

## REMARKS ON THE VOCALISM OF THE SECOND SYLLABLE IN MONGOLIAN

NICHOLAS POPPE

UNIVERSITY OF WASHINGTON

After the appearance of RAMSTEDT's "Comparative Phonology of the Written Mongolian and the Khalkha Dialect"<sup>1</sup> and the fundamental *Comparative Grammar* by VLADIMIRTSOV,<sup>2</sup> the task of the Mongolists became that of the detailed study of particular phenomena of the phonology of the Mongolian languages. One of the problems which is far from solved is the history of the vowels of the non-initial syllables. It is known that the vowels of the non-initial syllables lost their specific articulation and became assimilated by the vowel of the first syllable.<sup>3</sup> This process commenced long ago and even in the most ancient monuments of the Mongolian languages the vowels of the non-initial syllables are already assimilated in many words by the vowel of the stressed (i. e., first) syllable. Even in Written Mongolian the vowels of the non-initial syllables lost their original articulation in many words and were assimilated by the vowel of the stressed syllable.<sup>4</sup> It is sufficient to point out such words as *mongyol* "Mongol" and *onon* "Onon River" in which the original \**a* of the second syllable became *o* under the influence of the first syllable; e. g., the form *moal* in Rubruck's work<sup>5</sup> and *mongal* in Plano Carpini's description of his travel, both of which represent the older form \**mongyal*. To this we may add the name *Onan-*

<sup>1</sup> G. J. RAMSTEDT, "Das Schriftmongolische und die Urgamundart phonetisch verglichen," *Journal de la Société Finno-Ougrienne* 21 (Helsingfors, 1902).

<sup>2</sup> Б. Я. Владимирцов, Сравнительная грамматика монгольского письменного языка и халхаского наречия. Введение и фонетика (Ленинград, 1929).

<sup>3</sup> Владимирцов, *op. cit.*, p. 311 ff.

<sup>4</sup> Владимирцов, *op. cit.*, p. 314.

<sup>5</sup> William W. ROCKHILL, *The Journey of William of Rubruck to the Eastern Parts of the World 1253-55 With Two Accounts of the Earlier Journey of John of Pian de Carpini* (London, 1900, reprinted in Peking 1941), p. 115.

*kerule* (= Onon and Kerulen).<sup>6</sup> These facts are well known and we shall not dwell on them.

Under such conditions, it is often difficult to decide what the original vowel in the second or third syllable was; in some cases it could have been \**a* (e. g., \**mongγal*) and in others \**u* (e. g., *modun* "tree"). This problem is of great importance not only from the purely theoretical but also from the practical point of view, because correct transcription of Written Mongolian depends to a great extent upon the solution of this question.

As both RAMSTEDT and VLADIMIRTSOV correctly remarked, there was no primary \**o* or \**ö* in the non-initial syllables in Written Mongolian and the only primary rounded vowels were \**u* and \**ü*.<sup>7</sup> Therefore, the form *orun* "place" is, according to VLADIMIRTSOV, the only possible one; the form *oron* did not exist.<sup>8</sup>

This solution of the question, however, is too simple and the case of Mo. *orun*, in particular, is different.

First of all, we must mention that in the language of the *Secret History* the corresponding form is *oro* (*n*) "seat, throne"<sup>9</sup> and also "bed"<sup>10</sup> but there is also a parallel form, *orun* "representative, representation."<sup>11</sup> In the language of the ᠬᠦᠫᠤᠰᠤᠭᠤᠰᠤᠯᠠ script the only corresponding form is *orana* "in the place."<sup>12</sup> In colloquial Western Mongolian of the fourteenth century, represented in the Arabic-Persian-Chagatai-Mongolian dictionary *Muqaddimat al-Adab*, the word *oron* "place" occurs only once in this form (cf. *sorbisunu oron* "the region of the eyelashes"),<sup>13</sup> but many times in the form *oran* (cf. also *oranās*, *orandān*, *orantu*).<sup>14</sup> In the Monguor language this is *urōṅ*, "place,"<sup>15</sup> in Ordos *oron*

<sup>6</sup> РОСКНИЛ, *op. cit.*, p. 116.

<sup>7</sup> Владимирцов, *op. cit.*, p. 315-316.

<sup>8</sup> Владимирцов, *op. cit.*, p. 317.

<sup>9</sup> Eich HAENISCH, *Wörterbuch zu Mangᡤol un Niuca Tobca'an* (Leipzig, 1939), p. 126.

<sup>10</sup> HAENISCH, *op. cit.*, p. 128.

<sup>11</sup> HAENISCH, *op. cit.*, p. 128.

<sup>12</sup> Н. Н. Поппе, *Квадратная письменность* (Москва-Ленинград, 1941), p. 154.

<sup>13</sup> Н. Н. Поппе, *Монгольский словарь Мукаддимат ал-Адаб* (Москва-Ленинград, 1938), p. 325.

<sup>14</sup> *Muqaddimat al-Adab, Index* (Moscow-Leningrad, 1939), p. 488.

<sup>15</sup> A. de SMEDT C. I. C. M. et A. MOSTAERT C. I. C. M., *Le dialecte monguor parlé*

“place, country, dwelling.”<sup>16</sup> The data of the other Mongolian languages are of less value, because the vowel of the second syllable is reduced in them to such a degree that it does not tell anything: Khalkha *orɔ*, Buriat *orõŋ*, Kalmuk *orŋ id*. Also unimportant are the data of the related non-Mongolian languages; cf. Ma. *oron* “place, region,”<sup>17</sup> which is probably a Mongolian loan-word. The Turkic forms *orun* and *orin*, “place” mentioned by VLADIMIRTSOV<sup>18</sup> are not significant.

We have seen that Mo. *orun* (we transcribe it so with reservations) corresponds to *oran* of the dictionary *Muqaddimat al-Adab*. Now the following question arises: which is older—*orun* or *oran*? Is not the vowel *a* in *oran* a later development?

In all cases involving this problem we find that the vowel *a* is older. Consequently, the form *oran* is older and Mo. *orun* should be transcribed *oron* with *o* < \**a* of the second syllable under the influence of the first *o*. We can corroborate this statement with the data of certain dialects. To prove this we must start with the history of the vowel \**o* of the first syllable.

### I. The Vowel \**o* of the First Syllable

The vowel \**o* became *o* in all Mongolian languages: Mo. *bol-*, SH *bol-*, P *bol-*, Dag. *bol-*, Mog. *bol-*, Ord., Kh. *bol-*, Bur. *bol-*, Kalm. *bol-* “to become”; Mo. *ol-*, SH *ol-*, P *ol-*, Ord., Kh., Bur., Kalm. *ol-* “to find, to acquire.”<sup>19</sup>

In the Dagur language the initial *o* in monosyllabic stems has become *wɔa*: *wɔal-* “to find.”<sup>20</sup> In the Monguor language the vowel *o* is long in this word; cf. *õli-* “to find, to acquire, to

*par les Mongols du Kansou Occidental, III-e partie, Dictionnaire monguor-français* (Pei-p'ing, 1933), p. 478.

<sup>16</sup> Antoine MOSTAERT С. I. С. М., *Dictionnaire ordos* (Peking, 1941-44), p. 521.

<sup>17</sup> Иванъ Захаровъ, *Полный маньчжурско-русский словарь* (Санктпетербургъ, 1875), p. 132.

<sup>18</sup> *Op. cit.*, p. 317.

