-Yeniseian *baʔt (1).

References and notes:

**Ket:** Werner 2002: I, 108; Werner 1993: 24. Neuter gender. Plural form: bət-pul⁰-ŋ (ðammy.ɫn). The second part of this compound form is clearly buŋ⁰ ‘foot’ q.v. (reflecting the archaic nature of this compound, since buŋ⁰ means ‘foot’ rather than ‘leg’ in Modern Ket). The first part is equated by Werner with bət ‘face / forehead’ [Werner 2002: I, 112], which is semantically plausible. However, a
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separate word *baalt is also attested in the meaning 'joint' (and 'knee' as well) [Werner 2002: 1, 108], and it makes more sense to directly interpret 'knee' as 'joint-(of)-leg' rather than 'face-(of)-leg' if there is such a possibility. Quoted as *batpul-r, pl. *batpul'-an in [Werner 1977: 138]; *batpel ~ *batpil ~ *batil, pl. *batpil-ey in [Castrén 1858: 189].


**Kott:** Castrén 1858: 197. Genitive: *araši, plural form: *arša-n. The root morpheme seems to be the same as in *araŋ ~ *araŋ-an 'limb, joint' [ibid.]. Cf. in older sources: *arši (Kh.) [Verner 1990: 321].

**Arin:** Werner 2002: 1, 109. Attested only in (Kh.). Segmentation as *pat-as is justified through comparison with *karam-pat 'elbow' (Kh.) [ibid.].

**Pumpokol:** Not attested.

**Proto-Yeniseian:** S. Starostin 1995: 206. **Distribution:** Preserved everywhere except for Kott; not attested in Pumpokol. **Replacements:** Replaced in Kott with *arša, an etymologically obscure form. S. Starostin segments it as *ar-sha (probably following the alternate variant *aranša) and compares it with Kott *araŋ 'joint, limb' < Proto-Yeniseian 'bone' q.v. However, the origins and nature of the component -ša/na/ still remain unclear under such a scenario; the link with *araŋ consequently remains without a firm basis. **Reconstruction shape:** All correspondences are regular and trivial. **Semantics and structure:** The root *baalt per se must have had the general meaning 'joint' in Proto-Yeniseian (it is still preserved as such in Ket; see notes on Ket). In Ket-Yugh, the more precise meaning 'knee' was represented by a compound (*baalt-pul-); in Arin, *pat-as is a suffixal formation whose second morpheme is not quite clear, but cf. also *karam-pat 'elbow'. This does not, however, technically prevent us from setting up *baalt as the main bearer of the meaning 'knee' as well for Proto-Yeniseian.

45. KNOW

Ket *it-ey *um-1 (1), Yugh *it- ... -de (1), Kott *η=liga (2).

**References and notes:**

**Ket:** Werner 2002: 1, 384; Werner 1993: 50. Infinitive. The paradigm is a composite verb in which the stem *it- occupies the slot of "modifier", cf. *it-p-e-d-am 'I know', *it-ku-m 'you know', *it-a-lam 'he knows', *it-l'am (< *it-i-l'am) 'she knows', etc. (the second "kernel" stem alternates between -(a)am and -l'am). The 1st p. sg. form is quoted in [Castrén 1858: 74] as *iet-pc-d-em.

**Yugh:** Werner 2011: 342. No infinitive form. The paradigm is structured the same way as in Ket, although the second verbal root is different (*e rather than Ket *-am)-: 1sg. *it-p-a-d-e 'I know (it)', past tense *it-p-a-g-r-d-e, 2sg. *it-p-a-g-e 'you know (it)', past tense *it-p-a-g-r-g-e, etc. The 1st p. sg. form is quoted in [Castrén 1858: 74] as *iet-pc-d-e.

**Kott:** Castrén 1858: 196. Transcribed as *liga, i.e. with prenasalization, which is really just a pronunciation variant of *η=liga, where *η is the subject prefix of the 1st p. pr. The exact shape of the root is unclear, since no other forms are attested in the paradigm.

**Arin:** Not attested.

**Pumpokol:** Not attested.

**Proto-Yeniseian:** Not reconstructible. Ket-Yugh *ηit- is probably the best candidate, but even in Ket-Yugh the complex structure of this verb is not thoroughly understood, and it has no external parallels. Kott *η=liga, structured more like a nominal than a verbal formation, is even more obscure. For the moment, we prefer to leave the slot empty.

46. LEAF

Ket *tʰə (1), Yugh *tʰ-p (1), Kott *di-pi (1), Arin *ip-*ọŋ (1), Pumpokol *dʰ-ip-un (1), Proto-Yeniseian *γəpe (1).

**References and notes:**


Pumpokol: Dulzon 1961: 171 (Dict.). Attested in the idiomatic form x'ogon=dam-ŋŋ, where xogon = ‘trees’ q.v. Final -ŋŋ is unquestionably a plural suffix. The form cf-ŋ (Pal., Kl.), listed as another Pumpokol equivalent for ‘leaves’ [ibid.], must actually represent Yugh.


47. LIE

Ket t=...=qot (1), Yugh =χt (1), Kott dʰː=at-ŋŋ (1), Pumpokol ak # (2), Proto-Yeniseian *=qot (1).

References and notes:

Ket: Werner 2002: II, 360-361; Werner 1993: 94. Polysemy: ‘to lie / to sleep’. A suppletive verb: singular person forms are derived from the stem -ŋŋ, plural forms follow the stem -dam-ŋŋ. Use of the preverb t= is also obligatory. Cf. specific forms: d=t=a=ŋt ‘I lie / sleep’, past tense (t)=l=lot (< *d=t= rol-qot); d=t=a=r=am-ŋn ‘we lie / sleep’, past tense (t)=l=dam-ŋnn.

Yugh: Werner 2011: 211. As in Ket, a suppletive verb, where singular person forms are derived from the stem -ŋŋ, plural forms follow the stem -dam-ŋŋ. Cf. 1sg: d=t=a=ŋt ‘I am lying’, past tense d=t=a=ŋt (< *d=t= rol-ŋt), 3pl. d=t=a=dam-ŋnn ‘they are lying’, past tense d=t=a=ŋt (< *d=t= rol-ŋt). Another verb formed with the same root is d=t=a=ŋt ‘I am lying’ [Werner 2011: 211]; semantics are not quite clear, but the main morpheme is the same in any case.


Arin: Not attested.

Pumpokol: Dulzon 1961: 171 (Pal.). Very dubious (glossed as ‘to lie down’ and not attested in any other sources).

Proto-Yeniseian: S. Starostin 1995: 183 (*ŋq-ŋŋ, with probably incorrect segmentation). Alternately reconstructed as *qot in [Werner 2002: II, 360-361]. Distribution: Preserved in Ket-Yugh and Kott; in Arin definitely preserved in the meaning ‘sleep’ q.v., but not attested in the meaning ‘lie’; unclear situation in Pumpokol. Replacements: Pumpokol ak is an unclear form without any obvious parallels. Reconstruction shape: Ket-Yugh =qot and Kott =at- are compatible if we also take into consideration the archaic attestations in older sources on Kott/Assan: Kott dʰː=at-gat ‘I sleep’ (M., Dict., Kl.), Assan y=at-an ‘I sleep’ (M., Dict., Kl.). (See below on the polysemy ‘lie / sleep’). These forms show that the form was originally *dʰː=at-gat-ŋŋ, which allows to reconstruct Proto-Yeniseian *=qot. The irregular dropping of -ŋ- in Castrén-era Kott may, perhaps, be due to analogy with the non-present tense forms, where the consonant was dropped in a cluster: *a=l=at-gat-q > a=l-at-ŋŋ, etc. Semantics and structure: The verb *=qot was most likely polysemous in Proto-Yeniseian, meaning both ‘lie’ and ‘to sleep’. The paradigm must have been suppletive, since Ket-Yugh *=dam- in plural forms corresponds to Kott =tam- in such forms as dʰː=am-ŋŋ-an ‘we lie / we sleep’, etc.; the opposition *=qot / *=qam- / *=qam-/plen/ is thus safely reconstructible, although Kott shows no signs of the directional prefix t=, obligatory in Ket-Yugh.

48. LIVER

Ket sʰəŋ {ceŋ} (1), Yugh sen (1), Kott šičil (2), Arin sal (2), Proto-Yeniseian *sen ≠ (1).
References and notes:


Arin: Werner 2002: II, 438. Attested only in (Kh.).

Pumpokol: Not attested.

Proto-Yeniseian: S. Starostin 1995: 272. Distribution: Preserved only in Ket-Yugh. Replacements: Kott šišil and Arin sal are most likely related, although phonetically, the Kott word is closer to Arin šišili (Kh.) 'lungs', which, in turn, triggers comparison with the phonetically similar, but not well-corresponding Kott form šičatn 'lungs' [Werner 2002: II, 438]. Relations between all these words remain obscure. If Kott šičatn is an old fossilized plural (< *šičal-ŋ; the consonantal gradation is regular, cf. ipal, pl. ipat-ŋ 'asp tree'), then the difference between 'lungs' and 'liver' in Kott rests on differing models of paradigmatic behaviour, but the word is essentially the same, and its original meaning must have been generic ('internal organ?) - this is further confirmed by the fact that Arin šišili was glossed as 'lungs', not 'liver'. As for Arin sal, S. Starostin suggests (dialectal?) reduction from *sisal; in this particular case, such a development seems less likely than a transcriptional error. Ultimately, it seems that we are dealing with Kott-Arin *sisel 'internal organ', a form with no transparent internal etymology and vague semantics. In this context, Ket-Yugh *seŋ is a more reliable candidate for Proto-Yeniseian 'liver', although somewhat weakened by lack of parallels in Kott-Arin.

49. LONG

Ket 'ugde-s⁴ (*ugdošb) (1), Yugh 'ugde (1), Kott uy (1), Arin uṭa (1), Proto-Yeniseian *ʔux- (1).

References and notes:


Arin: Werner 2002: II, 323. Attested only in (Kh.) as an adverbial form.

Pumpokol: Not attested.

Proto-Yeniseian: S. Starostin 1995: 201. Alternately reconstructed as *ugd/s/ ≤ *ug-dš in [Werner 2002: II, 323]. Distribution: Preserved in all daughter languages, but not attested in Pumpokol. Reconstruction shape: Reconstruction of the word-medial consonant (or cluster) is problematic. If Ket-Yugh *ugde < *ug-de, where *-de is a fossilized suffix, it is comparable with Kott uy as a potential reflex of Proto-Yeniseian *ʔux-; the Arin adverbial form uṭa, in this case, also has to be analyzed as ṭ-a < *ʔux-ṭa. On the other hand, H. Werner reasonably suggests that original *ʔud- is also a possibility: Arin uṭa may be a reflexation of *ʔud-a (cf. Arin kute 'autumn' = Ket qgdi id. < Proto-Yeniseian *ugdi [S. Starostin 1995: 302]). But then we would probably expect Kott *ur or *ure instead of uy (cf. Kott hør 'autumn'). So, in the end, we prefer to regard the Ket-Yugh cluster here as the result of contraction with a former suffix, and agree with the reconstruction of a single velar consonant in word-medial position.

50. LOUSE

Ket šy [bə ~ bɔ] (1), Yugh ʒʰ:k (1), Kott iki (1), Arin serga (-1), Proto-Yeniseian *ʔo:ke [*xə:ke] (1).

References and notes:

51. MAN
Ket hit ́ (1), Yugh fi ́ (1), Kott fi: (1), Proto-Yeniseian *pixe (1).

References and notes:


Kott: Castrén 1858: 191. Not attested properly. Cf. malikik ‘man’ in (Kh.) in Werner 2002: I, 52, where the initial pa- could, with some effort, be etymologically related to Ket-Yugh *pixe, etc.; however, the overall structure of this compound remains quite confusing, and the correctness of the semantics ‘man’ (= ‘male human being’) may be put under doubt.

Pumpokol: Not attested.

Proto-Yeniseian: S. Starostin 1995: 249. Alternately reconstructed as *pixe in Werner 2002: I, 320. Distribution: Preserved in all daughter languages where attested, but not found in Pumpokol, and dubious in Arin. Reconstruction shape: Correspondences are regular; according to S. Starostin, the correspondence ‘Ket-Yugh *k : Kott -0-’ reflects Proto-Yeniseian *-x-. This solution may yet be amended in the future, but the presence of a back consonant in word-medial position is unquestionable.

52. MANY
Ket ́ (1), Yugh ́n (1), Kott payan (2), Proto-Yeniseian *boy- # (2).

References and notes:

Ket: Werner 2002: I, 42; Werner 1993: 82. Quoted as ́n’, ́n (S.-Imb.), ́n, (Na.-Imb.) in Werner 1977: 172. As oon- # / oan-di in Castrén 1858: 163. Castrén glosses the word with polysemy: ‘many / seven’, but more recent sources distinguish between the two: thus, in Werner 2002: I, 42, 48 ‘seven’ is ́n (glottal stop + tone 2), whereas ‘many’ is ́n (tone 4). This does not, however, exclude an old morphophonological connection between the two words. It is to be noted that ‘seven’ is the highest simple cardinal number in Ket (except for ‘10’), and, thus, its association with ‘many’ would be quite understandable. Cf. also bəyəm ~ bəyəm ‘many’ in Castrén 1858: 189.


Kott: Castrén 1858: 221.

Arin: Not attested.
Pumpokol: Not attested.

Proto-Yeniseian: S. Starostin 1995: 209. Alternately reconstructed as *biŋen in [Werner 2002: I, 153]. Distribution: Preserved in Kott, but possibly still active in its original meaning in mid-XIXth century Ket as well. Replacements: Attestation of Ket biŋen 'many' in Castrén's records, clearly related to Kott payan, shows that the modern Ket descendant of this proto-item, biŋen 'enough' [Werner 2002: I, 153], may have undergone a semantic shift ['many' > 'enough'], whereas Ket-Yugh *bɔŋen 'many' may have been a specific case of generalization of a high numeral ['seven' > 'many'], provided that the words for 'seven' and 'many' are indeed etymologically related. That said, it is also not excluded that Castrén's 'many' is a semantically inaccurate glossing; that the Ket words for 'many' and 'seven' are only accidentally similar; and that, consequently, Proto-Yeniseian *bɔŋen = 'enough', whereas Proto-Yeniseian (=Ket-Yugh) *xŋan = 'many'. Reconstruction shape: Correspondences between Ket-Yugh and Kott are regular.

53. MEAT

Ket isŋ (1), Yugh ɨs (1), Kott iči (1), Arin is (1), Pumpokol cič (2), Proto-Yeniseian *ʔise (1).

References and notes:

Ket: Werner 2002: I, 396; Werner 1993: 49. Feminine gender. Polysemy: 'meat / fish'. Quoted as isŋi; 'fish / meat' in [Werner 1977: 151], but only as isŋ 'fish' in [Castrén 1858: 162]. For the meaning 'meat', the latter source yields the word kiti ~ kiti [Castrén 1858: 167]; but this seems to be a somewhat more specialized hunting term, since Werner ([Werner 2002: I, 436; Werner 1993: 54]) lists it as kiti [kuŋ] 'body / (animal) flesh' (Russian 'м. мя', German 'Fleisch ausgeweidetes Tier').


Proto-Yeniseian: S. Starostin 1995: 194. Alternately reconstructed as *hitə ~ *ito > *tə in [Werner 2002: I, 396] (the reconstruction is almost certainly incorrect, since Pumpokol hitə ~ gile 'fish' q.v. cannot be related to these forms). Distribution: Preserved in all daughter languages except for Pumpokol. Replacements: In Pumpokol, replaced with cič = Kott šiq 'food' < Proto-Yeniseian *si-k 'food', a nominal derivative from *si- 'to eat' q.v. The phonetic development from Proto-Yeniseian to Pumpokol is perfectly regular, and the semantic shift ['food' > 'meat'] is typologically normal. This seems a better etymological decision than S. Starostin's earlier comparisons of Pumpokol cič with either Ket ɨšy 'snake, fish' q.v., or with Kott kiti 'flesh; animal body' [YED # 397], both of which suffer from phonetic problems, e. g. Proto-Yeniseian *k is not supposed to be palatalized in Pumpokol, etc. Reconstruction shape: Correspondences are regular. Semantics and structure: The polysemy 'meat / fish' in Ket-Yugh is most likely a secondary innovation, tied in with the semantic shift 'snake' > 'fish' in the same languages (see under 'fish').

54. MOON

Ket ɨqɨp (kuni) (1), Yugh ɨχep (1), Kott šuy (2), Arin ɨχuy (2), Pumpokol tuy (2), Proto-Yeniseian *suy (2).

References and notes:

Ket: Werner 2002: II, 90. Masculine gender. Plural form: ɨχin. Polysemy: 'moon / month'. Distinguished from the homonymous word ɨqɨp 'grandfather' with a different plural form: ɨqɨn [Werner 2002: II, 90], although this difference is not reflected in [Werner 1993: 65], where the plural for both words is listed as kuni. It is, however, reflected in [Werner 1977: 161], cf.: ɨqɨp 'moon / grandfather', but ɨqɨn 'moons / months' vs. ɨqɨn ~ ɨqən 'grandfathers'. In [Castrén 1858: 170], only the singular form is listed as ɨqɨp ~ ɨqɨ for
both 'moon' and 'grandfather'.

