# Horses and Humans: The Evolution of Human-Equine Relationships

Edited by

Sandra L. Olsen, Susan Grant, Alice M. Choyke, and László Bartosiewicz



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# TIBETAN 'HORSE BOOKS' FROM THE HIGH HIMALAYAS

# Petra Maurer and Angela von den Driesch

#### Introduction

During the past 1200 years Tibet has produced a kind of literature which local people nowadays designate simply as 'horse books' (Figure 1). These hand written books are dealing with topics such as horse breeding, horse appraisal, management for horse races and equine medicine.

The earliest manuscripts of this kind are those found in the monastery of the 1000 Buddhas in Dunhuang. Dunhuang, in ancient times situated at the famous Silk Road at the northern border of Tibet to China, played an important role as a trading centre and rest house during medieval and early modern times. Here, in 1900, a room was detected which had been closed and sealed for more than 1000 years and which contained many objects of art and manuscript rolls including hippological and hippiatrical texts written in Tibetan language. None of these texts was younger than the end of the government of the Emperor Zhen Kong in the year AD 1022. The manuscripts must therefore originate from the 11th or 10th century AD or maybe even earlier (Maurer and von den Driesch 1999:96). The

Dunhuang texts dealing with horses have been analyzed and translated into French by Anne-Marie Blondeau in 1972. They form a valuable contribution to our knowledge of early medieval Tibetan hippology and hippiatry.

# **Recently Discovered Manuscripts from Nepal**

In the frame of an interdisciplinary project in northern Nepal sponsored by the German Research Foundation (Deutsche Forschungsgemeinschaft), we were able to investigate animal husbandry in the districts of Dolpo and Mustang. Both are situated in Northern Nepal at altitudes between 2500 and over 4000 m. On that occasion, we and other members of the project secured a series of 'horse books' written in Tibetan language and kept either in monasteries or in private households. The books were photographed and later transliterated and translated into German by P. Maurer. Until now the following manuscripts have been examined (the transliteration of the Tibetan text follows the Wylie system without any corrections of misspellings) (Maurer 1995, 1998). Material presented between parentheses denotes contracted or abbreviated forms in the manuscript:



Figure 1. Two pages from the horse book owned by dPal mgon po, prince of Jharkot, Muktinath Valley, Southern Mustang.

- 1. A book owned by 'Jigs med seng ge dpal 'bar, king of Lomantang, consists of 5 different manuscripts, of which only 3 have a title: 1a. rTa shad (rin chen) 'phreng ba las rta bcos (khyad par) can bzhugs so (from an explanation of the horse, called the precious garland, the extraordinary medical treatment of the horse). 1b. rTa 'bum 'thong khol rta nad (thams cad) 'joms pa'i sman mdo bzhugs so (a medical treatise to overcome all diseases of the horse which liberates all horses by mere looking). 1c. rTa spyad nyi ma'i sgron ma bzhugs so (the treatment of the horse, called the lamp of the sun).
- 2. A manuscript owned by a traditional horse doctor *mThar phyin* from Tengkar, near Lomantang: *rTa yi 'byung khung dang rta bcos gsal pa'i me long bzhugs so* (the mirror which clarifies the origin of the horse and its medical treatment).
- 3. A manuscript, in the possession of *dPal mgon po*, prince of Jharkot, Muktinath valley, Southern Mustang, contains 8 different texts on horse appraisal and horse medicine, for example: 3a. *rTa bum mthong 'khol rta nad (thams cad) 'jom ba'i sman mdo* (a medical treatise to master all diseases of the horse, which liberates all horses by mere looking. 3b. *Cog ro rje'u khye 'u chung gi rta dpyad gsal ba'i sgron me* (the medical treatment of the horse, compiled by *Cog ro rje'u khye'u chung*).
- 4. The manuscript owned by a person from Jharkot named *sras po 'Jigs med* contains as well 8 different texts that were written alternatively by at least two writers. One of the titles reads: **4a.** *rTa bcos zab mo bzhe bya bzhugs so* (the profound medical treatment of the horse).
- 5. There are four texts owned by the horse doctor, *mTshams* pa ngag dbang, from Jomson, Southern Mustang. All manuscripts are incomplete, two of which have titles: 5a. rTa yi spu rigs rtags dang sman dpyad thor bu zhugs so (characteristics of horse hair together with several medical treatments). 5b. rTa chos nor bus 'phreng ba bzhugs so (the medical treatment of the horse, called garland of jewels).
- 6. There is a book belonging to the lama *rNam rgyal* from the Ribo bumpa monastery near Tarab in the district of Dolpo, a handwritten book that contains several texts from different authors, one of them bears the following title: 6a. *Ra'i rtag thabs rin chen sgrom me* (methods of inspection of the horse, called the precious lamp).
- 7. There is a manuscript owned by the lama *Tshe ring bkra shis* from the Khagar monastery near Tarab in Dolpo. The title is the same as mentioned under number 6, the content is identical as well.
- 8. There is a manuscript owned by the lama *Ye shes rgya mtsho* from Nyile in the district of Dolpo: *rTa shad (rin chen) 'phreng ba las rta bcos (khyad par) can bzhugs so.* The title and content is identical with the document mentioned under number 1a (see above) (with regard to other manuscripts on horses from Tibet see Maurer 1998:95ff.).