<sup>19</sup> Abbreviations: Bur. = Buriat language, Dag. = Dagur language, Kalm. = Kalmuk language, Kh. = Khalkha, Mo. = Written Mongolian, Mog. = Mogol in Afghanistan, Ord. = Ordos, P = ᠮᠣᠩᠭᠣᠷᠢᠯᠢᠭ᠎ᠠ script, SH = *Secret History*.

<sup>20</sup> Н. Н. Поппе, *Дагурское наречие* (Ленинград, 1930), p. 111.

obtain,"<sup>21</sup> but it is also long in *dōli-* "to lick," *džiōrǰo-* "to meet," *tōdžē* "fat, grease," and in many other words. On the other hand, \**o* > Mong. *u* in many words.<sup>22</sup> As the data of the Monguor language do not contribute anything to the solution of this question, we shall not dwell upon them.

In bisyllabic and polysyllabic stems, the uniformity is broken and \**o* develops in various languages in a different manner. The most important from this point of view is the Ordos language. There \**o* is usually represented by *o*, but in many words also by *u*.<sup>23</sup> In the Dagur language \**o* has become *o*, but in many cases it has resulted in *oa*.<sup>24</sup> About \**o* > Ord. *u*, the Reverend Antoine MOSTAERT tells us the following: "plusieurs mots qui dans d'autres dialectes montrent dans la première syllabe la voyelle *o* ont ici la voyelle *u*" and gives the examples *mudu* "tree," *urdu* "the tent of a prince," and *usū* "oil."<sup>25</sup> In the Dagur language the rule is that *oa* appears in the place of \**o* only before the vowel \**a* of the following syllable, but before \**u* it becomes *o*.<sup>26</sup> This is important, because it shows that the vowel \**o* of the first syllable manifests itself in different manners before different vowels. In other words, the different developments of \**o* permit us to define the primary phonetic value of the vowel of the second syllable: the vowel *o* indicates that the vowel of the second syllable is \**u*, and *oa* indicates that the vowel of the second syllable is \**a*.

#### 1. \**o* before \**u*

Ord. *mudu* "tree," Dag. *mōd id.* = Mo. *modun*, SH *mudun ~ modun*,<sup>27</sup> Kh. *moddo*, Bur. *modõŋ*, Kalm. *modŋ id.*

<sup>21</sup> A. de SMEDT C. I. C. M. et A. MOSTAERT C. I. C. M., *Dictionnaire monguor-français* (Pei-p'ing, 1933), p. 296.

<sup>22</sup> A. de SMEDT et A. MOSTAERT, "Le dialecte monguor parlé par les Mongols du Kansou Occidental, I-ère partie. Phonétique," *Anthropos* 24-25, p. 163.

<sup>23</sup> Antoine MOSTAERT, "Le dialecte des Mongols Urdus (Sud)," *Anthropos* 21 (1926). 865.

<sup>24</sup> H. H. Поппе, *Дагурское наречие*, pp. 110-111.

<sup>25</sup> MOSTAERT, *op. cit.*, p. 865.

<sup>26</sup> N. POPPE, "Über die Sprache der Daguren," *AM* 10 (1934). 199.

<sup>27</sup> The forms of the language of the *Secret History* are given after ERICH HAENISCH, *Wörterbuch zu Manghol un Niuca Tobca'an* (Leipzig, 1939).

Ord.  $\underset{\zeta}{u}\underset{\zeta}{d}\underset{\zeta}{u}$  "star," Dag.  $od \sim odd\ddot{o}$  *id.* = Mo. *odun*, Mu.<sup>28</sup> *hodun*, SH *hodun*, Mong.<sup>29</sup> *fōdi*, Kh.  $odd\ddot{o}$ , Bur. *odōṅ*, Kalm. *odṅ id.*

Ord.  $\underset{\zeta}{u}\underset{\zeta}{r}\underset{\zeta}{d}\underset{\zeta}{u}$  "tent of a prince" = Mo. *ordu*, SH *ordo* < \**ordu*, Kh.  $ord\ddot{o}$ , Kalm. *ord<sup>o</sup> id.*

Ord.  $\underset{\zeta}{u}\underset{\zeta}{l}\underset{\zeta}{u}\underset{\zeta}{s}\underset{\zeta}{u}$  "a hemp rope" = Mo. *olusu*, Kh.  $oll\ddot{o}s$ , Kalm. *olsṅ id.* = Ma. *olo* "hemp."

Ord.  $\underset{\zeta}{g}\underset{\zeta}{u}\underset{\zeta}{l}\underset{\zeta}{u}\underset{\zeta}{m}\underset{\zeta}{t}\underset{\zeta}{a}$  "fireplace, hearth" = Mo. *γolumta*, SH *ḥolumta*, Kh.  $goll\ddot{o}m't'v$ , Bur. Alar<sup>30</sup>  $g\ddot{u}l\ddot{a}nt\ddot{a}$ , Kalm.  $g\ddot{o}l\ddot{m}t'v \sim g\ddot{u}l\ddot{m}t'v id.$  = Tung. C.<sup>31</sup> *golumta id.*

Ord.  $\underset{\zeta}{g}\underset{\zeta}{u}\underset{\zeta}{m}\underset{\zeta}{u}\underset{\zeta}{d}\underset{\zeta}{a}$ - "to complain," Dag.  $g\ddot{o}m\ddot{d}\ddot{o}$ - *id.* = Mo. *γomuda-*, Kh.  $g\ddot{o}m\ddot{d}\ddot{o}$ -, Kalm. *g\ddot{o}m\ddot{d}^o-* *id.*

Ord.  $\underset{\zeta}{d}\underset{\zeta}{u}\underset{\zeta}{b}'\underset{\zeta}{t}\underset{\zeta}{u}\underset{\zeta}{l}$ - "to run, to ride quickly" = Mo. *dobtul-*, SH *dobtul-*, Kh.  $dob't'ol$ -, Kalm. *doptl-* *id.*

Ord.  $\underset{\zeta}{d}\underset{\zeta}{u}\underset{\zeta}{s}\underset{\zeta}{u}$  "oil" = Mo. *tosun*, Kh. *t'osso*, Bur. *tohōṅ*, Kalm. *tosṅ id.*

Ord.  $\underset{\zeta}{u}\underset{\zeta}{r}\underset{\zeta}{g}\underset{\zeta}{u}$ - "to flee" = Mo. *oryu-*, Kh.  $org\ddot{v}$ -, Kalm. *ory<sup>o</sup>- id.*

Ord.  $\underset{\zeta}{g}\underset{\zeta}{u}\underset{\zeta}{l}'\underset{\zeta}{t}\underset{\zeta}{u}\underset{\zeta}{r}$ - "être enlevé par cassement" = Mo. *qoltura-*, Kh.  $\chi ol't'or$ -, Kalm.  $\chi oltr$ - "to separate, to fall off."

Ord.  $\underset{\zeta}{\chi}\underset{\zeta}{u}\underset{\zeta}{m}\underset{\zeta}{u}\underset{\zeta}{g}\underset{\zeta}{a}\underset{\zeta}{l}\underset{\zeta}{b}\underset{\zeta}{z}\underset{\zeta}{i}$ - "être à l'affût de profits" = Mo. *qomuyalja-*, Kalm.  $\chi om\gamma olz^o$ - "to be greedy."

