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Western Medical Reports on Central Eurasia*

Religion, magic, and medicine have been inseparable in the diverse cultures of Central Eurasia until recent times. Often this has meant that medicine has been discussed by scholars primarily as a part of the history of religion. While of definite value, it should not replace a history of medicine in Central Eurasia. Ordinary medical conditions from childbirth through the ensuing coughs, colds, wounds, fractures, and fatigue to old age were easily distinguished from those more serious ailments which might require isolation from the community to prevent further contagion or which might signal the need for supernatural or religious intervention. This would suggest the presence of a rational, yet empirical, notion of disease combined with the religio-magical experience. When diseases caused severe deformities, a stigma might be attached not only to the individual but, if widespread, to an entire people. Domesticated livestock, so important to nomadic life on the steppes of Inner Asia, as well as wild animals and noisome insects were carriers of disease. Add to this the importance of the transmission of disease, especially during epidemics – by nomadization or migrations, armies, commercial travelers plying the Silk Road or post roads, the slave trade, or even by colonial occupation – and medicine takes on a new meaning and importance in the political, social and economic history of Central Eurasia.

1. *Rumor or Myth versus Authentic Medical Practice*

While Western sources on medical practice in Central Eurasia, particularly from the ancient and medieval periods, could belittle or attribute fanciful medical procedures or rites to Inner Asian peoples, occasional depiction of treatment also existed in more realistic form. Those misconceptions were

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usually drawn from rumor – not eye-witness reports – supporting ethnic stereotypes. Representative of these notions, Hippocrates (c.460-370 B.C.) postulated that horseback riding caused gout, sciatica and even impotence among the Scythians:

"The habit of riding causes swellings at the joints, because they are always astride their horses; in severe cases follow lameness and sores on the hips. They cure themselves in the following way. At the beginning of the disease they cut the vein behind each ear. When the blood has ceased to flow faintness comes over them and they sleep. Afterwards they get up, some cured and some not. Now, in my opinion, by this treatment the seed is destroyed. For by the sides of the ear are veins, to cut which causes impotence, and I believe that these are the veins which they cut." [1]

Gout was a common ailment and led to equally bizarre treatments in medieval times. The Armenian Grigor of Akanc' in his *History of the Nation of Archers* (late 13th Century) related a tale of a Mongol chieftan who suffered from gout, whereupon a Jewish physician was summoned, who prescribed that the chief's foot should be placed in the belly of a live red-haired boy. The monstrosity of this, though realized too late, resulted in the disemboweling of the physician and the feeding his entrails to dogs.[2]

More accurate descriptions of health and/or medical expertise also existed, including simple remedies, materia medica, and "doctors". Although the sources are sparse for Inner Asian in pre-history and antiquity, by medieval times and the following centuries discussions arose on the nature of specific diseases recognized by medical science, making use of observations from within the framework of traditional Inner Asian cultural settings. In antiquity such simple health notions as why Scythians wore belts appeared. Aulus Gellius (fl. 2nd century AD) wrote in his *Noctes Atticae*: "...the Scythians are also accustomed, when on any occasion it is necessary to fast, to bind up the

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1 Hippocrates (W. H. S. Jones, trans.), *Airs, Waters, Places*. London: Heinemann, 1923. v. 1:XXII, 126-131. For a more complete overview on the Scythians and medicine see M. C. Dumka, *Pro meditsinu skifiv (istoriko-medichne doslidjennya)*. Kiev: Derjavne Medichne Bidavntstvo URSR, 1960; also Charlotte Triebel-Schubert, "Anthropologie und Norm: Der Skythenabschnitt in der hippokratischen Schrift «Über die Umwelt»" *Medizinhistorisches Journal* 25 (1990):90-103.