With the exception of the texts owned by *mTshams ngag dbang* all manuscripts have been bound into books, and all

of them are a combination of several titles from different authors. As already stated, the titles mentioned above do not reflect the entire corpus because sometimes the title page is missing. Since none of these texts contains a colophon, their dates of origin remain unknown. There is no doubt that the texts from the High Himalayas clearly post-date the horse texts from Dunhuang, the latter ones being the oldest written records available on Tibetan hippiatry and hippology. However, when we compare the texts discussed here with the Dunhuang manuscripts, it becomes quite obvious that the contents show close similarities. It is therefore likely, that they do derive from these oldest known sources (Maurer 1997).

#### **Summary of Contents**

All documents analyzed are dealing with two main subjects: a theoretical or hippological part and a section on equine medicine. The hippological part of the manuscripts gives a more or less extensive description of the different types of horses according to their conformation and physical characteristics as well as behavior. Also, it comprises the evaluation of quality and color of the hair, the determination of age based on the form and wear of the incisors, and recommendations for the nutrition of a horse when participating in horse races. The book, owned by dPal mgon po of Jharkot, provides the most detailed information about the different types of horses. 72 types are described and grouped into four main categories corresponding to the four elements: fire, water, earth and wind. What precisely this classification is based on remains unknown to us (Maurer and von den Driesch 1999:77).

Often the different types of horses are compared with other animal species. We will cite an example: "The *khu gyen* horse is like a she-wolf roaming on the slopes of the high mountains. It shall be ridden in the case of escape and pursuit. In the evening it is faster than in the morning". We will cite another example: "The *mdo ba* horse, when running, will be like a fish in the water. It will be the best horse for races" (taken from the book listened under number 4).

In some of the manuscripts a section on horse anatomy is presented. The chapter describing the topography of the liver and the gallbladder, states, "the gallbladder lies above on the back side of the liver". One can realize that the anatomical chapter was overtaken from books on human medicine, the specialist knows that horses have no gallbladder. It seems that the anatomical chapter was incorporated into the horse books in order to raise their academic value and scholarly appearance. Anyhow, for the practicing horse doctor or horse healer, this anatomical instruction was without any importance because surgery was only applied for minor operations.

Most of the texts contain a section in which the number and the position of whirls in the hair coat of the horse and their consequences for the fate of the owner, his family,



FIGURE 2. TWO PAGES TAKEN FROM THE HORSE BOOK OWNED BY 'JIGS MED SENG GE DPAL 'BAR, KING OF LOMANTANG, MUSTANG.

and his horse are discussed. Actually, this section has nothing to do with horse appraisal. Its significance belongs to the field of divination. Each horse has a certain number of whirls in its hair coat, which is something very natural. Usually hair whirls are found on the forehead, on both sides of the neck, on the fore chest, in the umbilical region and on the flanks. In the Tibetan texts, these common hair whirls are considered to be good signs and should bring luck and health to the horse owner, his family and to the horse itself. Any hair whirls to be found on other parts of the body as usual are regarded as bad signs. They will bring unhappiness, disease, and even death to the horse owner, his family, and to the horse. This strange idea seems to be based on Indian hippological beliefs (Oloff 1981:76ff.), but it must be mentioned here that also ancient Chinese horse texts discuss this problem (Heerde 1997:5).

Let us now turn to the passages dealing with the treatment of horses when they fall ill. All documents contain passages on hippiatry and particularly one section illustrated with drawings (Figure 2). The hippiatrical parts are almost identical in all manuscripts studied. It is therefore evident that they rely either on each other or derive from an archetypus. The only exception is the manuscript owned by 'Jigs med seng ge dpal 'bar, former king of Lomantang (see manuscript mentioned under number 1). Here the illustrated part is much more detailed than in the other manuscripts. This indicates that either this passage is based on a different source or that the author himself added several descriptions of diseases and methods of healing.