Ord.  $\underset{\zeta}{j}\underset{\zeta}{u}\underset{\zeta}{s}\underset{\zeta}{u}$  "custom, habit," Dag. *jos id.* = Mo. *yosun*, Kh. *jos*, Bur. *johōṅ*, Kalm. *josṅ id.*

Ord.  $\underset{\zeta}{s}\underset{\zeta}{u}\underset{\zeta}{ṅ}\underset{\zeta}{g}\underset{\zeta}{u}$ - "to choose," Dag.  $soṅg\ddot{o}$ - *id.* = Mo. *songyu-*, Kh.  $soṅg\ddot{v}$ -, Kalm. *soṅg<sup>o</sup>- id.*

A few words with  $\underset{\zeta}{u}$  in the first syllable occur in the Ordos language also with *o*, e. g., *doso* "grease, fat, oil, butter," *orgo*- "éprouver un mouvement subit de frayeur, s'effrayer," and so on. The remark by the Reverend Antoine MOSTAERT concerning *doso* "nord-est du pays des Ordos" is an important indication

<sup>28</sup> *Muqaddimat al-Adab.*

<sup>29</sup> Mong. = Monguor language after A. de SMEDT et A. MOSTAERT, *op. cit.*

<sup>30</sup> Alar dialect of the Buriat language.

<sup>31</sup> Tungus language after M. Alexander CASTRÉN's *Grundzüge einer Tungusischen Sprachlehre nebst kurzem Wörterverzeichnis* (St. Petersburg, 1856).

that such forms with *o* are characteristic for certain dialects of the Ordos language. Thus the Ordos dialects can be classified from the point of view of the history of the vowel \**o* before \**u* into *u*- and *o*- dialects. The former are of great importance for the solution of our problem.

2. \**o* before \**o* < \**a*

Ord. *χolo* "far," Dag. *χol̥ id.* = Mo. *qola*, *SH hola*, Mu. *qola*, Kh. *χoll̥o*, Bur. *χol̥ō*, Kalm. *χol̥<sup>o</sup> id.*

Ord. *olon* "many," Dag. *w̥olāŋ id.* = Mo. *olan*, *SH olan*, Mu. *olan*, Kh. *oll̥o*, Bur. *ol̥ōŋ*, Kalm. *ol̥ŋ id.*

Ord. *χot̥o* "corral, town," Dag. *χot̥ōŋ* < other Mongolian languages = Mo. *qota*, *SH hoton* "corral," Mu. 302 *qotan* "corral," Kh. *χot̥o* "corral, town," Kalm. *χot̥ŋ* "corral."

Ord. *χoŋχo* "bell," Dag. *χoŋgār̥t* "bells on a shaman's costume" = Mo. *qongqa* "bell," Kh. *χoŋχo*, Bur. *χoŋχō*, Kalm. *χoŋχ<sup>o</sup> id.* = Tung. *koŋākte id.*

Ord. *χormō* "the lower part of a dress," Dag. *χoarām id.* = Mo. *qormai*, Mu. *qormai*, Kh. *χorm<sup>o</sup>ē*, Kalm. *χormā id.*

Ord. *χogot* "espèce de poireau," Dag. *χoagās* "wild onion" = Mo. *γoyosun* < \**γoyasun*, Bur. *γoyōt*, Kalm. *γoyosŋ id.*

Ord. *do'toro* "within, in," Dag. *do'tār id.* = Mo. *dotora* < \**dotara*, *SH dotora*, P *dot'ora*, Mu. *dotara*, Kh. *do't'or*, Bur. *dosō*, Kalm. *dotr̥ id.*

Ord. *nomoχon* "mild, of gentle character," Dag. *nomχāŋ* = Mo. *nomoqan* < \**nomaqan*, Bur. Aga<sup>32</sup> *nomgōŋ*, Kh. *nomgō̆* ~ *nomχo*, Kalm. *nomχŋ id.*

Ord. *ogo'tono* "kind of rat," Dag. *o'tāŋnā* "field mouse" = Mo. *oyotuna* < \**oyatuna*, Kh. *ogv't'no*, Kalm. *oy<sup>o</sup>ton id.* = Ma. *oyotono* "lepus dauricus."

Ord. *oros* "Russian," Dag. *orōs id.* = Mo. *oros* < \**oros*, Kh. *orvs*, Bur. *orōt* < \**oros*, Kalm. *orvs id.* Mo. *oros* < \**ros* = Росс, Россія (and not Русь); *SH* has *orusut* "Russian" < Русь.

<sup>32</sup> The Aga dialect of the Buriat language.

Ord. *doχo-* "to saddle" = Mo. *toqo-* < \**toqa-*, Kh. *t'oχχb-*, Bur. *toχō-*, Kalm. *toχ°- id.*

Ord. *domoḳ* "mockery," Dag. *domǎḡ* "joke" = Mo. *domoy* < \**domay* "story, legend," SH *domohci* "gossiper," Kh. *dombḳ* "legend," Bur. *domōḳ* "a sad song," Kalm. *dom°ḡ* "legend, tale" = Turkic Baraba *jomaq* < \**domaq* "tale."

Ord. *bodo-* "to think," Dag. *bodō-* < Kh. = Mo. *bodo-* < \**boda-*, Kh. *boddv-*, Kalm. *bod°- id.*

Ord. *ojo-* "to sew," Dag. *oḳ- ~ oḳi- id.* = Mo. *oyo-* < \**oya-*, Mu. *oyaba* "he sewed," Kh. *ojji-*, Bur. *ojō-*, Kalm. *ujb-* (converged with \**uya-* "to bind") *id.*

Ord. *dowon* "a small hill" = Mo. *dobo* < \**doba*, Kh. *dowv*, Bur. *dowō ~ dobō*, Bur. Alar *dubūḳ*, Kalm. *dowḳ id.* = Turkic Taranchi *doba* "hill" < Mongolian.

We see that the rounded vowel of the second syllable in Written Mongolian is really *u* < \**u* only in stems in which \**o* of the first syllable developed into *u* in the Ordos language. The rounded vowel of the second syllable is a secondary *o* < \**a* in stems in which the Ordos language has the vowel *o* < \**o* in the first syllable and in which the Dagur language has the diphthong *oa* (at the beginning of words *woa* < \**o*). We may also add that sometimes the Dagur language has the vowel *o* instead of *oa* in the first syllable, but in such cases it has a reduced *ā* in the second syllable. In this connection we may point out that in certain Mongolian languages the vowels easily change their place in words. For example, Kh. *āddvḳ ~ āddiḳ* "similar," *χālḳv ~ χālḳvḳ* "gate," and so on. It seems to be sufficient that the vowel concerned be somewhere in the word in question. Thus the Dagur form *domǎḡ* "joke" is as regular a development as *woalḳḳ* "many" or *doat'ār* "within."

It can be added that the secondary *o* < \**a* is always represented in the dictionary *Muqaddimat al-Adab* by *a*, even in words which have a rounded vowel in the second syllable in Written Mongolian: cf. *bora* "grey," *boyanī* "fine" (Mo. *boyonī* "short"), *botayan* "a young camel," *dotara* "within, in," *hoīmasun* "stockings," *hoqar* "short," *horai* "top," *mončaq* "ornament," *oḳaba*

"he kissed," *oḡayai* "penis," *olan* "many," *onqača* "boat," *oran* "place," *oraqsan qura* "the rain which fell," *oraba* "he entered," *qorayai* "worm," *soqar* "blind," and so on.<sup>33</sup>

The vowel \**a* of the second syllable was assimilated by the vowel \**o* of the first syllable at a very early period. In the language of the ḥP'ags-pa script there are such forms as *bodo* "substance," *oro-* "to enter," *qot'ola* "all." It is interesting that in all such cases the vowel is rendered by *o* and not by *u* while \**u* of the second syllable is consistently rendered by *u*: e. g., *bolburi* "recompensation," *modun* "tree," *yosu*, and never *bolbori*, *modon*, or *yoso*.<sup>34</sup>