Yugh: Werner 2011: 220. Masculine gender. Plural form: ʼχιθ-и́н ~ ʼχиθ-э́н. Polysemy: 'moon / month'. Quoted as ʼып, pl. ʼыб-и́н in [Werner 1977: 161]. Cf. the word for 'grandfather': ʼып ~ ʼып, pl. ʼыб-э́н [Werner 2011: 161]. As in Ket, the distinction between the plural forms of 'moon' and 'grandfather' is a serious argument in favor of homonymy rather than polysemy, with subsequent contamination (it can be seen that in Yugh the original plural form of 'moon' had been at least partially displaced by the plural of 'grandfather').


Pumpokol: Dulzon 1961: 171 (Dict., Pal., Kl.). The synonymous form ʼеп (Pal., Kl.) is probably not Pumpokol, but Yugh.

Proto-Yeniseian: S. Starostin 1995: 204 (ʼыыв/ису). Alternately reconstructed as 'тыу' / 'сыу' in [Werner 2002: II, 442]. Distribution: Preserved in Kott-Arin and Pumpokol, but replaced in Ket-Yugh. Replacements: In Ket-Yugh, replaced with 'ћип 'moon', of unclear origin; the most tempting solution would be to identify it with *ћиб 'grandfather', but the idea runs into significant phonetic problems (see notes on Ket-Yugh) - unless one can come up with a satisfactory solution for the irregular devoicing of the final consonant in the word for 'moon'. Reconstruction shape: Correspondences are generally regular. Arin ʼису 'moon' may be easily explained as a contracted variant of 'ћес-сыу 'sky-moon', so there is no need to set up an irregularly syncopated 'тыу-' in the reconstruction.

55. MOUNTAIN

Ket ʼқа́дь (қаа’у) (1), Yugh ʼxádь (1), Kott dʰiː (2), Arin kar (3), Pumpokol kó-мног (1), Proto-Yeniseian *рʰи́жь (2).

References and notes:

Ket: Werner 2002: II, 78; Werner 1993: 62. Neuter gender. Plural form: ʼжым-и́н ~ ʼжым-и́н (жын). Quoted as ʼкажь, pl. ʼжым-и́н, 'mountain covered with wood' in [Werner 1977: 159]. Close synonym: Pišita (э́н ~ и́н), pl. Pi-kəŋ (жын ~ жынып) ([Werner 2002: II, 17; Werner 1993: 78]); quoted as ʼилт, pl. ʼилкен / ʼилқь (S.-Imb.) in [Werner 1977: 169]. The meaning of this word is glossed as 'ridge covered with wood' ('mit Wald bedecktes Plateau'; 'a уаа қақо ее қақо' в) in [Werner 2002] and [Werner 1993] (also as 'heavily wooded area' and 'hills covered with wood' in the latter source). Scarce attestations in texts do not permit to sort out the semantic difference very well; however, ʼкажь still seems to be the more basic word in the singulative meaning 'mountain, hill', given that a very large number of compound formations are derived from it, e. g. ʼкаж-таг 'mountain top', ʼкаж-дэйн 'foot of the mountain' etc. [Werner 2002: II, 63].

It is interesting that M. Castrén lists neither of these forms in the meaning 'mountain'. The first word is found in his records as ʼгыи 'steep bank' ('steiles Ufer') [Castrén 1858: 169]. The second is not found at all. As for the meaning 'mountain', according to Castrén, it is expressed by the same word as 'stone' q.v. - highly improbable, since no other source confirms this semantics.


Kott: Castrén 1858: 221. Plural form: дʰи-ан. Cf. another phonetically close item, also glossed as 'mountain': dʰих, pl. dʰёк-э́н ~ дʰиқ-ан [Castrén 1858: 221]. It is tempting to explain the difference between dʰих and dʰиқ as dialectal variation, but it seems to be unprecedent. Cf. in older sources: ʼии (M., Dict.), ʼиы (Pal.), pača-и (Kh.) [Verner 1990: 300] (the latter form is idiomatic; the first stem is pača 'big' q.v.).


Pumpokol: Dulzon 1961: 163 (Dict., Pal.). The form is clearly plural, and comparison with Ket-Yugh ʼжым-и́н shows that final -мног is probably to be segmented out as not belonging to the root. The pseudo-synonymous form сыу (Pal.) [ibid.] is most likely Yugh rather than Pumpokol.

Distribution: Preserved in Kott and, with slightly modified semantics, in Ket-Yugh. Replacements: The situation with Proto-Yeniseian 'mountain' is quite complex. Ket-Yugh *qaɭy 'mountain; steep bank' corresponds to Kott xey ~ kɛɭy 'back side of axe / knife'; the same root is most likely present in Kott xe-lex ~ kɛ-lex 'back side of mountain' [Castrén 1858: 207]. The semantic development 'mountain' > 'side of axe / knife' is suspicious; a more likely common invariant would be 'elevation', 'protruding part', etc., implying that the primary semantics of 'mountain' for this root on the Proto-Yeniseian level is not likely. In Ket-Yugh, the word was probably originally applied to 'cliffs' or 'steep riverbanks', then extended to denote 'wood-covered mountains' as well. The same may be true in the case of Pumpokol, if the plural form ko-ʊnjoŋ is indeed the default equivalent for 'mountain(s)' in that language; if so, the 'mountainization' of *qaɭy should be pushed back to the Ket-Yugh-Pumpokol level. But the original word for 'wood-covered mountain' (the default kind of mountain for Yeniseian territory) must have been *rɪqɨ. (Arin kar 'mountain' is isolated in Yeniseian and has no etymological connections whatsoever.)

Reconstruction shape: Ket-Yugh *rɪqɨ and Kott dɨc correspond well to each other, reflecting Proto-Yeniseian *rɪqɨ. Certain problems arise due to a variant with the final velar: Kott dɨx 'mountain', possibly connected with -lex in xe-lex 'back side of mountain', cf. also the -k in such plural forms as Ket pɨkkɛn, etc. The nature of the relation between the variants *rɪqɨ and *rɪqɨ is unclear: the final consonants could be two different suffixes, or one might somehow be a historical allomorph of the other (but H. Werner's treatment of *rɪqɨ as a compound formation is unwarranted), but separating them as two different roots is simply impossible.

56. MOUTH

Ket qo ː {kə} (1), Yugh χo (1), Kott hoːpi (1), Arin bʰu=qo-n (1), Pumpokol qa-n (1), Proto-Yeniseian *ɡowe (1).

References and notes:


Arin: Dulzon 1961: 180 (M., Dict., Kl.). Quoted as bʊ-kɛn (in [Dict.]). The component bʰu~ bʊ is most likely the 1st p. possessive prefix 'my' (labial vowel instead of i-, as in bi-kɛl 'my son', etc., may be due to assimilation with the labial vowel of the root); cf. the simple variant qon 'mouth' in Strahlenberg's notes [ibid.], as well as o=qon with a different prefix ('his mouth?') in (Kh.) [Werner 2002: II, 126]. Polysemy: 'mouth / face' in (Dict.).


Proto-Yeniseian: S. Starostin 1995: 302 (*ɡowe). Alternately reconstructed as *ɡo in [Werner 2002: II, 126]. Distribution: Preserved in all daughter languages. S. Starostin separates the Arin and Pumpokol forms into a different root, comparing them with Ket qaɭy 'form, shape' and reconstructing Proto-Yeniseian *qaɭ (YED # 433); in the earlier source [S. Starostin 1995: 244] the Arin/Pumpokol forms are not compared with Ket, but are still separated from *ɡowe). This is dubious for both semantic ('form, shape' and 'face, mouth' are quite distinct meanings) and phonetic reasons (Ket -ŋ does not normally correspond to both Arin and Pumpokol -n). On the other hand, both Arin *qo-n and Pumpokol qa-n are perfectly explicable as the results of fusion of the plural suffix *-n (cf. Ket-Yugh) with the old root; this is noted in Werner's dictionary and represents the more economic and understandable solution. Reconstruction shape: Correspondences are generally regular. The intervocalic *-w- in S. Starostin's reconstruction is meant to account for *p- in Kott hopi, inexplicable otherwise. Semantics and structure: The polysemy 'mouth / face', observed in Arin and Pumpokol, may be archaic (although there are other candidates for expressing the meaning 'face' in Proto-Yeniseian as well).

57. NAME

Ket ɨ {ul} (1), Yugh i (1), Kott ɨx ~ ɨ:x (1), Pumpokol i (1), Proto-Yeniseian *ɨkə (1).
References and notes:

**Ket:** Werner 2002: I, 392. Neuter gender. Plural form: ɨʔ-ə [ɨʔ]. Quoted as i', pl. ɨʔ-ŋ in [Werner 1977: 150]; as i, pl. ɨaqte in [Castrén 1858: 161] (apparently, Castrén thought that i ‘sun’ q.v. and i ‘name’ were the same polysemous word, and listed the same plural form for both, which is clearly erroneous in the light of all other data sources).


**Arin:** Not attested.

**Pumpokol:** Dulzon 1961: 168 (Dict.). It must be noted that the form coincides with the Yugh equivalent and could very well be Yugh rather than Pumpokol.


58. NECK

Ket ɨqət ~ ɨqətə (қәм ~ қәмə) (1), Yugh k'ăxi (1), Kott fuymur ~ pʰuymur (2), Arin pem'ə (2), Proto-Yeniseian *kaqant (1).

References and notes:


**Arin:** Werner 2002: I, 283. Attested only in (Kh.).

**Pumpokol:** Not attested.

**Proto-Yeniseian:** S. Starostin 1995: 237. Alternately reconstructed as *qəta in [Werner 2002: I, 475]. Distribution: Preserved in Ket-Yugh. Replacements: In Kott-Arin, replaced with *puymo = *puymur, of unclear origin. The reason why the Ket-Yugh word is seen as more archaic is the Kott parallel in agqantar ‘collar’ (~ *kaqantar with dissimilation): the semantic development ‘neck’ > ‘collar’ is typologically normal, whereas the opposite would be quite strange. Subsequently, it is logical to suggest the metonymic shift (‘neck’ > ‘collar’) for Kott-Arin, and a replacement of the original ‘neck’ by an innovation. Reconstruction shape: Correspondences between Ket and Kott largely follow the same pattern as in the word for ‘hunger’: Ket əqət ~ əqət = Kott əqant, indicating a *CVCVnt-type structure. Semantics and structure: Due to its sheer length, Proto-Yeniseian *kaqant must have contained a suffix, although the element *-nt is hardly segmentable as a productive derivative morpheme on any level.

59. NEW

Ket kɨ-sə [κιςβ] (1), Yugh kɨʔ (1), Kott kɨ (1), Proto-Yeniseian *giʔ (1).

References and notes:


**Yugh:** Werner 2011: 227. Quoted as kɨl in [Werner 1977: 153]. Synonym: tulim [Werner 2011: 227], quoted as tulim, ~ tulim, in
60. NIGHT

Ket sʰiː {cu} (1), Yugh si (1), Kott šiːɡ ~ šiːx (1), Arin say (1), Pumpokol teč (1), Proto-Yeniseian *śiːg (1).

References and notes:

Ket: Werner 2002: II, 206; Werner 1993: 87. Neuter gender. Plural form: sʰiː-a ~ sʰiː-et-ŋ [aːza ~ aː disrespectful] (the latter form is a composite noun, with eːt-ŋ 'days' /pl./ as the second part; see 'sun' for further details). Quoted as sʰiː, pl. sʰiː-a in [Werner 1977: 176]; as sə, pl. siː-ŋ ~ sɪŋ in [Castrén 1858: 166].

Yugh: Werner 2011: 222. Neuter gender. Plural form: siː-et-ŋ (see notes on Ket for analysis of the plural form). Quoted as siː in [Werner 1977: 176]. Secondary synonym: saːr-ŋ, pl. saːr-ŋ in [Werner 2011: 222]; the plural form of this noun is also frequently employed as a suppletive form for si. This word corresponds to Ket sal 'to spend the night; staying the night' [Werner 2002: II, 162], and refers to 'night' as a "time period devoid of human activity" rather than the "dark period of time".


Pumpokol: Dulzon 1961: 174 (Dict., Pal., Kl.). Secondary synonym: teč 'night' (Dict., Pal., Kl.) [ibid.]. The latter, judging by external comparanda, could really mean 'time of night', 'spending the night', etc.

Proto-Yeniseian: S. Starostin 1995: 274. Alternately reconstructed as *šiːg in [Werner 2002: II, 206]. Distribution: Preserved in all daughter languages. Reconstruction shape: Correspondences are mostly regular. Word-final *-gis reconstructed primarily on the basis of its deletion in Ket-Yugh (the other uvular consonants are usually preserved). One problem is with Pumpokol -č, which, according to S. Starostin, is an unexpected reflexation and could reflect an additional suffix or, perhaps, a compound formation with eː 'sky'. Cf., however, a similar situation with 'fire' q.v., where Pumpokol -č is also found as the equivalent of a back consonant in Ket-Yugh. This implies that the reflexation may be due to some regular conditioning, although the data are too scarce to establish this regularity.

61. NOSE

Ket 'blin ~ 'blən {олин ~ олан} (1), Yugh 'blin ~ 'blən (1), Kott an ~ an (2), Arin 'ar-quy (3), Pumpokol haŋ (2), Proto-Yeniseian *xaŋ (2).

References and notes:


Pumpokol: Dulzon 1961: 74 (Dict., Pal., Kl.).

Replacements: The isogloss between Kott and Pumpokol is further strengthened with the existence of Ket *aŋxan ‘nostrils’, which H. Werner convincingly explains as ‘*aŋ ‘nose’ + *ŋxan, pl. from *quk ‘hole’ [Werner 2002: I, 45]. This means that two replacements have to be postulated: in Ket-Yugh, the old word for ‘nose’ was replaced with *ʔxin, and in Arin, with *ar-ŋuy, where -ŋuy = ‘hole’, as in tľm-ŋuy ‘window’. In theory, Ket-Yugh and Arin forms may be related [S. Starostin 1995: 197], since there are no phonetic obstacles for their common etymologization. However, significant discrepancies in the morphological structure of both words suggest that they have different origins: the Ket-Yugh form looks like a fossilized plural from *ʔn-, while the Arin form is a compound formation with an unidentified first part. For that reason, and also in order to avoid undesirable semantic “criss-crossing”, we prefer, following H. Werner, to keep Ket-Yugh and Arin forms separate from each other for the moment. Reconstruction shape: The presence of *h- in the Pumpokol form caused S. Starostin to reconstruct the Proto-Yeniseian equivalent as *xan, but it should be kept in mind that the presence / absence of a word-initial laryngeal in Pumpokol is hardly conclusive evidence; Proto-Yeniseian *?an ‘nose’ is definitely not excluded.

62. NOT

Ket bən⁹ [bən³] (1), Yugh bən⁹ (1), Kott mon ~ mon (1), Arin bon (1), Pumpokol amut (1), Proto-Yeniseian *waan (1).

References and notes:

Ket: Werner 2002: I, 157; Werner 1993: 30. This is the main particle of verbal negation in Ket (should be strictly distinguished from the prohibitive at ‘not!, don’t!’ [Werner 2002: 1, 72]). Quoted as bn²n ~ bn³ in [Werner 1977: 141]. Quoted as bën in [Castrén 1858: 190].

Yugh: Werner 2011: 228. This is the main particle of verbal negation in Yugh; should be strictly distinguished from the prohibitive at’ ‘not!, don’t!’ [Werner 2011: 228]. Quoted as bn² in [Werner 1977: 141].

Kott: Castrén 1858: 227. Cf. also bo ‘not!’ (prohibitive) [Castrén 1858: 224]. Cf. in older sources: mon (M., Dict.) [Verner 1990: 337].

Arin: Dulzon 1961: 174 (M., Dict.). In (KL), the meaning is glossed as ‘no’, but the few available examples confirm that this is indeed the verbal negative particle ‘no’ (e. g. bon paŋul’ong ‘I do not see’).

Pumpokol: Dulzon 1961: 174 (Dict.).

Proto-Yeniseian: S. Starostin 1995: 294 (*wa⁴). Alternately reconstructed as *ba ~ *bon in [Werner 2002: I, 157]. Distribution: Preserved in all daughter languages (but see notes on Pumpokol). Reconstruction shape: Initial *wa- is reconstructed by S. Starostin on the basis of the voiced stop (or nasal m, assimilated from *b under the influence of the following n) reflexion in all languages and dialects. Semantics and structure: Proto-Yeniseian *wa₃ is internally segmented into *wa- *n by S. Starostin on the basis of Kott prohibitive bo, which is supposed to reflect original *wa without the nasal suffix. However, the mechanism of *wa- *n being generated from *wa remains unclear. Pumpokol amut is also a strange form; if it is related here, it must go back to *wa-mun-t, with an additional prefixal and suffixal component, but the nature of these components is unclear - perhaps the attested form is not really just a simple negation (*no’), but a complex predicative form (e. g. ‘there is not’).