2 Grigor of Akanc' (Robert P. Blake and Richard N. Frye trans.), *History of the Nation of Archers*. Cambridge: Harvard-Yenching Institute, 1954:61-63; for extensive commentary on it and related practices by the Mongols, see Francis Woodman Cleaves, "A Medical Practice of the Mongols in the Thirteenth Century", *Harvard Journal of Asiatic Studies* 17 (1954):428-444.

belly with broad belts, in the belief that the hunger thus troubles them less...".[3] Best known, however, are the two scenes on the Kul' Oba vase (in the Hermitage Museum, St. Petersburg) where the Greek artisan depicted the bandaging of the leg of an injured Scythian and of tooth extraction. It is also possible that Greek medical traditions were transmitted across the reaches of Inner Asia to Tibet.[4]

2. *Materia Medica including Mineral Baths & Vapours, Fumigants, and Poisons*

The preparation and use of *materia medica* by various Inner Asia peoples was known from early times. According to Herodotus (c.484-425 B.C.): "Hemp grows in Scythia... The Scythians, as I said, take some of this hemp-seed, and, creeping under the felt coverings, throw it upon the red-hot stones; immediately it smokes, and gives out such a vapour as no Grecian vapour-bath can exceed; the Scyths, delighted, shout for joy, and this vapour serves them instead of a water-bath; for they never by any chance wash their bodies with water."[5] Later variations or additional uses of smoke and baths have been observed. Purification by smoke was well-known and widely practiced.

Some resorted to the use of smoke to cleanse or ward off noxious beasts. When Evert Ysbrants Ides (1657-1706), ambassador of Peter the Great to the Emperor of China, reported on his journey (1692-1695), the following practice was depicted among the Nisovian Tungus: "Both Men and Women carry a Pot on the Left Arms, continually furnished with old smoaking Wood; which preserves them from the biting of the *Moschitoes*, or *Gnatts*, with which the River *Tungusky* and the Woods are so abundantly pestered...".[6] The Buriat

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3 Aulus Gellius, *The Attic Nights of Aulus Gellius, I-III*, translated by John C. Rolfe, (London: William Hienemann, 1928), Book XVI, iii, 2-8, 136-137.

4 See Christopher I. Beckwith, "The Introduction of Greek Medicine into Tibet in the Seventh and Eighth Centuries" *Journal of the American Oriental Society* 99 (1979):297-313.

5 Herodotus (Geoge Rawlinson, trans.), *The History of Herodotus*. New York: Tudor Publishing Company, 1941. v. 4:136, 137.

6 E. Ysbrants Ides, *Three Years Travels from Moscow overland to China*. London: W. Freeman, J. Walthoe, T. Newborough, J. Nicholson, and R. Parker, 1706:30. Courtesy of the Wellcome Institute for the History of Medicine (London).

used a different method to escape from the "frightful gnats and horseflies, which propagate here in such quantities that they darken the air and make it impossible for people to breathe freely. Everyone here wears delicate nets woven of horsehair over his face, high boots and leather gloves."[7]

Mineral springs or baths had a definite place in some cultures and were used for medicinal purposes. George Timkowski, a member of the Russian Mission to China in 1820-1821, commented on the mineral springs called *arachan* near Urga. "In some diseases, the Mongols, according to the advice of their lamas, make use of these waters: no preparations, however, are made for the patients; but on their arrival, pits are dug in the ground, which serve instead of baths."[8] Similarly, in 1840 a brief treatise on the healing powers of the Khasurtai-on-Kurba mineral spring in Transbaikal was written by a Khori Buriat, Vanchik Sagin, who had been trained as an "apprentice of smallpox vaccination" (CECEG-ÜN ÜSINГ), a practice begun by the Russians at the beginning of the 19th century.[9]

Among the most interesting medicinal preparations were poisons. For example Aristotle (384-322 B.C.) told how the Scythians made poison for their arrows "out of the snake. Apparently the Scythians watch for those that have just borne young, and then taking them let them rot for some days. When they think that they are completely decomposed, they pour a man's blood into a small vessel, and dig it into a dunghill, and cover it up. When this has also decomposed they mix the part which stands on the blood, which is watery, with the juice of the snake, and so make a deadly poison."[10] Aelian (fl. 3rd century B.C.) repeated this story, but suggested the medical skill, implied by Aristotle, and also identified an eye-witness: "And the Scythians are even said to mix serum from the human body with the poison that they smear upon their arrows to drug them. This serum somehow floats on the surface of the blood,

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7 Hans Jakob Fries (Walther Kirchner, trans.), *A Siberian Journal: The Journal of Hans Jakob Fries, 1774-1776*. London: Cass, 1974-1975:137.

