# On the Ordinal Suffixes in the Altaic Languages

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キーワード アルタイ諸言語 満州・ツングース語 チュルク語 序数詞 時間的表現

- 要 旨 チュルク語の序数詞接尾辞-inci/-üncü/-uncu(トルコ語など)と満州・ツングース語の序数詞接尾辞-ci(満州語など),及びチュルク語の別の序数詞接尾辞-(ω) ωκω/-(ω)ωκω/-(у)ωκу (カラガス語など)とツングース語の別の序数詞接尾辞-(g)ī(エウェンキー語など)とが、歴史時代以前の両言語の接触を通じ、二者とも序数詞の持つ時間的表現の機能を媒介とした借用関係にある可能性を検討する。
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## 0. Introdution

Correspondence of cardinal numbers among the Altaic languages has often been dealt with in relation to 'the Altaic Theory'. On the other hand, the study of other types of numbers seems to remain in the secondary position. In spite of many descriptive studies of Altaic ordinal numbers, the author thinks that only Sinor (1959) has dealt with this theme from a contrastive and comparative standpoint in studying the Altaic languages. Hence, the purpose of this paper is to propose the following hypothesis: to assume a borrowing relationship between

Turkic and Manchu-Tungus by comparing ordinal suffixes of both the languages. We notice that ordinal suffixes share a certain morphological similarity in the two languages, unlike the cardinal numbers.

#### 1. Ordinal Suffixes in Turkic

щербак (1977:144-151) states that there are two types of ordinal numbers in Turkic, except for loanwords from Mongolian. The first type (named type I) consists of a narrow vowel + a nasal + an affricate + the same narrow vowel as the first element (e.g., -inci/-unci/-unci/-unci in Turkish). The second type (named type II) is made up of a narrow vowel + a fricative + a velar stop + the same narrow vowel as the first element (e. g., -(u)wku/-(u)wku/-(y)wky/-(y)wky in Karagas, reported by Рассадин (1978:118)). Рассадин (1978:119) ехраіль that a fricative -w in type II phonetically corresponds to a nasal + an affricate -nč in type I. Therefore, type II appears to have been created by the combination of a narrow vowel + a fricative and a velar stop + a narrow vowel. Серебренников and Гаджиева (1986:129) states that type I can be devided into two parts, and Тенишев (1988:184) describes the latter part of type I (i. e., an affricate + a narrow vowel \*-čy/\*-či) as a dialectal form of ordinal suffixes.

#### 2. Ordinal Suffixes in Manchu-Tungus

There are also two kinds of ordinal suffixes in Manchu-Tungus. Manchu, for example, has an ordinal suffix  $-ci^{\frac{2}{3}}$ , which is made up of an affricate + a front narrow vowel. Solon, Nanai and Oroki share this morpheme (named type I). Bachnebhy (1958:797) reports  $-v\bar{u}$  as an Evenki dialectal form. The other type (named type II) is  $-(g)\bar{\imath}$ , which is usually attached with a possessive suffix. Type II prevails more than type I in Manchu-Tungus as a whole, including Evenki, Even, Negidal, Orochi, Udehe and Ulcha.

#### 3. The Contrast of Ordinal Suffixes.

It is possible to recognize a morphological similarity between Turkic and

Manchu-Tungus both in type I and in type II. Ramstedt (1952:66) has already pointed out the similarity between the two languages in type I, as in the following:

'...Daneben hat das Solonische, wie auch andere Dialekte, einen Typus auf \*-či, der mit dem türkischen -č der Endung -nč vergleichbar ist, mit der Bedeutung »im so-und-so vielten Jahre», z.B. žūtči "im zweiten Jahre", "zweijährig",...'

In contrast, Sinor (1959:423) is critical, as in the following:

'It is tempting to equate the Manchu ordinal suffix -ci with the Turkish forms, and already  $R_{\text{AMSTEDT}}$  succumbed to the temptation. On closer scrutiny difficulties arise; the most important among them, which in my view rules out this comparison, is that the Turkish suffix is not  $-\check{c}i$ , but  $-n\check{c}i$ , and we have no right to whisk away the -n-....It seems, therefore, extremely unlikely that there should be any direct connection between Turkish  $-n\check{c}i$  and Mandchu<sup>[sic]</sup> -ci, and we must look elsewhere for an explanation....'