63. ONE

Ket qu-s⁴ [kys³] / qɔʔ-k {kɔ’k} (1), Yugh χu-s / χɔʔ-k (1), Kott hʉː-ča (1), Arin q’u-sey (1), Pumpokol x’u-ta (1), Proto-Yeniseian *qu-s-a (1).

References and notes:

Ket: Werner 2002: II, 122, 132; Werner 1993: 67. The two forms are respectively quantifying inanimate and animate objects. Predicative form: qus’-am / q’k-du “he is one (alone)” ~ q’k-da “she is one (alone)”. The suffixes are not productive, but it hardly
makes sense to regard the two forms as not representing an original single root. Quoted as $qu's_i$ / $q\tilde{s}_2$ in [Werner 1977: 162, 166]; as $kuq$ (anim.) / $kog-de$ (anim. predic.) / $kus'\tilde{e}m$ in [Castrèn 1858: 40-41].

**Yugh:** Werner 2011: 113. The two forms are respectively quantifying inanimate and animate objects. Quoted as $\upnu'$ in [Werner 1977: 162, 166].

**Kott:** Castrèn 1858: 212. The root is $hu\tilde{e}$-, as seen from the old derivative formation $hu$-piga 'alone' (where -piga is derived from the same root as 'man' q.v.). Cf. in older sources: $lu\tilde{a}$ (M., Dict., Pal., Kl.) [Verner 1990: 341]. Cf. also $xan\tilde{c}$-xit 'one' (Kh.), where xit = 'person' q.v., but xan\tilde{c} shows a significantly deviant phonetic shape [ibid.].

**Arin:** Dulzon 1961: 75 (M., Dict., Kl.). Quoted as $k'u$-zey in (Pal.) and as $kui$-sa in Strahlenberg’s records. Cf. $kus$-ket 'one person' (Kh.) in [Werner 2002: II, 132].

**Pumpokol:** Dulzon 1961: 75 (Dict., Pal., Kl.).

**Proto-Yeniseian:** S. Starostin 1995: 306 (*qu-sa). Alternately reconstructed as *$qu$ ~ *$qut$ in [Werner 2002: II, 132]. **Distribution:** Preserved in all daughter languages. **Reconstruction shape:** Correspondences are regular. **Semantics and structure:** Forms such as Ket-Yugh *$q\tilde{e}$k 'one (animate)' and Kott $hu$-piga 'alone' clearly imply that *-s(a) was a suffixal element in Proto-Yeniseian. 

Word-final *-s is a suffixal element common for most of Proto-Yeniseian numerals. As for the component *-s, it may be compared with the singulative suffix *-s that is segmented out of archaic nominal stems such as 'eye' q.v. or 'stone' q.v. If this is the case, then it is also highly probable (as originally proposed by S. Starostin) that *-s is the original numeric morpheme (‘one’), whereas *$qu$- is an old deictic element, perhaps to be compared with some of the Yeniseian demonstrative pronouns. Nevertheless, on the exact Proto-Yeniseian level it was clearly the morpheme *$qu$- that already functioned as the primary carrier of the numeric meaning, which is why the protoform is entered as *$qu$-s-a and not *$qu$s-a.

### 64. PERSON

**Ket** $k\tilde{e}t$ (*ke’m*) (1), Yugh $k\tilde{e}t$ (1), Kott hit ~ het (1), Arin qit (1), Pumpokol kit (1), Proto-Yeniseian *$ke\tilde{e}t$* (1).

**References and notes:**

**Ket:** Werner 2002: I, 420; Werner 1993: 52. Suppletive plural: $dc\tilde{e}y$ [*$v\tilde{e}g$] 'people' [Werner 2002: I, 185]. Quoted as $kc\tilde{e}t_2$, pl. $dc\tilde{e}y_2$ in [Werner 1977: 143, 153]; as $kci$ ~ $kiet$, pl. $kced\tilde{e}y$ (sic!) in [Castrèn 1858: 167].

**Yugh:** Werner 2011: 218. Suppletive plural: $d\tilde{e}c\tilde{e}y$ 'people' [ibid.]. Quoted as $kci\tilde{e}$, pl. $d\tilde{e}c\tilde{e}y$ in [Werner 1977: 143, 153].

**Kott:** Castrèn 1858: 210. Suppletive plural: $\tilde{c}ci$ 'people' [ibid.]. Cf. in older sources: $il$-it (M., Dict., Pal., Kl.), xit (Kh.) [Verner 1990: 388] (the "prefix" $il$ may be the same as in Ket $il$ $k\tilde{e}t$ 'living person').

**Arin:** Dulzon 1961: 187 (M., Dict., Kl.). Quoted as $kli$ in (Pal.); as $kit$ in (Kh.) [Werner 2002: I, 420].

**Pumpokol:** Dulzon 1961: 187 (Dict., Pal., Kl.).

**Proto-Yeniseian:** S. Starostin 1995: 236; Werner 2002: I, 421. **Distribution:** Preserved in all daughter languages. **Reconstruction shape:** Correspondences are regular (some uncertainties remain about the original vocalism). **Semantics and structure:** The word had a suppletive plural on the Proto-Yeniseian level, reconstructed as *$je\tilde{e}y$* [S. Starostin 1995: 309], probably the original plural of an unpreserved singular *$je\tilde{e}$* 'person'.

### 65. RAIN

**Ket** *ull*-'es* (1), Yugh ur-es (1), Kott ur ~ ur-ɛ (1), Arin kur (1), Pumpokol ur-'ait (1), Proto-Yeniseian *$xur$* (1).

**References and notes:**

root may actually be etymologically different from 'water'). Quoted as \( \text{ul}^\text{i}-\text{es}^\text{j}_1 \sim \text{ul}^\text{i}-\text{es}^\text{j}_2 \) in [Werner 1977: 187].

**Yugh:** Werner 2011: 242. Masculine gender. Plural form: \( \text{u}^\text{r}-\text{es}^\text{aj} \). Literally: 'water' q.v. + 'sky' (although the first root may actually be etymologically different from 'water'). Quoted as \( \text{ar}-\text{es} \sim \text{ar}-\text{es} \) in [Werner 1977: 187].


**Arin:** Dulzon 1961: 165 (M., Dict., Pal., Kl.). Quoted as \( \text{kur}-\text{asa} \) in (Kh.) [Werner 2002: II, 338] (where the second component is an Ablaut variant of \( \text{'es}^\text{ky} \)).

**Pumpokol:** Dulzon 1961: 165 (Dict., Pal., Kl.). The second root morpheme -ai is a morphophonological variant of \( \text{c}^\text{c} \text{'sky'} \).  

**Proto-Yeniseian:** S. Starostin 1995: 297. Alternately reconstructed as \( \text{ʔu}^\text{r}^\text{a}\text{(es) } \sim \text{ʔk}^\text{r}^\text{a}\text{(es)} \) in [Werner 2002: II, 338]. **Distribution:** Preserved in all daughter languages (but see notes on structure below). **Reconstruction shape:** Correspondences are regular. **Semantics and structure:** There is a problematic relationship between the listed forms and the original Proto-Yeniseian word for 'water'. In Ket-Yugh, 'rain' is easily analyzable as a compound form: \( \text{ʔur 'water' } + \text{ʔes 'sky'} \). This has led to H. Werner merging the 'water' and 'rain' roots in one (\( \text{ʔu}^\text{r}^\text{a} \text{'water', } \text{ʔu}^\text{r}^\text{a} \text{'rain'} \)). However, Kott, Arin, and Pumpokol consistently feature different resonants in the root morphemes for 'water' and 'rain', e. g. Arin \( \text{ku}^\text{r} \text{'rain' } \sim \text{ku}^\text{r} \text{'water'} \), Pumpokol \( \text{ur}-\text{ai} \) (where -ai < ?es 'rain' vs. ul 'water'). This remains unexplained in Werner's reconstruction, but is accounted for in S. Starostin's, where original \( \text{sur} \text{'rain'} \) is opposed to \( \text{ur} \text{'water'} \). It is not excluded that the two roots are, in the end, related (through some non-trivial morphophonological connection) on a higher level than Proto-Yeniseian, but for PY it is indeed preferable to separate them. In Ket-Yugh, *sΔur* and *sΔur, according to S. Starostin's correspondences, must have merged phonetically, so, technically, the Ket-Yugh forms listed here could just as well go back to 'water', not 'rain', but ultimately there is no strong evidence to separate them from their Kott, Arin, and Pumpokol correlates in the lexicostatistical aspect.

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66. RED  
**Ket** \( \text{s}^\text{i}^\text{u}^\text{l}^\text{i}-\text{am}-\text{s}^\text{y} \sim \text{s}^\text{i}^\text{u}^\text{l}^\text{i}-\text{em}-\text{s}^\text{y} \) (сюлемсъ) (1), Yugh \( \text{sur}-\text{be}^\text{b}s \) (1), Kott \( \text{śur}-\text{um-} \# (1), Arin \( \text{t}^\text{u}^\text{r}^\text{a} \) (2), Pumpokol \( \text{t}^\text{u}^\text{l}-\text{si} \) (1), Proto-Yeniseian \( \ast\text{sur-} \) (1).

**References and notes:**

**Ket:** Werner 2002: II, 213; Werner 1993: 91. A transparent derivative of \( \text{s}^\text{u}^\text{r}^\text{a} \) 'blood' q.v., formed with the aid of an inanimate object class predicative suffix. Cf. also the verb \( \text{s}^\text{u}^\text{r}^\text{e}^\text{y}^\text{c} \) 'to become red' [Werner 2002: II, 213]. Quoted as \( \text{s}^\text{u}^\text{r}^\text{e}^\text{m} \) in [Werner 1977: 178]; as \( \text{s}^\text{u}^\text{l}^\text{e}^\text{m} \) in [Castrén 1858: 188].

**Yugh:** Werner 2011: 246. Plural form: \( \text{sur}-\text{bes}-\text{in} \sim \text{sur}-\text{bes}-\text{in} \). A transparent derivative of \( \text{sur} \) 'blood' q.v., formed with the aid of the productive marker -be's (here, with the meaning 'like', 'such as'). Quoted as \( \text{sur}-\text{be}s \), pl. \( \text{sur}-\text{bes}-\text{n} \) in [Werner 1977: 178]; as \( \text{sur}-\text{bes} \) in [Castrén 1858: 187].

**Kott:** Castrén 1858: 215. Only attested in the infinitive form \( \text{sur}-\text{um}-\text{ai}-\text{čei} \) 'to paint red; to dye' (also \( \text{sur}^\text{u}^\text{r}^\text{a} \text{m}^\text{i} \text{c}^\text{y} \text{id} \)); with some doubt, the root \( \text{sur} \) (same as 'blood' q.v.) could also be present in the adjectival form 'red', although it is not directly attested in Castrén's materials. However, no alternative equivalent is attested, either, and both internal and external data suggest that no alternative equivalent actually existed. Furthermore, cf. in older sources: \( \text{sur}^\text{u}^\text{r}^\text{a} \text{m}^\text{i} \text{c}^\text{y} \text{i} \text{d} \) (M., Dict., Pal., Kh., Kh.) [Verner 1990: 324].

**Arin:** Dulzon 1961: 170 (M., Dict., Pal.). Strangely quoted as \( \text{r}^\text{u}^\text{g}^\text{a} \) in (Pal.); cf. also \( \text{t}^\text{u}^\text{l} \) (it is red) in (Kh.) [Werner 2002: II, 213]. The probability of borrowing from Pumpokol, discussed in [Werner 2002: II, 213] and in S. Starostin's notes, is quite low (very few, if any, such cases in the rest of Arin data).

**Pumpokol:** Dulzon 1961: 170 (Dict., Kl.). Quoted as \( \text{t}^\text{u}^\text{l}-\text{z}^\text{i} \) in (Pal.). The morpheme -si (-zi) is a standard adjectival suffix.

**Proto-Yeniseian:** S. Starostin 1995: 278. **Distribution:** Preserved everywhere, with the likely exception of Arin (but see further notes). **Replacements:** Arin \( \text{t}^\text{u}^\text{r}^\text{a} \) cannot be regarded as a regular reflexion of Proto-Yeniseian *sur* (the regular reflexion is found in Arin \( \text{sur} \) 'blood' q.v.). Since in all other Yeniseian languages the word for 'red' is transparently derived from 'blood', S. Starostin suggests either contamination with Proto-Yeniseian \( \text{tu} \) 'raw' (not likely, since 'raw' and 'red' are rather distant from each other semantically, not to mention that \( \text{tu} \) has no known reflexion in Arin), or borrowing into Arin from Pumpokol, which is even less likely, since this is the only such case in the entire corpus. It seems that, given the sharp distinction in consonantism, the Arin word has to be counted as etymologically different from the rest. It is possible to suggest an alternate etymology: cf. Ket-Yugh \( \text{tu}^\text{r}^\text{e}^\text{y}^\text{t} \) 'red currant', Pumpokol \( \text{tur}^\text{č}^\text{a} \text{ri} \) 'strawberry' [Werner 2002: II, 286], reconstructed as \( \text{tu}^\text{a} \) in [S. Starostin 1995: 289]. Arin \( \text{t}^\text{u}^\text{r}^\text{a} \) is
phonetically and semantically (red /berry/) compatible with these forms; in fact, it is not even excluded that *tuɾe- is the archaic Yeniseian root for 'red', preserved in most languages only within derived formations for names of red berries, whereas Arin is the only language to preserve the original form. Nevertheless, given the distribution of 'blood'-based derivatives, it is not permissible to rank it as the optimal candidate for Proto-Yeniseian 'red'. Reconstruction shape: Correspondences are regular (see notes on 'blood').

Semantics and structure: Comparison of Ket sʰuɾ'=am- and Kott šur-am- allows to suggest Proto-Yeniseian status for the adjectival stem *suɾ-am-, but it should be noted that Pumpokol and Yugh both show different ways of stem formation. This means that the semantic connection between 'blood' and 'red' must have been well understood at all stages of development of Yeniseian languages, allowing the derived formation to be "reformed" from time to time according to various productive models.

67. ROAD

Ket qɔʔt {qоʔи́м} (1) / qik {qъык} (2), Yugh čʰʔ (1) / čik ~ čʰʔk (2), Kott hek (2), Arin kut (1), Pumpokol koat (1), Proto-Yeniseian *qοʔt (1) / *qιq (2).

References and notes:

Ket: Werner 2002: II, 123; Werner 1993: 70. Neuter gender. Plural form: qiɾʰ-ɛj [qиɾъеj]. Quoted as qɔʔt, pl. qиɾʰ-ɛj, in [Werner 1977: 164]; as qoat, pl. qoat-ɛj in [Castrén 1858: 170]. The meaning for this word is glossed as 'winter road' ('Winterweg') in [Werner 2002]. It should be noted that the plural form is actually suppletive, but, contra [Starostin 1995: 261], it is not a plural form which was derived from *qoʰṭ 'road' (the consonantal mutation would be unprecedented), but rather from qiɾʰ 'current, flow' [Werner 2002: II, 154] - perhaps as a result of the semantic shift from 'currents' to 'water-ways' to 'ways' in general.Werner 2002: II, 154; Werner 1993: 74. Neuter gender. Plural form: qiɾʰ-ɛj [qиɾъеj] ~ qiɾʰ-ɛj. Quoted as qиɾt, pl. qиɾʰ-ɛj, in [Werner 1977: 167]. The meaning for this word is glossed as 'summer road' ('Sommerweg') in [Werner 2002].

With the peculiar distinction between two types of 'road / way' (one for the winter, one for summer, which is not particularly surprising for a Siberian hunter culture), it seems impossible to determine which one is more "basic"; for the moment, we include both words as synonyms.


Kott: Castrén 1858: 209. Plural form: hay-ɛj. Castrén does not record any opposition between 'summer road' and 'winter road' (but neither does he record one for Ket, where it certainly exists, so it is quite probable that the Kott situation was inadequate described as well). Cf. in older sources: xik (Kh.) [Werner 1990: 306]; other sources list an entirely different stem - itik (M., Dict., Kl.).

Arin: Dulzon 1961: 166 (M., Kl.). Quoted as kat in (Dict.). Cf. the composite form kol-kut 'road' in (Kh.) [Werner 2002: II, 123] (etymology of the first root is unknown).

Pumpokol: Dulzon 1961: 166 (Dict.).

