

Medical Syncretism in the Formation of Tibetan Medicine Through Perspectives of The Silk Road

Zitong Zhou^{1,a,*}, Zexuan Lin^{2,b}

¹Culver Academies, Culver, 46511, U.S.

²Worcester Academy, Worcester, 01604, U.S.

a. tonyzitongzhou@gmail.com, b. anthonylin6357@gmail.com

*corresponding author

Abstract: This research paper argues that the Silk Road contributed to advancements in ethnic Tibetan medicine by inspecting syncretisms with Indian and Chinese medical practice. It examines the significance of ancient Chinese medical histories, the Chinese Taoist thought system, and the Indian Buddhist thought system to Tibetan medicine through researching texts from eleventh-century Tibet and relevant contemporary research. The analysis establishes the connection between the Silk Road and Tibetan drugs. It affirms the role of cross-cultural interactions with South and Eastern Asia in developing Tibetan healing. This paper wishes to shed light on the importance of ethnic medicines and promote intercultural exchange using Tibetan medicine as an example.

Keywords: Tibetan medicine, Silk Road, Syncretism, Ayurveda medical influence, Chinese medical influence

1. Introduction

The Silk Road was arguably the most critical network connecting ancient and medieval Eurasia, consisting of long-distance land and maritime trade routes. Following Zhang Qian's Journey to the West, rapidly thriving trade significantly augmented interactions between Europe and China. Along the Silk Road, distinct ideas and cultures actively engaged and collided with each other, and the ensuing syncretism led to advancements in numerous practices, especially in the field of medicine. For example, 14th-century Arabic physicians transmitted Islamic versions of Hellenistic medicine to India, fusing local traditions to form Unani medicine [1]—similar cases, when regional medical beliefs combined to form distinctive systems, were not infrequent in history.

Extensive work, such as *The Silk Road and Chinese Medicine* by Xuehui Chang and Leili, has been done on syncretism in medical science. However, while the majority has focused on the influence of other cultures on ancient Central Chinese medicine, research regarding ethnic medication, which is almost equally as sophisticated, is limited.

This research will primarily focus on the formation process of Tibetan medicine on the Silk Road. The first section discusses Chinese influences on Tibetan treatment, drawing evidence from medical exchanges in the book *Extrinsic Materia Medica* by Xun Li in the 10th century, records of Indian travel within China from the memorial to the throne, and Chinese histories of Tibet. The second section deals with Indian influences that traveled through the Silk Road, examining archaeological evidence, the Four Tantras, and the Old Tibetan Annals. After closely investigating Chinese and

Indian forces, this paper will also compare the significance of the two cultures to Tibetan medicine.

2. Chinese influences on Tibetan medicines from the Silk Road

2.1. Background

The Silk Road embraced multiple important trading cities from South Asia to East Africa. Across the entire Afro-Eurasia, the portion of the Silk Road between China and Tibet was especially active in interactions during the Sui and Tang dynasties (581-907 CE). Under the reign of Songtsen Gampo, the Tubo Dynasty of Tibet engaged in more open and diverse foreign policies with the concurrent Tang Dynasty, such as tribute, negotiating alliances, and political intermarriage (He Qin), which forged close connections. The historical significance of this section of the Silk Road is known today as the “Tangfan Road”, meaning the ‘Tang-Tibetan route’. According to the *New Book of Tang*, in 634, Tubo envoys traveled to Chang'an along the Tangfan Road. From 657 to 661, envoy Wang Xuanze was commissioned by Emperor Mu Zong of Tang to travel to India. In 822, Mu Zong sent envoy Liu Yuanding to Tubo to negotiate an alliance[2]. During the 213 years of interaction, both dynasties were influenced by the culture of each other, primarily through the He Qin policy, where two Tang princesses married the emperor of Tubo, significantly influencing Tibetan medicine[3].

Naturally, extensive medical exchange occurred along the Tangfan Road, leading to notable parallels between Tibetan and Chinese traditional medicines. Chinese scholars from the University of Qinghai examined the influence of Confucianism on Tibetan treatment by referring to their tradition of "doctors' morals"[4]. Tibetan doctors were required to follow rules that ensured their respect, morals, and responsibility. A detailed examination of the critical Tibetan medical texts has proven the existence of such a tradition, which can be readily identified with its shadow from Confucianism[4]. Works such as *Tibetan Medicine Plurality* [5], *The Philosophy of Tibetan Medicine* [6], and *General History of Tibetan Medicine* [7] have also established extensive similarities in medical methodology, ideological structure, and relative content between Chinese and Tibet texts, such as the *sMan-dpyad-chen-mo* and *Prescriptions worth thousand gold for emergencies*. They concluded that Chinese medical texts were modified to become Tibetan medical tantras, though this paper argues that Indian influences were equally significant.

Such a research background has offered sufficient evidence that Chinese influences on Tibetan medicines occurred through the Silk Road, providing a new perspective. In addition, current and previous research has focused extensively on similarities between Chinese and Tibetan medicine. An examination of differences, however, can reflect how Chinese medicines have been modified to fit into Tibet.