8 George Timkowski, *Travels of the Russian Mission through Mongolia to China and Residence in Peking in the years 1820-1821*, with corrections and notes by Julius Klaproth. 1-2. London: Longman, Rees, Orme, Brown, and Green, 1827:127, 71. Courtesy of the Wellcome Institute for the History of Medicine (London).

9 See N. Poppe, "An Essay in Mongolian on Medicinal Waters" *Asia Major* (n. ser. 6) (1957-1958):99-105.

10 Aristotle (W. S. Hett, trans.), *Aristotle, Minor Works*. London: Heinemann, 1936:141, 310-313.

and they know a means of separating it. Theophrastus is a sufficient witness to the fact."[11] Expertise in poisons may also be extended to antidotes.

Much later, in the nineteenth century, Western medical doctors reported numerous tales regarding *materia medica* and poisons, including the involvement of the local religious community in the treatment for snake bites, which were "very common, and the people have an efficient remedy for it; they catch a frog, rip open its belly, and tie it over the wound; this affords immediate relief. Another remedy is a sort of gum or fungus found at the stumps and on the boughs of the *toghrác* or 'poplar' tree; there are two kinds called *cará* and *ác* or 'black' and 'white' *toghrágho* respectively; the black is the kind used; it is powdered and mixed into a paste with water or spittle and so applied to the wound; it afforded immediate relief. There is one kind of snake called *dúr*; its bite is immediately fatal, nothing cures it. People say that if the Mullá repeats the *Kalima* and breathes *dam* upon the wound, a cure is certain. God only knows; but in Lob he never arrives till the snake-bitten is dead."[12]

The use of poisons and plants by the Scythians, thus, only foreshadowed the importance of trade in *materia medica*; the investigation of this trade should not be limited to more modern times with medicinal rhubarb, but should be extended to include the medieval period by using materials such as Francesco Balducci Pegolotti's *La pratica della mercatura* (c.1340) and the well-known *Codex Cumanicus* (1st half of the 14th century). The travel of such products along routes in Central Eurasia has long been displaced by better known articles of trade such as silk, horses, and tea.[13]

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11 Aelian (A. F. Scholfield, trans.), *Aelian On the Characteristics of Animals*. 2. London: Heinemann, 1959:IX, 15, 234-235.

12 [Sir T. D. Forsyth], *Report of a Mission to Yarkund in 1873, under command of Sir T. D. Forsyth, K.C.S.I., C.B., Bengal Civil Service, with historical and geographical information regarding the possessions of the Ameer of Yarkund*. Calcutta: Printed at the Foreign Department Press, 1875:53. Courtesy of the the Wellcome Institute for the History of Medicine (London).

13 For medicinal rhubarb see Clifford M. Foust, *Rhubarb: The Wondrous Drug*. Princeton: Princeton University Press, 1992; relevant remarks on the *Codex Cumanicus* see N. Vatamanu, "Un médecin co-auteur du «Codex Cumanicus»" in Heinz Goerke and Heinz Müller-Dietz (eds.), *Verhandlungen des XX. Internationalen Kongresses für Geschichte der Medizin. Berlin, 22-27. August 1966*. Hildesheim: Georg Olms Verlagsbuchhandlung, 1968:296-297.

Curious pharmaceuticals sometimes spoken of by Western travelers may not only have been commonly used but also time-honored traditions, regardless of their suspected dubious worth by the Western scientific community. When Henning Haslund-Christensen (1896-1948) spoke to Mongol companions about the scientific theories surrounding dinosaur finds, he was told by his Mongol companions: "It is only for you white people with your new learning that it is anything new. We call these *Tenggerin losang yasa* (the bones of the Dragons of Heaven) and we have used these bones for many years as a cure for certain diseases."[14]

3. *From Quarantine to "Hospitals"*

Another element of medical practice which figured prominently, but has been little studied was, from medieval times (and earlier) the presence of "hospitals" which included not only the more formal institution as it is thought of today, but also its earlier and more primitive form of quarantine in huts, tents or yurts for the sick as a means of isolation to spare tribal communities from contamination and contagion (real or imagined).[15] Further examples of this are mentioned below in Marsden's report on leprosy among the Yakut.