Similar to the traditional Chinese veterinary medicine, the medical part of the manuscripts under discussion begins with the description of the diseases of the 5 "full organs" (=viscera) being heart, lung, liver, spleen, and kidneys. Also, descriptions from the so-called "hollow organs" (=bowels), which in Chinese medicine are comprised of the stomach, small intestines, large intestines, gallbladder, and urine bladder. Only the diseases of the intestines in general and sometimes of the stomach are mentioned in our texts. For example:

"If a horse suffers from a kidney disease it does not eat and drink. Its hind legs are folded; the rear part of its body staggers; it has a sad face; its urine looks like a broth made from lentils" (then it follows with the enumeration of the remedies).

All passages dealing with medical treatment are built up in the same manner. In the beginning of each paragraph, the diagnosis and the symptoms are given, followed by the method of treatment, mostly the enumeration of drugs applied. In the end, we often find the remark that this specific treatment will be useful and cure the disease. As the diagnosis and the symptoms are not given precisely, the specific disease one is dealing with cannot always be identified, as it is the case with the example I just mentioned. The kidney disease described here may mean an infectious or non-infectious nephritis (or pyelonephritis) as well as the so-called lumbago of the horse (equine paralytic myohaemoglobinaemia).

<sup>&</sup>lt;sup>1.</sup> Chinese medicines differentiate between viscera and bowels. The socalled five viscera store essential qi and do not discharge waste. Thus they are full but cannot be filled. The bowels process and convey matter, and do not store. Thus they are filled, yet are not full (Zmiewsky 1985:66).



FIGURE 3. TWO PAGES TAKEN FROM THE HORSE BOOK OF DPAL MGON PO. THE TRANSLATION WILL BE GIVEN IN THE TEXT.

Besides the diseases of the different organs, other descriptions are dealing with wounds on the back, the belly and elsewhere, with the dislocation of joints, and with poisoning by different agents including the poison of a dog, which means rabies. We would like to present to you another example taken from the manuscript of *sras po 'Jigs med* (see manuscript mentioned under number 4):

"If a horse has been injured by a yak's or a cattle's horn, it does not die when the intestines are not perforated. One washes the intestines thoroughly with lukewarm water and puts them back into the belly. One puts the horse onto its back, seizes its four legs and moves it to and fro. One sews up the wound well and prepares a compress made from clay, oil and warm porridge of barley. If it was attacked elsewhere one cleans the wound with the gall fluid of a bear and the abdominal secretion of the musk deer solved in water. The wound itself has to be circled with fire. This will definitely help. In case the intestines are perforated there is no remedy" (Figure 3).

# **Pharmaceutical Therapy**

The application of drugs is the most used method of healing. The majority of pharmaceutical medication is prepared from plants. Minerals, substances of animal origin and medications of the so-called *Dreckapotheke* (a German word which means dirty pharmacy) are used. *Dreckapotheke* remedies include urine (mainly of young boys), carcasses, feces of animals, and water with which the inside of shoes has been washed out. This fact indicates a close connection with Chinese veterinary medicine, where remedies from the *Dreckapotheke* are also applied,

for instance water in which dirty socks have been washed (von den Driesch and Franke 1992:133).

Concerning the plants it is very difficult if not impossible to identify the species one is dealing with. In the Himalayas, the same name is often used for different plants, which do not even belong to the same botanical family. According to Lobsang Tenpa, a physician in Chabahil/Kathmandu, Nepal, particular plants are quite often disease-specific. From this follows that the vernacular name of a plant alone may not be sufficient to identify it. The medical practitioner has to know which particular plant is needed for which particular illness (Maurer 1997:616). The following table lists those plants, minerals, and substances of animal origin, which are recommended regularly and quite often in the manuscripts that we have analyzed (Table 1).

Table 1. List of drugs frequently mentioned in the horse books from the High Himalayas.

