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## MONGOLIAN DISTINCTION ON HORSE COLORATION

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### **Annotation**

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This report is an extension of the author's presentation at the Tenth Forum on Northeast Asian Ethnic Cultures held on November 15, 2019, at the Central University for Nationalities under the auspices of the Society for the Study of Northeast Asian Ethnic Cultures of the Chinese Ethnological Society. The presentation was given in Mongolian and interpreted into Chinese. Although this international symposium could have been held to celebrate the development of One Belt, One Road, no collection of papers is expected to be published until 2022. This article is the English translation of Japanese original text "Mongol ni okeru Uma no Keiro ni kansuru Bunruimeisho no Meineigenri" written by Yuki Konagaya and published in "Biostory" (2022, 38: 85-94). According to the wide variety of horse coat colors, there are many Mongolian words. In this article several main folk terms of horse coat color are clearly classified and you can grasp how people categorize the terms according to the key criteria of their taxonomy. These folk terms are very useful for nomads specially when they should find the missing horses that usually graze autonomously far away from the campsite.

### **Keywords**

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Horse coat color, folk term, taxonomy, variety.

## INTRODUCTION (SEARCHING FOR MISSING LIVESTOCK IN NOMADIC PASTORALISM)

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In general, nomadism refers to pastoralism with seasonal migration. Therefore, when the process of sedentarization has progressed, as in the Inner Mongolia Autonomous Region of China, it is no longer referred to as nomadic (Humphrey and Sneath, 1999). However, from an animal behavior perspective, the formation of flock boundary might be a critical stage of domestication (Tani, 2017: 48-50), and absence of flock boundary suggests the different situation of domestication. In Africa, even if nomadic, sheep and goat flocks maintain boundaries and can pass each other when different flocks encounter in pasture, whereas in the case of reindeer, described as semi-domesticated (Matsui, 1990), there are no boundaries.

In Mongolia, the herd boundary is not clear. Despite day-grazing, and whether nomadic herding with seasonal migration or stationary herding with little seasonal migration, the lack of herd boundary means that people must be careful not to encounter other people's herds.

For example, in the case of sheep and goats, it is common for children to be scolded for going out to graze and joining other's herd.

In the case of cows, mothers and calves are grazed in separate herds to allow for milking in the morning and the evening. In the unlikely event that mother cows and their calves meet and merge in the grassland, cows no longer can be milked that day. For example, if the calf is born late and too small, or if the milker is away, the mother cow and calf are grazed together in the morning, so it is clear to everyone that the cow will not be milked that day. Thus, during the milking season, although it appears that the cows are day-grazing, people take advantage of the nature that mother cows come back to their offspring by their own needs (Umesao, 1955). And the cows that are not involved in milking, collectively known as *subai*, are left out in the field. For this *subai* group, nomads grasp the spatial movement of their cows only by water source or a sodium called *hojir*.

In the case of horses, day-grazing is not common. During the milking season, the mothers voluntarily stay with their foals that are tethered during the day, and the stud male who controls the females also stays together. Then, after the last milking of the day, the foals are released into the field as part of one male unit, a group of horses led by the stud male (Konagaya, 2019: 247). It can be said that night-grazing is carried out until the foals are tethered again the next morning. Thus, it is not day-grazing. And other seasons than milking the horses graze freely far away from camp site.

As described above, regardless of the degree of progression of sedentarization, day-grazing was not originally very common, with the exception of sheep and goats (Table 1).

In other words, in Mongolia, like reindeer herding in Siberia, nomads rely heavily on "livestock autonomy" (Stepanoff, 2017). As a result, "losing track of livestock" is a common occurrence. It is actually the "lost-and-found" that they must frequently engage instead of day-grazing. Because the livestock are left to their own autonomic activity in the grasslands, it is no exaggeration to say that, with the exception of the summer milking season, the nomads' work is not so much day-grazing as "searching for missing livestock."