Proto-Yeniseian: S. Starostin 1995: 261. Alternately reconstructed as *qʔt in [Werner 2002: II, 123]. Distribution: This root is attested everywhere except in Kott. Reconstruction shape: Correspondences are generally regular (some usual vocalic fluctuations in Arin and Pumpokol aside). Semantics and structure: The Ket-Yugh situation with semantics is probably archaic, i. e. Proto-Yeniseian *qʔt should be reconstructed with the meaning 'winter road'. Overall, it seems as if Ket-Yugh preserved the original lexical distinction between 'summer road' and 'winter road', whereas Kott, Arin, and Pumpokol generalized one word of the two (alternately, it is possible that only one word of the two was elicited by the inquirers - for instance, depending on the season in which the research was carried out?). S. Starostin 1995: 301 (*qъи́г). Alternately reconstructed as *qik in [Werner 2002: II, 154]. Distribution: This root is attested in Ket-Yugh and Kott, but not Arin and Pumpokol. Reconstruction shape: The exact phonemic nature of the uvulars remains unclear, because various assimilative / dissimilative processes could have obscured the original structure. However, the alternation -k / -y- in Kott does firmly suggest that the second consonant was also a uvular. Semantics and structure: The semantics 'summer road', attested in Ket-Yugh, is likely to be archaic.
68. ROOT

References and notes:


**Kott:** Castrén 1858: 219. The word is most likely a compound, where the second part = puľ ’foot’ q.v. and the first part is etymologically unclear (the original root may be *tɨːC-, with many possible choices for the second consonant due to high probability of assimilation with -puľ). Cf. in older sources: tičembalan (M., Dict., Kl.), bičembalan (Pal.) [Verner 1990: 322] (the strange orthography of the latter variant is unclear). Different stem listed in (Kh.): aiciq (obviously connected with aći ’tree’ q.v.).

**Arin:** Duzlon 1961: 169 (M., Dict.). Quoted as tʰem-bir-gan in (Kl.), as lʰem-bir-gan in (Pal.) (all the forms are really plural, ’roots’). Quoted as ten-bir in (Kh.) [Werner 2002: II, 317]. The structure of the form is the same as in Kott q.v.

**Pumpokol:** Duzlon 1961: 169 (Dict., Pal., Kl.). The form is quite obviously plural (’roots’). The quasi-synonymous entry tɨči (Dict.), tɨči (Kl.) [ibid.] in reality represents the Yugh form q.v.

**Proto-Yeniseian:** S. Starostin 1995: 217 (*ciːj). Alternately reconstructed as *tʰiːdə́-a – *tʰiːgə́ in [Werner 2002: II, 265]. Distribution: Preserved in all daughter languages, although in a seriously modified form, although in Kott-Arin, in Kott-Arin, replaced with *tem-bul, where *-bul may be the same root as ’foot’ q.v. (S. Starostin rejects this idea because the regular Arin word for ’foot’ is pɨł, not *pir; however, reflexes of liquid resonants in Arin are known to fluctuate rather chaotically, and it is not excluded that this particular split was influenced by different phonetic contexts or paradigmatic levellings, etc.); the first part, *tem- (m- could be the result of assimilation with *-bul, so the second consonant is really obscure), has no known etymology. Reconstruction shape: A complicated situation. First, Ket-Yugh *ciːj and Pumpokol kɨ́d- are compatible with each other under the condition that the initial consonant was an affricate (*č- or *č-), dissimilated (*ciːj- > *ciːj-) in Ket-Yugh. Second, pace S. Starostin, it is actually possible to tie these forms to their Kott and Arin equivalents. Proto-Kott-Arin has *tem-bul, where *-bul may be the same root as ’foot’ q.v. (S. Starostin rejects this idea because the regular Arin word for ’foot’ is pɨł, not *pir; however, reflexes of liquid resonants in Arin are known to fluctuate rather chaotically, and it is not excluded that this particular split was influenced by different phonetic contexts or paradigmatic levellings, etc.); the first part, *tem- (m- could be the result of assimilation with *-bul, so the second consonant is really obscure), has no known etymology, but cf. also such dialectal Assan forms as tɨːy-bul – tʉːg-bul ’root’; this variation can only be explained in terms of an original nominal paradigm *tey, pl. *te-n. The word ’foot’ was probably attached to the original root in order to reduce homonymy (*tey-bul, pl. *te-n-bul ~ *te-n-bul-an > *tem-bul-an). Subsequently, a Proto-Yeniseian reconstruction like *ciːj could regularly yield Kott-Arin *tiː (>*tey with vocalic dissimilation).

69. ROUND
Ket kɾuɨɡlɨˈɡay-s� {кургляйсы} (-1), Yugh mɨmpil (1), Kott e:per (2).

References and notes:

**Ket:** Werner 2002: II, 446; Werner 1993: 55. Borrowed from Russian кръгляй, Potential earlier synonyms include: (a) South Ket hirɨntan-ə́ [Werner 2002: I, 345], a morphologically complex form of unclear origin and not very secure from a semantic point of view; (b) teśp [Castrén 1858: 176], with no modern attestation.

**Yugh:** Werner 2011: 249. Plural form: mɨmpil-ıɨ́.

**Kott:** Castrén 1858: 200. Meaning glossed as ’circle; round’.

**Arin:** Not attested.

Proto-Yeniseian: Not reconstructible due to lack of sufficient data. The closest Proto-Yeniseian root would probably be *pu’d ‘to turn, twirl’ [S. Starostin 1995: 252], from which the Yugh form for ‘round’ is derived, but it is hard to make a firm statement based on data from just one language in this case.

70. SAND
Ket *h₃nʰyäŋ ~ *h₃nʰyŋ (খ্যাৎ ~ খ্যায়) (1), Yugh *f₃nᵢŋ (1), Kott tʰagan ~ tʰakän (2), Arin pʰinⁿ⁻ᵃŋ (1) / tan-en (2), Pumpokol p’inn-ᵢŋ (1), Proto-Yeniseian *pən-ᵢŋ (1).

References and notes:


Arin: Dulzon 1961: 177 (M., Dict., KL). Quoted as *f₃nᵢŋ in (Pal.). All forms represent morphological plurals.

References and notes:


Arin: Dulzon 1961: 177 (M., Dict., KL). Quoted as *f₃nᵢŋ in (Pal.). All forms represent morphological plurals.


Semantics and structure: The form *pənᵢŋ is obviously complex and, most likely, represents a plurale tantum, with *pən- as the original root.

71. SAY
Ket =ma (1) / sʰag-a-be’t (cazaᵩem) (2), Yugh =ma (1) / sʰag-a-be’h:ŋ (2), Kott dʰ=a=cagar-an (2), Proto-Yeniseian *saga- # (2).

References and notes:

Ket: Werner 2002: I, 17. A highly irregular verb, cf. the paradigm: 1sg nᵢ=ma ‘I say’ (< *di=ma with assimilation), 2sg kᵢu=ma ‘you say’, but 3sg m. bᵢ-dᵢ ~ bᵢ-rᵢ ~ bᵢ-ᵢ ‘he says’, 3sg f. mᵢ-nᵢ ~ mᵢ⁻nᵢ ‘she says’ (the subject markers are prefixed in the 1st and 2nd persons, but suffixed in the 3rd person). This verb is generally used in complex sentences to introduce indirect speech (“I say that...”, etc.). Werner 2002: I, 157; Werner 1993: 84. A composite verb, consisting of the “kernel” verbal stem -be’t ‘to do’ and the “modifier” say- conveying the main meaning ‘say’. Quoted as s¹ag-a-be’t in [Castrén 1858: 185] (actually a Yugh form).

Yugh: Werner 2011: 251. Cf. the paradigm: 1sg nᵢ=ma ‘I say’ (< *di=ma with assimilation), 2sg kᵢu=ma ‘you say’, 3sg m. nᵢ=ma ‘he says’, (< *du=ma with assimilation), 3sg f. nᵢ=ma ‘she says’ (< *da=ma). Like in Ket, this verb is generally used in complex sentences to introduce indirect speech (“I say that...”, etc.). Werner 2011: 251. See notes on Ket.


Arin: Not attested properly. Cf. the form qed’ilii (M., Dict., KL), glossed as ‘speak’ [Dulzon 1961: 162]; there is no evidence for it being the default verb for ‘to say’ in Arin, nor is it even clear how it is to be morphologically segmented.
**Pumpokol**: Not attested properly. Cf. the form kal'u (Dict.), glossed as 'speak' in [Dulzon 1961: 162]; there is no evidence for it being the default verb for 'to say' in Pumpokol.

**Proto-Yeniseian**: S. Starostin 1995: 269. Distribution: Preserved in all the languages where it is attested, but the original semantics raises doubts (see further notes). Reconstruction shape: Correspondences are generally regular, although the nature of -t- in Kott -saga- is problematic: it is not identifiable as a suffix, yet it can hardly be part of the original root, since there are no traces of such a resonant in either Ket or Yugh. Semantics and structure: It is possible that the actual meaning of Proto-Yenisean *saga*- was closer to 'speak, talk' than to 'say', considering that in Ket-Yugh at least, the highly irregular verb *=ma* 'to say' looks more archaic than *saga*--; formally, however, it is difficult to project *=ma* onto the Proto-Yeniseian level due to its conspicuous absence from Castrén’s records of Kott material.

72. SEE

Ket \(t=\text{un}\eta \sim t=\text{o}\eta \{\text{m}\eta\}\) (1), Yugh \(t=\text{o}\eta\) (1), Kott \(t^h=\text{a}\eta\text{-}\text{an}\eta\) (1), Arin peng'aul'\(\text{on}\eta\) (2), Pumpokol \(ya=xal-di\) (3), Proto-Yeniseian *\(t=\ldots=\text{un}\eta\) (1).

References and notes:

**Ket**: Werner 2002: II, 228; Werner 1993: 101. (Quoted as [m] in the latter source, clearly a misprint for [n]). Verbal root -\(\text{un}\eta\) used only in conjunction with the preverb \(t=\). Cf. particular forms: \(d'=t=\text{on}\eta \ 'I see', past tense \(t=t'=\text{a}\eta\text{-}\text{en}\eta\), etc.) is also frequently translated as 'to see'. Superficial analysis of existing Ket texts, however, shows that this verb's primary meaning is that of intentional activity, i.e. 'to look', as opposed to \(t=\ldots=\text{un}\eta\) 'see'; it is therefore ineligible for inclusion in the wordlist. Same goes for the preverbal verb \(k=\ldots=d\) \(\) (Werner 2002: I, 194); \(d'=\text{a}=\text{t}=\text{en}\) 'I look at him', etc.), whose main difference from \(\text{un}\ldots\text{en}\eta\) is that it is generally used with animate objects ('to look at someone'), whereas \(\text{un}\ldots\text{en}\eta\) is generally used in the meaning 'to look at smth. '.

**Yugh**: Werner 2011: 277. \(\) Infinitive form, clearly segmentable into the preverb \(t=\) and the root \(\text{on}\eta\), cf. particular forms: \(d'=t=\text{on}\eta \ 'I see', past tense \(d'=\text{a}=\text{en}\text{-}\text{en}\eta\), etc.) is also frequently translated as 'to see'. Superficial analysis of existing Ket texts, however, shows that this verb's primary meaning is that of intentional activity, i.e. 'to look', as opposed to \(t=\ldots=\text{un}\eta\) 'see'; it is therefore ineligible for inclusion in the wordlist. Same goes for the preverbal verb \(k=\ldots=d\) \(\) (Werner 2002: I, 194); \(d'=\text{a}=\text{t}=\text{en}\) 'I look at him', etc.), whose main difference from \(\text{un}\ldots\text{en}\eta\) is that it is generally used with animate objects ('to look at someone'), whereas \(\text{un}\ldots\text{en}\eta\) is generally used in the meaning 'to look at smth. '.

**Kott**: Castrén 1858: 218. 1st p. sg. Cf. past tense: \(t=\text{a}=\text{en}\text{-}\text{an}\eta\), imperative: \(t=\text{a}=\text{en}\text{-}\text{an}\eta\). As in Ket, the complex stem consists of the preverbal formative \(t=\) and the root morpheme \(\text{a}=\text{en}\)- \(\text{a}=\text{en}\)-.

**Arin**: Dulzon 1961: 160 (M., Kl.). Quoted as peng'aul'on in (Dict.), with no specification as to the exact nature of the form. In (Kh.), the segmentally similar form pencludu is glossed as 'I see' [Werner 2002: II, 53]. If \(\text{d;}\) can be analyzed as the past tense marker, then we are dealing with a composite verb, where the first root is *pen* (?) and the second is a monovocalic *o* / *u* (?). Quite obscure.

**Pumpokol**: Dulzon 1961: 160 (Dict.). The complete citation is bau ya=xal-di, which probably means 'I see them'; -di is the 1st p. sg. suffix and ya= is segmentable as an auxiliary morpheme context (cf. ya=icli-du (Dict.) 'I laugh' [Dulzon 1961: 182]). The root morpheme seems to be *xal*-

**Proto-Yeniseian**: S. Starostin 1995: 290 (*\(t=\text{un}\eta\)). Distribution: Preserved in Ket-Yugh and Kott, but apparently lost in Arin and Pumpokol (at least, as the default equivalent for 'to see'). Replacements: Both the Arin and Pumpokol forms are difficult to segment, and neither of the two has a decent etymology (S. Starostin’s attempt to compare the Pumpokol form with Ket \(d=\text{ba}=\text{en}\text{-}\text{en}\eta\) ‘I see’, actually ‘I look’, in [YED # 1057], is based on a probably incorrect segmentation of the Pumpokol form and has to be rejected). Reconstruction shape: Correspondences between Ket-Yugh and Kott are regular; labial vocalism in Ket-Yugh corresponding to \(a\) in Kott generally reflects Proto-Yeniseian *\(a\). Semantics and structure: Ket-Yugh and Kott agree on the basic structure of the verb, consisting of the directional prefix *\(t=\) and the root *\(x=\text{an}\eta\) separated by grammatical morphemes such as the tense and conjugation markers.
73. SEED
Arin ěui=n-urliga # (1).

References and notes:

**Ket:** Not attested.
**Yugh:** Not attested.
**Kott:** Not attested.
**Arin:** Werner 2002: I, 167. Attested only in (Kh.). The first component is most likely ěu 'grass', just as in ěui=uy-boson 'straw' [ibid.]. Since it is somewhat dubious that the word for 'seed' should contain a root with the meaning 'grass', the whole entry is quite suspicious.
**Pumpokol:** Not attested.
**Proto-Yeniseian:** Not reconstructible due to lack of data.

74. SIT
Ket sʰês-ś-ta {cechmə} (1), Yugh s’e-s-ta ~ s’e-s-te (1), Kott dʰ=ə=uy-an (2), Arin a=ku-m (2), Pumpokol tit-k’o-du (1), Proto-Yeniseian *xu- (2).

References and notes:

**Ket:** Werner 2002: II, 187; Werner 1993: 86. Composite verb; the "kernel" -ta is a very frequent formative part of (usually) static action verbs. Cf. specific forms: t=shês-ta ~ t=shês-te 'he sits', past tense t=shês-3-3-ta ~ t=shês-3-3-te, etc. Quite distinct from the dynamic action verb k=...-n't to sit down' [Werner 2002: I, 402], formed with the preverb k= (t=k=ə=ddi=γ:yn 'I sit down', etc.). Quoted as sesta, past tense sesogalta in [Castrén 1858: 186].
**Yugh:** Werner 2011: 282. Composite verb, as in Ket. Cf. specific forms: 1sg di=shês-te 'I sit', past tense di=shês-3-3-te, etc. Quite distinct from the dynamic action verb ka=γ-p ~ ka=γ-ŋ 'to sit down' [Werner 2011: 279].
**Arin:** Werner 2002: I, 221. Attested only in (Kh.). To be segmented, probably, as a= (conjugation marker) + -ku- (root) + -ŋ (a variant of 1st p. sg. marker -ŋ). The strange distinction between akum 'I sit' and akume 'I live', marked in the source, may be fictitious.
**Pumpokol:** Duzzon 1961: 182 (Dict.). Glossed as 'I am sitting' (actually, more likely to be 'he is sitting', in the light of the personal ending -du). Structurally, the verb looks like a composite formation, with tit- as the main lexical root.
**Proto-Yeniseian:** S. Starostin 1995: 297. **Distribution:** Preserved in Kott-Arin, but probably replaced in Ket-Yugh and Pumpokol. **Replacements:** Other than Kott-Arin, the old root *xu- is also preserved in the Ket-Yugh infinitive form u-ŋ 'to sit' [Werner 2002: II, 380] (< *xu-\~V\~iŋ; Werner doubts that -ŋ is segmentable as a suffix, but this component is quite often met in various infinitives); this makes it the optimal candidate for the basic Proto-Yeniseian 'to sit', but also raises the issue of the replacement of the original paradigm in Ket-Yugh and Pumpokol with *ses- [S. Starostin 1995: 279]. **Reconstruction shape:** Root-initial x- is reconstructed on the basis of the Arin form (a=ku-m, etc.).

75. SKIN
Ket ō {ul} (1), Yugh iəl ~ iə̱l ~ iə̱l (1).
References and notes:


Kott: Not attested.

Arin: Not attested.

Pumpokol: Not attested.

Proto-Yeniseian: Not reconstructible due to lack of data. The Ket-Yugh word is comparable with Kott ćk ‘hair’ (see notes on ‘hair’), meaning that the original meaning of the etymon was probably closer to ‘body hair; animal hair, fur’ than to ‘skin’.

76. SLEEP

Ket t=...=qot (1), Yugh =γt (1), Kott dʰ=ac-t-ŋ (1), Arin ‘a=qod-ŋ (1), Pumpokol bun’e-du (3), Proto-Yeniseian *=qot (1).