Sinor (1959:423) assumes that type II in Tungus is comparative to the Kamass ordinal suffix *-git*, and he (1959:424) compares ordinal suffixes in the Uralic and Altaic languages in the table below.

| •  | Turkish      | Uralian | Tunguz   | Mongol                |
|----|--------------|---------|----------|-----------------------|
| 1. | -nti, -nči   | -nt     |          |                       |
| 2. | -mči(<*-mti) | -mt     | -pti     |                       |
| 3. | -ti          |         | -ti, -či | -ci(?)                |
|    |              |         |          | -tu, -ta(-ntu, -nta?) |
| 4. |              | -gi(t)  | -gi      | ,                     |

The author supposes that it is possible to assume some relationship between both types in the two languages. As for type I, Sinor stands in opposition to "any direct connection" because of the existence of nasals in Turkic ordinal suffixes. We notice here that Turkic type I consists of two parts. Sinor himself seems not necessarily to deny this possibility by saying, just under his table, "...Whether the suffixes of line 1, 2 are composite suffixes cannot be decided at present....". In other words, Turkish -nti, -nči of line 1 and -ti of line 3 may share the same origin. With regard to ordinal suffixes of line 3, Sinor also writes "... Line 3 has an archaic character. The agreement between Bulgar-Turkish and Tunguz is interesting,...". To sum up, as Ramstedt (1952:66) points out, it seems that, in type I, Turkic is related to Manchu-Tungus, though it does not matter at present what kind of relationship, comparative or contrastive, exists.

In addition, the author would like to propose a possibility that both languages share a relationship also in type II. As we have seen, Sinor compares Tungusic  $-(g)\bar{\imath}$  with Kamass -git, but in the author's view, Turkic type II is more likely as the origin of Tungusic type II.

There are two problems in this view. First, while Turkic type II has variants of a back vowel in accordance with vowel harmony, Tungusic type II does not have such an equivalent variant. To solve this, we can think of such morphemes as  $-(\omega)\omega\kappa uu/-(u)\omega\kappa uu$ , which are variants of  $-(\omega)\omega\kappa u/-(u)\omega\kappa u/-(y)$  as the origin of Tungusic  $-(g)\bar{\imath}$ . Paccaduh (1978:120) explains that  $-(\omega)\omega\kappa uu/-(u)\omega\kappa uu$  do not follow vowel harmony, and they have a long vowel, which corresponds to Tungusic type II. Second, consonants in Tungusic type II are only voiced. However, this might be the result of vocalization which possibly took place between vowels either in Turkic or in Tungus.

If we suppose that Tungusic type II are loanwords from Turkic, there is a possibility that Tungus may have borrowed both ordinal suffixes through a direct contact with the Turki in an ancient period, before the Turki moved westward from their birthplace. For example, Mepbak (1977:151) regards Buriat ordinal suffix  $-\partial o xi/-\partial a xi$  as loanwords, which consist of Turkic locative

suffix + the latter part of Turkic type II: da + ki. In a similar way, the latter part of Turkic type II (a velar stop + a long front narrow vowel) may have been borrowed as ordinal suffixes to Tungus. Benzing (1982:68) gives *pirvajhi* 'first' (<russ. pervyj + ki) as an example of Chuvash ordinal suffixes. In addition, Sinor (1959:422) says the following, referring to a Kalmuck ordinal suffix:

'I do not wish to enter into the discussion concerning the origins of the Kalmuck  $-d \partial k\tilde{c}\partial$  ordinal. The second element in it, if it is a second element, could be a borrowing from Turkish. Such morphological borrowings are more frequent than it is generally assumed, e.g. Tuvin has borrowed the Mongol ordinal suffix: bir duyaar "first"....'

#### 4. The Function of Ordinal Suffixes

In this section, we will discuss a linguistic situation incident to borrowing, based on the supposition that both types of ordinal suffixes in Manchu-Tungus were borrowed from Turkic.