Table 1

**Day-grazing or not of flocks or herds**

livestock		day-grazing
sheep and goat		○
cattle	milking stock	Δ (mothers with breasts are returning home)
	not milking stock	×
horse	milking stock	Δ (mother and child are released only at night)
	not milking stock	×

If they are diligent, they may visit the site where the livestock herd is located frequently and rarely lose their livestock. Nevertheless, it is very possible that natural threats may cause livestock to travel far in a short period of time, chased by blizzards or heavy winds. In addition, in recent years, people tend to skip to check whereabouts of their livestock herds because of many opportunities for distant travel, such as going to the city to purchase various products. As a result, the number of lost-and-found search works has not decreased, irrespective of their sedentarization. On the contrary, it may in fact be increasing in the present day, when people have many errands other than herding.

In recent years, however, there has been a significant change in the method of searching the missing animals. In the past, nomads would visit others' camp, after having a cup of tea they would start talking to exchange information, and continue their search. In some cases, they would not return for several months. Nowadays, however, it is possible to collect information on rumors *or surag* using cell phones. In Inner Mongolia, the social networking service WeChat in particular is being used extensively as a notice board for livestock searches. The search for missing livestock is an information activity that is developing in an unprecedentedly diverse way.

In the search for missing livestock, the two most essential elements for identifying individuals or herds are the coat color, called *jüs* or *jüsem* in Mongolian, and the branding mark, called *tamaga*. These linguistic indicators are especially important when obtaining information from others.

The purpose of this paper is to decipher the principles of folk terms of horse coat colors, using the original sources that have been compiled as a folk vocabulary. Note that the Mongolian language is transcribed in romanized form only at the first appearance. The ts/ch sound in Mongolian is unified to ch in Inner Mongolian.

**NAMING PRINCIPLES FOR HORSE COAT COLOR  
(A HYPOTHESIS)**

The horse (*Equus caballus*) belongs to the odd-toed horse family Equidae. Recent genomic analysis has revealed that the Przewalskii horse (*Equus ferus przewalskii*), positioned as a subspecies of the tarpan (*Equus ferus*), previously considered a wild horse, is a rewilding horse domesticated in Kazakhstan (Gaunitz et al., 2018). Furthermore, genome analysis of 273 ancient horses collected from all over Eurasia by more than 100 researchers has shown that the modern domestic horse had its home in the western Eurasian steppe (Volga Don region, north coast of the Caspian Sea) and spread rapidly

throughout Eurasia around the second millennium BC, thus rejecting Anthony's scenario presented by him in "Horse, Wheel, and Language" (Librado et al., 2021). However, the paper does not use archaeological evidence from the Mongolian plateau. On the other hand, after organizing various studies, including genome analysis, it has been shown that the wild horse Turpan is also only a myth (Lovász et al., 2021). In any case, it is generally believed that its coat color diversified with the domestication process.

The color of a horse's coat, or coat color, is said to be due to two types of melanin, eumelanin (blackish brown) and pheomelanin (reddish brown), and the color varies depending on the ratio of the two. In Japan, for example, the Japan Horsemen's Association defines 14 main types: Kurige (chestnut), Tochikurige (bright chestnut), Kage (meaning deer hair), Kurokage (black deer hair), Aokage (blue deer hair), Aoge (meaning blue hair), Ashige(gray), Kasuge (roan), Buchige (pattern), Tsukige (palomino), Kawarage (buckskin), Samege (cremello), Usuzumige (dun), Siroge (white). Of these, black deer hair and blue deer hair are vocabulary with describing expressions attached to deer hair, so from the principle of word composition, they can be considered a type of deer hair. This paper will not deal with these coat colors terms expressed by superimposing words in this way. Similarly, markings such as stars on the forehead and boots on the feet are not treated in this paper. We will focus on vocabulary in which a single word is used to describe a specific color of the horse coat.

My first awareness of Mongolian perceptions of horse coat color was in a movie theater in 1980, when I was studying in Mongolia. The audience was getting moved during a historical narrative scene, but I did not know why, and shortly afterwards I saw two spotted horses on the screen. People seemed to love the fact that a man and a woman were each riding a horse with the same pattern from the distant scene. Although it is said that spotted horses are not ridden by people of status, the color of the horses' coats certainly makes it easy to recognize that they are same coat color. Or perhaps the color was used to create a scene in which a man and a woman were in love, even if they had to give up their social positions. From this episode, we can understand that the Mongolian perception of a horse coat color is 1) that it is something to be judged from a distance and 2) that having same coat color is a kind of beauty.