References and notes:

Ket: Werner 2002: II, 360-361; Werner 1993: 94. Polysemy: ‘to lie / to sleep’. See notes on ‘to lie’ for paradigm details. Should be distinguished from the dynamic action verb usʰεŋnʰ ‘to go to sleep’ [Werner 2002: II, 360], occasionally translated as simply ‘sleep’ in some sources as well (e.g. [Werner 1993: 113]), but in a somewhat inaccurate manner.

Yugh: Werner 2011: 259. Polysemy: ‘to lie / to sleep’. See notes on ‘to lie’ for paradigm details. As in Ket, should be distinguished from the dynamic action verb usan ‘to go to sleep’ [Werner 2011: 259].

Kott: Castrén 1858: 220. Same word as ‘to lie’ q.v. The entry is dubious, since Castrén only gives the meaning ‘to lie’; however, the past form a=li=at-tan is so frequently glossed in older sources with the meaning ‘I sleep’ that this seriously looks like a flaw in Castrén’s semantic notation. In the German-Yeniseian semantic index, he renders the meaning ‘to sleep’ (schlafen) as Kott ċagal-a-kŋ (p. 252), but on. p. 215 ċagal-a-kŋ is only translated as ‘to drowse’ (schlummern). External cognates in Ket also indirectly support the idea that dʰ=ac-t-ŋ may have been the basic equivalent for both ‘lie’ and ‘sleep’, whereas ċagal expressed a more specific meaning. Cf. the actual form in the older sources: a=li=at-tan ‘sleep’ (M., Dict., Pal., Kl.) [Werner 1990: 371].


Pumpokol: Dulzon 1961: 183 (Dict.). Cf. the suppletive - infinitive? - stem: utu ‘to sleep’ (Dict., Pal., Kl.), and the synonymous zotik ‘to sleep’ (Pal., Kl.) [ibid.]. The latter form of the two might actually be Yugh rather than proper Pumpokol.

Proto-Yeniseian: See notes on ‘to lie’; in Proto-Yeniseian, the meanings ‘lie’ and ‘sleep’ were most likely expressed by the same root.

77. SMALL

Ket h₃nʰa (x̌nra) (1), Yugh femʰa ~ fenʰa ~ fenʰnʰa ~ fenʰnʰa (1), Kott kišla: (2), Arin kalqona (3), Pumpokol xilʰyŋ-du (3), Proto-Yeniseian *=ŋəŋ- # (1).

References and notes:

Ket: Werner 2002: I, 337; Werner 1993: 123. Secondary synonym: ‘m-da’ ‘small / fine / thin’ [Werner 2002: I, 362]; this word has more limited distribution (applied to thin slices of meat, fine sand, etc.). Quoted as h₃na in [Werner 1977: 192]; as h₃ne ~ h₃ne in [Castrén 1858: 174].
Yugh: Werner 2011: 194. Quoted as *fin′e in [Werner 1977: 192]; as fin′e in [Castrén 1858: 191].
Arin: Dulzon 1961: 172 (M., Dict., Kl.). Quoted as kalhona in (Pal.).
Pumpokol: Dulzon 1961: 172 (Dict., Pal., Kl.). A predicative form (the suffix -du is a personal ending, i.e. = 'he is small'); the root is obviously the same as in *xillun-l'a 'child' (Dict., Pal.). The quasi-synonymous form finem (Pal., Kl.) is most probably Yugh rather than proper Pumpokol.
Proto-Yeniseian: S. Starostin 1995: 248 ("paration"). Alternately reconstructed as *pən′a in [Werner 2002: I, 337]. Distribution: Preserved only in Ket-Yugh. Replacements: (a) Although Arin kaljona and Pumpokol xillun- 'small' seem to share the same root, the actual words are derived from words for 'child' (< Proto-Yeniseian *yvl 'child' [S. Starostin 1995: 308]) according to different models of derivation; therefore, it is difficult to regard this situation as either a shared innovation or a common archaism on the part of these two languages - the semantic derivation ['child' > 'small'] seems a more likely solution; (b) Kott kilša: has no etymological connections whatsoever, not to mention a somewhat strange phonetic shape for a native Yeniseian word. Thus, only Ket-Yugh *pən-remains as a potential candidate for the original Proto-Yeniseian 'small'.

78. SMOKE

Ket du? (d’y) (1), Yugh du? (1), Kott tu (1), Arin t'u (1), Pumpokol d'ukar (1), Proto-Yeniseian *duʔ (1).

References and notes:

Arin: Dulzon 1961: 166 (M., Dict., Kl.).
Pumpokol: Dulzon 1961: 166 (Dict.).
Proto-Yeniseian: S. Starostin 1995: 224 (*dulʔi-). Alternately reconstructed as *dulʔ ~ *duka in [Werner 2002: I, 210]. Distribution: Preserved in all daughter languages. Reconstruction shape: Correspondences are generally regular; the only problem is with reconstructing the root-final segment - an issue unresolved in both S. Starostin's and Werner's reconstructions. Overall, the evidence for a final back consonant is weak and inconclusive. The Pumpokol form is clearly composite, with unclear segmentation (could be du-ka or du-ka- 'bonfire with smoke'). The transcription tug in some old sources on Kott could technically transcribe *tuʔ. Conversely, if there was a velar or uvular phoneme at the end of the root, we would have expected it to be preserved in at least some of the well-attested languages / dialects, but this does not seem to be the case. For now, it is preferable to think of *dulʔ as the original structure.

79. STAND

Ket iŋ° (uny) (1), Yugh ifin (1), Kott du=ŋ=a=tək-ŋ ~ du=ŋ=ə=tək-ŋ (2), Arin =təŋ (2), Pumpokol iča=diŋ- (2), Proto-Yeniseian *=diŋ ~ *=dik (2).

References and notes:

Ket: Werner 2002: I, 393; Werner 1993: 47. Cf. specific forms: di=kk=en° ~ di=ŋ° 'I stand', past tense d=ŋ=fin°; ku=kk=en° ~ ku=ŋ° 'you stand' (sg.), past tense k=ŋ=fin, etc. Quoted as iŋi in [Werner 1977: 151]; as di=ʔu, past tense du=ʔ=fin in [Castrén 1858: 182].
Yugh: Werner 2011: 289. Cf. specific forms: di=fin 'I stand', past tense d=ŋ=fin; ku=fin 'you stand' (sg.), past tense k=ŋ=fin, etc.
80. STAR

Ket qaʔ (kɔ̞' ~ kɔ'1) (1), Yugh չ3ʰχ (1), Kott al=aga ~ al=ak ~ al=‘ax (1), Arin ’il=qoy (1),
Pumpokol ˈkak-ɛn (1), Proto-Yeniseian *qɔːqa (1).

References and notes:


Kott: Castrén 1858: 196. Plural form: alaɡ-an ~ alaɡ-n. The word-initial sequence al= is segmented out as a fossilized prefix, due to external comparison and complete analogy with such cases as 'dog', 'bird' q.v., etc. Cf. in older sources: aluq'-a (M., Dict., Pal., Kl.), alaka-n (Kh.) [Verner 1900: 314] (plural forms).

Arin: Dulzon 1961: 167 (M., Dict., Kl.). Quoted as il=xox in (Pal.); as il=xok in (Kh.) [Werner 2002: II, 122]. Initial il= is the same fossilized prefix as in 'dog' q.v.

Pumpokol: Dulzon 1961: 167 (Dict., Pal.). The form is clearly plural ('stars').

Proto-Yeniseian: S. Starostin 1995: 265. Alternately reconstructed as *qpoʔ a in [Werner 2002: II, 122]. Distribution: Preserved in all daughter languages. Reconstruction shape: Correspondences are regular. In Kott and Arin, the word shows fusion with the same obscure prefix as in the word for 'dog' q.v. (*il=qɔxa ~ *il=qɔxa).

81. STONE
Ket ściš ə? (mu’i:bo) (1), Yugh čiš (1), Kott šiš (1), Arin qes (1), Pumpokol kit (1), Proto-Yeniseian *ciʔ-s (1).

References and notes:


Pumpokol: Dulzon 1961: 168 (Dict., Pal., Kl.).

Proto-Yeniseian: S. Starostin 1995: 217 (*čiš). Alternately reconstructed as *tiš in [Werner 2002: II, 312]. Distribution: Preserved in all daughter languages (H. Werner separates the Arin and Pumpokol forms, but, according to S. Starostin’s tables of correspondences, they are in complete agreement with the others). Reconstruction shape: S. Starostin reconstructs initial *č in this root, but it must be noted that this is the only case where both Arin and Pumpokol show an initial q- or k- in their reflexion. We propose to amend the reconstruction to *čiʔ-s (with the same consonant as in ‘hair’ and ‘head’ q.v.); this solution is more economic, since the only “irregularity” that it implies is the development *čiʔ-s > šiš in Kott instead of the expected *hiš, which could be explained through additional assimilation / palatalization in a specific context. Semantics and structure: The original paradigm is reconstructible as sg. *čiš, pl. *čištj; this means that *-s is most likely a fossilized singulative suffix (cf. a similar case with the word for ‘eye’ q.v.).

82. SUN
Ket i: iu (1), Yugh i (1), Kott e:ga ~ e:zą (1), Arin ‘eya (1), Pumpokol hix-em (1), Proto-Yeniseian *xış-a (1).

References and notes:


Pumpokol: Dulzon 1961: 183 (Dict., Pal., Kl.). The form is somewhat strange, since it includes the predicative (adjectival) suffix -/em/; H. Werner tentatively explains it as the predicative formation ‘it is sunny’. Cf. ha (Dict.), xeg (Kl.) ‘day’ [Dulzon 1961: 165].


83. SWIM
Ket sʰuy {cоүл} (1), Yugh suʰy (1), Kott ul=šuy (1), Proto-Yeniseian *suːy (1).

References and notes:

Ket: Werner 2002: II, 210; Werner 1993: 90. Within the paradigm, this infinitive form occupies the slot of the "modifier": cf. dašʰu=a-šet 'she swims', past tense dašʰu=a-šet (šet ~ -šet is the verb-forming "kernel" with the original meaning 'to do, make'). (The old simple paradigm was still preserved in the Yugh dialect). This is the most frequently used and neutral verb in the meaning 'to swim' (other specific directional verbs are also found, e.g. 'swim with the current', etc., but we do not list these). Quoted as sʰuɣ in (S.-Ibm) / sʰuɣ₁ (Kur.) / sʰuɣ₁ ~ sʰuɣ₂ (Sur.) in [Werner 1977: 177].

Yugh: Werner 2011: 274. The simple paradigm (1sg di=šu=aɣ 'I swim', past tense di=šu=aɣ, etc.) co-exists in Yugh with several extended variants, such as di=šu=aɣ=aɣ 'I swim' (with the preverb =-aɣ) and di=šu=aɣ=aɣ='I swim'. Quoted as suɣ₂ ~ suɣ₁ in [Werner 1977: 177].

Kott: Castrén 1858: 203. Infinitive form; the finite tense forms also include the auxiliary stem -ək, e.g. ul=šuy-ək-y 'I swim', etc. The first component = ul 'water' q.v.; the second component is etymologically related to Ket sʰuy q.v., but may also be the same verbal root as in Kott šuyə 'to wander, go astray' [Castrén 1858: 215].

Arin: Not attested.

Pumpokol: Not attested.

Proto-Yeniseian: S. Starostin 1995: 279. Alternately reconstructed as *suɣə in [Werner 2002: II, 210]. Distribution: Preserved in all daughter languages where it is attested, but not found in Arin or Pumpokol. Reconstruction shape: Correspondences are regular and trivial. Semantics and structure: In Kott, the verb only exists in conjunction with ul 'water'; this may be a hint at some earlier meaning, but it might just as well be a Kott innovation, carried out in order to reduce homonymy with multiple other words that have the same phonetic shape (suy 'moon', šuy 'midge', etc.).

84. TAIL

Ket huct (xъyъml) (1), Yugh fuct (1), Kott fugay ~ fukay ~ pʰugay (1), Arin pʰug'ay (1), Proto-Yeniseian *puc-aŋ (1).

References and notes:

Ket: Werner 2002: I, 332; Werner 1993: 122. Neuter gender. Plural form: hucə=ŋ (xъyъŋ). Quoted as huct₁, pl. hucə=ŋ₁ / hucə=ŋ₂ (Bak., Sur.) in [Werner 1977: 193]; as hucut in [Castrén 1858: 174]. This is the basic word denoting the 'tail' of animals; specific terms are also known for 'tail of bird': hişʰ [Werner 2002: I, 320], and for 'tail of fish': kʰrap ~ kʰrap [Werner 2002: I, 326]. Neither of the two is eligible for inclusion.

Yugh: Werner 2011: 271. Neuter gender. Plural form: fucə-ŋ. Quoted as fuct, pl. fucə-ŋ₁ ~ fucə-ŋ₂ in [Werner 1977: 193]; as fux₁, pl. fucə-ŋ in [Castrén 1858: 192]. This is the basic word denoting the 'tail' of animals; specific terms are also known for 'tail of bird': fis [Werner 2011: 271], and for 'tail of fish': fuqə [Werner 2011: 271]. Neither of the two is eligible for inclusion.


Arin: Dulzon 1961: 187 (M., Kl.). Quoted as it-bugey (Kh.) in [Werner 2002: I, 332]; the first component is obscure.

Pumpokol: Not attested.

Proto-Yeniseian: S. Starostin 1995: 253 (*pʰuəŋ). Alternately reconstructed as *pʰuət- ~ *pʰuəŋ in [Werner 2002: I, 332]. Distribution: Preserved in all daughter languages, but not attested in Pumpokol. Reconstruction shape: All correspondences are regular. Semantics and structure: The stem ends in the same morpheme that is also found in Ket ul=ət = Kott ul=əj 'rib' (< Proto-Yeniseian *ʔuət- [S. Starostin 1985: 200]) and several other words denoting body parts (heel, jaw, cheek, etc.); according to the phonetic correspondences laid out by S. Starostin, this suffix reflects Proto-Yeniseian *-aŋ and may not be equated with *ʔuəl 'bone' q.v., as suggested by H. Werner; consequently, Werner's interpretation of the word as a compound formation from an unattested root with the hypothetical meaning 'fluffy, woolly' + 'bone' remains unfounded.
85. THAT₁
Ket $t=\cdot \{\text{my} \} \ (1)$, Yugh $t=\cdot \ (1)$, Kott $\text{uy-o} : \ (2)$, Proto-Yeniseian $*\text{ʔu} \ (1)$.

References and notes:

Ket: Werner 2002: II, 294; Werner 1993: 102. Within the standard triple opposition in Ket, this pronoun indicates the intermediate (not-too-distant from the speaker) degree of deixis. The usual attributive forms are: $\text{tu-}r^\prime$ (masc. sg.), $\text{tu-r^\prime} \partial$ (fem. / neuter sg.), $\text{tu-n^\prime} \alpha$ (pl.). The masc. attributive form is quoted as $\text{tuda}_1$ (Bak., Sur.) / $\text{tur}^\prime_3 \partial$ (Kur.) / $\text{tur}^\prime_3$ (S.-Imb.) in [Werner 1977: 184]. Frequently translated as 'this' (Russian $\text{sm\text{n}}$), but we still include it in the wordlist under the Swadesh meaning 'that', since it forms a frequent opposition with the near-deixis pronoun $\text{k-i 'this'}$ q.v.

Yugh: Werner 2011: 104. The usual attributive forms are: $\text{tu-t} \ (\text{masc. sg.}), \text{tu-da} \sim \text{tu-da}_1 \ (\text{fem. sg.}), \text{tu-na} \sim \text{tu-n^\prime} \alpha$ (pl.). The masc. attributive form is quoted as $\text{tu-t}$ in [Werner 1977: 184]; as $\text{uc-t} \sim \text{tu-du}$, pl. $\text{tu-na}$ in [Castrén 1858: 50].

Kott: Castrén 1858: 55. Masculine form; the feminine equivalent is $\text{un} \alpha$, the plural form is $\text{uni-o} \gamma$. The same root is responsible for the formation of the 3rd p. pronouns: $\text{uy-n } \text{'he'}, \text{uy-n } \text{'she'}, \text{uni-an } \text{'they}'. Internal reconstruction suggests that the original stem is $*\text{ʔu}-$, with the plural variant $\text{ʔu-n}$; these are further combined with markers of gender and (superfluous) plural suffixes and subject to some analogical levelling.

Arin: Not attested.

Pumpokol: Not attested.