Cardinal numbers play a significant role in deciding linguistic origins because they comprise basic vocabulary. In contrast, it is not very rare that ordinal numbers are borrowed from other languages of different linguistic genealogies. This is the case with Japanese. In the author's view, this type of borrowing in ordinal numbers may have occurred for the purpose of such temporal expressions as years or ages. Gabain (1974:107) explains that though cardinal number is also available, ordinal numbers are more commonly used for the expression of years in Old Turkic. Zhao and Zhu (1985:59) and Komatsu (1978: 34) state that the number of years is expressed in ordinal numbers in such modern dialects as Uighur and Uzbek. Gabain (1974:107) also says that ordinal numbers are used to express the number of months. Mep6ak (1977:144) reports that Salar ordinal numbers remain only for the name of months, and Lin (1985:47-48) explains in detail about this usage, as in the following:

## '2. Ordinal numbers

Though Salar borrows Chinese ordinal numbers, Turkic ordinal numbers still also remain only in counting months and the number of irrigation. For instance, -nd3i and -ənd3i/-ind3i are attached after cardinal numbers which end in a vowel and in a consonant, respectively. In most cases, aj "month" is not added to ordinal numbers to express the names of months, as in the following:

 $b \ni r$  "one"  $+ - n d \ni i \rightarrow b \ni r \ni n d \ni i$  "the first month or January" i g i "two"  $+ - n d \ni i \rightarrow i x i n d \ni i$  "the second month or February"  $u d \ni i$  "three"  $+ - i n d \ni i \rightarrow u d \ni i n d \ni i$  "the third month or March"

The reason why these ordinal numbers remained or fossilized in Salar is probably that these numbers were exclusively used in such limited situations as the expression of months. On the other hand, as Ramstedt (1952:66) states for Manchu-Tungus, type I ordinal suffixes are used to express the number of years or ages in Manchu and Evenki dialect as well as Solon. In expressing ages in Manchu, a classifier se, which is a loanword from a Chinese word 歳 'years old', is attached after cardinal numbers, as in Korean. As for the expression of the number of years, aniya 'a year or years' is added to ordinal numbers. As for the number of months, cardinal numbers are used in Manchu. Bacuneвич (1958:797) reports that the Evenki ordinal suffix  $-4\bar{u}$  also expresses ages. Цинциус ed. (1975, 1977) gives concrete examples about each numeral. In цинимус ed. (1975:305), for instance, there are such meaning as 'third', 'three years old' and 'the third month' in the entry of  $u_{na}u\bar{u}$ . It is not certain whether the last type of meaning can be found in all ordinal numbers, because it is not described in the entries of all numerals. However, the author thinks that this usage is also one of temporal expressions. In addition,  $u \wedge \bar{u}$ , type II in that language, is described to mean not only 'third' but also 'a sable of three years old' (the age of a sable is known by a small scar on teeth). The latter can be an uncommon usage, because there is no description of this usage in the entries of other numerals. The typical usage of ordinal numbers may have caused the limitation of object, namely specific animals that the Evenki mainly live on. This is the case with Salar mentioned above.

It will be quite natural that ordinal numbers should be used to express the number of years or ages, in that particular time is expressed as an orderd point on the temporal scale which begins from a fixed point and flows continuously. Notice that Mongolian ordinal numbers, which are morphologically different, also express the number of years. Hence, the author's view does not neccessarily require the assumed borrowing between Turkic and Manchu-Tungus, and it never attests the hypothesis of the borrowing.

We notice that regarding the borrowing between Turkic and Manchu-Tungus, most words were loaned via Mongolian, as Poppe (1965:160-161) points out in the following:

'The Turkic loan-words in Manchu were probably borrowed through Mongolian because most of the words concerned occur also in the latter. Consequently, the words in question are actually Mongolian loan-words in Manchu, although they had been borrowed by the Mongols from the Turks. This is not surprising because Manchu had no immediate contacts with Turkic in historical times.'

However, the Manchu-Tungus may have had a direct contact with the Turki in the *pre*historical times.