In the language of the *Secret History* the primary \**u* is usually *u* in such cases, but the primary \**a* after a syllable containing the vowel *o* is often *o*, as, e. g., *bodo* "cattle," *bohdo* "holy," *boro* "grey," *botoḡan* "a young camel," *dorona* < \**dorana* "east," *dotora* < \**dotara* "within, in," *ḡocor-* "to remain behind," *jobo-* "to suffer," *olon* "numerous," *oro-* "to enter," *soḡor* in the name *Duwa soḡor* (\**soqar* "blind"), *sonos-* < \**sonas-* "to hear," and so on.<sup>35</sup>

A few words seem to contradict the rule in the Ordos language, e. g., *uḡḡ't'urg'ū* "les espaces célestes, ciel, firmament": though the second syllable contains the vowel \**a* (cf. Mo. *oḡtaryū*) the vowel \**o* of the first syllable has become *u*.<sup>36</sup> This development is due to the influence of the diphthong \**ui*. It is known that the diphthong \**ui* and also the long vowel *ū* assimilate the vowels of the first syllable, e. g., Ord. *ḡuḡšū* "bec, museau; partie saillante d'un contrefort d'une chaîne de montagnes, éperon; pointe en forme de bec, soc de charrue; subdivision; bannière mongole, sorte, espèce" = Mo. *qosiyun*, Kh. *ḡoḡšū* *id.*

*The practical result of the above is that in words with the vowel*

<sup>33</sup> Поппе, *Muqaddimat al-Adab*, pp. 34, 40. The forms concerned can be checked by means of the Index.

<sup>34</sup> Поппе, *Квадратная письменность*, pp. 38-39; cf. the vocabulary at the end of the book.

<sup>35</sup> HAENISCH, *op. cit.*, *passim*.

<sup>36</sup> Our attention was drawn to these exceptions by the Reverend Antoine MOSTAERT in one of his letters.



*o* in the first syllable, the rounded vowel of the second syllable should be transcribed in Written Mongolian as *u* only when the vowel \**o* of the first syllable becomes *u* in the Ordos language; it should be transcribed as *o* (secondary) < \**a* only when the vowel \**o* of the first syllable remains *o* in the Ordos language.

## II. The Vowel \**u* of the First Syllable

The vowel \**u* of the first syllable often assimilates the vowel \**a* of the second syllable. This occurs even in Written Mongolian. In such cases the original quality of the vowel of the second syllable cannot easily be determined. As an example we may take Mo. *quluγana* "mouse," which is etymologically connected with *qula* "brown" (with the suffix *-γana* as in *altayana*, name of a plant, or *qarayana*, also a plant, derived from *altan* "gold" and *qara* "black" respectively), and consequently is a development of an older form \**qulayana*. It is interesting that this word has the same form, *quluqana*, also in the language of the ᠬᠦᠫᠠᠭᠰᠤᠯᠤᠯᠠ script and *ᠬᠤᠯᠤᠬᠠᠨᠠ* in the *Secret History*. Thus it is not easy to decide in what cases Mo. *u* derives from \**u*, and in what cases from \**a*. There is, however, a solution.

In the Tsonᠭol dialect of the Buriat language (spoken in the valley of the Selenga River, in the communities of Tamcha, Noikhon, and so on, not far from Staryi Selenginsk) the vowel *u* of most of the other Mongolian languages and dialects is, in many words, represented by *o*, while in other words the correspondence is Tsonᠭol *u* = *u*. Thus there is a double correspondence: Ts. *o* = *u* and Ts. *u* = *u*. It is not difficult to discover that Ts. *o* < \**u* (in the first syllable) occurs only before a syllable with \**u*, while the original vowel \**u* of the first syllable remains unchanged before \**a*. On the basis of this observation it is possible to decide in what cases Mo. *u* of the second syllable is a primary \**u* and in what cases it is a secondary *u* < \**a* under the influence of the vowel *u* of the first syllable.<sup>37</sup>

It is also to be noticed that in the Dagur language the vowel

<sup>37</sup> Unfortunately there is no dictionary of the Tsonᠭol dialect. All the following examples were taken from Н. Н. Поппе, *Язык и колхозная поэзия Бурят-Монголов селенгинского аймака* (Ленинград, 1934).

\**u* of the first syllable has become *o* before \**u* of the second syllable but has developed into *oa* before \**a* of the second syllable, e. g.,  $\chi\text{od}\ddot{\text{r}} < \text{qudu}\gamma$  “well,” but  $\chi\text{oad} < *q\text{uda}$  “men whose children married each other” = Mo. *quda* “ceux, qui contractant des mariages, allient leur famille à celle d’un autre” (KOWALEWSKI), Ord.  $\chi\text{uda}$  “les chefs de deux familles alliées par le mariage de leur enfants” (MOSTAERT).

### 1. \**u* before \**u*

The vowel \**u* of the first syllable before \**u* of the second syllable becomes *o* in the Tsongol dialect.

Ts.  $\text{bog}\ddot{\text{o}}$  “stag” = Mo. *buγu*, SH *buhu*, Ord.  $\text{bu}\underset{\zeta}{\zeta}\text{gu}$ , Kh.  $\text{bu}\underset{\zeta}{\zeta}\text{g}\text{v}$ , Bur. Alar *boγō*, Kalm. *buγ<sup>u</sup> id.*

Ts.  $\chi\text{od}\ddot{\text{o}}\text{k}$  “well,” Dag.  $\chi\text{od}\ddot{\text{r}} < *q\text{uduy}$  *id.* = Mo. *quduγ*, SH *huduh*, Ord.  $\chi\text{ud}\underset{\zeta}{\zeta}\text{uk}$ , Kh.  $\chi\text{udd}\text{v}\underset{\zeta}{\zeta}\text{k}$ , Bur. Alar, Khori  $\chi\text{ud}\ddot{\text{a}}\text{k}$ , Kalm.  $\chi\text{ud}\text{v}\underset{\zeta}{\zeta}\text{id.}$  = Turk. Anadolu *quju* < \**qujuq id.*

Ts. *onō* “to ride horseback,” Dag. *onō id.*, cf. Ts. *onōt conv. perfecti* = Mo. *unu-*, Ord.  $\text{un}\underset{\zeta}{\zeta}$ , Kh.  $\text{un}\text{v}$ -, Kalm. *un<sup>u</sup> id.* (On the other hand, Ts. *unǎ* “to fall down” = Mo. *una id.*).

Ts. *osō* “water,” Dag. *os id.* = Mo. *usun*, Ord.  $\text{us}\underset{\zeta}{\zeta}$ , Kh.  $\text{us}$ , Bur. Alar, Khori  $\text{uh}\ddot{\text{a}}\eta$ , Kalm. *usη id.*

Ts.  $\text{bol}\ddot{\text{t}}\ddot{\text{o}}$  “all,” cf.  $\text{bol}\ddot{\text{t}}\ddot{\text{or}}$  “completely,” Dag.  $\text{bol}\ddot{\text{t}}\ddot{\text{o}}$  “completely” = Mo. *bultu*, Ord.  $\text{bul}\ddot{\text{t}}\underset{\zeta}{\zeta}\text{u id.}$ , Kalm. *bult<sup>u</sup> “all together.”*

Ts. *orgō* “to grow,” Dag. *orgō id.* = Mo. *urγu-*, Ord.  $\text{ur}\underset{\zeta}{\zeta}\text{gu}$ -, Kh.  $\text{ur}\underset{\zeta}{\zeta}\text{gv}$ -, Bur. Alar, Khori  $\text{ur}\underset{\zeta}{\zeta}\text{ǎ}$ -, Kalm. *urγv id.*