English name	Scientific name	Tibetan name
Frankincense	Balsamodendron mukul (Commiphora mukul)	gu gul
Monk's hood; aconite	Aconitum ssp	bong dmar (bong dkar)
Sweet flag	Acorus ssp	shu dag
Devil's dung	Ferula asafoetida	shing kun
Himalayan rhubarb	Rheum emodi	chu rtsa
Sulphur	Sulphur	mu zi
Liquorice	Glycyrrhiza chebula	shing mngar
Chelubic myrobalan	Terminalia chebula	a ru ra
Garlic	Allium sativum	sgog skya
Musk	Moschus	gla rtsi

With regard to the application of remedies three different forms can be distinguished:

- 1. Oral administration of a single remedy or of a mixture. For this purpose, the ingredients are first pulverized, then either boiled with water or mixed with a base (sman rta) of Tibetan beer (chang), molasses, or butter. The remedy is always given to the horse through the mouth, never through the nostrils or the anus.
- 2. Drugs for external applications are mixed with animal fat, butter or oil.
- 3. *Fumigation*. For the fumigation of inflamed parts of the respiratory tract and skin diseases, plants are chopped up coarsely and mixed. Besides medicinal plants, preparations from the *Dreckapotheke* are used, for instance a sole of an old shoe. To ensure that the smoke reaches the mouth and the nose or a skin wound, the horse is partly or entirely covered with a blanket (Maurer 1997:616ff).

# **Further Forms of Therapy**

Further forms of applications or treatments regularly mentioned in the texts are:

- 1. Bloodletting (gtar ba) is one of the most common methods applied in ancient equine medicine for healing any kind of disease. It is always connected with the idea of a disharmony in the composition of the blood, and thus causes a weariness of the whole body. In the thinking of ancient medical men, bloodletting restores the equilibrium of the blood's composition (consisting of blood - sanguis, yellow bile - chole, mucus - phlegma and black bile - melanchole in the western Galenic-system of blood, bile and wind in the Ayurvedic system of India and of bile, mucus and wind (pneuma) in the Tibetan medical system). In European veterinary medicine and in Tibetan veterinary medicine too, bloodletting seems to be regarded as an effective procedure to cure any disease. In general, it is carried out on a vein near the diseased organ or on the jugular vein (rtse chung).
- 2. Moxibustion (*me btsa'*) and cauterization (*tshugs me*), two procedures of Chinese origin, are very similar treatments. They are based on the idea that the disturbed flow of energy in the meridians can be influenced by these procedures. The moxa is a cone prepared from different plants. It is burnt down directly on the skin (Figure 4), particularly on the acupuncture points

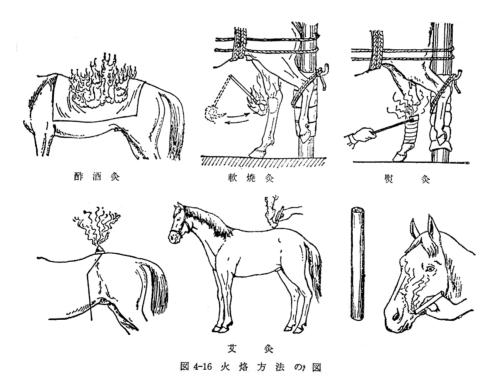


FIGURE 4. AN ILLUSTRATION ON THE USE OF MOXA IN THE HORSE. THE ILLUSTRATION WAS TAKEN FROM A MODERN JAPANESE COMPENDIUM ON VETERINARY ACUPUNCTURE.



FIGURE 5. IRON INSTRUMENTS FOR CAUTERISATION STILL IN USE IN THE MUKTINATH VALLEY WHEN TREATING ILL ANIMALS.

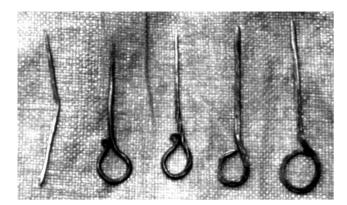


FIGURE 6. IRON NEEDLES FOR PIERCING AND CAUTERISATION STILL IN USE IN THE MUKTINATH VALLEY WHEN TREATING ILL ANIMALS

(gsang gnas) (see von den Driesch 1989:41ff). In the case of cauterization, a special heated iron instrument (Figure 5) or a sharp needle (Figure 6) is used instead of the cone. This kind of treatment is a still frequently practiced form of therapy and prophylaxis today by the people of the High Himalayas. P. Maurer has observed that none of the horses showed any reaction during the treatment with cauterization. The manuscript owned by the king of Lomantang (number 1) presents a figure of a horse, in which all the bloodletting and cauterization points are shown. These have different forms, namely points, crosses, and a combination of points and crosses. Additionally, a swastika can be found on the drawing (Figure 7).