In Sinor's table of Uralic and Altaic ordinal suffixes, there are Turkic - $m\check{c}i$  (<\*-mti) and Tungusic -pti arranged in line 2. He considers -pti the third (ordinal) suffix. It is true that both  $nad\bar{\imath}$  and  $nad\bar{\imath}pti$ , which are ordinal numbers derived from nadan 'seven', means 'seventh', but it is doubtful whether -pti is one of ordinal suffixes. The author thinks that this is another kind of suffix that follows the type II ordinal suffix - $(g)\bar{\imath}$ . Bachrebhy (1958:694) explains the difference in type II between with and without -pti, as in the following:

<sup>&#</sup>x27;Порядковые числительные, выделяя один из нескольких пред-

метов, употребляются в краткой форме и имеют лично-притяжательный суффикс 3-го л. мн. ч. -тын, указывающий на отношение к остальным предметам. Вне указанного отношения, самостоятельно употребляется форма со сложным суффиксом - $\bar{\mu}$ пты, - $\bar{\mu}$ пты; (-вугда Втм, Нрч, 3, Алд, Учр, -тку В-Л).

Her explanation shows a functional difference between  $-(g)\bar{\imath}$  and  $-(g)\bar{\imath}pti$ . The author thinks that it is the inclusion of  $-(g)\bar{\imath}$  that the latter also works as an ordinal suffix, because other elements precede -pti. Ramstedt (1952:241) explains as in the following:

'In den meisten tungusischen Dialekten werden Adjektiva auf *-pti* gebraucht um Zeitbestimmungen auszudrücken (WAS<sup>2</sup>. S.204f.), z.B. negd. *čawu* 'vorgestern', *čawupti* 'vorgestrig'; ...'

Benzing (1956:91) considers -pti "a suffix that makes a temporal adjective from an adverb". By the way, why does this suffix follow the type II ordinal suffix -(g) $\bar{\imath}$ ? The author thinks that ordinal numbers were also regarded as one of temporal expressions. As we have already seen, the Evenki type I  $u n a u \bar{u}$  is used in the sense of 'the third month' as well as for ages. In addition, the usage of type II  $u n \bar{u}$  for the age of a sable is probably considered a temporal expression. Bacunebuu (1958:694) points out that type II is used to express time. These facts may support the hypothesis that the main usage of ordinal numbers in Tungus was a temporal expression. Hence, Tungusic -pti is not an ordinal suffix by itself. Sinor (1959:424) leaves room for discussion, by stating below his table that "...On line 2, the connection with Tunguz -pti is hypothetic....".

Sinor (1959:424) writes the following, after he has cited Benzing's view on -pti:

"...This is not an impossible suggestion, and we may well have a parallel case in the Buryat ordinal suffix -daxi, which normally forms adjectives with a temporal or locative meaning...."

It is interesting that Buriat ordinal numbers also include adjectival suffixes with a temporal and locative meaning: e.g., **MYH66** 'now' > **MYH66XH** 'present' and  $\ni H \partial \ni$  'here' >  $\ni H \partial \ni XU$  ' of this place'. Written Mongolian has the same suffix: e.g., odu-a 'now' > oduki 'present' and ende 'here' > endeki ' of this place'. This suffix is functionally similar to -pti. However, Tungusic  $-(g)\bar{t}$  forms ordinal numbers by itself, while Buriat -da- cannot form ordinal numbers without -xi. In other words, the Buriat ordinal suffix -daxi does not consist of two parts. Thus, there is a structural difference in suffixes between the two languages.

Щербак (1977:151) states that -xi, the latter part of the Buriat ordinal suffix -daxi, has its origin in a velar + a front narrow vowel in Turkic type II:-(u)шки/-(u) шки/-(y)шку/-(y)шку. It is worth pointing out here that Turkish -ki/-kü form temporal adjectives, which is widely the case with the Turkic languages.

Рассадин (1978:100-101) explains that Karagas ordinal suffixes -ки/-ки/-ку /-ку also form temporal and locative adjectives. Therefore, they share the same origin in the Proto-Turkic.