Ts.  $\chi\text{ol}\ddot{\text{o}}\text{s}\ddot{\text{o}}$  “reeds” = Mo. *qulusun*, Ord.  $\chi\text{ul}\underset{\zeta}{\zeta}\text{usu}$ , Kh.  $\chi\text{ull}\underset{\zeta}{\zeta}\text{os}$ , Bur. Alar  $\chi\text{ul}\ddot{\text{a}}\eta$ , Kalm. *χulsη id.*

Ts. *nogōsō* “duck,” Dag. *nogās id.* = Mo. *nuγusun*, Ord.  $\text{nu}\underset{\zeta}{\zeta}\text{gusu}$ , Kh.  $\text{nu}\underset{\zeta}{\zeta}\text{gvs}$ , Kalm. *nuγvsη id.*

Ts. *olōt* < \**ulus* “people,” Dag.  $\text{ol}\ddot{\text{or}} < *ul\text{us id.}$  = Mo. *ulus*, Ord.  $\text{ul}\underset{\zeta}{\zeta}$ , Kh.  $\text{ul}\underset{\zeta}{\zeta}\text{os}$ , Bur. Alar  $\text{ul}\ddot{\text{at}}$ , Kalm. *ul<sup>u</sup>s “people.”*

Ts. *orsō* “flowed, streamed” (past tense), Dag. *orsō-* “to flow” = Mo. *urus-*, Ord.  $\text{ur}\underset{\zeta}{\zeta}$ -, Kh.  $\text{ur}\underset{\zeta}{\zeta}$ -, Bur. Alar  $\text{ur}\ddot{\text{ā}}\text{v}$ -, Kalm. *uros-* “to flow.”

Ts.  $\text{bo}\chi\ddot{o}\text{l}$  “haystack” = Mo. *buqul*, Kh.  $\text{bu}\chi\chi\text{o}\text{l}$  *id.*

Ts.  $\text{t}'\text{o}\ddot{g}\ddot{o}\text{l}$  “calf” = Mo. *tuyul*, Ord.  $\text{t}'\text{u}\ddot{g}\text{u}\text{l}$ , Kh.  $\text{t}'\text{u}\ddot{g}\text{o}\text{l}$ , Bur. Alar.  $\text{tu}\ddot{g}\ddot{a}\text{l}$ , Kalm.  $\text{tu}\ddot{g}\text{l}$  *id.*

Ts. *nomö* “bow” (Dag. *nem id.* is of a different origin) = Mo. *numu*, Ord.  $\text{n}\ddot{u}\text{m}\ddot{u}$ , Kh.  $\text{n}\ddot{u}\text{m}$ , Bur. Alar *nomö*, Kalm.  $\text{num}\ddot{n}$  *id.*

Ts. *somö* “arrow,” Dag. *somö id.* = Mo. *sumun*, Ord.  $\text{s}\ddot{u}\text{m}\ddot{u}$ , Kh.  $\text{s}\ddot{u}\text{m}$ , Bur. Alar *homöŋ*, Kalm.  $\text{sum}\ddot{n}$  *id.*

Ts.  $\chi\text{o}\text{rd}\ddot{o}\eta$  “fast, quick” = Mo. *qurdun*, Ord.  $\chi\text{ur}\ddot{d}\text{u}\text{n}$ , Kh.  $\chi\text{ur}\ddot{d}\text{o}$ , Bur. Alar  $\chi\text{urd}\ddot{a}\eta$ , Kalm.  $\chi\text{urd}\ddot{n}$  *id.*

Ts.  $\text{t}'\text{s}\ddot{o}\chi\ddot{o}\text{m}$  “particular, unusual, remarkable” = Mo. *čuqum*, Kh.  $\text{t}'\text{s}\ddot{u}\chi\chi\text{o}\text{m}$  “real, true, particular,” Bur. Alar *soχöb id.*

## 2. \*u before \*a

Ts.  $\text{u}\ddot{r}\ddot{g}\ddot{a}$  “Mongolian lariat” = Mo. *urya id.*, *uraqa* “a sling used to catch birds,” Ord.  $\text{u}\ddot{r}\ddot{a}\chi\text{a}$  “lacet avec lequel on prend des oiseaux, lacet pour entraver un pied à un cheval qui vient boire,” Ord.  $\text{u}\ddot{r}\ddot{g}\text{a}$  < \**uyurya* “perche à noeud coulant pour prendre les chevaux,” Kh.  $\text{u}\ddot{r}\ddot{g}\text{b}$  “Mongolian lariat,” Kalm.  $\text{u}\ddot{r}\gamma\text{b}$  *id.* (Ord.  $\text{u}\ddot{r}\ddot{g}\text{a}$ , Kalm.  $\text{u}\ddot{r}\gamma\text{b}$ , and Mo. *uyurya* = Turkic *uqruc id.* > Russian укрюк). The vowel of the first syllable became short in some of the Mongolian languages long ago and even in the *Secret History* there is only a form *huraḥala-* “to make slings.”<sup>38</sup> Ma. *uryan* “Mongolian lariat” is a loan from Mongolian, because otherwise it would be \**furyan*: cf. *SH huraḥala-* “to make slings.”

Ts.  $\text{d}\ddot{u}\text{nd}\ddot{a}$  “in the middle,” Dag.  $\text{d}\ddot{o}\text{a}\text{n}\text{d}$  *id.* = Mo. *dunda* ~ *dumda* “middle,” Ord.  $\text{d}\ddot{u}\text{nd}\text{a}$ , Kh.  $\text{d}\ddot{u}\text{nd}\text{b}$ , Kalm.  $\text{d}\ddot{u}\text{nd}^{\text{o}}$  *id.*

Ts.  $\text{d}\ddot{u}\text{r}\ddot{a}\text{s}\chi\ddot{a}\text{l}$  “souvenir, commemoration,” Dag.  $\text{d}\ddot{o}\text{a}\text{r}\ddot{a}\text{l}$ - “to wish, to like something” = Mo. *durasqal* “memorial, souvenir,” Ord.  $\text{d}\ddot{u}\text{r}\text{a}$  “wish, desire,” Kh.  $\text{d}\ddot{u}\text{r}\text{b}$  *id.*, Kalm.  $\text{d}\ddot{u}\text{r}\ddot{n}$  “wish, inclination.”

Ts.  $\chi\text{ur}'\text{t}'\text{s}\ddot{a}$  “sharp” = Mo. *qurča*, Ord.  $\text{q}\ddot{u}\text{r}\text{t}'\text{s}\ddot{a}$  *id.*, Kh.  $\chi\text{ur}'\text{t}'\text{so}$ , Kalm.  $\chi\text{ur}\text{t}\text{so}$  *id.*

<sup>38</sup> HAENISCH, *op. cit.*, p. 79.

Ts. *bu'tsä-* "to return, to go back," Dag. *bu'tši-* *id.* < Kh. = Mo. *buča-*, Ord. *bu'tša-*, Kh. *bu'tso-* *id.*

Ts. *um'tä-* "to sleep," Dag. *wōan'tä-* *id.* = Mo. *unta-* ~ *umta-*, Ord. *un'ta-*, Kh. *un'to-*, Kalm. *unto-* *id.*

Ts. *bulāḡ* "corner" = Mo. *bulung* < \**bulan*, Ord. *buluḡ*, Kh. *bullo*, Kalm. *bulḡ* *id.*

Ts. *bulāk* "source, fountain," Dag. *bulār* *id.* = Mo. *bulay*, Ord. *bulak*, Kh. *bulloḡ*, Kalm. *bulḡ* *id.*

Ts. *t'urā* "town" = Mo. *tura* "fortress, castle," Ord. *t'ura* "nom mongol de la ville de Chen mou hien," Kh. *t'uro* "citadel, building, small town," Bur. Alar *turā* "town" = Ma. *tura* "a wooden pillar supporting the ceiling."