4. *Medical Doctors: Soothsayer to Physician*

Soothsayers, diviners, shamans, lamas, and mullahs also assumed the role of healer, adding to their influence and power. The conflict which developed between the religious community-native doctors and modern Western medicine should not be surprising. Well into the nineteenth century mullahs were considered by some as the main obstacle to medical progress in Turkestan where, for example, verses of the Koran were written on paper to cure ills;

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[14] Henning Haslund-Christensen, *Tents in Mongolia (Yabonah): Adventures and Experiences among the Nomades of Central Asia.* London: Kegan Paul, Trench, Trubner & Co., Ltd., 1934:56.

[15] One exception is the study by A. Terzioglu, "Die Ilkhanischen Krankenhäuser und die Einflüss der islamischen Medizin auf Byzanz zu dieser Zeit" in *Proceedings of the XXIII International Congress of the History of Medicine, London, 2-9 September 1972.* 1-2. London: Wellcome Institute for the History of Medicine, 1974:288-296.

amulets were also common.[16] Others saw the more scientific side of medicine. Sart physicians, for example, first consulted a standard medical book, *Tukhpatul Muminin*, to determine treatment according to symptoms and temperament. These doctors used drugs extracted mainly from plants, many of which grew wild or were cultivated in and around Tashkent, Bukhara, and Samarkand.[17]

It was probably inevitable that Westerners themselves would be called to practice medicine in the region. Most prominent were either Christian missionaries or medical men serving with foreign delegations/embassies. Thus, the Moravian community at Sarepta on the Volga in the 1760-1770s did have a physician, a pharmacy (opened 1776), and a mineral bath which attracted many patients. While serving primarily its own community and having little respect for native medical practices by their Kalmyk neighbors, the Moravian physician did treat the Kalmyk prince Bambar.[18]

The Manchu court of K'ang-hsi provided another example. In a request to Pope Clement XI (letter dated 9 December 1714), K'ang-hsi requested specialists in medicine and surgery be dispatched to his court for Imperial service; earlier decrees had asked for medicines.[19] The Italian Jesuit Giovanni Giuseppe Da Costa (in China from 1715-1747) examined and suggested treatment for one of K'ang-hsi's son's for his ulcerated feet.[20] Dr. Thomas Garvine of Ayrshire (during 1716-1717), who was attached to Lorenz Lange's

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16 Guillaume Capus, "Médecins et médecine en Asie centrale" *Revue scientifique* (3rd ser.) 33 (1884):168-177; esp. 177.

17 Eugene Schuyler, *Turkestan: Notes of a Journey in Russian Turkestan, Khokand, Bukhara, and Kuldja*. 1-2. New York: Scribner, Armstrong & Co., 1877:149-150. More northern steppe areas of Central Asia and Mongolia would expand the *materia medica* to include animal matter.

18 C. R. Bawden, *Shamans, Lamas and Evangelicals: The English Missionaries in Siberia*. London: Routledge & Kegan Paul, 1985:14-20, 44-45, 200.

19 Antonio Sisto Rosso, O.E.M., *Apostolic Legations to China of the Eighteenth Century*. South Pasadena: P.D. and Ione Perkins, 1948:298-301, 187.

20 A fragment of this episode has been preserved in Manchu; see the text and translation with remarks by Nicola Di Cosmo, "A Manchu Fragment on the Medical Treatment Given by the Italian Jesuit Giovanni Giuseppe Da Costa to Yin-ssû, Eighth Son of K'ang-hsi" in Klaus Sagaster and Helmut Eimer (Eds.), *Religious and Lay Symbolism in the Altaic World and Other Papers*. Wiesbaden: Otto Harrassowitz Verlag, 1989:100-108. Rosso also has material on Da Costa in China, but identifies him as Portuguese; see 265.

the mission to China, was allowed to feel the emperor's pulse.[21] Service at K'ang-hsi's court could also be trying. Some were forced to endure his barbs. For example, the doctor Rev. Domenico Volta (1721) was asked "How many people did you kill by your treatments? I think the people you killed by your treatments are more than those I executed", followed by the emperor's hearty laughter.[22] Others, such as the physician Fr. Giovanni Borghese (1710) led a stormy life in China and were sent away from the court.

