# Thai Medicine Reconsidered: "Royal" and "Rural" Practitioners and the Struggle to Define a Tradition

Christopher Pierce Salguero Charlottesville, Virginia

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Department of East Asian Studies

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### Introduction

Traditional Thai medicine, as defined by the government of Thailand today, is one of two officially recognized healing systems alongside modern Western (farang) medicine. Traditional doctors ( $m\bar{o}\ b\bar{o}r\bar{a}n$ ) are defined as those "practicing the healing arts by means of knowledge gained from traditional texts or study which is not based on science." in contradistinction to farang biomedical doctors, whose training is based on science. This definition is rather open-ended, and indeed throughout Thailand many types of traditional healing practices exist. However, the phrase mō bōrān—and in this paper, its English equivalents "traditional doctor" and "traditional physician"—refers to individuals trained in a formal system of healing embodied in authoritative texts at licensed institutions, and these are distinguished from "traditional healers" who have not. The best-known of these traditional medical schools are located at the Wat Phō and Wat Mahāthāt temples in Bangkok, and in the north of the country, at the Shivagakomarpaj Traditional Medicine Hospital in Chiang Mai.

Every formally-trained  $m\bar{o}$   $b\bar{o}r\bar{a}n$  is required to study a standardized curriculum, which typically includes one year of classes to become a traditional pharmacist and another two years to become a traditional physician. The art of therapeutic massage ( $nuadb\bar{o}r\bar{a}n$ ) can be taken during a fourth, optional, year. Physicians graduating from these

programs are examined by the Ministry of Public Health, and are licensed and regulated by the national government through a process analogous to that which regulates medical doctors, nurses, and other practitioners of *farang* medicine.

Traditional Thai medicine has not received much academic attention since the 1970s and 80s, when Jean Mulholland at the Australian National University analyzed the authoritative texts taught at the licensed medical schools, while scholars such as Ruth Inge-Heinze, Viggo Brun, and Trond Schumacher undertook the study of Thai folk healing. In reviewing the literature from that time, one receives the impression that there are in fact two Thai medical systems—the elite scholarly practices based on  $\bar{A}$  yurveda and centered around the  $m\bar{o}$   $b\bar{o}r\bar{a}n$ , and a folk tradition based among poor illiterate rural healers. I believe that this dichotomy is based on several misconceptions.

Recognizing that in some cases it may be useful to distinguish between an elite and a non-literate tradition, I will raise the possibility that this distinction was originally made in the nineteenth century by the medical establishment at the authoritative schools to marginalize the less empirical features of traditional healing while increasing the aura of prestige and legitimacy surrounding the practice of "orthodox" medicine. As I will attempt to show, the distinction between the two types of Thai medicine is often no more than rhetorical: royal medicine's claims of connection with a long pedigree of Siamese

<sup>&</sup>lt;sup>1</sup> Mulholland 1979c, p. 224

tradition is tenuous at best, and even the highly-trained  $m\bar{o}$   $b\bar{o}r\bar{a}n$  graduating from urban medical schools continue to accept and practice unorthodox methods normally attributed to "rural" practitioners. Medicine as actually practiced today evidences roots in Indian Āyurveda and *hatha yoga*, Khmer herbalism, Chinese meridian theory, and indigenous Tai beliefs, which have been blended in unique and distinct ways by individual practitioners.<sup>2</sup>

The standardization of medical texts in the mid- to late-1800s—primarily at the Wat Phō royal temple in Bangkok—was heavily influenced by a growing awareness of European science. The traditional medicine of the modern  $m\bar{o}$   $b\bar{o}r\bar{a}n$ , I will argue, defined itself at this time in opposition to Western biomedicine, and began the struggle to present itself as a rational and legitimate alternative that continues even today. The effort to create a Thai medicine that could stand in direct juxtaposition to Western science necessitated de-emphasizing indigenous practices seen as being superstitious, and elevating other more empirical theories with connections to classical Indian medicine.