Ts. *unāyā* "colt" = Mo. *unaya*, Ord. *unaga* "poulin dans sa première année," Kh. *unoḡ*, Bur. Alar *unāḡāḡ*, Kalm. *unḡ* *id.*

Ts. *unā-* "to fall," Dag. *wōanā-* *id.* = Mo. *una-*, Ord. *una-*, Kh. *unb-*, Bur. Alar *unā-*, Kalm. *unb-* *id.*

We have seen that the vowel \**a* of the second syllable does not influence the development of the vowel \**u* of the first syllable in the Tsongol dialect, while \**u* of the second syllable transforms it into *o*.

### III. The Vowel \**ö* of the First Syllable

The Common Mongolian \**ö* of the first syllable has been preserved in almost all Mongolian languages. The correspondences are the following:

CoMo. \**ö*, *SH* *ö*, *P* *ö*, Ord. *ö*, Kh. *ṽ*, Bur. Alar (and also Tunka, Bōkhon, Ekhirit Bulgat, and Barguzin) *ṽ*, Kalm. *ö*, e. g., CoMo. \**öḡe* "color," *SH* *öḡe* (HAENISCH's transcription *ongge*), *P* *öḡe*, Mo. *öḡge*, Ord. *öḡö*, Kh. *ṽḡa*, Bur. Alar *ṽḡṽ*, Kalm. *öḡ* *id.* = Turkic \**öḡ* > Uigur, Chagatai *öḡ* or *öḡ* "face, front side," Telengit, Kirgiz *öḡ* "color, outer appearance."

In certain Mongolian languages and dialects \**ö* and \**ü* converged, and both vowels have become *ü* or its further development *u*. Thus the Eastern Buriat dialects, Aga and Khori (in Trans-

baikalia), do not distinguish between \**ö* and \**ü* and both vowels have become *u*, as, e. g., *uŋgě* “color.” The Dagur language also does not distinguish between the vowels \**ö* and \**ü* which have become *u*, as, e. g., *k'urk* “blue” = Kh. *χv̄χχa*, Kalm. *kök id.*<sup>39</sup> The Mogol material collected by RAMSTEDT is quantitatively too small to reach any conclusion although RAMSTEDT remarks that \**ö* and \**ü* in many cases are confused.<sup>40</sup>

We may add that in the Eastern Buriat dialects the original vowels \**ö* and \**ü* do not affect the vowel of the following syllable differently; e. g., in the Aga and Khori dialect the long vowel after *u* (of both origins) is either *ē* or *ā*: cf. Aga *uizēp* ~ *uizāp* “I saw,” *ugēp* ~ *ugāp* “I gave,” while in the Khalkha language the vowel *u* < \**ü* requires after it the long vowel *ē* and *ü* < \**ö* requires the long vowel *ā*, e. g., *uozēt* “after having seen,” but *ögāt* “after having given.” Thus the data of languages or dialects not distinguishing between \**ö* and \**ü* are of no value for our purpose.

There is a third group of Mongolian languages in which both \**ö* and \**ü* are preserved. Although they distinguish between \**ö* and \**ü*, they seem, at first glance, to do so inconsistently. We refer to the Ordos dialect in which \**ö* sometimes yields *ö*, but sometimes also *u*, as, e. g., Ord. *ölös-* “to be hungry” = Kh. *illas-*, Bur. Alar *öldö-* *id.*, but Ord. *murgu-* “to bow” = Kh. *mürga-*, Bur. Alar *mörgö-* *id.*

We have seen that \**o* of the first syllable has become in the Ordos language *u* before \**u* of the second syllable, but it is *o* before the vowel *o* < \**a* of the second syllable. We find that \**ö* remains *ö* in the Ordos language only before \**e* of the second syllable, but it becomes *u* before \**ü* of the second syllable. Thus we can establish the following proportion: *o : u = ö : u*.

### 1. \**ö* before \**ü*

Ord. *murgu-* (~ *mörgö-*) “to bow” = Mo. *mörgü-*, Kh. *mürga-*,

<sup>39</sup> Поппе, Дагурское наречие, p. 113.

<sup>40</sup> G. J. RAMSTEDT, “Mogholica, Beiträge zur Kenntnis der Moghol-Sprache in Afghanistan,” *Journal de la Société Finno-Ougrienne* 23, No. 4, p. 51.

Bur. Alar *mörgö-*, Kalm. *mörgö- id.*, cf. *SH mürgü-* (H<sup>41</sup> *murgu-*) *id.*

Ord. *muŋgu* (~ *möŋgö*) "silver" = Mo. *möŋgü*, Kh. *möŋga*, Bur. Alar *möŋgöŋ*, Kalm. *möŋgü id.*, cf. *SH müŋgü* (H *munggu*) *id.*

Ord. *urum* "tarière, vrille, vilebrequin, foret" = Mo. *örüm*, Kh. *vräm*, Kalm. *örm* "gimlet."

Ord. *urgusu* (~ *örgösu*) "épine, piquant" = Mo. *örgesün* \**örgüsün*, Kh. *ürgas*, Kalm. *örgesü* "thorn."

Ord. *undur* "high" = Mo. *öndür*, Kh. *ündar*, Bur. Alar *öndör*, Kalm. *öndü id.*, cf. *SH ündür* (H *undur*) *id.*

Ord. *udu* "feather" = Mo. *ödin*, Kh. *üdda*, Kalm. *ödü id.*, cf. *SH ödin* (H *odun*) *id.*

Ord. *k'uruuk* "picture" = Mo. *körüg*, Kh. *çvrak*, Kalm. *körög id.* < Turkic. Cf. Uigur *körüg* "picture," *kör-* "to see."

It is to be noticed that in several words the vowel \**ö* became *ü* under the influence of the vowel \**ü* of the second syllable even in the *Secret History*. Is this evidence that the *Secret History* was transcribed in a dialect which was an ancestor of the Ordos language?

It is known that in the dialects the vowel \**e* of the first syllable becomes *ö* or its further developments (Kh. *ü*, Bur. Alar *ö*) under the influence of the following syllable; as, e. g., Mo. *emüne* "in front," Dag. *emel id.* = Ord. *ömönö*, Kh. *üman*, Kalm. *ömü* "before, in front."<sup>42</sup> But in several words \**e* of the first syllable has also become *ü* or *u*. Cf. Mo. *edür* "day" = *SH üdür* (H *udur*) *id.*, P *üdürč'in* "the whole day," Ord. *udur* "day"; Mo. *elgü-* "to suspend" = Ord. *ulgu-* *id.*; Mo. *ergü-* "to lift" = Ord. *urgu-* *id.*; Mo. *ebül* "winter" = *SH übül* (H *ubul*), P *übül id.* Although the correspondences in such words are inconsistent in all languages, it is not impossible that the development \**e* > *ü* took place under the influence of the vowel \**ü* of the second syllable similarly to \**ö* > *u* in the Ordos language. Apparently \**e* became first *ö* and the latter became, under the influence of the vowel \**ü* of the second syllable, *ü* (or *u*): \**edür* > *ödür* > *udur*. If this

<sup>41</sup> H means HAENISCH's transcription.

<sup>42</sup> Poppe, Дагурское наречие, p. 108.

notion is correct, the development \**ö* > *u* in the Ordos language must be of great antiquity.