Or, across China, in Turkestan, there was Major Henry Walter Bellew (1834-1892) who, as a medical doctor with the Forsyth Mission to Yarkand (1873-1874), maintained a clinic and kept a "Record of sick, out-door and in-door patients, treated at the Dispensary of the Káshghar Embassy from the 1st November 1873, at Sánjú, to the 24th May 1874, at Kokyar." The list of ailments treated was extensive, "...testif[ying] to the eagerness with which European medical aid is sought by the people of Káshghar... [and] a fair exponent of the diseases from which they suffer."[23]

5. *Diagnosis and Treatment of Specific Diseases*

5.1. *Plagues and Poxes*

Though not necessarily understood in terms of cause, and certainly not in cure or prevention, persistent blame was placed on Inner Asian peoples for the spread of epidemic diseases to Europe, especially plague(s). These accusations surfaced repeatedly in contemporary Latin texts after the invasion of the Huns and remained during the Avar period and continued later with Mongol advances into the Carpathian basin, thereby giving rise to the notion that central Europe (and especially Hungary) was considered a "birth-place of plagues".[24]

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21 See Renate Burgess, "Thomas Gavine - Ayrshire Surgeon Active in Russia and China" *Medical History* 19 (1975):91-94.

22 Rosso 378-379; on the problems of Borghese 290-292.

23 Forsyth 67-69.

24 George Fleming, *Animal Plagues: Their History, Nature, and Prevention*. London: Chapman and Hall, 1871:29. Courtesy of the Wellcome Institute for the History of Medicine (London).

The European populace paid little attention to such epidemics among, for example, the Volga Bulgar until the threat approached central Europe.[25]

The expansion of the Ottoman empire into Europe in the late Middle Ages permitted a further joining of medical influence between East and West.[26] Although Western medical personnel in the Ottoman empire were numerous, the best known medical "news" came from the traditional Turkish medical treatment for smallpox, described in the famous letter (1 April 1717) from Lady Mary Wortley Montagu in Adrianople to Sarah Chiswell. So confident in the Turkish "invention of engrafting (which is the term they give it)", Lady Montagu wrote that "you may believe I am very well satisfied of the safety of the experiment since I intend to try it on my dear little son."[27]

With the Russian expansion into Siberia and Central Asia, the number of Western travelers greatly increased. Although a good number were physicians, their task was to collect all sorts of information, scientific and ethnographic as well as political, thus sometimes neglecting to record the medical traditions of the indigenous peoples they encountered. However, it should also be remembered that an organized Russian medical service did not appear until Peter the Great (1682-1725) so mandated by edict in the Admiralty Regulations of 1722. Information on medicine in Inner Asia expanded as the

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25 See U. Schamiloglu, "The End of Volga Bulgarian" in *Varia Eurasiatica: Festschrift für Professor András Róna-Tas*. Szeged, 1991:157-163. Similarly, see David Neustadt, "The Plague and Its Effects upon the Mameluke Army" *Journal of the Royal Asiatic Society* 1946:67-73; Daniel Panzac, *La Peste dans l'Empire Ottoman, 1700-1850*. Collection Turcica V. Louvain: Éditions Peeters, 1985.

26 See studies by Markus Köhbach, "Europäische Arzte im Osmanischen Reich am Beginn des 18. Jahrhunderts - der Fall *Sinâsi*" *Sudhoffs Archiv* 64 (1980):79-85; B. N. Sehsuvaroglu, "British physicians in the service of the Ottoman Empire" in *Proceedings of the XXIII International Congress of the History of Medicine, London, 2-9 September 1972*. 1-2. London: Wellcome Institute for the History of Medicine, 1974:808-812; Rhodes Murphey, "Ottoman Medicine and Transculturalism from the Sixteenth through the Eighteenth Centuries" *Bulletin of the History of Medicine* 66 (1992):376-403; G. A. Russell, "Physicians at the Ottoman Court" *Medical History* 34 (1990):243-267; and A. Terzioglu, "Über Hofspitäler und Hofärzte in der Palästen der turkischen Osmanensultane in Edirne und Istanbul" *Medizinhistorisches Journal* 3 (1968):212-221.