Proto-Yeniseian: The Ket-Yugh and Kott systems of demonstrative pronouns (for Arin and Pumpokol, these systems remain unknown) are, upon first sight, so dissimilar that no adequate protolanguage reconstruction seems possible. However, a more thorough comparison of Ket-Yugh $*\text{ka-} \sim *\text{qa- 'that (far away)'} / *\text{tu- 'that / this (intermediate)'} / *\text{ki- 'this'}$ with Kott $*\text{uc-'that'} / *\text{i- 'this'}$ shows that the systems are still compatible, with two assumptions: (a) that Kott has reduced the original tripartite system to a binary opposition; (b) that the Ket-Yugh forms are composite in origin, and reflect a fusion of three original vocalic stems ($*\text{a 'that /far away'}, *\text{u 'that /intermediate'}, *\text{i 'this'}$; typologically, this is a very natural system) with additional monoconsonantal "modifiers". These formerly separate morphemes ($*\text{k- 'that}, *\text{i- 'that'}, \text{maybe also } *\text{q-} \text{'}$) could have an adverbial origin, and might even be etymologically identical with some of the Yeniseian verbal prefixes. Any alternative solution would either have to resort to substrate hypotheses (borrowing of the entire system of demonstratives in either Ket-Yugh or Kott from an unknown source) or projecting all of the attested morphemes onto the Proto-Yeniseian level, increasing their overall count to unrealistic levels. For that reason, we tentatively reconstruct the tripartite system $*\text{ʔa 'that (far away)}, *\text{ʔu 'that (intermediate), } *\text{n 'this'}$ for Proto-Yeniseian.

85. THAT₂
Ket $q=\cdot \{\text{\text{k}a} \} \ (2)$, Yugh $k=\cdot \ (2)$, Proto-Yeniseian $*\text{ʔa} \ (2)$.

References and notes:

Ket: Werner 2002: II, 153. Within the standard triple opposition in Ket, this pronoun indicates the "far away from the speaker" degree of deixis. The usual attributive forms are: $\text{qa-}r^\prime$ (masc. sg.), $\text{qa-r^\prime} \partial$ (fem. / neuter sg.), $\text{qa-n^\prime} \alpha$ (pl.).

Yugh: Werner 2011: 186. The usual attributive forms are: $\text{ka-t} \ (\text{masc. sg.}), \text{ka-da}_1 \ (\text{fem. sg.}), \text{ka-n^\prime} \alpha$ (pl.). The masc. attributive form is quoted as $\text{ka-t}$ in [Werner 1977: 153]; as $\text{ka-}t \sim \text{ka-du}$, pl. $\text{ka-na}$ in [Castrén 1858: 50].

Proto-Yeniseian: 0

86. THIS
Ket $k=\cdot \{\text{ku} \} \ (1)$, Yugh $k=\cdot \ (1)$, Kott $\text{i-n^\prime-u} \ (1)$, Proto-Yeniseian $*\text{ʔi} \ (1)$. 
References and notes:

**Ket:** Werner 2002: I, 435; Werner 1993: 52. Within the standard triple opposition in Ket, this pronoun indicates the "near the speaker" degree of deixis. The usual attributive forms are: \( ki-r't \) (masc. sg.), \( ki-r't \) (fem. / neuter sg.), \( ki-n'a \) (pl.). The masc. attributive form is quoted as \( ki-da \) (Bak., Sur.) / \( ki-d'a \) (Kur.) / \( ki-r't \) (S.-Imb.) in [Werner 1977: 153].

**Yugh:** Werner 2011: 104. The usual attributive forms are: \( ki-t \) (masc. sg.), \( ki-da \sim ki-d'a \) (fem. sg.), \( ki-na \sim ki-n'a \) (pl.). The masc. attributive form is quoted as \( ki-t \) in [Werner 1977: 153]; as \( ki-t' \sim ki-du \), pl. \( ki-na \) in [Castrén 1858: 50].

**Kott:** Castrén 1858: 54. Masculine form. The feminine equivalent is \( in-n'\). The plural form is \( inn-n'\). The simpler form, stripped of gender and number suffixes, is attested as the adverb \( in 'here' [ibid.]; comparison with other demonstrative stems (e.g. 'that' q.v.) shows that the word can be further segmented into the original root 'thi' and the fossilized suffixal extension *-n(i)-.

**Arin:** Not attested.

**Pumpokol:** Not attested.

**Proto-Yeniseian:** See notes on 'that'.

87. THOU

Ket \( u ~ u' \{y\} \) (1), Yugh \( u \) (1), Kott \( au \) (1), Arin \( au \) (1), Pumpokol \( 'ue \) (1), Proto-Yeniseian \( *?aw \) (1).

References and notes:

**Ket:** Werner 2002: II, 318; Werner 1993: 107. Declinable personal pronoun with the same root throughout the paradigm. Quoted as \( u ~ u' \{y\} \) in [Werner 1977: 185]; as \( u/\{y\}g \) in [Castrén 1858: 48]. The possessive pronoun, represented by an etymologically different stem \( uk \sim u/\{y\} \) [Werner 2002: II, 327], is not eligible for inclusion.

**Yugh:** Werner 2011: 108. The possessive pronoun, represented by an etymologically different stem \( uk \sim u/\{y\} \) [Werner 2011: 102], is not eligible for inclusion. Quoted as \( u ~ u' \{y\} \) in [Werner 1977: 185].

**Kott:** Castrén 1858: 52. Cf. the plural formation: \( au-on' \) 'you' and the possessive form: \( au-še \) 'thy', pl. \( au-šen.n\).

**Arin:** Dulzon 1961: 186 (M., Dict.).

**Pumpokol:** Dulzon 1961: 186 (Dict.).

**Proto-Yeniseian:** S. Starostin 1995: 185. Alternately reconstructed as \( *ug/a/ \sim *ug/a/ \) in [Werner 2002: II, 318]; this reconstruction is transparently influenced by the attested reflexions of the possessive stem and cannot be accepted for the Proto-Yeniseian level. **Distribution:** Preserved in all daughter languages. **Reconstruction shape:** The 'diphthongic' structure of this pronoun is rather unique for Proto-Yeniseian, so the regularity of the correspondences cannot be ascertained, but no better reconstruction can probably explain the discrepancy between Ket-Yugh \( ?u \) and Kott-Arin \( *a.u.** Semantics and structure:** The form \( *?aw \) represents the direct stem of the 2nd p. sg. pronoun. The etymologically different oblique stem, lost in Kott-Arin, is still preserved in Ket-Yugh as \( ?u_k \) (possessive pronoun: 'your') or \( ?u_k \) (verbal prefix of subject or object). These forms may have been influenced by Ket-Yugh \( ?u \) 'you', but their velar constituent is completely autonomous, and there is no direct or indirect evidence that it was, at any time, present in the direct stem as well.

88. TONGUE

Ket \( e'y \{e'i\} \) (1), Yugh \( ey \) (1), Kott \( alu/p ~ alu/p \) (2), Arin \( *a'lu/p \) (2), Pumpokol \( ay \) (1), Proto-Yeniseian \( *?ey \) (1).
References and notes:


**Arin:** Dulzon 1961: 189 (M., Dict., Pal., Kl.). Quoted as *eəp in (Kh.) [Werner 2002: I, 27].

**Pumpokol:** Dulzon 1961: 189 (Dict., Pal.).

**Proto-Yeniseian:** S. Starostin 1995: 187; Werner 2002: I, 272 (*ʔy). **Distribution:** Preserved in Ket-Yugh and Pumpokol. **Replacements:** In Proto-Kott-Arin, *ʔy was replaced by *alup (vocalism provisionally follows the Kott form rather than the controversial Arin variants), of unclear origin. Proto-Yeniseian *ʔy 'tongue' is still preserved in Kott *ɛy, pl. *ɛy-ɛ, but only in the meaning 'voice; sound' [Castrén 1858: 199]; since the semantic shift ('tongue' > 'voice') (the actual meaning in Castrén's vocabulary may have been 'speech, language') is more probable than the opposite, this increases the chances of *ʔy as the original Proto-Yeniseian equivalent for 'tongue'. **Reconstruction shape:** All correspondences are regular.

89. TOOTH

**Ket **it {uml} (1), Yugh *iʰːt (1), Kott *iṭ ~ *i̯e (1), Arin *i̯i-t (1), Proto-Yeniseian *ʔt̯i̯i (1).

References and notes:


**Yugh:** Werner 2011: 345. Neuter gender. Plural form: *i̯i-ɛnj ~ *i̯i-ŋj. Quoted as *i̯i, pl. *i̯i-ɛnj in [Werner 1977: 152].

**Kott:** Castrén 1858: 201. Plural form: *i̯i-ŋj. Cf. in older sources: *i̯i (Kh.) [Verner 1990: 315].

**Arin:** Werner 2002: I, 382. Attested only in (Kh.); the form is plural ('teeth').

**Pumpokol:** Not attested.

**Proto-Yeniseian:** S. Starostin 1995: 195. Alternately reconstructed as **i̯i in [Werner 2002: I, 382]. **Distribution:** Preserved in all daughter languages, but not attested in Pumpokol. **Reconstruction shape:** Correspondences are regular (vocalism of the second syllable is somewhat questionable; the exact protoform could be either **i̯i or **i̯i).

90. TREE

**Ket **oks~ {оksъ} (1), Yugh *oxsī (1), Kott *atči ~ *ačē (1), Arin *os̯čē (1), Pumpokol *hɔx-on (2), Proto-Yeniseian *ʔɔksi (1).

References and notes:


**Yugh:** Werner 2011: 83. Masculine gender. Plural form: *а̯派人 (suppletive paradigm on the synchronic level). Quoted as *оx̯, pl. *а̯派人 ~ *а̯派人 in [Werner 1977: 133, 171]; as *оx, pl. *а̯派人 in [Castrén 1858: 164].

**Kott:** Castrén 1858: 198. Plural form: *а̯派人 ~ *а̯派人 (suppletive paradigm on the synchronic level). Cf. in older sources: *а̯派人 (M., Dict., Pal.), *а̯派人 (Kh.) [Verner 1990: 305].

**Arin:** Dulzon 1961: 165 (M., Dict., Pal., Kl.). The "prefixal" component is really *kus 'one' q.v.; the simple form *оx (M., Dict., Pal., Kl.) is listed in all sources in the meaning 'forest' [Dulzon 1961: 170]. Quoted as *оx 'tree / forest' (Kh.) in [Werner 2002: II, 50].

**Pumpokol:** Dulzon 1961: 165 (Dict., Pal., Kl.). Polysemy: 'tree / forest', although the presence of the plural marker -i/и indicates that the primary semantics here is plural. The quasi-synonymous form *oxsi (Pal., Kl.) 'tree', as well as *ak (Pal., Kl.) 'forest', is really Yugh
rather than proper Pumpokol.

Proto-Yeniseian: S. Starostin 1995: 198. Alternately reconstructed as *(x)ksi ~ *(x)tsi in [Werner 2002: II, 50]. Distribution: Preserved everywhere except in Pumpokol, where the suppletive plural has replaced the old singular form. Reconstruction shape: Correspondences are regular; the correspondence "Ket-Yugh -š- : Kott-Arin č ~ tč ~ šč" is recurrent and normally reflects Proto-Yeniseian *-š-. Semantics and structure: The word 'tree' was suppletive on the Proto-Yeniseian level; the plural form is reconstructed as *(x)tlq > Ket-Yugh *t=t[ə]q, Kott ak ~ ax, Pumpokol ho= in hox-an; possibly also Arin α (Kh.) 'firewood' [S. Starostin 1995: 295]. In Arin, the situation seems to have been as follows: (a) original *(x)tlq has undergone the shift ['trees, wood' > 'firewood']; (b) the old singular form ošče 'tree' consequently shifted to denoting the plural 'trees, wood'; (c) a new singulative was formed by the prefixation of kus= 'one' to ošče 'trees'.

All attempts by S. Starostin and H. Werner to trace *(x)ksi and *(x)tlq back to the same lexical root through various scenarios of internal reconstruction are problematic and ultimately unnecessary: the two forms share a general phonetic similarity, but do not really have even a single segment in common, and suppletive formations for 'tree (sg.)' and 'forest / trees (coll.)' are well attested throughout the world. It should be noted that, in [YED # 139, 759], S. Starostin himself finally abandoned the idea (based on external Sino-Caucasian evidence, although some of that evidence is questionable in itself).

91. TWO

Ket in {bun} (1), Yugh in (1), Kott ɨnə (1), Arin k'ina (1), Pumpokol h'ine-anə (1), Proto-Yeniseian *xín-a (1).

References and notes:

Ket: Werner 2002: II, 423; Werner 1993: 130. Predicative forms: 'in-an' '(there are) two' (with inanimate objects), 'in-anə' '(there are) two' (with animate objects). Quoted as īn, - īn in [Werner 1977: 194]; as īn (attributive form), īn-ən (predicative form) in [Castrén 1858: 40, 163].

Yugh: Werner 2011: 356. Predicative forms: 'in-e' '(there are) two' (with inanimate objects), 'in-ən' '(there are) two' (with animate objects). Quoted as īn in [Werner 1977: 194].


Pumpokol: Dulzon 1961: 164 (Dict., Kl.). Incorrectly copied as nine-an in (Pal.).

Proto-Yeniseian: S. Starostin 1995: 296. Alternately reconstructed as *(k)ain in [Werner 2002: II, 423]. Distribution: Preserved in all daughter languages. Reconstruction shape: Correspondences are regular. Initial *x- is reconstructed based on the presence of back consonants in Arin and Pumpokol. Semantics and structure: The suffix *-a is a common element in the formation of Yeniseian numerals; the original root is simply *xín-.

92. WALK (GO)

Ket e-inə ~ 'ey-inə {euyə} (1) / =tn' =tn= (2), Yugh e-inə ~ ey-inə (1) / =de (2), Kott ei-xe:ey-anə (1) / in-anə (2), Pumpokol bul'uin (4), Proto-Yeniseian *hey- (1) / *zə~ *zɛn # (2).

References and notes:

Ket: Werner 2002: I, 261; Werner 1993: 43. Infinitive form, frequently used as the "modifier" in composite verbs, e. g. 'ey-ba-yə-a-gan 'I am preparing to go', etc. Quoted as ey-eynə ~ ey-ən in [Werner 1977: 148]. Werner 2002: I, 261; Werner 1993: 28. This stem is used in finite forms of the paradigm, cf.: bə=u=ISHEDI ~ bə=ʔalgo= in (o akti) 'I go', past tense bə=ʔweak= in (c. 'bə=ʔweak= in'), etc. The most archaic phonetic variant of the root is seen in the North Ket past tense form bə=ʔweak=den (without reduction of the root vowel).
Yugh: Werner 2011: 151. Infinitive form, frequently used as the "modifier" in composite verbs, e. g. eyın-bu-g-a-yan 'I am preparing to go', etc. Quoted as ey-inj in [Werner 1977: 148]. Werner 2011: 151. This stem is used in finite forms of the paradigm, cf.: bə=är-de 'I go', past tense bə=är=de ~ bə=är=de.

Kott: Castrén 1858: 199. 1st p. sg. Cf. the past tense: eä=l-a=xey-aj, imperative: eä-l-xex ~ eä-l-xex. The verb consists of two stems: basic stem =xey- and "modifying" stem eä. Castrén 1858: 126. The paradigm is: 1st p. sg. present tense eä=x, 1st p. pl. oý-in-touq (with double marking of plural); 1st p. sg. past tense a=l-i=e-xan-aj, 1st p. pl. a=l-oý-in-touq; imperative a=l-ta (with suppletion?). The lexical difference between eä=...xe and =in- is not explained in Castrén's description; we have to accept both words as technical synonyms. Cf. also a different form in the older sources: anuga 'to go' (M., Dict., Kl.) [Verner 1990: 316], where -n is quite likely the past tense affix (verbs are generally noted in past tense in these sources), but the root remains unclear.

Arin: Not attested properly. In [Dulzon 1961: 168], there is a form that is glossed as the infinitive 'to go': 'unquat (M., Dict.); however, it coincides completely with the adverb 'unquat' in front of (M., Dict., Kl.) [Dulzon 1961: 161], and in the light of this circumstance per se as well as external comparison, we prefer to exclude this form due to a high risk of inaccurate attestation.

Pumpokol: Dulzon 1961: 168 (Dict.).

Proto-Yeniseian: S. Starostin 1995: 231 ('heylVŋ). Distribution: Probably preserved in both Ket-Yugh and Kott, but not attested in Arin; the Pumpokol situation is dubious. Reconstruction shape: The verbs of movement form a rather complex system both in Ket-Yugh (where we at least have sufficient data) and in Kott (where Castrén's description seems very sketchy and approximate in terms of semantics). Here, we only concentrate on morphemes that seem to have reflexes both in Ket-Yugh and in Kott. As it is, Proto-Yeniseian *heyl- 'to go' is reconstructible based on: (a) the Ket-Yugh infinitive (verbal noun) form *ʔey-inj 'to go', where -Vŋ is an auxiliary formant frequently seen in infinitives; (b) the exactly corresponding Kott infinitive hey=aj; (c) possibly also Kott eä- in eä-xey-aj < *heyl-a-key-aj (?), although the deletion of b- in this case would be rather strange. Distribution: Attested in Ket-Yugh and perhaps in Kott. Reconstruction shape: This is a highly tentative reconstruction that can, nevertheless, reasonably reconcile two of the most basic Ket-Yugh and Kott equivalents for the meaning 'to go'. Namely, the Kott root *e-in- (most explicitly seen in the 3rd p. form: də=an-e 'he goes') and Ket-Yugh *de(n) may be etymologized together if the root-initial consonant is reconstructed as *y. In this case, the development *yein > *den in Ket-Yugh is completely regular, and in Kott, according to S. Starostin's correspondences, *eën should have yielded *yen, with subsequent contractions (*eën-aj 'I go > eänj, etc.). There are no significant problems with this scenario, other than the fact that *y is a relatively rare phoneme in Proto-Yeniseian (but see T).