Later, during my fieldwork, I often asked questions about the horse coat color, but in an era without digital cameras, it was quite difficult to develop an understanding of the horse coat color. It was the coat color *khaliyun* that led me to the naming principle that I will examine in this paper. The dictionary says *khaliyun* is an otter. I was curious about the color of the otter, and then heard that it was the color of a horse I saw in the town of Ulaangom in 1995 (Photo 1).

However, it looked much grayer than the actual otter. To begin with, there must be a wide range of coat colors among wild animals, so how could we standardize them? Then, looking closely at the otter, I noticed that whatever the color of its coat, it is characterized by being white on the inside and dark on the outside. This characteristic might be the basis for standardization. When viewed from a distance, the color of the mane and tail, especially on the outside, may serve as a discriminating indicator.

People looking for horses in Mongolia always have a pair of monoculars or binoculars with them and look at them from a distance (Photo 2).





*Photo 1*

The first thing that distinguishes a horse from a distance is whether it is dark (baraan) or light (*bügeen*) (Namhai, 2018: 15). Furthermore, if the mane and tail are clearly different from the color of the body coat, they are easily recognizable from a distance.

Therefore, it might be principle of naming horse coat color that the combination of the “coat” of the entire body and the “long hair (mane and tail)”. If we call the entire body “ground”, and call mane and tail together “hair,” the naming principle of the horse’s color might be “the difference between the ground and the hair”.



*Photo 2*

For example, in Japanese classification, Kage has black hair on a reddish-brown background, Kurige is yellowish-brown and can be both with black hair and with white hair, and Tochikurige has a darker background than Kurige. Among the broadly brown hairs, they are not distinguished by the presence or absence of black hair. They can be regarded as being distinguished only by the overall color of the coat. Furthermore, if the hair is white on the chestnut ground (Kurige), it is named chestnut with tail flower (Obana-kurige), not described in one word. If the entire coat is paler, it is called Kawarage which is yellowish with black hair; if it is not with black hair, it may be called Tsukige (like moon), and if it is mixed with white hair, it may be considered Kasuge (roan). However, since the classification focuses on the color of whole body, black hair would also be included. Thus, the Japanese classification or folk terms regarding horse coat color is not governed by the naming principle of combination of coat and long hair.

## **FOLK VOCABULARY ON HORSE COAT COLOR**

The diversity of horse coat colors in Mongolia has often been introduced (Nozawa, 1991: 60-61; Koibuchi, 1992: 150-158). However, no one has succeeded in deriving their naming principles. That failed because they tried to discriminate by color type and shade, while using the previously mentioned Japanese expressions as a standard. In this paper, I will rearrange horse coat color terms based on the Mongolian descriptions and prove the hypothesis that “difference between the ground and hair”. In other words, the difference in color between the coat of the entire body and the long hair of the mane and tail might be the key criterion of taxonomy.



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**ENCYCLOPEDIA OF INNER MONGOLIA**

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In the Encyclopedia of Mongolian Folklore (Livelihood Edition) (1979), of the 238 pages of descriptions on horses, the coat colors are described in a large quantity (Konagaya, 2019: 245), with 20 pages, 29 items, and 220 articles (Burentogs, 1979: 21-41) devoted to it (hereinafter referred to as the Inner Mongolia version).

In this Inner Mongolia version, the horse coat colors are often explained by comparisons with other coat colors or by the vocabulary itself, or by figurative expressions using other objects such as butter, cow dung, smoke, felt, and so on. These explanations make us more confused and bring us far from understanding. It reflects that verbal explanations of colors can be difficult.

Therefore, in the following, the descriptions are numbered and simplified, focusing on the difference between “coat” and “mane and tail.” This reflects the fact that the Mongolian text is often divided into two separate explanations: *ih bie*, and *del, süül*. The former translates as “large body” and refers to the coat. In the latter, *del* means mane and *süül* means tail, and since they are used almost as a couplet in the description of horse coat color, we use mane and tail here. Note that the Roman transcription reflects the Mongolian vertical spelling.

1) Saaral (*saral*) Mixed colors. Nine types are listed, including white and black.

2) Sharga (*shirg-a*) Yellowish coat, yellowish-white mane and tail. Six examples of representations are given, including red and white.

3) Khaliyun (*haligun*) With light brown coat and black mane and tail. Seven examples are given, including white and blue.