As for the double forms Ord. *muŋgu* ~ *möŋgö* "silver," *urgusu* ~ *örgösü* "pin," and so on, they belong to different dialects of the Ordos language, just as the double forms with *u* and *o* (*dosu* ~ *dusu*).

## 2. \**ö* before \**e*

The vowel \**ö* remains *ö* in the Ordos language before \**e*. In the *Secret History* the vowel \**e* of the second syllable becomes *ö* in numerous cases after the vowel \**ö* of the first syllable. In the dictionary *Muqaddimat al-Adab*, the primary \**e* of the second syllable remains *e* even in cases when in Written Mongolian the vowel of the second syllable is a rounded one, i. e., a secondary *ö* < \**e*.

Ord. *ölön* "herbes épaisses constituées par les feuilles du lasi-agrostis splendens," Mu. *öleng*, SH *öleŋ* (H *oleng*) = Mo. *ölöng*, Kh. *öllä* "hard grass," Kalm. *ölŋ* "grass, meadow."

Ord. *ölös-* "to be hungry," SH *öles-* ~ *ölös-* (H *oles-* ~ *olos-*) = Mo. *ölös-* < \**öles-*, Kh. *ölläs-*, Bur. Alar *öldö-*, Kalm. *öl's-* *id.*

Ord. *ömök* "help, reinforcement," SH *ömere-* (H *omere-*) "to assemble, to defend together" = Mo. *ömög* < \**ömeg* "help, defense," Kh. *ümäk* "defense, guard," Kalm. *ömör-* "to defend."

Ord. *önör* "qui est en grand nombre, nombreux, famille," SH *önör* (H *onor* without translation) in the expression *önör nikenten* "belonging to one family, to one clan" = Mo. *önör* < \**öner*, Kh. *ünar* "having a large family or many children," Kalm. *önŋ id.* (\**öner* has nothing in common with Mo. *ünür* < \**hünür* < \**fünür* "smell, odor").

Ord. *önötšin* "orphelin," SH *önöcit* (H *onocit*) "orphans," Mu. *önečin* "orphan" = Mo. *önöčin* < \**önečin*, Kh. *ün'tši*, Bur. Alar *önöšöŋ*, Kalm. *öntšŋ id.*

Ord. *kölör-* "to perspire," SH *kölesün* (H *kolesun*) "perspiration," Mu. *köler-* "to perspire" = Mo. *kölere- id.*, *kölesün* "perspiration," Kh. *χöllar-* "to perspire," Bur. Alar *χölör-*, Kalm. *kölr- id.*

Ord. *k'öndölön* "transversal, across," *SH köndelen* (H *kon-delen*), Mu. *köndelen id.* = Mo. *köndelen*, Kh. *χῖνδῶλα*, Bur. Alar *χῖνδῶλῆṅ*, Kalm. *köndῶlṅ id.*

Ord. *k'önök* "seau dans lequel on trait les vaches" = Mo. *könög* < \**köneg* "milking vat," Kh. *χῖνῶκ*, Bur. Khorī *χῖνῆκ*, Bur. Alar *χῖνῆκ id.*

Ord. *k'öröngö* "semence, levure (pour faire du koumyss), biens, fortune" = Mo. *köröngge* < \**köreṅge*, Kh. *χῖραṅγα* "yeast; fortune, capital," Kalm. *körṅgə* "seeds, yeast."

Ord. *mölt'öl-* "to detach" = Mo. *möltel- id.*

Ord. *mön<sup>k</sup>χῶ* "eternal, everlasting," *SH mungke* (HAENISCH), *möngke* (PELLIOT),<sup>43</sup> Mu. *mönke*, P *μονκ'α* (should be interpreted as *mönk'e*) = Mo. *möngke*, Kh. *μῶνχα*, Bur. Alar *mönχῶ*, Kalm. *mönkῶ id.*

Ord. *mörö* "shoulder," *SH müri* (H *muru*) = Mo. *mörö* < \**möre id.*, Kh. *μῖρα*, Kalm. *mörṅ id.* = Tung. C. *mīrä*, Tung. Barguzin *māre*, Ma. *meyiren* "shoulder."

Ord. *mörön* "river," *SH müren* (H *muren*), Mu. *mören* "sea" = Mo. *mören*, Kh. *μῖρα*, Kalm. *mörṅ* "river."

Ord. *nö<sup>k</sup>χῶ-* "to repair, to mend, to patch" = Mo. *nökö-* < \**nöke-*, Kh. *νῦχχα-*, Kalm. *nökῶ-* *id.*

Ord. *sögöd-* "to kneel," *SH sögöt-*, Mu. *söged-* = Mo. *sögöd-* < \**söged-*, Kh. *σῶγαD-*, Kalm. *sögdῶ-* *id.*

Ord. *tölö-* "indemniser, dédommager," Mu. *töle-* = Mo. *tölö-* < \**töle-*, Kh. *τῦλλα-*, Kalm. *töl-* "to pay."

Ord. *törö* "government, empire," *SH töre* "rule, custom" = Mo. *törö* < \**töre*, Kh. *τῦρα*, Kalm. *törῶ id.* = Turcic Uigur, Anadolu, Chagatai, Koman *törä* "rule, law."

Ord. *bödönö* "quail" = Mo. *bödöne* < \**bödene*, Kh. *βῦδῶνα*, Kalm. *bödnῶ id.* > Chagatai *bödänä id.*

Ord. *böglö-* "to cork, to jam," *SH bökle-* "to block, to jam" = Mo. *bögle-*, Kh. *βῦγλα-*, Kalm. *böglῶ-* *id.*

Ord. *bögsö* "posterior," *SH bökse*, Mu. *bökse id.* = Mo. *bögse*, Kh. *βῦγσα*, Kalm. *böksῶ id.*

<sup>43</sup> Paul PELLIOT, *Histoire secrète des Mongols* (Paris, 1949), p. 56.



Ord.  $b\ddot{o}^k\chi\ddot{o}$  "strong," SH *bökö*, Mu. *böke id.* = Mo. *böke*, Kh.  $b\ddot{v}\chi\chi a$ , Kalm. *bök<sup>ö</sup> id.*

Ord.  $b\ddot{o}^k\chi\ddot{o}n$  "small flies" = Mo. *bököne* < \**bökene id.*

Ord.  $b\ddot{o}^k\chi\ddot{o}$  "hump," SH *bokotur* (= *böketür*) "having a hump," Mu. *böke* "hump" = Mo. *bökö* < \**böke*, Kh.  $b\ddot{v}\chi\chi a$ , Kalm. *bök<sup>᠋</sup> id.*

Ord. *bölök* "group," SH *bölök* "horde, troop," Mu. *bölek* "another" = Mo. *bölög* < \**böleg*, Kh.  $b\ddot{v}llak$  "group, piece; chapter," Kalm. *böl<sup>ö</sup>g id.* = Turkic Uzbek *böläk* "part, another."

Ord. *dögöm* "near," Houa *i i iu dögem* "convenient" <sup>44</sup> = Mo. *dögöm* < \**dögem* "convenient, near," Kh.  $d\ddot{v}\chi\chi am$  "convenient, favorable, near."

Ord.  $d\ddot{o}^k\chi\ddot{o}m$  "depression in the soil" = Mo. *tököm* < \**tökem*, Kh.  $t\ddot{v}\chi\chi am$  "depression."

Ord. *dörö* "anneau qu'on met au nez des boeufs" = Mo. *dörö* < \**döre*, Kh.  $d\ddot{v}ra id.$ , Kalm. *dör<sup>ö</sup>* "a bridle for oxen."