- 3. Piercing with a small lancet is used on external tumors, ulcers, or swellings.
- 4. Sprinkling with water is used to activate the blood circulation and to cure diseases accompanied by fever. It is one of the oldest application forms in human and veterinary medicine. It is already mentioned in the so-called veterinary papyrus of Kahun in Egypt,

- a document on veterinary medicine dating to the 19<sup>th</sup> century BC (von den Driesch 1989:16f).
- The curing of "similar with similar" found in some of the texts under discussion is more a magical practice than a homeopathic one. For example, to cure the bite of a dog, the burnt hair of the dog should be added to a mixture of drugs. To heal the bite of a water rat (chu byi), the bitten part has to be scratched with the carcass of a rat: "If the horse is bitten by a water rat, at the place where (the water rat) has bitten a swelling appears. Therefore one mixes musk with sweet flag (and) with the urine of an eight-year-old boy as a base and spreads (this ointment) on (the swelling). Internally one gives Chinese surge (=Euphorbia wallichiana/kansuensis), chickweed (=Stellera chamaejasme), black hogweed (=Heracleum ssp), and chelubic myrobalan. All the veins have to be bled. If one finds the carcass of a water rat, this is excellent. If one scratches (the swollen part with the carcass), this will help definitely" (taken from the manuscript listed under number 3, Maurer 1995:150). What precisely a water rat means from a zoological point of view remains unclear.

#### **Magical Practices and Rituals**

Other magical practices than the above-mentioned include the holding of a mirror in front of the horse and the binding of a red silk ribbon around its head, a procedure which is supposed to cure any kind of disease which appears suddenly.

Rituals are described in almost every manuscript. A ritual consists in the citation or the writing down of a mantra, in order to combat demons, which are made responsible when a horse falls ill. The same role with the same aim plays a substitution offering to the horse. Here a distinct recitation has to be spoken in front of small horse sculpture made from unburned clay. The text is usually formulated in an

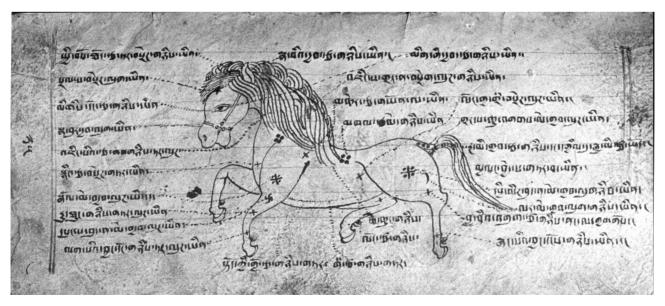


FIGURE 7. FIGURE OF A HORSE IN WHICH THE BLOODLETTING AND CAUTERISATION POINTS ARE SHOWN. FROM THE HORSE BOOK OF 'JIGS MED SENG GE DPAL'BAR.

imperative form commanding the demon(s) to release the horse and to vanish. Many of these horse sculptures have been found in a cave near the village Kagbeni in the Kali Gandaki valley (Simons, Schön and Shrestha 1994:55, fig. 16).

#### Conclusion

The horse books discussed here comprise different topics on horse management. Most important for horse holders and horse healers in the past have been the chapters with equine medicine. The often short paragraphs were easy to comprehend and the texts could be learned by heart. The medicinal content of the manuscripts is very old and has its roots in the origin of the horse texts from Dunhuang.

Many of these therapies are still in use today. Due to the almost complete lack of modern veterinary care in these remote high mountain areas, many horses are treated in the traditional manner. It seems that some local horse healers, most of them illiterate persons, know the content of the respective horse books of their village because they have been read to by an educated person. Besides this, the knowledge on equine medicine has been transmitted through oral communication from an experienced healer to a disciple, sometimes father and son. This means that there is not only a written but also an oral tradition. But the methods of healing according to the oral tradition are simpler; for instance, the drugs known and used by horse healers have fewer ingredients than the drugs described in the texts. If and how this oral tradition is connected with the written tradition, cannot yet be fully established (Maurer 1997:616).

From both a historical and medical point-of-view, the texts were influenced by horse texts from India that were based on the Tibetan translation of the Ashvāyurveda (the knowledge of the long life of the horse) and of Shālihotra (e.g. horse appraisal, horse types, significance of hair whirls). They were also influenced by the concepts of Chinese medicine (e.g. moxibustion, cauterization, and pharmaceutical therapy) and as it has been stated also for human medicine (Meyer 1988:57ff).

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