4) Ulaan (*ulagan*) Meaning red. Grayish-white with reddish tips of the coat; examples of one type of expression are given.

5) Yagaan (*yagan*) means pink. See the section on red 4).

6) Buural (*bugurul*) Dense mixture of white hairs. Four examples of expression are given, including black and blue.

7) Chookhor (*chokhor*) Spotted. Fourteen examples of expressions are given, with names of colors and parts.

8) Khar (*khar-a*) means black. Five examples are given, including the expression watery.

9) Khyarman (*hilmeng*) White horse with red eyes. Hard to see during the day, but has good night vision.

10) Chelmen (*chelmen*) Same as Khyalman.

11) Chilbeng (*chilbeng*) Same as Khyalman.

12) Chekhir nududu (*chekhir nidudu*) meaning cloudy eye.

13) Shaazan nududu (*shajang nidudu*) meaning pottery eye. Same as above.

14) Alag (*alag*) Speckled. Twenty-five examples of expressions are given, with names of colors and parts.

15) Khaltar (*khaltar*) Brown coat, white snout and other parts, black tail. Nine examples are given, including black and yellow.

16) Nuguun (*nugugan*) A black horse that has lost its strength due to overuse. Often used in the Syringol region. In some regions, it refers to a type of black horse.

17) Zeerd (*jigerde*) Both the coat and maned tail are reddish. Six examples of expression are given, including red and brown.

18) Chabidar (*chabidar*) Coat is Zeerd, maned and partially white. Two examples of expression are given, including red.

19) Kheer (*kheger*) Coat reddish rather than brown, mane and tail black. Six examples are given, including black and red.

20) Menggetü (*menggetü*) with mole. 17 examples of expressions are given, including black and brown.

21) Tolbotu (*tolbotu*) with bubbles. 17 examples of expressions such as black, brown, etc. are listed.

22) Khalzan (*khaljan*) means baldness and refers to the whiteness of the nose. 16 examples of expressions are given.

23) Sartai (*sartai*) means moon and refers to the star mark. 19 examples of expressions are given.

24) Khüren (*khüreng*) Entirely brown. Seven examples of expressions are given, including black and red.

25) Khuwa (*khuwa*) In khalkha it is *Khongol*, whitish gold. The maned tail is the same as the coat. Three examples of expressions are given, including red.

26) Khul (*khula*) Deeper than Khuwa, with black mane. Five examples of expression are given, including black and white.

27) Bor (*boro*) White at the base and blue at the mane. Seven examples are given, including black and white.

28) Chengker (*chengkher*) The root is white and the tip is blue, making it appear blue. Some localities call it whitish boll. One example of a compound expression is given.

29) Chagan (*chagan*) Specific parts are white. There are 34 examples of expression according to the name of the part.

The order in which these coat colors are listed is by no means alphabetical, but rather a kind of cohesive order. For example, 5) follows 4); 9) to 11) refer to the same coat color, which is known as cremello horse (whitish all over, pink skin color and blue eyes); 12) and 13) are the same; 17) and 18) have the same coat color; 20) to 23) have a marking respectively mole, spotted, nose white, and star; 25) and 26) are so similar in coat color that they can be explained by comparing their colors to each other. Although this logical cohesion is confirmed, it is unclear whether or not the order of the references has any meaning. At any rate, the description in the book provides us a rough understanding of the coloring and a hint of further segmentation of the expressions.

Interestingly, the most examples of expression are provided about white color (the above item no. 29), which includes 34 types. It is clear that there is a wide variety of cases of white horses, including the expressions that refer to the whiteness of certain parts of the body. On the other hand, the four words that are entirely white are *Saarial*, *Buural*, *Bor*, and *Chenkel* (hereafter referred to as *Tsenkel*), and at first glance it is difficult to distinguish between them. The Japanese term *Ashige* is characterized by the fact that the white color becomes darker as the horse ages, and only *Bor* (gray) can be found described as such (Burentogs 1979: 38). And the whiter of the two is considered *Tsenkel* (sky blue). *Buural*, on the other hand, generally means white hair for humans, and even in the case of the horse coat color, it is described as colored “on the body other than the head and limbs”



(Burentogs 1979: 23), which could be interpreted as white on the head and limbs. There seems to be a difference between *Buural*, which has a coat of various colors and white spines, and *Saaral*, which has a white coat and colored spines.