93. WARM (HOT)

Ket ur'sə (yea) (1), Yugh us (1), Kott fal ~ pʰal (2), Arin k'usi (1), Pumpokol utti-či (1), Proto-Yeniseian *xus- (1).

References and notes:


Kott: Castrén 1858: 224. Meaning glossed as 'hot, warm'; it remains unclear whether the two meanings were or were not distinguished lexically in Kott. Cf. in older sources: pal-tu (it is warm) (Kh.) [Verner 1990: 378] (-tu is the 3rd p. predicative suffix).


Pumpokol: Dulzon 1961: 167 (Pal.). Also attested in (Dict.) in the extended variant 'uttüči-dín. Meaning glossed as Latin 'calidus'. The quasi-synonymous form afam (Pal.) is really Yugh 'hot'.

Proto-Yeniseian: S. Starostin 1995: 299. Alternately reconstructed as *usə ~ *utə ~ *kusa ~ *katə in [Werner 2002: II, 380-381]. Distribution: Preserved in all daughter languages, with the probable exception of Kott. Replacements: In Kott, there may have been a merger of the lexically distinct Proto-Yeniseian meanings 'warm' and 'hot': Kott fal ~ pʰal is compared both by S. Starostin and H. Werner to such forms as Yugh ap, Ket a 'heat', Yugh af-inj, Ket a-n 'hot', etc. < Proto-Yeniseian *kap- 'hot' [S. Starostin 1995: 182; Werner 2002: I, 91-92], with the somewhat weakly founded assumption of development from *kap-al (neither the suffix nor the...
Correspondences are regular. Initial *x- is reconstructed on the basis of k- in Arin. Final -či in Pumpokol is equivalent to the predicative suffix -s' in Ket-Yugh. Semantics and structure: The semantic opposition *xus- 'warm': *ʔap- 'hot', best attested in Ket-Yugh, is quite probably of Proto-Yeniseian origin.

94. WATER

Ket *urə (1), Yugh ur (1), Kott *ul (1), Arin kul (1), Pumpokol ul (1), Proto-Yeniseian *xur (1).

References and notes:

Pumpokol: Dulzon 1961: 160 (Dict., Pal., Kl.). There is also a strange quasi-synonymous form dok 'water' (Pal., Kl.) with no supporting parallels whatsoever [ibid.].
Proto-Yeniseian: S. Starostin 1995: 298. Alternately reconstructed as *(k)ulə - *(k)ulə in [Werner 2002: II, 378]. Distribution: Preserved in all daughter languages. Reconstruction shape: Correspondences are regular. Initial *x- is reconstructed based on the velar reflexion k- in Arin. For the difference between 'water' and 'rain', see notes on 'rain'.

95. WE

Ket at ~ at-n {am ~ amn} (1), Yugh at-n (1), Kott ay-oŋ (1), Arin ai-ŋ (1), Pumpokol 'ad-in (1), Proto-Yeniseian *ʔaŋ-ŋ (1).

References and notes:

Ket: Werner 2002: II, 419; Werner 1993: 129. This form is clearly connected with at 'I', but cannot be derived from it synchronically. Cf. also the possessive pronoun 'etn-ə' our' [ibid.]. Quoted as atə, / atə ~ etn; (S.-Imb.) in [Werner 1977: 173]; as atn in [Castrén 1858: 48].
Yugh: Werner 2011: 342. This form is clearly connected with at 'I', but cannot be derived from it synchronically. Cf. also the possessive pronoun ann-na (< 'at-n-da') 'our' [Werner 2011: 313]. Quoted as atn in [Werner 1977: 173].
Kott: Castrén 1858: 52. Formally, can be regarded as a suffixal plural of ai 'I q.v. Cf. the possessive stem: ayon-še 'our', pl. ayon-šin.
Pumpokol: Dulzon 1961: 173 (Dict.). The quasi-synonymous form etn-in 'we' (Pal., Kl.) is really Yugh, not proper Pumpokol.
Proto-Yeniseian: S. Starostin 1995: 185 (forms quoted in association with *ʔulə T q.v.). Alternately reconstructed as *ad-ŋ in [Werner 2002: II, 419]. Distribution: Preserved in all daughter languages. Reconstruction shape: The Proto-Yeniseian equivalent for 'we' was clearly the regular plural form of T; hence, see notes on T for reconstruction peculiarities. The plural marker was probably *-ŋ (ʔulə-ŋ), with contraction and assimilation in Ket-Yugh (> *ʔulə-ŋ > *ʔulən > *ʔutn).

96. WHAT

Ket *akus~ aksə {акусь ~ аксь} (1), Yugh 'assa (1), Kott ši-na ~ še-na (1), Proto-Yeniseian *si ~ *ʔa=si (1).
References and notes:

**Ket:** Werner 2002: I, 66; Werner 1993: 13. This default inanimate object pronoun may be used both independently (e.g., *aks* *kw̱tʰ-b=ket* "what are you doing?") and as a "modifier" in the incorporating verb 'to do what?'. The earlier source [(Castrén 1858: 51)] lists the following forms: *assa = a-t* 'what?' (at least the former is probably Yugh), *aksi=t* *āku* 'what then?'

**Yugh:** Werner 2011: 332. Cf.: *u-assa kw̱tʰ-b=ket* "what are you doing?" Quoted as *assa* in [Castrén 1858: 51].

**Kott:** Castrén 1858: 55. The sequence -*na* is tentatively segmented out as a suffix due to (most likely) the same root morpheme *ši* in *aši-x* 'who?' q.v.

**Arin:** Not attested.

**Pumpokol:** Not attested.

**Proto-Yeniseian:** S. Starostin 1995: 183 (*ʔas-* / *šV*). **Distribution:** Preserved in all daughter languages where attested, but not found in Arin or Pumpokol. **Reconstruction shape:** The Proto-Yeniseian morpheme clearly had the fricative *-s* as its main distinctive component, but the vocalic "framing" differs in between Ket-Yugh and Kott and is hard to reconstruct convincingly. The hypothetical variant *ʔasi* surmises reduction of the second syllable in Ket-Yugh (> *ʔas*) and of the first syllable in Kott (*ʔasi-na > *ši-na > *ši-na*). However, it is more probable that *ʔas* was a separate prefixal morpheme, considering that it does not elide in Kott *aši* 'who?' (if this were a strictly phonetic process, one would expect reduction in both of the interrogative pronouns).

97. **WHITE**

**Ket** *tʰay-im* (*mazum*) (1), Yugh *tʰig-beʰš* (1), Kott *tʰeg-am ~ tʰek-am* (1), Arin *tama* (1), Pumpokol *t'amxo* (1), Proto-Yeniseian *tʰak-am* (1).

References and notes:

**Ket:** Werner 2002: II, 249; Werner 1993: 94. The suffix -*im ~ -am* is an adjectival formant, but the word is not properly segmentable on the synchronic level (there is no separate noun from which it could be derived; see, however, notes on Common Ket-Yugh for additional discussion). Quoted as *tayam* in [Werner 1977: 179]; as *taum* in [Castrén 1858: 175].

**Yugh:** Werner 2011: 335. Temporarily derived from *tʰik* 'snow' with the productive suffix -beʰš (cf. the same model in the formation of 'red' q.v.). Cf. also the verb: *tʰig-* 'to become white' [ibid.]. Quoted as *tʰig-beʰš* in [Werner 1977: 179]; as *tʰig-bes* in [Castrén 1858: 177].

**Kott:** Castrén 1858: 218. Formally, could be analyzed as an adjectival derivate from *tʰik* 'snow' [Castrén 1858: 219]. Cf. in older sources: *tegama* 'white' (M., Dict., Pal., Kl.), *inka-tekam-a* 'it is white' (Kh.) [Werner 1990: 286].

**Arin:** Dulzon 1961: 158 (M., Kl.). Quoted as *tʰama* in (Dict., Pal.); as *tama ~ tama* 'is white', *beri=k=tam-tu* 'is (very) white' (Kh.) in [Werner 2002: II, 249].

**Pumpokol:** Dulzon 1961: 158 (Dict., Pal., Kl.).

**Proto-Yeniseian:** S. Starostin 1995: 282 (*tʰak*). Alternately reconstructed as *tʰeg'am* in [Werner 2002: II, 249]. **Distribution:** Preserved in all daughter languages, but morphologically restructured in Yugh. **Reconstruction shape:** The situation here is complicated. Most of the attested forms can rather easily be analyzed as derived from Proto-Yeniseian *tʰik* (= S. Starostin’s *ʔiq*) 'snow' > Ket *tʰik*, Yugh *tɪk*, Kott *tʰɛk*, Arin *tʰ*, Pumpokol *tʰig* [S. Starostin 1995: 285] with the aid of the productive derivational suffix *-Vm*. This scenario is further corroborated by the absolutely identical situation with the adjective 'red' q.v., derived in the exact same way from Proto-Yeniseian 'blood'. The only fact that goes directly against such a scenario is the root vocalism in Ket: *tʰiq*-im instead of the expected *tʰiq*-am. This is such a serious argument that it caused S. Starostin to separate Proto-Yeniseian *tʰiq* 'snow' from *tʰak* 'white', and then look for separate external comparanda for each of these roots. However, there is an alternate explanation: namely, that Ket *tʰiq*-im actually reflects a different 'Ablaut' grade of *tʰik* 'snow' (parallel to such Proto-Yeniseian variants as *clɛp~ 'całp' dog’, *æs~ *ʔas* 'sky', etc.). In fact, the same grade of vocalism may be implicitly present in the contracted Arin and Pumpokol forms as well (i.e. it is possible to regard Arin *tama*, Pumpokol *tamxo* as contracted from *tʰak-am* rather than *tʰik-am*), while Kott may have restructured the vocalism by analogy with the noun 'snow' - and Yugh has carried the restructuring even further, by replacing the old suffix with...
a new one. Whatever be the case, it seems that Ket vocalism simply does not constitute sufficient evidence for postulating an extra Proto-Yeniseian root; the more economic solution is to propose the derivation ['snow' > 'white'] already at an early stage of Proto-Yeniseian.

98. WHO

Ket b'iits'ē / besa [bimtce / bęce] (1) / 'ana ~ 'anāt {annya ~ anem} (2), Yugh as- (3) / an'eit (2), Kott a=ši-x (3), Proto-Yeniseian *ʔan- # (2).

References and notes:

**Ket:** Werner 2002: I, 134; Werner 1993: 25, 28. Masculine and feminine variants respectively. According to E. Vajda, these forms, "...being gender-specific, can be used in rhetorical questions or when the speaker knows the gender of the person asked about" [Vajda 2004: 31]. Quoted as b'iits'ē3 / b'iits's3 ~ bêts'ē3 (masc.), besa3 / bes's3 (Kur.) (fem.) in [Werner 1977: 139]. Werner 2002: I, 34; Werner 1993: 16. Free variants. This is the gender-less interrogative pronoun, used in situations where there is no need to indicate masculine or feminine sex of the referent. Accordingly, we treat b'iits'ē and 'ana as synonyms. Quoted as ane3 ~ an3 (S.-Imb.) in [Werner 1977: 134]; as anet ~ an ~ anast in [Castrén 1858: 51].

**Yugh:** Werner 2011: 337, 338. This stem forms the feminine gender interrogative pronoun (as-xa) and the plural form of the interrogative pronoun, indifferent to gender (as-x-in). Quoted as ane3x, 'who (of woman)' in [Werner 1977: 135]. Werner 2011: 338. This stem forms the masculine gender interrogative pronoun. Quoted as ane3x ~ ane3x ~ aane3t in [Werner 1977: 134].

**Kott:** Castrén 1858: 55. Plural form: a=ši-5-an. Possible internal analysis of the form: a= is a common Yeniseian pronominal prefix (same as a= in Ket *ʔan=5- 'what?', *ʔan=x- 'who?', etc.); =ši- is the main interrogative morpheme (same as in ši-na 'what?' q.v.); -x is the final suffix that conveys the meaning of animacy, possibly < 5g 'male' [Castrén 1858: 200] (this would mean that the form originally referred only to the masc. gender).

**Arin:** Not attested.

**Pumpokol:** Not attested.

**Proto-Yeniseian:** S. Starostin 1995: 181. Distribution: Preserved only in Ket-Yugh. Replacements: Apart from Ket-Yugh, the animate interrogative pronoun is attested only for Kott (alit), where it shares the same root with the inanimate pronoun (ši-na) and has a probable internal etymology: < *a-ši-5-g, lit. 'what male?' (not secure, since the final velar consonant may have other origins as well). In Ket-Yugh itself, both Ket and Yugh show two sets of equivalents for 'who?', one of them common and probably inherited from the common ancestor (*ʔan-), the other one different in the two languages and probably innovated (see notes on Ket-Yugh). Tentatively, we choose *ʔan- as the original 'who?', since there are no reasonable scenarios of its secondary origin. The overall confusion may have been caused by a tendency to reform the original system of interrogative pronouns by introducing new "gender-sensitive" stems, formed from alternate interrogative morphemes (*ši, *bi, etc.).

99. WOMAN

Ket qi'm {κigm} (1), Yugh čem ~ čim (1), Kott alit ~ alit (2), Arin kem-el'ã # (1), Proto-Yeniseian *qem (1).

References and notes:

**Ket:** Werner 2002: II, 90; Werner 1993: 65. Feminine gender. Plural form: qi'm-n {κigm}. Quoted as qi'm2, pl. qi'm-n1 in [Werner 1977: 161]; as qim ~ qim, pl. qi'm-en in [Castrén 1858: 170].

**Yugh:** Werner 2011: 141. Feminine gender. Plural form: čem-n ~ čim-n. Quoted as čem1 ~ čim1, pl. čem-n1 ~ čim-n1 in [Werner 1977: 161]; as čim, pl. čim-en in [Castrén 1858: 172].

**Kott:** Castrén 1858: 196. Plural form: alit-n ~ alit-n. It should be noted that al~ could quite possibly be the same fossilized prefix here.
as in 'dog', 'bird', 'star' q.v. However, since the word has no parallels in Ket-Yugh, this time there is no external evidence to justify this segmentation. Cf. in older sources: alit 'woman', alit 'wife' (Kh.); alit 'wife' (M., Dict., Pal.) [Verner 1990: 310].

**Arin:** Werner 2002: I, 25. Most of the sources only record the word 'wife' for Arin, which seems to be a compound form: bi=qam 'alte (M.), bi=qam-alte (Dict.), bi=qam-al (Pal.) [Dulzon 1961: 167], where bi- ~ bi- is the possessive prefix 'my', =qam- corresponds to Ket qi*m*, etc. 'woman', and -al ~ -alte is to be equated with Kott alit 'woman' q.v. Only in (Kh.), next to the form kek melte 'wife' (= ke=kmn-'ete 'your wife?'), we also find kem-elte 'woman'. Since Proto-Yeniseian seems to have had a firm lexical distinction between 'husband' / 'man' and 'wife' / 'woman', the Arin forms, for the most part, seem like collocations of both terms (i. e. 'wife' = 'woman').

**Pumpokol:** Not attested. Cf. ils=em (Dict.), ilz=em (Pal.) 'wife' (where ils= is a semantically obscure component, also attested in ils=et (Dict., Kl.), ilz=et (Pal.) 'husband') [Dulzon 1961: 167, 173].

**Proto-Yeniseian:** S. Starostin 1995: 266 ('q*lym'). Distribution: Preserved in Ket-Yugh and, most likely, in Arin; possibly also in Pumpokol, if the word for 'wife' in that language had the same root as 'woman'. Replacements: In Kott-Arin, there is another stem for the meanings 'woman' and 'wife', functioning on its own in Kott (alit) and as part of a compound with the older word for 'woman' in Arin (*qem-alit, with various assimilations and reductions in the actual attested dialectal forms). There are no parallels for this *halit in Ket-Yugh, and it is not clear why Arin turned the old word into a compound, and Kott retained only the newer part of this compound, but from the point of view of cognate distribution, this is the most economic scenario. Reconstruction shape: Consonantal correspondences between all the languages are fully regular (in Pumpokol, the root-initial uvular is lost inside a compound formation: *ils=qem > ilsem). Reconstruction of the vocalism is less secure: *qem seems like the optimal variant, as it is attested in both Yugh and Pumpokol, but the discrepancy between *qem and *qim in Ket-Yugh lacks an explanation so far.

100. YELLOW

Ket q̇lýq̇-ay-sý (кълъйсы) (1), Kott šuy (2), Arin it'tima (3), Pumpokol t'ul-sí # (4).