2.2. Methodology and Definitions

This paper examines the Chinese influence on Tibetan medicine through the Tangfan Road. As aforementioned, the effects and interactions are mainly attributed to the open foreign policy under the reign of Songtsen Gampo. The following content used two important medical works and one medical methodology from Tibetan medicine: *sMan-dpyad-chen-mo*, *Somaratsa*, and Sphygmology. Whereas the two medical works were made possible by He Qin policies, the passage of physiology was attributed to less remarkable interactions along the Silk Road. The section seeks to discover and corroborate the Chinese influence on Tibetan medicine by investigating a Tibetan medical methodology that is likely to be learned from the Chinese medicine system and by analyzing how the Taoist thought system imported from China influenced Tibetan medicine. Thus, the analysis consists of comparing content between medical works and methodologies between the two regions regarding chronology. In addition, debated topics and concerns regarding questions not limited to but such as originality of medical appointments and evolution of medical concepts were analyzed considering

the most popular academic speculations. While speculations and theories vary, the results or methods at the center of the debate always have transparent and corroborated relationships with Chinese medicine.

2.3. Medical Influence Pre-He Qin: Sphygmology

Under the reign of Songtsen Gampo, the Tubo dynasty of Tibet engaged in more open and diverse foreign policy. During the 212 years of Chinese and Tibet diplomacy (634-846 B.C), envoys from both sides frequently traveled along the Silk Road to pay tribute, negotiate alliances, and cultivate goodwill. Scholars later named this subpart of the Silk Road the "Tangfan Road" to emphasize the communication between Tang and Tubo[2]. Historical records from both dynasties described extensive interactions between merchants, monks, and immigrants. Travelers, especially Chinese physician monks, spread medical knowledge to Tibet, along with the intermarriage policy, bringing valuable Chinese medical knowledge to Tibet with remarkable implications for local medicines[7].

According to *A Brief History of Tibetan People*, Tibet had "Adopted medicine and methods of enumeration"[8]. Tibetan oral tradition held that Songtsen Gampo's grandfather, Dabnese, was cured by a Chinese doctor dealing with cataracts. Pierre Huard, a highly respected French physician specializing in Asian medicines, suggested that the Chinese medical work *Sphygmology Classic*, by Wang Shuhe, was passed to Tibet by the Silk Road and to India and Arabia[9]. Tibetan scholar Banjul Sambo mentioned the Chinese's spread of "fire medicine and physiology" during a discussion of Tibetan medical history. Field investigations by the Southwest Normal Academy of Sciences in the 1960s found manuscripts of the *Chronicle of Sphygmology inheritance*, records of Chinese sphygmology compiled by Tibetan doctors in Tibetan households, which corroborates that sphygmology in Tibetan medicine was a product of Chinese medical influence[7]. Their methodologies were highly similar: the internal organs represented by a part of the right hand in Tibetan beliefs correlated with the ones described by the left in Chinese medicine. This difference could have stemmed from disparities in anatomical knowledge. The Chinese tended to rely far more on theories of Yin Yang and the five elements than on anatomy. Physicians thus assumed the liver was located in the left part of the human body. However, Tibetans discovered that the liver was actually in the right amount of the body through observing bodies left to decay in the wild as part of their "sky burial" tradition, who then developed somewhat different methods. Despite the difference in the physiology method, it is shown that the approach of both Chinese medicine and Tibetan medicine resemble one another on a general and macro view of the structure of physiology practices, and this paper believes that it is highly possible that they mutually influence each other.

2.4. Princess Wencheng and Medical Exchange: sMan-dpyad-chen-mo

During the time of Songtsen Gampo, the He Qin policy with the Wencheng Princess of Tang introduced Tibet to even more Chinese medical influence. In *rgyal rabs rnams kyi byung tshul gsal bavi me long chos vbyung bzhug so*, Sönam Gyaltzen claimed that "Princess Wencheng brought one hundred medical prescriptions for the treatment of 404 serious diseases, five diagnostic methods, six medical devices, and four medical treatises"[10]. Among those, the medical treatises were compiled into a single medical treaty in the Tibetan language named *sMan-dpyad-chen-mo*.

While the original work is lost, this work has extensively influenced the structure of Tibetan medicine. The content of the work was claimed to be contained in the *Four Tantras*, which is one of the most if not the most important works in Tibetan medicine. Nevertheless, The content contained in the *Four Tantras* is overly systematic and detailed that merely four medical books cannot communicate such a thorough Chinese medical knowledge structure[7]. The communication of such structural knowledge of Chinese medicine is only possible through comprehensive medical work. It

is thus reasonably doubted that a complete Chinese medicine work was brought to Tibet. During the Tang dynasty, the only work claimed to be "encyclopedic" was *The Prescriptions Worth Thousand Gold for Emergencies* by Simiao Sun. Although this work was not fully published at the time of the He Qin policy, it is possible that the draft of the work was given to the Tubo dynasty. Significant influence from Chinese medical knowledge gave Tibetan medicine a structural reformation that amalgamated Chinese medical concepts and beliefs.