27 Lady Mary Wortley Montagu (Robert Halsband, Ed.), *The Selected Letters of Lady Mary Wortley Montagu*. London: Longman, 1970:98-99.

nation did, with the development of factories, the mining and fur industries and with labor camps or prisons.[28]

Heinrick Fick (1679-1750), an adviser to Peter and later arrested by the Empress Anna in 1731, was sent to Tobolsk and on to the Yakut where he reported on the ill-treatment of these peoples, their exploitation, terrible living conditions and affliction with diseases, especially smallpox.[29] Early in the next century, Joseph Rehmann (1779-1831) would report on smallpox among the Buriat in Siberia in 1805-1806.[30] There is a good deal more material on smallpox, not just among Mongolian peoples[31], which can further add to the history of this disease and the variety of treatments available in Inner Asia, including attitudes toward it by native populations.

5.2. *Leprosy and Other Serious Skin Ulcers*

When the Rev. Charles Wenyon M.D., crossed Siberia in 1893, he found leprosy to be "an extremely rare disease" and those afflicted by it "well provided for", even though the local treatment of using sarsaparilla could have been deemed ineffective by a qualified Russian doctor.[32] Only a few years before him, Kate Marsden (1859-1931), a member of the Royal British

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[28] See, for example, Basil Haigh, "Urals Factory Hospitals and Surgeons at the Dawn of the Nineteenth Century" *Medical History* 22 (1978):119-137.

[29] [Heinrich Fick] in A. R. Cederberg, "Heinrich Fick: Ein Beitrag zur russischen Geschichte des XVIII. Jahrhunderts." Beilage 8: "Unterthänigste Vorstellung und Eröfnung, betreffende der Jakutten, Tungussen und anderin Nord-Syberien entlegenen dem Russischen Reiche unterworffnen und contribuirenden völcker, besondern grossen Gravationen" *Tartu Riiklik Ülikooli Toimetised, Acta et Commentationes, B Humaniora* 17 (1930):137-139.

[30] See Herbert Franke, "Unveröffentlichte Reiseberichte und Materialien über Sibirien, die Mongolei und China" *Sinologica* 3 (1953):31-36; Walther Heissig (Ed. and introduced), *Mongoleireise zur spaten Goethezeit. Berichte und Bilder des J. Rehmann und A. Thesleff von der russischen Gesandtschaftsreise 1805/06.* Verzeichnis der orientalischen Handschriften in Deutschland. Supplementband 13. Wiesbaden: Franz Steiner Verlag, 1971; Hartmut Walravens, "Zum Werk des Arztes und Ostasienforschers Joseph Rehmann" *Sudhoffs Archiv* 67/1 (1983):94-106.

[31] See Henry Serruys, "Smallpox in Mongolia during the Ming and Ch'ing Dynasties" *Zentralasiatische Studien* 14 (1980):41-63.

[32] Charles Wenyon, *Across Siberia on the Great Post Road.* London: Charles H. Kelley, 1896:185-188.

Nurses' Association and a Medalist of the Russian Imperial Red Cross Society, visited the leper colonies of Yakutia in the summer 1891. Her records on Russian neglect in treatment, hospitals, etc. for the lepers of the region, spurred changes, though probably not as rapidly as Wenyon's report would suggest. Filled with great detail, her account is most valuable for Yakut reactions to the disease. "An illustration of the intense dread the natives have of leprosy is their conviction that it originates from the devil. 'Smallpox, measles, scarlet fever', they say, 'were appointed by God; but leprosy was sent by the devil'. Hence their belief that the lepers are possessed."[33]

Yakut diagnosis of leprosy seemed to be seldom in error. "The natives, dreading the contagion of leprosy, watch each other very carefully, and as soon as they discover the slightest trace of the existence of the germ of the disease, they at once submit the suspected individual to a formal inspection. This inspection is made by several of the older members of the community, who are well acquainted with the symptoms of the disease. They rarely make any mistakes in their decision..."[34] Once diagnosed the Yakut dealt with lepers in ways similar to many other societies past and present. "When once a man is known to be tainted with leprosy, he is thrust out from his people, and driven away, as if he were some noxious animal, into a lonely spot in the forest, or on the marshes, where he is doomed to a living death... His first duty is to make a cross, which he is bound to place outside [his hut or yurt], as a warning to anyone who may happen to pass to shun him."[35]