References and notes:

**Ket:** Werner 2002: II, 143; Werner 1993: 73. A transparent formation from q̇lýq̇ 'gall'.

**Yugh:** Not attested.

**Kott:** Castrén 1858: 214. Same word as 'moon' q.v.

**Arin:** Dulzon 1961: 167 (M., Kl., Dict.). Same word as 'green' q.v.

**Pumpokol:** Dulzon 1961: 167 (Dict.). Somewhat dubious, since this is the same word as 'red' q.v.

**Proto-Yeniseian:** Not reconstructible: the Ket word is transparently derived from 'gall', the Kott word is the same as 'moon', the Pumpokol word is the same as 'red', and the Arin word has no etymological parallels whatsoever.

101. FAR


References and notes:

**Ket:** Werner 2002: I, 125; Werner 1993: 26. Adverbial form; the predicative variant is bîl*-am. Quoted as bîl* (S.-Imb.) / bîl* á ~ bîl* (N.-Imb.) in [Werner 1977: 139]; as bieI ~ bieI:~ bieI in [Castrén 1858: 189].

**Yugh:** Werner 2011: 132. Quoted as bi:*r, in [Werner 1977: 139]; as hier in [Castrén 1858: 189].

**Kott:** Castrén 1858: 222. Secondary synonym: u:sa 'far (away)' [Castrén 1858: 204]. Cf. in older sources: pil*a 'far (adv.)' (Kh.) [Verner 1990: 303].

**Arin:** Werner 2002: I, 125. Attested only in (Kh.), as an adverbial form; -ta seems to be a segmentable suffix.

**Pumpokol:** Not attested.
**Proto-Yeniseian**: S. Starostin 1995: 211. Alternately reconstructed as *ʔbiʔrə* in [Werner 2002: I, 125]. Distribution: Preserved in Ket-Yugh and Kott; preservation in Arin is under serious doubt. Replacements: Arin pu-ta 'far' is regarded by both S. Starostin and H. Werner as cognate with Ket-Yugh *biɣr* and Kott *pið*, but this is a problematic judgement. Even if the segmentation into pu-ta is correct (cf. *u*-ta 'long' which seems to corroborate this assumption), vocalic and consonantal correspondences are not easily confirmed: in particular, elision of the root resonant seems quite suspicious, since Arin usually preserves resonants in clusters. We prefer to count the Arin form as a lexical replacement for the moment, albeit without any reasonable etymology. Reconstruction shape: Correspondences between Ket-Yugh and Kott are quite regular.

102. HEAVY
Ket st³:s³ *(cʌnɪcʌ) (1), Yugh sə (1), Kott šik-ŋ (1), Arin şoga (1), Proto-Yeniseian *səɡ- (1).

**References and notes:**

Ket: Werner 2002: II, 221; Werner 1993: 92. The non-predicative form is s³:ɛ. Quoted as s³:ɛ/s³ (predicative), s³:s³ (attributive) in [Werner 1977: 177]; as s³: ~ s³:ɛ in [Castrén 1858: 186].
Kott: Castrén 1858: 213.
Arin: Werner 2002: II, 221. Attested only in (Kh.) as an adverbial (or predicative) form ('it is heavy').

**Pumpokol**: Not attested.

**Proto-Yeniseian**: S. Starostin 1995: 273. Alternately reconstructed as *səka ~ səgo* in [Werner 2002: II, 221]. Distribution: Preserved in all daughter languages, but not attested in Pumpokol. Reconstruction shape: Consonantal correspondences are completely regular; vocalic reconstruction is approximate, but generally indicative of Proto-Yeniseian *s*.

103. NEAR
Ket uːtis³ *(yɪmʊcʌ) (1), Yugh uːtis ~ uːtis (1), Kott ima-ŋ (2), Proto-Yeniseian *ʔutɨ [xutɪ] (1).

**References and notes:**

Arin: Not attested.

**Pumpokol**: Not attested.

**Proto-Yeniseian**: S. Starostin 1995: 201 (*ʔutɨ*). Distribution: Preserved only in Ket-Yugh. Replacements: In Kott, PY *ʔutɨ ‘near’ is preserved in the adverbial form uːtis-ga ‘here’ (directional) [Castrén 1858: 204], i. e. ['near' > 'here']. Kott ima-ŋ ‘near’ is compared by S. Starostin with Ket im-da ‘small; (to grow) thickly, densely’ [YED # 100], implying the semantic shift ‘small (gen.)’ > ‘small (of distance)’ > ‘close, near’. The plausibility of such a shift may be put under doubt, but this is currently the best etymology for the Kott word anyway. Reconstruction shape: Lack of parallels in Arin means that the Proto-Yeniseian equivalent of the Ket-Yugh forms could have been *ʔutɨ* or *xutɨ*. Semantics and structure: Although final -s³ is not segmentable on the Ket-Yugh level, it is not likely that it could have constituted part of the root on the Proto-Yeniseian level, for general structural reasons.

104. SALT
Ket \( tɔ? \) \((mən')\) (1), Yugh \( ɛʃ? \) (1), Kott \( ʃi-n-čɛt \) (1), Arin \( tus \) (-1), Pumpokol \( tus \) (-1), Proto-Yeniseian \*čəʔ (1).

References and notes:

Ket: Werner 2002: II, 301; Werner 1993: 104. Neuter gender. Quoted as \( tɔʔ \) in [Werner 1977: 183]; as \( t^{'}ʃi-ɛ \sim t^{'}a-\$a \sim t$_{2}$a, pl. \( t^{'}ʃi-ɛ-n \) in [Castrén 1858: 178].


Kott: Castrén 1858: 214. Plural form: \( šinɛcit-ay \). Phonotactic considerations and external comparison suggest the analysis of this form as a compound. Cf. in older sources: \( šinɛcit \) (M., Pal., Dict., Kl.), \( šinɛct \) (Kh.) [Verner 1990: 370].

Arin: Dulzon 1961: 183 (M., Dict., Pal., Kl.). A transparent Turkic borrowing (< Common Turkic \*\( tuz \) 'salt').

Pumpokol: Dulzon 1961: 183 (Dict.). A transparent Turkic borrowing (< Common Turkic \*\( tuz \) 'salt'). The other quasi-synonymous form, \( ĉɛ \) (Pal., Kl.), is most likely Yugh rather than proper Pumpokol.

Proto-Yeniseian: S. Starostin 1995: 216. Alternately reconstructed as \*\( t^{'}ət\) or \*\( t^{'}aga \) in [Werner 2002: II, 301]. Distribution: Preserved in Ket-Yugh and in Kott (as part of a compound). Replacements: Arin and Pumpokol \( tus \) 'salt' are borrowed from Turkic; H. Werner's attempts to relate them to Ket-Yugh and Kott forms are unnecessary. Reconstruction shape: Correspondences between Ket-Yugh \*čə and Kott \( ʃi\) - are quite regular. Semantics and structure: Kott \( šinɛct \) is not a particularly transparent form. Its first part may be the original plural form of 'salt' (i. e. \( ʃi-n = Ket \ t^{'}ʃi-ɛ-n \) in Castrén's notation), but the component -ɛct has no reasonable etymology. There is also an alternate possible analysis, completely different: \( šinɛct = *si-ɛt-šɛ-ɛt 'stones, rocks' q. v. + *čə or maybe *tʊćə 'salt'; the main obstacle here is the final consonant, which then finds no equivalent in Ket-Yugh and whose disappearance there has to be ascribed to an irregular / sporadic process (e. g. an original \*čət with dissimilation?). In any case, there are multiple possible scenarios that allow to etymologize the Kott word on the same basis as the Ket-Yugh item, but no clear preference for an optimal one.

105. SHORT

Ket \( h$ɔl$-\( ʃ\) \) \((\chiəl$ɔɾ\) (1), Yugh \( foʔl \) (1), Kott \( t^{'}u:kì \) (2), Arin \( kamara \) (3).

References and notes:

Ket: Werner 2002: I, 324; Werner 1993: 120. The non-predicative form is \( h$ɔl$\). Plural form: \( h$ɔl$-\( ʃ\)-\( a\)j \) \((\χəl$ɔɾ\)\). Quoted as \( h$ɔl$\), pl. \( h$ɔl$-\( a\)j\) in [Werner 1977: 191]; as \( h$ɔli \) in [Castrén 1858: 174].

Yugh: Werner 2011: 202. Plural form: \( f$ɔl$-\( ʃ\) \). Quoted as \( f$ɔl$\), in [Werner 1977: 191]; as \( f$ɔl$ \) in [Castrén 1858: 192].

Kott: Castrén 1858: 219. Cf. in older sources: \( tukik\) 'it is short' (Kh.) [Verner 1990: 323].

Arin: Werner 2002: I, 407. Attested only in (Kh.).

Pumpokol: Not attested.

Proto-Yeniseian: Not reconstructible: Ket-Yugh \*\( p$əl$ \) 'short' and Kott \( t^{'}u:kì \) (< \*\( tuk\) ) have more or less equal chances at representing the Proto-Yeniseian item. Arin \( kamara \) is slightly more suspicious: in [YED # 100], it is tentatively compared by S. Starostin with Ket \( im-du \) 'small', Kott \( imirəŋəkə ~ iməɾ\) id. Vocalic correspondences are suspicious, but if \( kamara \) is indeed a 'corrupt' variant of \*\( kimara \), it is then easily comparable with \( iməɾ\) < Kott-Arin \*\( xim-\( gəɾa \), and in this case, the semantics of 'short' for Arin is most likely secondary.

106. SNAKE

Ket \( tiɣ \) \((məz \sim məx)\) (1), Yugh \( či:\( k \) (1), Kott \( on-xəy \sim on-koy \) (2), Arin \( an-koy \) (2).
References and notes:


Kott: Castrén 1858: 202, 252. Plural form: opx-o ~ opxot-n. The second part in this compound formation is clearly hos 'worm' q.v.; the first part remains unclear. Cf. in older sources: onxy (Kh.) [Verner 1990: 315].

Arin: Werner 2002: II, 47. Attested only in (Kh.). The structure of this compound is exactly the same as in Kott q.v.

Pumpokol: Not attested.

Proto-Yeniseian: Not reconstructible. The original meaning of Proto-Ket-Yugh *čɪɟ, considering the external, evidence and distribution of cognates, must have been 'fish' q.v. As for Kott-Arin *tay-kay, it is clearly a composite formation where the second component is *kay 'worm' q.v.; the first component is tentatively equated by H. Werner with *tay 'rope' [Werner 2002: II, 47], thus, 'rope-worm'? (this is by no means a finalized etymology). In both cases, it seems as if the original Proto-Yeniseian form for 'snake', whatever it might have been, has undergone different paths of "tabooization" in Ket-Yugh and Kott-Arin.

107. THIN₁

Ket h'aksʰ-e-m ~ h'aksʰi-m (хаксем) (1), Yugh faksi-m (1), Kott fača-m ~ pʰača-m (1), Proto-Yeniseian *pak-se-m (1).

References and notes:


Yugh: Werner 2011: 110. Said of flat objects (such as bread, etc.). Quoted as faks-im in [Werner 1977: 189]. Quoted as faq-em in [Castrén 1858: 191].

Kott: Castrén 1858: 225.

Arin: Not attested.

Pumpokol: Not attested.

Proto-Yeniseian: S. Starostin 1995: 245 (*pak-si-m). Alternately reconstructed as *phak-sam in [Werner 2002: I, 293]. Distribution: Preserved in all daughter languages where attested, but not found in Arin or Pumpokol. Reconstruction shape: Correspondences are regular, although vocalism of the second syllable is hard to determine. Semantics and structure: In Proto-Yeniseian, as in attested languages, the word must have been applied to flat objects. S. Starostin's morphological segmentation of the stem into *pak-si-m is conditioned by external comparison; Yeniseian-internally, *-m is indeed a derivational suffix, but *pakse- (or *paksi-) functioned as a monolithic stem already in Proto-Yeniseian.

107. THIN₂

Ket tʃa ~ tsua (mos ~ mos) (2), Yugh tʃal'a ~ tʃal'ya (2), Kott tʰa:ge (2), Proto-Yeniseian *tʃə- (2).

References and notes:

Ket: Werner 2002: II, 276; Werner 1993: 99. Meaning glossed as 'schmal, eng'; applied to 'snowshoes', 'ropes', i. e. 3D-objects. Quoted as tsua in [Werner 1977: 182]; as to al'a ~ to al'a ~ to a in [Castrén 1858: 177] (the first two forms contain an extra suffix and are probably Yugh).

Kott: Castrén 1858: 217. The difference between *fašan and *t’sge ‘thin’ is not made clear in Castrén’s description, but it is quite likely that it was the same as in the etymologically related Ket-Yugh pair.

Proto-Yeniseian: S. Starostin 1995: 287 (*tšYv*). Distribution: Preserved in all daughter languages where attested, but not found in Arin or Pumpokol. Reconstruction shape: Consonantal correspondences are regular; vocalism of the second syllable is not reconstructed with any degree of certainty. Semantics and structure: In Proto-Yeniseian, as in attested languages, the word must have been applied to 3D-objects.

108. WIND
Ket *bey* {bēu} (1), Yugh *bey* (1), Kott *pe*y (1), Arin *pay* (1), Pumpokol *bay* (1), Proto-Yeniseian *bey* (1).

References and notes:


Pumpokol: Dulzon 1961: 160 (Dict., Pal.). Quoted as *boi* in (Kl).


109. WORM
Ket *u’tiɣ* ~ *u’tix {yμuχ} (1), Yugh ‘ɔlli ~ ɔl (2), Kott *hoy* (3), Proto-Yeniseian *koy* (3).

References and notes:

Ket: Werner 2002: II, 371; Werner 1993: 115. Masculine gender. Plural form: *uṭi-n {wun}*. Quoted as *uṭi-y* in [Werner 1977: 189]. A highly localized word, not encountered beyond the Southern area. Less viable candidates include (a) *kɪn* ‘caterpillar, earthworm’, a rare, not too well confirmed word that is completely homonymous with *kɪn* ‘Russian’ (!) [Werner 2002: I, 477]; (b) *kɪn* pl. *kɪn* ‘worm’ [Werner 2002: II, 436], which is actually ‘maggot’ rather than the required ‘earthworm’.

The word *uṭiɣ* is clearly a composite formation: the second part is easily identifiable as *tɪɣ* ‘snake’ q.v. The first part is more problematic; possibly = *u* ‘meadow’ [Werner 2002: II, 376] (i.e. ‘worm’ as ‘meadow-snake’).


Arin: Not attested.

Pumpokol: Not attested.

Proto-Yeniseian: S. Starostin 1995: 242 (*kɪn*). Distribution: Preserved only in Kott (although the Arin and Pumpokol equivalents are simply not attested). Replacements: (a) In Ket, replaced in the meaning ‘worm’ by *uṭiɣ*, a compound of ‘snake’ with an unclear first component (see notes on the Ket form); (b) in Yugh, replaced by *ɔl* ‘worm / small insect’, cognate with Ket *sλago* ‘spider’ [Werner 2002: II, 48], indicating a more generic term than simply ‘worm’. Reconstruction shape: The reconstruction depends almost exclusively on the Kott form, meaning that reconstruction of the vocalism is quite approximate. Semantics and structure: Ket *hoy*, pl. *hɔ-n* is cognate with Ket *kɪn* ‘maggot, larva’, reflecting the Proto-Yeniseian paradigm *koy*, pl. *kɔy-n*. In Kott, the latter form was generalized as a (collective) singular and contracted.
110. YEAR

Ket $s^\prime i: \{\text{кынты}\}$ (1), Yugh $si: (1)$, Kott $\dot{s}e\dot{g}a \sim \dot{s}e\dot{g}\dddot{a}$ (1), Arin $\dot{s}h\dot{e}y$ (1), Pumpokol $c'iku$ (1), Proto-Yeniseian $^*s\dddot{i}c\dddot{a}$ (1).

References and notes:

Ket: Werner 2002: II, 223; Werner 1993: 92. Neuter gender. Plural form: $s^\prime i:k\cdot\eta$ [сикъ]. Quoted as $s^\prime i:k$ in [Werner 1977: 178]; as $si$, pl. $si:k\cdot\eta$ in [Castrén 1858: 187].


Kott: Castrén 1858: 213. Plural form: $\dot{se}k\cdot\eta$. Cf. in older sources: $\dot{s}ega$ (M., Dict., Pal.), $gu\dot{s}ek$ ‘one year’ (Kh.) [Verner 1990: 299].

Arin: Dulzon 1961: 162 (M., Dict., Pal.). Cf. also $kus=\dot{s}ey$ ‘year’ (Kh.) in [Werner 2002: II, 223] (literally = ‘one year’, see under ‘one’).

Pumpokol: Dulzon 1961: 162 (Dict., Pal.).

Proto-Yeniseian: S. Starostin 1995: 275. Alternately reconstructed as $^*s\dot{g}a$ in [Werner 2002: II, 223]. Distribution: Preserved in all daughter languages. Reconstruction shape: Correspondences are generally regular, although vocalic reconstruction in both syllables is somewhat questionable. Semantics and structure: S. Starostin has proposed that $^*a$ is an old suffixal element, present also in such words denoting time as $^*si:\cdot\text{‘night’ q.v.}$, $^*x\dot{u}:\dddot{i}\cdot\text{‘day’ (see under ‘sun’)}$, but this is questionable.