In the Tang dynasty, the inflow of Chinese medical knowledge, especially *The Prescriptions Worth Thousand Gold for Emergencies* by Simiao Sun, also known as the king of pharmacy in Chinese history, communicated Taoist ideologies and incorporated them into Tibetan medicine. One of the main influences was the "Tree Analogy", a feature of Tibetan treatment that used the tree as an analogy to explain the law of life of human beings. The *Four Tantras* notes: Consider men as three trees with nine trunks together. There are forty-seven branches and two hundred and four leaves. The blossoms give birth to five different fruits, using the tree as a metaphor for the root tantra [11].

The Tree Analogy viewed the human body as a continuous being rather than discrete parts. In terms of the human body, the "tree of life" itself combines the life of "human" and "tree". So, the "tree analogy" virtually conveys that there is an inevitable relationship between humans and nature. Taoism believes in a similar view of human beings. For example, in *The Master Who Embraces Simplicity: A study of the philosopher Ko Hung*, the author explains: "Therefore, a person's body, a country's image. Chest and abdomen of the residence, as if the palace. The limbs are as if they are in the countryside. The bones and joints of the body are like all the officials. Spirit is also like a king, blood is also like a minister, and Qi is also like the people." [12] This excerpt contends that the human body was whole not only in the observable "form", but also in the non-observable "spirit".

Taoist literature also likened the body's governance to the state's power, called the "national analogy, " closely linked with Tree Analogy. In this sense, Tibetan and Chinese opinions regarding the human body were highly parallel. Since humans' lives resemble that of nature, humans should embrace the flow of nature rather than oppose it, Tibetan medicine reasoned, known as "nature cultivation. The *Four Tantras* strongly emphasized this notion, advising "Hold happiness toward everything", "Always hold a heart of kindness like that of the Bodhisattva", or "Restrain anger and maintain a good-natured temper." [11].

Taoists believed in corresponding ideas which are similar to Tibetan medicine's theory. *The Prescriptions Worth Thousand Gold for Emergencies* advocated reducing unnecessary emotion and embracing fate, preventing most illnesses. It claimed:

Therefore, the excellent regimen often engages in less thinking, longing, less desire, less business, less talk, less laughter, less sadness, less happiness, less joy, less anger, less good, and less evil. The twelve lessers, the nourishment of the nature of the Duqi. Thinking more makes the spirit weak; more thoughts scatter attention!" [13].

The Tibetan "Hold happiness toward everything" was about events, compared to the Taoist "Everything enjoys the same spring, " related to objects. Yet both endorsed concepts of joyfulness and equality, perceiving all life, karmic gatherings, and dispersions within these two concepts. Thus, the content of Tibetan medicine on "nature cultivation" is essentially the same as the Taoist view, which proves how Tibetan treatment is influenced by Chinese medical philosophy.

2.5. Princess Jincheng and Medical Exchange: Somaratsa

In 710 BC, Princess Jincheng of Tang became the second princess married to Tibet through He Qin. The second He Qin further reinforced the Chinese medical influence on Tibetan medicine. According to *The New Book of Tang*, Princess Jincheng committed to "giving into the increase of tens of thousands of cloth, all the workers from the miscellaneous occupations, and spread the Guizi music" [14]. The "workers from the miscellaneous occupations" included doctors serving the royal

family, who were given the title of “medical worker” in the Tang Dynasty. Another occupation given the title “worker” was the ancient Chinese Xuanxue scholars. Fields such as astrology, Feng Shui, and alchemy were already widely utilized in Chinese medicines, and the Xuanxue scholars spread the medical use of mystical methods. For example, Tibetan hospitals often referenced astrological prophecies at the beginning of the year, implying an ideological influence—the unity of Heaven and Man, the concept that man and nature are integrated[15]. Among those brought by Princess Jincheng, Khata Mahakinda and Chukaguara were most prominent in their contributions to the spread of Chinese medicine. Khata Mahakinda was a scholar monk, “Khata” being the name for monks, and Chukaguara was a medical worker. Both helped compile and translate Chinese medical works into the Tibetan language, including *Somaratsa*, an essential text of Tibetan medicine brought by Princess Jincheng[7].

The ideological and methodological influences brought by the He Qin policy are strongly reflected in classical medical works and Tibetan medical beliefs. Whereas medical practices such as physiology and Chinese herbal formulas serve a vital role in Tibetan medicine, the ideological influences of Taoism competed with the concurrent Buddhism inflow and thus are less reflected in the current Tibetan treatment. Still, the Taoist belief in the entirety of humanity and the unity of heaven and men made remarkable contributions to the Tree-analogy theory, one of the basis of Tibetan medicine. In addition, the methodologies and ideologies of Chinese medicines were modified to become more suitable to indigenous culture. Through the modification and amalgamation of Chinese medical influences, the methods such as physiology, herb formulas, and the ideologies above continued to serve as cornerstones in the current Tibetan medicine studies.