However, this push toward orthodoxy has not fully succeeded, and healing in

Thailand is still a diverse collection of practices rather than a unity (or duality) as implied

<sup>&</sup>lt;sup>2</sup> Note that in this paper I use the conventional "Tai" to refer to the ancient ethnic group of that name, "Siamese" to refer to the people of the kingdoms of Siam, and "Thai" to refer to the people of the modern nation which took the name "Thailand" after the second World War.

by the moniker "traditional Thai medicine." While this diversity may present a challenge for certain elite traditional physicians intent on competing with biomedicine, it is in fact an acknowledged and desirable feature of traditional Thai medicine as understood by those who patronize this system in their daily lives. Instead of understanding Thai medicine as a dualistic world of royal and rural practitioners, I hope to show that the scholar would be better served by looking at Thai medicine as an eclectic, unorganized plurality of practices and theories with diverse influences—and, at times, striking inconsistencies.

Chief among the written sources I will draw upon in this paper will be sections of the student manuals currently in use by the Shivagakomarpaj Institute, a hospital and traditional medical school in northern Thailand which is in many ways at the center of the royal-rural debate, as it is both an authoritative licensed medical school and a community clinic offering free traditional healthcare to the surrounding villages. I will use translations of Shivagakomarpaj's materials I made with the assistance of two informants while conducting field research over 26 months in Thailand from 1997 to 2004. I will also refer to several texts translated by other scholars, most notably Mulholland, who has provided the only full-length English-language translation of a Thai medical text.

<sup>&</sup>lt;sup>3</sup> Much less the abbreviation TTM, used by Brun (2003). This is a clear attempt to give Thai medicine the unified appearance of TCM, or Traditional Chinese Medicine.

However, I will attempt to contextualize these written sources by looking at the various cultural pressures that affected their creation, preservation, and dissemination. For this I will often rely on unwritten ethnographic materials. These consist largely of my own observations made during the periods I apprenticed in traditional Thai healing with several teachers in Chiang Mai, supplemented by secondary sources from the fields of history and anthropology.

# A Review of the Medical Sources in Siam

According to research in linguistics, genetics, and anthropology, the Tai people are believed to have inhabited a homeland in the Tonkin region on the coast of modern Vietnam until the beginning of the common era.<sup>4</sup> Due to population pressures, they are believed to have begun migrating into the Chinese province of Yunnan in the eighth century, from which they were quickly expelled. In the twelfth century, the Tais moved south into modern Laos, Thailand, Burma, and Assam, which they continue to inhabit to this day. Before the arrival of the Tais, the region they would call Siam (also Syām or Sayām) was dominated alternately by the Mon kingdom of Dvāravatī (fl. sixth to twelfth centuries) and the Khmer empire (fl. seventh to eleventh centuries). In 1238, the Tai ruler Si Intharathit established Sukhodaya ("Dawn of Happiness") in what is now northern Thailand, and swiftly began to exercise control over an increasing territory. The Sukhodaya period is considered by Thais to be the "Golden Age" of Siam, and the third king, Rāma Gamhèn (or "Rama the Brave") is said to have been among the most benevolent and righteous in Siamese history.<sup>5</sup>

The influences on Tai culture during this period came from many places. The Southeast Asian adoption of Indian culture had begun in earnest in the first centuries of

See Terwiel 1978a for a discussion of origins and early Tai migrations.
 Griswold and Nagara, pp. 43-44

the common era. This influence peaked as the south Indian Chola Empire (c. ninth to twelfth centuries) extended politically and economically into the region, establishing Mahayana Buddhism and Hinduism from modern Cambodia to the islands of Indonesia. Some Tais were converted to Mahayana Buddhism as well during this time. Theravada Buddhism and Sinhalese iconography entered from the northwestern Dvāravatī, which had close connections with other Theravada kingdoms in South Asia, and the Siamese Tais are thought to have converted to Theravada Buddhism under their influence shortly after their arrival in the area. The Khmer region to the east, centered around Angkor, was marked by its own species of Brahmanism, which would play an important role in shaping Siamese culture as well.