Ord. *dörwö* "four," SH *dörben*, Mu. *dörben* = Mo. *dörben*, Kh.  $d\ddot{v}rwa$ , Bur. Alar *dörb<sup>᠋</sup>᠋᠋*, Kalm. *dörw<sup>᠋</sup> id.*

Ord.  $d\ddot{o}^t\ddot{o}$  "direct, short (a way)," SH *dötelen* "approaching" = Mo. *döte*, Kh.  $d\ddot{v}^t a$ , Bur. Alar *d<sup>᠋</sup>t<sup>᠋</sup>᠋* "near."

Ord.  $g\ddot{o}^k\chi\ddot{o}$  "blue," SH *köke*, Mu. *köke id.* = Mo. *köke*, Kh.  $\chi\ddot{v}\chi\chi a$ , Bur. Alar  $\chi\ddot{e}\chi\ddot{e}$ , Kalm. *kök<sup>ö</sup> id.*

Ord.  $g\ddot{o}^k\chi\ddot{o}$  "breast," SH *kokan* (= *köken*) "female breast," Mu. *köken id.* = Mo. *kökön* < \**köken*, Kh.  $\chi\ddot{v}\chi\chi a$ , Kalm. *kök<sup>᠋</sup> id.* = Turkic Chagatai *kökältäš* "foster-brother."

Ord.  $g\ddot{o}^t\ddot{o}l-$  "to lead," SH *kötöl-* (H *kotol-*) = Mo. *kötel-*, Kh.  $\chi\ddot{v}^t al-$ , Kalm. *kötl- id.*

Ord.  $t\ddot{o}r\ddot{o}-$  "to be born," SH *töre-*, Mu. *töre- id.* = Mo. *törö-* < \**töre-*, Kh.  $t\ddot{v}r-$ , Kalm. *tör- id.* = Turkic *törä- id.*

Thus in all cases Ordos has the vowel *ö* before the vowel \**e* in the first syllable. When the first syllable is followed by a long  $\ddot{u}$  < \**egü* the vowel \**ö* of the first syllable becomes *u*, although the second syllable contains the vowel \**e*; cf. Ord.  $g\ddot{o}^k\chi\ddot{o}$ - "to suck, to sip," Mu. *kökebe* "sucked" = Mo. *kökö-* < \**köke-*, Kh.  $\chi\ddot{v}\chi\chi a-$ , Kalm. *kök<sup>ö</sup>-* "to suck," but Ord.  $g\ddot{u}^k\chi\ddot{u}r$  "container for liquids"

<sup>44</sup> MOSTAERT, *Dictionnaire ordos*, p. 155.

= Mo. *köküür* < Colloquial, Mo. *\*kökegür*, Kh. *χöchür* “a bag for liquids” (literally: “sucker”).

The vowel *\*ö* remains as such also before *\*i*:

Ord. *džönök* < *\*jönig* “qui est tombé en enfance” = Mo. *jönög* < *\*jönig* “senile,” Kh. *džvñ-* “to become senile,” *džvñ'tak* “senile.”

Ord. *mösu* “ice” = Mo. *mösün* < *\*mölsün* < *\*mölisün*, Kh. *müs*, Bur. Alar *mölěhěŋ* < *\*mölisün*, Khori *mulěhěŋ* < *\*mölisün*, Kalm. *mösŋ* < *mölsün* < *\*mölisün*, Dag. *meis id*.

The observations made above enable us to draw certain conclusions. The first is that we now have a satisfactory solution for the transcription of the rounded vowels of the second syllable in Written Mongolian: after *\*o* of the first syllable the vowel is *u*, when the vowel *\*o* of the first syllable becomes *u* in the Ordos language (*mudu* “tree” = Mo. *modun*); after *\*o* of the first syllable the vowel is a secondary *o* (< *\*a*) in cases in which the vowel of the first syllable is *o* in the Ordos language (*oron* “place” = Mo. *oron* < *\*oran*); after *\*ö* of the first syllable the vowel is *ü*, when the vowel is *u* in the Ordos language (*murgu-* “to bow” = Mo. *mörgü-*); after *\*ö* of the first syllable the vowel is a secondary *ö* (< *\*e*), when the vowel of the first syllable remains *ö* in the Ordos language. It is also possible to distinguish between the primary and secondary *\*u* in the second syllable: it is a primary *\*u* in cases in which the vowel *\*u* of the first syllable becomes *o* in the Tsongol dialect (*oso* “water” = Mo. *usun*), but it is a secondary *u* < *\*a* in cases in which the vowel *\*u* of the first syllable remains *u* in the Tsongol dialect (*χulgănă* “mouse” = Mo. *quluγana* < *\*qulaγana*).

The second conclusion is more interesting from the purely theoretical point of view. The vocalic harmony in agglutinative languages is usually considered nothing but the dependence of the vowels of the non-initial syllables upon the character of the vowel of the first syllable.<sup>45</sup> This is correct, but on the other hand it cannot be denied that in the Mongolian languages it is the

<sup>45</sup> Cf. for instance Martti Räsänen, *Zur Lautgeschichte der Türkischen Sprachen* (Helsinki, 1949), pp. 96-97.

vowel of the second syllable which influences the vowel of the first syllable, although this has nothing to do with vocalic harmony.

It is known that the vowel *\*i* of the first syllable becomes another vowel under the influence of the second syllable: Kh. *maχχo* “meat” = Mo. *miqan id.*<sup>46</sup> The vowel *\*ü* of the second syllable transforms the vowel *\*e* of the first syllable into a rounded front vowel in many Mongolian languages.<sup>47</sup> The vowel *\*i* of the second syllable transforms the back vowel of the first syllable into a mid vowel in Khalkha and many other languages, and into a front vowel in the Kalmuk language (cf. Kh. *mörᠢ*, Kalm. *mörᠢ* “horse” = Mo. *morin*). In another article, we have demonstrated that the groups *\*uγa* and *\*üge*, constituting the original second and third syllables, developed, at an early stage, into *\*oγa* and *\*öge* and that the latter became *ō* and *ö* respectively. They greatly influenced the vocalism of the first syllable. Here we may add that the groups *\*uγa* > *\*oγa* and *\*üge* > *\*öge* resulted in different vowels in the principal groups of the Mongolian languages—in long rounded vowels in the Eastern Mongolian languages (cf. *\*jiruγa* > *\*jiroγa* > Kh. *ᠳᠵorō* “ambler”), but in long unrounded vowels in the Western Mongolian languages (cf. *\*jiruγa* > *\*jiroγa* > Kalm. *džorā* “ambler”), while in both groups of languages *\*uγa* > *\*oγa* has labialized the vowel of the first syllable (*\*jiruγa* > Kh. *ᠳᠵorō* and Kalm. *džorā*). And here in this article we have seen that in certain dialects the primary *\*u* and *o* < *\*a* influenced the vowel *\*o* of the first syllable in a different manner. The same can be remarked about the vowels *\*u* and *\*u* < *\*a* influencing in different manners the vowel *\*u* of the first syllable. We have also seen that the vowels *\*ü* and *ö* < *\*e* of the second syllable have a different effect upon the vowel *\*ö* of the first syllable. *Thus our general conclusion is that the history of the vocalism of the first syllable in the Mongolian languages depends mainly upon the primary character of the vowels of the second syllable.*

<sup>46</sup> This phenomenon is known under the name of “breaking”: RAMSTEDT, “Das Schriftmongolische und die Urgamundart phonetisch verglichen,” §55.

<sup>47</sup> RAMSTEDT, *op. cit.*, §38. An exception is the Dagur language where *\*e* of the first syllable does not undergo this influence. Cf. Поппе, Дагурское наречие, p. 108.