3. Indian Influences on Tibetan Medicines Through the Silk Road

3.1. Methodology and Definitions

This section of the paper examines Tibetan medicine from when official Indian-Tibetan contact first occurred in the 7th century CE, focusing mainly on the 10th to 12th centuries when Tibetan medicine experienced its most rapid growth due to the Second Diffusion of Buddhism. Treatment before and after this period will only be discussed in general. This section first provides an overview of how Ancient Tibet and India held interactions and the significance of such interactions, then discusses why such influences are closely linked to the Silk Road. Through a closer look at The Four Tantras, this section focuses on how Indian Buddhism mainly affects the system of Tibetan medicine.

Most research was conducted online, utilizing various secondary and primary sources. Primary sources include an English translation of the Tibetan Four Tantras and the *Mirror of Beryl*, a history of Tibetan medicine by Desi Sangye Gyatso, ruler of Tibet in the 17th century. This paper also refers to archaeological evidence, such as artifacts from ancient Tibetan forts in the Taklamakan desert, although only from a rudimentary perspective. Secondary sources include books like *Buddhism, Diplomacy, and Trade: The Realignment of Sino-Indian Relations, 600-1400*, by Tansen Sen (2014), and several other scholarly articles. This section will mainly focus on medical texts from the Second Diffusion because they represent contemporary medical practice more accurately than orally transmitted healing methods. Moreover, medical texts have significantly impacted Tibetan practices over the centuries, acting as textbooks for physicians.

3.2. Indian Interactions with Ancient Tibet up to the Mongolian Era

While the previous section discussed Taoist influences on Tibetan medicine, its close relationship with Indian Buddhism is undisputed. Tibetan tradition believed that all medicine originated from the Medicine Buddha. *The Four Tantras*, the foundational work in Tibetan medicine which will be discussed in greater detail in the later sections, began with: “Healer of the maladies of the three inborn

mental poisons, the Medicine Buddha, the King of Aquamarine Light, I pay my homage before you” [11]. The Medicine Buddha then “entered into a meditative concentration called ‘the King of Medicine’, to alleviate four hundred and four disorders” (10), suggesting that the Buddha was the source of all healing. Acknowledgment of the Buddhist deities was reflected in the 17th-century medical history *Mirror of Beryl*, composed by the Fifth Dalai Lama Desi Sangye Gyatso [16], who likewise attributed the healing to the Buddha, referred to as respectfully as “of the lotus family, Tathagata, god of gods” (33). As the late Tibetologist Gyurme Dorje (2014) concluded, “For centuries and up to the present, the greatest exponents and lineage holders of Tibetan medicine have endeavored to experimentally cultivate the attributes of the Buddhas of medicine within the authentic meditative contexts of the Mahayana and Vajrayana Buddhist traditions” (129).

From the above paragraph, it is possible to claim that Tibetan medicine was inseparably intertwined with the Buddhist religion. Therefore, understanding Buddhist history in Tibet about India is crucial for studying its influences on the local pill. Contact between India and Tibet stems back to the 7th century CE and persisted over the following centuries. Two prominent rulers were pivotal in establishing Buddhism as the dominant religion: King Songtsen Gampo and King Trisong Detsen. The founder of the Tibetan Empire, King Songtsen Gampo, was believed to have dispatched an envoy to India out of his admiration for Buddhism, considered the first official interaction between the two regions. It was believed only a young man called “Thonmi Sambhota” survived the journey, and his return inspired the King to commence the mass translation of Buddhist Sanskrit scriptures into his language. With the support of the King, Buddhism experienced its first significant dissemination in Tibet [17]. The next Dharma ruler, King Trisong Detsen, reportedly invited two Buddhist masters, Chinese monk Moheyan and Indian philosopher Santaraksita, to engage in a debate in the eighth century known as “the Great Debate of Samye”, with the King himself as the host. Tradition held that Trisong Detsen favored Santaraksita and decided to shift the Empire’s religious inclination towards Indian versions of Buddhism, an event widely regarded as a critical moment in Buddhist history. In *the Tibetan Reader* [18], David Ruegg, a scholar on Mahayana Buddhism, contended in his historiography that Tibetan accounts were inconsistent and the debate should be viewed as an essentially religious debate irrelevant to nationalism. However, David Ruegg also noted that other historians considered the Samye debate reflective of a greater shift towards Indian Buddhism in Tibetan society. Soon after the debate, the King met another Indian master, Padmasambhāva, in Nepal, yet despite being held in high regard traditionally, information on the actual person was limited. The Samye monasteries, south of Lhasa, built during Trisong Detsen’s rule and supported by his government, offer more concrete evidence of a society-wide evolution. The spread of Buddhism in the 7th and 8th centuries was closely related to India, whether through envoys or religious figures [19].

In the 9th and 10th centuries, political fragmentation contributed to the decline of Buddhism in Tibet. The last ruler of the Tibetan Empire, King Lang Dharma, was a firm believer in the local Bon religion and persecuted Buddhists, forcing monks into exile. However, the 11th and 12th centuries saw a revival of interactions between India and Tibet known as the Second Diffusion. In 1042 CE, as part of an effort to restore “pure” Buddhism, various Indian teachers were invited to Tibet, including the famed monk Atisha, who taught from the city of Tolung, where wrote his representative work the *Bodhipathapradīpa* [20]. Not only did Buddhist influence arrive from India, Tibetan scholars also studied in India. Marpa Lotsawa, a Tibetan translator, traveled to India in his youth and studied under Indian masters like Naropa, later returning to Tibet and settling down in Lhodrak. His teachings in the tantras of the Six Teachings of Naropa gradually formed the Kagyu branch of Tibetan Buddhism [21]. Medicine flourished alongside religion: *the Four Tantras* were composed during this period.