Leprosy could also be mistaken for other serious skin diseases which ate deep into tissue. In Turkestan, the so-called "Sart disease" or "Afghan sore" or "worm-eaten" ailment was a skin ulcer which attacked the face and hands, especially of children leaving scars; accoding to some reports, the natives were good at curing this.[36]

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33 Kate Marsden, *On Sledge and Horseback to the Outcast Siberian Lepers*. New York: Cassell Publishing Co., 1892:163; the appalling conditions among the Yakut had already been noted by Fick.

34 Marsden 255-256.

35 Marsden 94-95.

36 See Schuyler 148; also Capus.

5.3. *Common Ailments in Central Eurasia*

Many diseases of a more or less serious nature were prevalent throughout Central Eurasia; a number could be studied ranging from eye ailments and goitre to cholera, malaria, and venereal diseases. For Western sources, the numerous travel accounts may be considered of special value. Johann Friedrich Erdmann (1778-1846), for example, presented a discussion of diseases in the region of Kazan with many valuable comments concerning the Tatars and Chuvash, as well as for the Cheremis, Mordvin, and Votyak. His study, which might be considered a precursor to the modern field of medical geography, took into consideration venereal diseases, typhus, eye ailments which often led to blindness, and other conditions.[37] Jean-Guillaume Capus (1857-1931), who travelled widely with scientific expeditions to the Urals, Siberia, Central Asia, the Caucasus, Afghanistan and the Indian frontier during the decade of the 1880s, wrote a little-known article on medicine in Central Asia which contained a survey of a number of diseases found in Central Asia: syphilis, skin ailments, typhoid, cholera, scrofula, dysentary, eye problems, goitre, leprosy, anthrax, the *rischte* worm (*Filaria medinensis, Gm.*).[38] A major concern in the nineteenth century was the spread of cholera. The unsanitary conditions, including contaminated drinking water and infestations by fleas, lice, and bedbugs, found throughout Central Eurasia were cause for alarm.

6. *The Medical Lexicon*

Some 18th and 19th century medical personnel also helped to collect Altaic vocabulary for diseases. Peter Simon Pallas (1741-1811) is best known, but little has been done with his medical vocabulary. [See Appendix I] Henry Walter Bellew also contributed, appending a "Comparative vocabulary of some

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37 Johann Friedrich Erdmann, *Medicinische Topographie des Gouvernments und der Stadt Kasan, nebst meheren darauf Bezug habenden historischen, geographischen, statistischen und ethnographischen Notizen.* Riga & Dorpat: J. F. Meinshausen, 1822:esp. 157-163. For a general remarks see D. J. Schove, "Chronology and historical geography of famine, plague and other pandemics" in *Proceedings of the XXIII International Congress of the History of Medicine, London, 2-9 September 1972.* 1-2. London: Wellcome Institute for the History of Medicine, 1974:1265-1272.

38 Capus.

dialects spoken in the territory of Kashghar" to the *Report of a Mission to Yarkund in 1873*. The vocabulary is given in English, Yarkandi, Kirghiz, Sárigh Cúlí, Wákhi, and Kalmác (the later being Kalmyk) and includes the terminology for parts of the body, diseases and medicines. [See Appendix II.] Bellew was assisted by a native doctor, one Asmat Ali, who certainly must have helped him to obtain a reliable medical vocabulary.[39]

Or, mention can be made of an early Russian medical handbook by a future court physician (Moscow), Osip Kirillovich Kamenetskii (1754-1823), with the latter part of the book by one Yakov Sapolovich, entitled *Kratkoe nastavlenie o l"chenii bol"ziei prostymi sredstvami* (St. Petersburg, 1802; 1811) was translated into Kalmyk by the Titular Counsellor and Cavalier Mikolai Lebedev as *Axarxan surghali ebüciten küüg kimda arghcar emneküyin züü* (St. Petersburg, 1823). Expressly for "the use of teachers in the countryside where there were no doctors"[40], this manual has been largely ignored by Kalmyk scholars, probably because it is a translation, but the medical vocabulary might prove most valuable. The very existence of this terminology clearly indicates that various Inner Asian peoples had the ability to distinguish and diagnose a number of medical conditions.