The comparison of Karagas ordinal suffixes and Tungusic compound ordinal suffixes is as follows:

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Karagas \downarrow the original ordinal suffix (phonologically -(u/u)u + \kappa uu corresponding to -n\check{c}) \uparrow an adjectival suffix that follows a temporal and locative word Evenki \downarrow the original ordinal suffix -(g)\bar{\imath} + pti \uparrow an adjectival suffix that follows a temporal word Cf. Buriat \downarrow the borrowed Turkic locative suffix -da + xi \uparrow an adjectival suffix that follows a temporal and locative word
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There is a structural similarity between them. This may be because Karagas ordinal numbers also served to express time. It is an interesting correspondence that just as the Tungusic compound  $-(g)\bar{\imath}pti$  as well as  $-(g)\bar{\imath}$  forms ordinal numbers, Karagas  $-(u)m\kappa u/-(u)m\kappa u/-(y)m\kappa y/-(y)m\kappa y$ , which are theoretically compound suffixes, form ordinal numbers as a whole. If  $mep6a\kappa$  is true, in Turkic dialects, from which Buriat borrowed ordinal suffixes, the compound suffix: -da- (locative suffix) + -ki, was considered an ordinal suffix as a whole. Here the author thinks that it is -ki, not -da-, that has a principal function as an ordinal suffix. Compare Chuvash -ki in Benzing (1982:68). If this assumption is true, the author supposes that -ki, which had been originally an adjectival suffix, not an ordinal suffix, worked as a part of ordinal suffixes in Turkic dialects, and the -ki, which was then regarded as an ordinal suffix by itself, was borrowed to Tungus.

#### 5. Conclusion

It is doubtful whether Sinor (1959:423-424) rightly regards the ending of Udehe ordinal numbers -ti as the type I ordinal suffix. As shown in Menges (1968:150), the author thinks that this is the third person plural possessive suffix. Menges (1968:150) shows some examples where a vowel addition and a vowel change take place at the end of cardinal numbers by this suffix (e.g., omoiti 'first' < omo 'one' and ileäti 'third' < ila 'three'). This is because a velar stop was dropped by the attachment of this type II ordinal suffix, as Menges explains. It is commonly found that a possessive suffix follows type II, but at present the author does not know any example where type I affects the preceding vowel. It is also impossible to consider this the combination of type I and type II. However, one of the obvious merits in Sinor (1959), often referred to here, is his conclusion, which says "...Tunguz would then have ordinal suffixes of, at least, two different types:..." (p.424), which neither Ramstedt nor Benzing states. The author completely agrees with him in this point.

Finally, it is absolutely necessary to confirm that the purpose of this paper is to propose (not to demonstrate) a possibility of a borrowing relationship between Turkic and Manchu-Tungus. At the present stage, there remains a possibility that some facts in phenomenal correspondence found in the two languages are nothing other than mere coincidence. Therefore, the author specifies that the hypothesized borrowing is not attested fully by evidence presented here.

#### **NOTES**

- 0) This paper is based upon the author's presentation in the 99th General Meeting of the Linguistic Society of Japan at Kansei Gakuin University on October 15th, 1989.
- 1) The Tuva ordinal suffix -ki belongs to type II, though it loses a narrow vowel and a fricative. However, the use of this suffix appears to be of relatively recent origin. See Рассадин (1978:120).
- 2) The transliteration of the Manchu alphabet is based upon Möllendorff (1892).
- 3) According to Unhunge ed. (1975,1977), Oroki ordinal numbers with  $-u\bar{u}$  are only  $\partial \bar{y} j \bar{e} u\bar{u}$  'second' and  $xyj\bar{e}uu$  (sic) 'ninth', and it is not obvious whether this is the case with other ordinal numbers. Compared with other ordinal numbers, the suffix  $-u\bar{u}$  is not obligatory to form ordinal numbers in this language. We notice that Ikegami (1980) gives the following examples:  $d\theta\theta jjee-ni$  'the second month of pregnancy' and illee-ni 'the third month of pregnancy', where -ni is considered a possessive suffix. However, they may be type II examples. It is interesting that these ordinal numbers, mentioned in Ikegami (1980), are also specifically used for the term of pregnancy, which is a kind of a temporal expression.
- 4) Though Written Manchu does not distinguish the length in vowels, vowels in type I are considered long. This assumption is supported by the fact that the Evenki -чū has a long vowel (See василевич (1958:797) and Циншиус ed. (1975,1977)) and that the Proto-Manchu-Tungus vowels, which correspond to Nanai -ea/-iə of ordinal suffixes, are long. (See цинциус (1949:101) and Benzing (1956:61)). Hence, it is disadvantageous to the

author's view that Turkic type I does not have a long vowel.