Following the Buddhist revival in the 13th century, the Mongols annexed Tibet, but the religion continued and remains a significant influence on Tibetan life to the modern day. To conclude,

Buddhism was first introduced to Tibet in the 7th and 8th centuries and reached its zenith in the 10th and 12th centuries.

3.3. Indian-Tibetan Route as Part of the Silk Road

It is commonly acknowledged in the literature that the Silk Road was not a singular, clear-cut route from China to the Roman Empire but numerous routes with various starting points and active destinations that fell into disuse during varying periods. Although lesser known than the Northwestern Silk Road that passed through Dunhuang and Turfan, the Southern trade route traveling from China to India through Tibet was just as much an indispensable branch of the ancient Silk Road [22]. This paper argues that Tibet was at least closely connected to the Northwestern Silk Road, and the Indian-Tibet trade route was most certainly a part of the Southern Silk Road when placed in a greater context.

The Tibetans had been aware of and interested in the Silk Road since the eighth century, as demonstrated by the desert forts of Miran and Mazar-Tagh. Both were located in the Lop-Nor Desert, and Miran had been a small Buddhist hub under the Kroraina Kingdom. In the eighth century, when the Tibetan King Songtsen Gampo marched his armies into the Lop-Nor, he conquered several important trade hubs that were part of the Silk Road, such as Dunhuang. He would continue until the Chinese capital of Chang'an. In order to safeguard its control, the Tibetan Army established forts along their path of conquest, the most prominent being Miran and Mazar-Tagh, both of which were excavated by the famed Silk Road explorer Aurel Stein [23]. At these two sites, he uncovered thousands of Tibetan wood slips, several letters in Khotanese, and a Turkish script written in Runic [24]. This demonstrates that cross-cultural interactions persisted after Tibetan control, and it is plausible that forts such as these were involved in the Northwestern Silk Road trade until the ninth century when the Tibetan forts were abandoned after the collapse of the Tibetan Empire.

Tibet was not just aware of and connected to the Silk Road trade, but that Tibet was an integral actor in the Southern Silk Road between China and India. The Tang-Tubo route that linked Tibet and China did not stop in Tibet but extended beyond into Northern India through Nepal. This path was established in the seventh century when Tibet under Songtsen Gampo and China established friendly relations by 640, further illustrated when the Tibetans lent thousands of mercenaries to the recently-attacked Chinese envoy of Wang Xuance [25]. However, it was not until around the tenth century, when alternative routes were interfered with by conflicts, that the China-Tibetan-India route became the dominant path for the Southern Silk Road. Departing from Chang'an, traders traveled southeast into Lhasa, then continued till near the Kailas Range, presumably then into Nepal and finally arriving in India (171-74). The prosperity of this branch of the Silk Road reflected not only on merchants but also supported Buddhist clergy, who utilized these routes extensively to travel to and from India and Tibet. Modern examinations of Buddhist structures in the Mustang region of Nepal reveal ample evidence for extensive Indian and Tibet interactions since the 11th century, which has transformed Mustang into a Buddhist hub and significantly affected its local culture [26]. This paper goes as far as to suggest that the Second Diffusion of Buddhism in Tibet was enabled by flourishing routes between India and Tibet, considering that most monks who traveled to Tibet, including the Atisha above and Marpa Lotsawa, who both became extremely influential and well known, took routes through Nepal, often by way of Mustang [26].

To sum up, the Tibetans were closely connected to the Northwestern Silk Road for at least a century and, when placed in the context of the Southern Silk Road, arguably a significant participant in and benefactor of this definitive trade network.

3.4. Examples of Indian and Tibetan Syncretism in the Field of Medicine

3.4.1. The Four Tantras

The Four Tantras (rGyud bzhi) was considered the central piece of Tibetan medicine systems. The prolific Tibetan-English translator Gavin Kilty describes it as “the bible of Tibetan medical science and...met with great praise from all established Tibetan medical traditions” in his introduction for *the Mirror of Beryl* [16]. Its origins are disputed: traditionally, the historical Buddha Shakyamuni was believed to be the source of *the Four Tantras*, and Yuthog Yontan Gonpo the Younger, a physician who lived in 12th-century Tibet, discovered and published it. Some sources, however, suggested that Yuthog Yontan Gonpo was the real author of the text [27]. Regardless of the author, the Tantras were undoubtedly closely related to Buddhist systems of medicine. Yuthog Yontan Gonpo himself was a revered physician and Buddhist tantric master experienced in Indian methods of healing. According to University of Tibetan Medicine professor Yang (2014), he traveled extensively to India throughout his life, where he studied core Ayurvedic texts such as Vāgbhata's *Heart of Medicine* (Aṣṭāṅgahrdayasaṃhitā) and various other Indian and Chinese texts, settling down at the age of thirty-four to practice medicine in Tibet (173).