## MONGOLIAN HORSE ENCYCLOPEDIA

In Mongolia, a two-volume book “Comprehensive Encyclopedia of Mongolian Horses” was published in 2006. Although not explicitly stated, it is cited quite a lot from the above book (Inner Mongolia edition) published in China 40 years ago. The fourth part of the first volume contains 15 pages of color photographs of “coat colors” (Bayanbat, 2016: 167-182), and the order of the entries and the content of the text largely follow that of the Inner Mongolian edition.

Several changes are recognized in this Mongolian version compared to the Inner Mongolian version, as follows; *Yaghan* (purple) is put into the red color. Three types such as *Khyalman* (cremello) are put into the black horses (Photo 3).



Photo 3

The following two items regarding eyes are omitted. The heading for *Khüren* (brown) is (probably a mistake) given to black *Khüren*. The Chinese sound *Khuwa* was changed to *Ukha. Khongol*, which is supposed to be a dialect of *Uha*, is omitted and a compound expression, *Khongol Kheer* is recognized. *Tsenkel* is put in the *Bor* (gray ash).

With these changes, the 29 items listed above are now 23.

In this paper, we exclude the four items related to the markings as mole, spotted, nose white, and star, so there are 19 color items to be dealt with. However, *Nogoon* (green) should be omitted since it is a type of black and is noted to have significant regional differences. In addition, according to the description that the yellow coat of *Khuwar* (*Uhar*)

and *Khongor* are regional differences across the national border, we will assume that *Khuwar* and *Khongor* refer to the same coat color and exclude the compound expression *Khongor Kheer*. The remaining 17 items can be considered to be commonly understood across the national border as basic terms for expressing coat color. They are numbered and listed below. The romanized transcriptions below reflect the Mongolian Cyrillic alphabet. Each description here will be further simplified as a combination of coat and mane/tail, i.e., “ground and hair”.

1) *Saaral (saaral)* Mixed colors on white background with hair of various colors, including black

2) *Sharga (sharga)* yellow with yellowish white hair (light colored hair)

3) *Khaliun (khaliun)* light brown with black hair

4) *Ulaan (ulaan)* Reddish-gray with same colored hair

5) *Buural (buural)* Mixed white on colored background + white hair

6) *Tsoohor (tsoohor)* haphazard pattern

7) *Khar (khar)* Black with black hair

8) *Alag (alag)* speckled

9) *Khaltar (khaltar)* brown with black hair and also with white nose face, etc.

10) *Zeerd (zeerd)* reddish brown with same colored hair

11) *Tsabidar (tsabidar)* red-yellow with white hair and also with white groin, etc.

12) *Kheer (kheer)* Brown with black hair

13) *Khüren (hüren)* Brown with brown hair

14) *Ukhaa (uhaa)* or *Khongor (khongor)* yellow with yellow hair

15) *Khul (khul)* dark yellow with black hair

16) *Bor (bor)* gray with gray hair

17) *Tsagaan (tsagaan)* partial white

From these 17 items, in addition to the pattern expressions *Alag* (speckled) and *Tsookhor* (spotted), *Tsagaan* (white) is also treated as a pattern expression as mentioned above, and except for these three items, the remaining 14 coat colors are reordered to be summarized by ground color, and the hypothesis will be tested in the next chapter. In the verification, we will examine whether there is any contradiction between the names of the duplicated expressions, which were once excluded from the study, and the classified names.

## DISCUSSION (VERIFICATION OF THE HYPOTHESIS)

First, for the grayish ground, there are *Saaral* /*Buural* /*Bor*. *Saaral* is distinguished as having a white coat and colored stinging hairs (Burentogs, 1979: 21), *Buural* as having a diverse coat and white stinging hairs (Burentogs, 1979: 23), and *Bor* as having a mixture of white hairs all over the body (Burentogs, 1979: 38). The distinction between “coat and pubescence” can be simplified as follows: white ground + colored pubescence/colored ground + white pubescence/white mixed throughout. This combination of “coat and pubescence” is not a distinction between “coat and mane or tail (ground and hair),” but may be a similar distinction for the grayish color. If the mane and tail are lighter, it is more likely to be called *Buural*, and if they are darker, *Saaral*, although it is unclear how they would look from a distance due to these differences in principle.