The history of medicine in Central Eurasia must begin with paleopathology. The human remains of prehistoric, ancient (and even medieval) civilizations might yield much valuable information not only on the death of an individual but, perhaps, also on the disappearance of entire peoples. Because paleopathology is still in its infancy as a tool of archaeological research on Inner Asia, written and graphic sources, however biased, remain tantamount. Only a part of this history has been recorded from the Western perspective from ancient Greek authors to nineteenth century explorers, physicians and nurses.

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39 Forsyth 534-561.

40 The Kalmyk edition exists in the Early Printed Books Collection at The Wellcome Institute for the History of Medicine (London); see also Nigel Allan's brief description of this volume in "Illustrations from the Wellcome Institute Library. Some Early Medical Contacts with the Kalmuck Tribes of Siberia", *Medical History* 27 (1983):305-309, see especially 308.

APPENDIX I.

PETER SIMON PALLAS' KALMYK VOCABULARY FOR DISEASES*

English	German	Kalmyk
high fever	hitziges Fieber	Chaloon-Oebötschin
plague, pestilence	Pest	Oehlöt-öbetschin
smallpox	Blattern	Zäzäk, Jarrà
measles	Masern	Ulanöd Oebötschin
intermittent fever (malaria)	Wechselfieber	Besegä
stitch in the side (pleuralgia)	Seitenstechen	Särdeng
vesicatory (producing blisters)	blasenziehendes Mittel, Feuerkraut	Gal ebessün
apoplexy	Apoplexie	Mandshi
epilepsy	Epilepsie	Sjüüder
cough	Husten	Chanjä adun
bloody cough (haemoptysis)	Bluthusten	Sagbà
consumption (TB)	Schwindsucht	Zaadshi Obötschin
edema, hyposarca (anasarca) of skin	Hautwassersucht	Ussun-Batcha
dropsy, abdominal dropsy (ascites, hydroperitoneum)	Bauchwassersucht	Belegi
skin ulcer	Hautgeschwür	Chatigà
venereal disease syphilis	Lustseuchenbeule	Momo
the itch, scabies	Krätze	Chammoo
venereal disease syphilis	geile Seuche	Mereß
"city pox"	beiden Soongaren Oiraten, Stadtpocken	= Chotton-jarra

* Compiled from: Gerhard Doerfer, Altere westeuropäische Quellen zur kalmückischen Sprachgeschichte (Witsen 1692 bis Zwick 1827). Wiesbaden: Otto Harrassowitz, 1965:217.

APPENDIX II.

HENRY WALTER BELLEW'S ALTAIC VOCABULARY FOR AILMENTS / DISEASES*

English	Yarkandi	Kirghiz	Kalmác
pain	aghri	agric	öbduá
pus	chiring	yiring	kölsun
gall	ót	ót	thosun
fever	tap	tepma	chichir
ague	bazgik	bazgik	chichir
smallpox	chichak	chichak	chichak
cough	yútil	yútal	khanyána
catarrh	zukám	phutupti	thomo
palsy	shal	shal	khachudwá
madness	saranglik	saranglik	karikta
jaundice	sárghiyip	sárígh kasal	sharla-öbduá
wound	zakhm	zakhm	sharkha
ulcer	yará	yará	
pustule	yará	yará	butsuruc
ringworm	tâz	táz	khojúgúr
itch	cichish	kotur	khámo
abcess	chibán	chícán	tsakáchí
goitre	bucác	pucác	bolzúr

* Compiled from Dr. H. W. Bellew, "Comparative vocabulary of some dialects spoken in the territory of Kashghar" in [Sir. T. D. Forsyth], *Report of a Mission to Yarkund in 1873*. Calcutta: Printed at the Foreign Department Press, 1875:537-538. Courtesy of the the Wellcome Institute for the History of Medicine (London).