Partly due to the personal experiences of the author in India and partly due to the already deep integration of Buddhism into Tibetan society as depicted in Section 2.1, various parallels can be drawn between Ayurveda and the Four Tantras. The first section of the Four Tantras, the *Root Tantras* (Tsa Gyue) dealt with core concepts such as three humors and five elements, which existed in Indian Ayurveda. Tibetan triadic theory suggested three principle energies or humors (nad), *Loong*, *Tripa*, *Baekan*, also called *Chi*, *Schara*, and *Badahan*, thought to influence physical and personality characteristics and govern bodily functions [28]. For example, although most are a mix of the three, the triadic theory describes the defining features of each energy: *Loong*-dominant people are lean and lack muscle, often socially anxious but highly creative and intelligent. *Tripa*-dominant individuals possess average, well-rounded physical characteristics, including standard height and medium muscularity, while *Baekan*-dominants tend to be more heavyweight (261-62). Interconnectedness, an underlying Buddhist concept, was also manifested within Tibetan beliefs, illustrated by this excerpt from *the Four Tantras*: “*Loong* and *began* by nature are cold like the element Water, whereas blood and tripa by nature are hot like the element Fire. The nature of *cin* and *chaser* can be either hot or cold, depending on the predominance of *nyepa*.” [11] The three humors were connected with the five elements of Buddhism: fire, water, air, earth, and space, reflecting the integral role of Buddhism in Tibetan medicine. Concepts of three humors related to the five elements are present in both Tibetan mixture and Ayurvedic tradition. The latter recognized *loong*, *tripa*, and *baekan* as “*doshas*”: *vata*, *pitta*, and *kapha*, which were believed to be connected to the same five elements [29], as well as affecting individuals similarly as their Tibetan counterparts [30]. Although the *Four Tantras* related each of its humor with somewhat different elements compared to modern Ayurveda, both nonetheless were associated with the concept of interconnectedness with the environment. Considering the matching characteristics of each energy in the two medical systems, it can be assumed with confidence that Yuthog Yontan Gonpo inherited his knowledge of triadic theory from Indian sources. Whether he gained this knowledge before or during his travels in South Asia is uncertain, but irrelevant to the focus of this paper.

The Indian influence contributed to far more than merely conceptual aspects of Tibetan medicine. Combining the idea of triadic theory with empirical experience, Tibetan doctors compiled practical medical practices that would guide countless physicians. The *Four Tantras* relied heavily on triadic theory to assist in diagnosis and prescription. The *Root Tantra*, the first of the *Four Tantras*, concluded:

The pathways of *loong* disorders are the bone, ears, skin, heart, life channel, and large intestine.

Blood, perspiration, eyes, liver, gallbladder, and small intestine are the pathways of *tripa* disorders. *Baekan* disorders move through nutritional essence, muscles, fats, marrow, regenerative fluid, feces, urine, nose, tongue, lungs, spleen, stomach, kidneys, and urinary bladder. These pathways of *loong*, *tripa*, and *baekan* disorders are identified based on their relation to bodily constituents, waste products, sensory organs, vital organs, and vessel organs [11].

The text contended that all diseases are the results of disorders in the three senses of humor, occurring when a particular comedy overpowers the others and disrupts balance within the body. Different organs were assigned to each spirit, intended to aid doctors in diagnosing the humor type of each illness. This short but relatively comprehensive list above laid down the groundwork for the following extended discussion of specific applications in triadic theory:

The *loong* urine appears like water with large bubbles. The *tripa* urine is reddish-yellow with a lot of steam and a foul odor. The *baekan* urine is white with little odor and moisture.

The nature of *loong* pulse is floating, empty, and halts irregularly. The *tripa* pulse beats fast, overflowing and twisting in the heart. The *baekan* pulse is sunken, declining, and slow [11].

Excerpts from the same Tantra detailed diagnostic characteristics regarding urinalysis and pulse analysis, both widely used in Tibetan medicine. The descriptive observations reflected the role of Yuthog Yontan Gonpo as a respected medical practitioner, while providing medical students of the following centuries with specific guidelines and suggestions regarding diagnosis. Although pulse analysis has mostly been discredited by modern medicine, urine analysis is still widespread in modern hospitals. The rest of the *Four Tantras* provided a wealth of insight into various fields, such as embryology, anatomy, and physiology, based on conceptual knowledge of the three humors. The *Explanatory Tantras*, offered extremely detailed suggestions on conception and obstetrics, including diet suggestions, actions to avoid, and fetal development on an almost week-by-week basis: "Delivery can be delayed if the loong obstructs the cervix" [11].

The undisputed Indian origins of the Tibetan medical bible, the *Four Tantras*, were reflected explicitly in its text, recognizable even with only a cursory glance. Based on Indian Buddhist concepts, Tibetan physicians developed a sophisticated and unique system of medical knowledge.