The three types of light yellowish (light brown) hair are *Khongor* or *Ohaa* (*Huwa* in Inner Mongolia)/*Sharga* (light hair)/*Khul* (black hair), and the contrast in hair color, or mane and tail color, is obvious when the three types are laid out like this (Table 2).

Table 2

**Classification of horse color by combination of coat and mane: 14 colors**

Coat color		Mane and tail are same color as coat	Mane and tail are lighter than coat color	Mane and tail are darker than coat color
grey		Bor, Ulaan	Buural	Saaral Khaliyun, Kharltar
right /yellowish brown		Khongor (Khuwa/Oha)	Sharga	Khul
red brown		Zeerd	Tsabidar	
dark brown		Khüren		Kheer
black		Khar	–	–

The *Sharga*, whose mane and tail are paler than its coat, appears as a golden color on its entire body. The two brothers who play the main characters in the famous story of “Genghis Khan’s Two Horses” in the Ordos region have a coat color called *Jagar*, with a light-yellow coat and black mane and tail (Yang, 2001: 132). This coat color is also used by Nozawa (1991). According to Nozawa, the black hair type is used for the *Jagar*, making it impossible to distinguish it from the *Khongol*, since the *Khul* is not black-haired. For the time being, let us keep *Jagar* as a dialect to avoid confusion.

It is worth considering the duplicated expressions *Khongol Sharga* (Burentogs, 1979: 22) and *Khongol Zeerd* (Burentogs, 1979: 29), although they are taxonomic names. The former is a duplication of the taxonomic name in the yellow system. This would imply a recognition that there is no contradiction between the color of the coat, *Khongol*, and the term for the whitish mane in that coat, even if the terms are superimposed.

On the other hand, the latter would mean that there is no clear boundary between *Khongol* (yellowish brown) and *Zeerd* (reddish brown), which is shown next. Since subtle colors can be judged differently by different people, it can be assumed that if the color seems too light to be called *Zeerd*, then *Khongol* is used as a descriptive term.

As category for the dark yellowish or reddish (light brown) color, we will exclude the common word “Ulaan” (red), which is actually a kind of grayish color (Burentogs, 1979: 23). Other than this, the three terms used for hair color are *Zeerd/ Tsabidar* (white hair and limbs)/ *Khul* (black hair). The mane and tail contrast sharply with the coat. However, the *Khul* is also mentioned in the light brown family. The reddish brown is also commonly used, as can be seen in the expression *Zeerd Khul* (Fulin, 1979:37). On the other hand, the expression *Khongol Khul* can also be found (Burentogs, 1979:38). In other words, the term *Khul* refers to a horse with a black mane that is darker than its coat, and the coat itself can include a wide range of colors, from reddish brown to yellowish brown. On the other hand, the term *Khul*, which refers to a black mane, is inconsistent with the terms *Sharga* and *Tsabidar*, which refer to a whitish mane, so they are not used interchangeably.

The fact that *Kheer* and *Khul* are never combined may mean that there is a division of life between *Kheer* and *Khul*. That is, if the coat is dark brown, as described next, *Khul* is not used, and is given over to *Kheer*.

As for the brownish ground, the description is *Khüren/Kheer* (black hair)/*Khartal* (black hair + white mouth), and so far no description has been found for the case where the entire body is dark brown and the mane and tail are lighter in color than the coat, except for *Tsabidar*. For *Tsabidar*, despite the fact that the coat is described as reddish brown, examples of the expression *Khüren Tsabidar* (Burentogs, 1979: 30) or *Tsabidar Khüren* (Burentogs, 1979:37) confirm that it is commonly used for a dark brown coat. In other words, the term *Tsabidar* refers to a coat with a lighter mane and a white inguinal area than the coat, but the coat can include a wide range of brown colors.

Note that the compound expression *Tsabidar Khartal* is also mentioned as an example of *Khaltar* (Burentogs, 1979: 28), and it must be said that there is a contradiction in this regard. However, as far as the specific commentary is concerned, it may be a misnomer, since it is only included in *Tsabidar* and there is no element of black hair. At least it is not adopted in the Mongolian version.