5) It is difficult to decide at present in which language vocalization took place. Рассадин (1978:100) gives voiced variants -zu/-zi, -zy/-zy as well as -кu/-кi, -кy/-кy as Karagas suffixes. As far as his examples are concerned, voiceless suffixes follow voiceless consonants, while voiced suffixes follow vowels, nasals and a trill. Though Рассадин (1978:101) describes -кии having a long vowel as this variant, he writes "...он никогда не гармонирует, а согласный к, оказываясь между гласными, сохраняет свою глухость и силу и геминирует в произношении...".

Thus, this cannot be evidence of vocalization in Turkic.

On the other hand, Tungus has variants between - $\kappa$ - and - $\epsilon$ -. Bachrebhy (1958:761) describes that the suffix - $\epsilon \bar{u}$ , which changes intransitive verbs to transitive verbs, turns to - $\kappa \bar{u}$ , when it follows a voiceless consonant. Similarly, the directional suffix - $\kappa u \partial \bar{a}$  becomes - $\epsilon u \partial \bar{a}$  after vowels and voiced consonants except  $\mu$ ,  $\mu$  and  $\mu \epsilon$ . When Tungusic type II follows a cardinal number, the ending -n usually drops and a suffix becomes directly adjacent to a vowel. (The ending -n does not drop in Manchu juwan 'ten' and tumen 'ten thousand', even in forming ordinal numbers. In contrast, Evenki  $\partial \bar{a} \mu$  'ten' becomes  $\partial \bar{a} \epsilon \bar{u}$  'tenth', and loses its ending nasal like other cardinal numbers.)

In addition, Evenki dialects have the ordinal suffix  $-\kappa \bar{u}$  with a voiceless consonant. This is described in the entry of 'tenth' in Benzing (1956:104) and the entries of 'second' and 'tenth' in Luhluye ed. (1975,1977).

6) However, Gabain's note No. 32 states that cardinal numbers are used to express ages in Old Turkic. The author supposes that ages and the number of years were not expressed separately in a primitive stage. In short, ages start at the birth, and the number of years begins from a temporal starting point that is objectively set up in the society. Both are counted by the unit of year. The choice of either cardinal or ordinal numbers for a temporal expression depends upon dialects. There are differences in this choice among Turkic dialects. For example, Turkish expresses ages and the number of years with

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cardinal numbers.

7) 2. 序数詞 撒拉語吸収了漢語的序数詞,只有在計算月份名称以及灌溉田 地澆水的次数時,還保留着与其它突厥語相同的序数詞。即以在元音結尾的 基数詞后加附加成分 -nd3i, 在輔音結尾的基数詞后加附加成分 -ənd3i/-ind3i 的方法構成。表示月份名称時一般不在序数詞后再加 aj"月"。例如:

- 8) For example, there are three regional differences in meaning for the word 'corn': 'maize' in America and Australia, 'wheat' in England and 'oats' in Scotland. This kind of phenomenon is not very rare, because the meaning of a word is likely to be connected with the specific object which is especially familiar to people in the region. The limitation of usage takes place on such an occasion.
- 9) For instance, 'July 7th, 1961' becomes as follows:

  emu minggan uyun tanggū ninju emuci aniya nadan biyai nadan

  'one thousand nine hundred sixty first year seven month's seven'
- 10) According to Poppe (1955:248-249), the Middle Mongolian ordinal suffix -tu is morphologically more ancient than -tuγar, which prevails in Mongolian dialects. This suffix -\*tuγar alternates with -\*taγar having an open vowel in Common Mongolian. However, ordinal suffixes in modern dialects were derived from -\*tuγar having a narrow vowel in the first syllable: e.g., ∂yzaap~ -∂yzээp in Mongolian Khalkha dialect. Sinor (1959:422, 424) hypothesized that ordinal suffixes in Turkic, Mongolian and Manchu-Tungus are related with each other. If this is true, there is a mutual relationship among the Altaic ordinal suffixes.
- 11) Василевич describes as follows:

'При обозначении времени порядковые числительные употребляются с возвратно-притяжательным суффиксом; например: илидуви гунэн на третий день она сказала,

дыгидувэр эмэрэн на четвертый день она пришла.

- 12) See к. м. Черемисов ed. (1973) Бурятско-русский словарь.
- 13) See Ozawa ed. (1983) Gendai Mongorugo Jiten.

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