Instead of mere medical influences, Indian medical beliefs, and Buddhism became deeply intertwined with Tibet. The Buddhist works, and experts in Buddhist philosophy brought profound and systematic knowledge of the Indian Ayurveda medicine. As reflected in the *Four Tantras*, Buddhist ideas became the cornerstone of Tibetan treatment and claimed to be the origin of the entire medical system. The Indian medical influence is mainly reflected by general medical beliefs such as the fields of diagnosis for illnesses and prevention. In addition, medical instruments and herbs were also profoundly influencing Tibetan medical practices. Thus, Indian medical influence profoundly contributed to the early formation of Tibetan medicine.

4. Conclusion

From the 6th to the 13th century CE, the Silk Road was crucial in disseminating Chinese and Indian medical knowledge in Tibet. Before consolidating relations between the Tang and Tubo Empires, traders and scholars along the Chinese-Tibetan Tangfan route were already facilitating the exchange of medicines. The policy of He Qin pursued by the Tang Dynasty married the Princesses Wencheng and Jincheng to the Tibetan royal family, bringing along an influx of Taoist beliefs incorporated into existing local medicine. Roughly simultaneously, the establishment of Buddhism laid the basis for the Second Dissemination in Tibet, during which Indian Ayurvedic influence flowed into Tibet.

Whereas Chinese medicine was passed to Tibet through political affairs and population interaction along the Silk Road, Ayurveda medicine was spread mainly due to religious missionaries. Thus, the two drugs have played different roles in forming Tibetan medication. Through the influence of Buddhism, Tibetan medicine became conceptually closer to Ayurveda medicine. From the Buddhist

theory for the origin of Tibetan medicine to its general structure of medical knowledge, Tibetan drug largely resembles Ayurveda medicine. In medical instruments, knowledge of signs of impending death, and the philosophy of release of nature, Tibetan treatment inherited the core belief from Ayurveda medicines. However, the Chinese shadow in Tibetan medicine can only be found in methodologies such as sphygmology and Chinese herbs. Although the philosophy of Chinese medical beliefs can be traced from Tibetan treatment, they are essentially attributes and derivatives of the medical methodologies themselves. In other words, while Chinese philosophy dwells in medicine, the Indian influences penetrated and influenced Tibetan medicine on a structural level.

This paper highlights not only the history and practices of this particular ethnic medicine but also a story of the Silk Road that serves as a compelling example of economic and cultural interactions between civilizations that proved highly beneficial to all parties of the exchange. Academic research on Tibetan medicines, as well as Tibetan traditional culture in general, remains limited, among which papers in English are even more scarce. Sources on specific geographical routes through Tibet are few and hard to find. In this field, most focus has been on foreign influences, especially the Buddhist influence, to the extent that the original Bon culture is often overlooked. Although the thesis of this paper limits the discussion of Bon, more emphasis and scholarly attention could be placed on identifying elements of the more local Bon culture in Tibetan tradition.

From the perspective of the Silk Road, the medical exchange not only revealed the rich cultural syncretic influences on medicine but, more importantly, showcased how knowledge and concepts were amalgamated and integrated. The differences between the medical practices were emphasized equally as the similarities. The tradition of "sky burial" gave the Tibetans a deep understanding of human anatomy, leading to a modified physiology method. The inflow of Ayurveda medicine and Buddhism merged with the native Bon religion and its medical practices. Instead of duplicates of Chinese or Ayurveda medicine, the current Tibetan medicine has reached something higher. The influences from the Silk Road became its cornerstones, while the superb tower of Tibetan medicine belongs to nothing but itself.

Although the paper emphasized the differences between Tibetan medicine and Chinese and Ayurveda medicine, the reasons and incentives for specific modifications and selection of medical practices are still a mystery. As Tibetan medicine grew, it adopted medical knowledge from both China and India. However, simultaneously, choices on contents to be deserted happen simultaneously. An apparent reason, criteria, or standard for selecting medical practices and knowledge should exist to lead to the formation of Tibetan medicine. Thus, the logistic for adopting medical practices from different medical systems deserves more attention as it is also vital to understand the formation process of Tibetan treatment.

Acknowledgment

Zexuan Lin and Zitong Zhou contributed equally to this work and should be considered co-authors

References

- [1] Parveen, Abida, Minhaj Ahmad, Bushra Parveen, Rabia Parveen, and Muhammad Iqbal. 2022. "The Traditional System of Unani Medicine, Its Origin, Evolution and Indianisation: A Critical Appraisal." *Indian Journal of Traditional Knowledge* 21 (3). <https://doi.org/10.56042/ijtk.v21i3.38882>.
- [2] Liyun Liu, Luo Bao. 2018. *From the "Tangfan Ancient Road" to the "Tea Horse Road": On the Relationship between Tibet and the Silk Road and Its Significance*. China: China Academic Journal Electronic Publishing House.
- [3] Yihong, Pan. "Marriage Alliances and Chinese Princesses in International Politics from Han through T'ang." *Asia Major* 10, no. 1/2 (1997): 95–131. <http://www.jstor.org/stable/41645530>.
- [4] Lei Zhang, Jitian Wang, Sangduo Huaqian. 2021. *A Study of Confucius Virtues and Culture in Tibetan Medicine*. China: China Academic Journal Electronic Publishing House.
- [5] Salick, Jan, Anja Byg, Anthony Amend, Bee Gunn, Wayne Law, and Heidi Schmidt. "Tibetan Medicine Plurality."