For those with a black ground, even a black mane is not an indicator of distinction, and no classification name exists. Also, if the mane or other parts of the body have white hairs, they are called by the name of the part, as seen in the example of the expression for white, or perhaps this is why they are not found as a classification name. On the other hand, subtle variations in the blackness of the coat are distinguished by adjectives. It is also permissible to superimpose a base color, as in *Khüren Khar* (brownish black) (Burentogs, 1979: 25) or *Khar Khüren* (blackish brown) (Burentogs, 1979: 36). Although this implies a blurring of boundaries, it will be shared between these two representations that the former is blacker.

Finally, the *Khaliyun* is always black-haired and black-footed. It is a requirement that they have black hair and black feet rather than a coat color, and it is a sufficient condition that they are not dark brown like the hare and not reddish brown like the *Khul*. The coat of both *Kheer* and *Khul* belong to a distinct color called *Baraan* (dark), whereas the coat of *Bügeen* (light) with black hair and black feet can be classified as *Khaliyun*. In the detailed description of the *Khaliyun* color, the word *Kheer*, which is a type of black hair, and *Saaral* are often mentioned, and is understood to be a type of *Saaral*, or grayish-black hair.

As described above, the hypothesis of the naming principle of “difference between the ground and the hair” was confirmed for three sets of hair: hair the same color as the ground, hair darker than the ground, and hair lighter than the ground, ranging from gray or light brown to yellowish brown, reddish brown, and dark brown.

The *Khaltar* is characterized by black hair with the addition of white inguinal area and nasal surface. Similarly, the *Tsabidar* has white inguinal area and nasal surface, but its hair color stands out along with the white hair. In other words, *Khaltar* (mainly dark brown + black hair + white areas) and *Tsabidar* (mainly reddish brown + white hair + white areas) can be regarded as a pair. Since the word ends in *tar* and *dar*, respectively, and the initial sounds are *ha* and *t* in black *har* and white *tsagaan*, respectively, there seems to be a phonetic contrast.

The above considerations are summarized in a table (Table 3).



Table 3

**Classification of horse colors based on combinations of coat, mane, tail, nose: 13 colors**

Coat color	Mane and tail are same color as coat	Mane and tail are lighter than coat color	Black mane and tail	Black mane and tail with black leg	Black mane and tail with white mouse or groin	White mane and tail with white mouse or groin
grey	Bor	Buural	Saaral	Khaliyun	Khaltar	Tsabidar
yellowish brown	Khongor	Sharga	Khul			
red brown	Zeerd					
dark brown	Khüren		Kheer			
black	Khar	—	—	—	—	—

Excluding the still-undetermined *Saaral* and *Buural*, there are two colors with conspicuous black manes: *Khul* and *Kheer*. On the other hand, there are only two colors in which the white mane stands out: the *Sharga*, with its yellow coat, and the *Tsabidar*, with its white mouth and inguinal area. If a white mane did exist in the darker coat, it would probably be white not only in the mane and tail but also in other parts of the body, becoming *Saaral* or *Buural*.

## CONCLUSION

This paper discusses the Mongolian vocabularies of the horse coat color, which are known for their diversity, and reveals that the difference between the coat and long hair (mane and tail) is the naming principle. For nomads, it is important to be able to distinguish the horse from a distance, as they are constantly searching for missing horses or groups of horses, and it is important to be able to identify them from a distance. The three distinctions of light, dark, and the same of mane and tail comparing to the coat would be very reasonable identification criteria.

In fact, there are a number of coat colors with white coats and patterns that are often mentioned in encyclopedias. These patterns must be effective in searching for horses, especially when communicated through verbal expression. How the diversity of coat colors, including patterns, is maintained in nomadic practices needs to be studied separately. For example, the daily calendars used by nomads show lucky colors by birth date along with the lunar calendar, and many people in Khotont District, Arkhangai Province considered these as their lucky colors and took them into consideration when selecting a male of the species. If this is a common practice, then the degree of dispersion of lucky colors indicated in the birth dates contributes to the diversity of horse coat colors. These practices, along with further coat color identification and the cessation of regional and individual differences that were left out of this paper, will be the subject of future work. We also hope to see progress in genome analysis and genetics for Mongolian horses. It would be a great pleasure if this paper provides an opportunity to do so.

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