Economic Botany 60, no. 3 (2006): 227–53. <http://www.jstor.org/stable/4257114>.

- [6] YONTEN, PASANG. "The Philosophy of Tibetan Medicine." *India International Centre Quarterly* 18, no. 2/3 (1991): 27–40. <http://www.jstor.org/stable/23002363>.
- [7] Jingfeng Cai. 2002. *General History of Tibetan Medicine*. China: Qinghai People's Publishing House.
- [8] Fensheng Huang. 1985. *A Brief History of Tibetan People*. China: Nation Publishing House.
- [9] Pierre Huard and Ming Wong. 1968. *CHINESE MEDICINE*. World University Library.
- [10] Dpa' bo gtsug lag phreng ba. 1564. *mkas-pavi-dgav-ston*[Sage feast – Tibetan History]. Translated by Hao Huang. China: Central University for Nationalities Press.
- [11] Yuthog Yontan Gonpo. 2008. *The Root Tantra and the Explanatory Tantra*. Translated by Thokmay Paljor, Passang Wangdu, and Sonam Dolma. Dharamsala, India: Men-Tsee-Khang Publications.
- [12] Hong Ge. 2013. *Mental Tranquilization of Baopuzi*. China: China Book Council.
- [13] Simiao Sun. 2011. *Prescriptions worth thousand gold for emergencies*. China: China Medical Science and Technology Press.
- [14] Xiu Ouyang, Qi Song, Zhen Fan, Xiaqing Lu, Yaochen Mei. 1975. *The New Book of Tang*. China: China Book Council.
- [15] Tso Ngon Tibetan Medical Association. 2014. *The Unity of Heaven and men in Tibetan Medicine* <http://www.tmst.org.cn/zangyixuewenhua/329.html>.
- [16] Desi Sangye Gyatso. 2010. *Mirror of Beryl*. Translated by Gavin Kilty. Wisdom Publications.
- [17] Banerjee, A. C. 1981. "Buddhism in Tibet : A Study." *The Tibet Journal* 6 (2): 74–80.
- [18] Ruegg, David Seyfort. "On the Tibetan Historiography and Doxography of 'The Great Debate of Samye.'" In *The Tibetan History Reader*, Gray Tuttle and Kurtis R. Schaeffer edited. New York: Columbia University Press, 2013.
- [19] Stein, Rolf Alfred. 1972. *Tibetan Civilization*. Stanford University Press.
- [20] Behrendt, Kurt. 2014. "Tibet and India: Buddhist Traditions and Transformations." *The Metropolitan Museum of Art Bulletin* 71 (3): 1–48.
- [21] Ducher, Cécile. 2021. "Marpa Lotsawa Chökyi Lodrö." In *Oxford Research Encyclopedia*.
- [22] Anderson, James. 2009. "China's Southwestern Silk Road in World History." University of Illinois Press. https://libres.uncg.edu/ir/uncg/f/J_Anderson_China_2009.pdf.
- [23] Whitfield, Susan, and Ursula Sims-Williams. 2004. *The Silk Road: Trade, Travel, War and Faith*. British Library.
- [24] Stein, Aurel. 1921. *Serindia--Explorations in Central Asia and Westernmost China Vol 1*. <http://archive.org/details/dli.pahar.2144>.
- [25] Sen, Tansen. 2003. *Buddhism, Diplomacy, and Trade : The Realignment of Sino-Indian Relations, 600-1400*. Honolulu : University of Hawai'i Press. <http://archive.org/details/buddhismdiplomac0000sent>.
- [26] Heide, Susanne von der. 2012. "Linking Routes from the Silk Road through Nepal–The Ancient Passage through Mustang and Its Importance as a Buddhist Cultural Landscape." In . Japan: Kathmandu University.
- [27] Jha, Arun Kumar. 2007. "The Medicine Buddha: The Psychic Approach of the Tibetan Buddhism (from the Reign of Songtsen Gampo to Trisong Deutsen)." *Proceedings of the Indian History Congress* 68: 1161–67.
- [28] Badmaev, Vladimir. 2014. "Tibetan Medicine: Essentials of Complementary and Alternative Medicine." <https://www.badmaevtradition.com/sites/default/files/documents/Tibetan-Medicine-Essentials-of-Complementary-and-Alternative-Medicine.pdf>.
- [29] Shilpa, S, and C. G. Venkatesha Murthy. 2011. "Understanding Personality from Ayurvedic Perspective for Psychological Assessment: A Case." *Ayu* 32 (1): 12–19. <https://doi.org/10.4103/0974-8520.85716>.
- [30] Travis, Frederick T., and Robert Keith Wallace. 2015. "Dosha Brain-Types: A Neural Model of Individual Differences." *Journal of Ayurveda and Integrative Medicine* 6 (4): 280–85. <https://doi.org/10.4103/0975-9476.172385>.