At Sukhodaya, the Tais seem to have begun what would be a long tradition of eclecticism: they incorporated both Mon-influenced religious ideas and Khmer-style Brahmanic rituals at the royal court. However, compared with later Siamese kingdoms, Sukhodaya was also perhaps the most Tai. In contrast with the Khmer-inspired caste system and legal code which would govern Ayudhyā, the style of rule at Sukhodaya was "paternalistic and personal," based on vows of loyalty between vassals and kings in accordance with Tai tradition.<sup>8</sup> During this period, the fundamental principles of ethics

 <sup>&</sup>lt;sup>6</sup> Griswold and Nagara, p. 32
 <sup>7</sup> Griswold and Nagara, p. 67

<sup>&</sup>lt;sup>8</sup> Skinner, p. 2, 45

were established which would influence Siamese law and government to the modern day, and the Tais began to experiment with the institutions of statecraft. The basis for the modern Thai script was developed as well during this period. Inscriptions from Sukhodaya are regrettably few, centuries of humidity and war having exacted their toll on the material record. Nevertheless, although none remain from this period, it could have been at this time that the first Tai medical treatises were recorded.

Ayudhyā, founded in 1351 in what is today central Thailand, annexed Sukhodaya in 1376. Rapidly extending into the Khmer regions of Lopburi and U Thong, Ayudhyā became the dominant kingdom in the region until the eighteenth century. Although Ayudhyā was founded by a Tai ruler (named Ramathibodhi I), most of its territory had long been under Khmer influence, and thus the new state was much more heavily influenced by the Brahmanic government rituals and Hinduized religion than Sukhodaya had been. Perhaps because of the strength of those institutions, Ayudhyā became one of the most successful kingdoms in the region, and enjoyed an uninterrupted succession of 34 generations of rulers. 9

Indian forms of medicine probably entered Sukhodaya or Ayudhyā along with other cultural influences from both Mōn and Khmer neighbors. It is likely that a people who originated in the coastal regions of northern Vietnam would be unfamiliar with the

plants of the central Southeast Asian plain. The Tais—particularly given their proclivity for borrowing features of religion and government from their neighbors—probably looked to the prevailing forms of medicine in the region to which they migrated for useful pharmacological information. However, judging from the diversity and inconsistency of the later sources, the Thai system was probably not borrowed in its entirety from a previously existing Khmer or Mon tradition, nor was it necessarily adopted all at once. The knowledge the Tais brought with them no doubt would also have been a factor in forming their medical tradition, as indigenous beliefs continue to form an important layer of culture among modern Tai people across Southeast Asia. 10 Contact with Muslim communities, Hindu traders, or even European explorers and missionaries also can not be ignored. Boundaries throughout the region were fluid, power frequently changed hands, and many ethnic groups coexisted in the busy ports and markets of the Ayudhyā kingdom.

Ayudhyā was ultimately destroyed when the city was burned and looted by Burmese invaders from 1765 to 1767. The devastation left the economy in shambles, toppled the reigning dynasty, and threatened to end the state of Siam altogether. Due to the near-complete destruction, we are left with very few texts or other primary materials

<sup>&</sup>lt;sup>9</sup> See Griswold and Nagara<sup>10</sup> Terwiel 1978a, pp. 251-54

relating to Ayudhyān culture, including medicine. The earliest medical text extant from this period is the Tamraa phra osot Phra Narai ("Medical Texts of King Narai"), a small book which collects a number of herbal prescriptions said to have been presented to King Narai (1657-1688) and to his successor King Phettharatcha (1688-1697). Mulholland briefly describes this text in her outline of the history of Thai medical documents.<sup>11</sup> Inscribed on palm-leaf manuscripts thought to date from the eighteenth century, these prescriptions were found by the medical expert and professor, Prince Damrong Rajanubhap, in the Royal Library and were compiled for publication in 1917 as a cremation text commemorating the death of a well-known Bangkok physician. The prescriptions are attributed to the Ayudhyā period based on names and dates cited within the document.

The palm leaf manuscripts of King Narai are representative of a fundamental feature of Thai medicine remarked upon by many observers: the importance of special herbal recipes handed down through generations of healers. This type of manuscript typically comprises a list of individual recipes written on palm leaves and bound together within bamboo covers. The texts are often passed from teacher to student as a set, though each prescription is used separately in practice. 12 These individual prescriptions are often

Mulholland 1987, p. 7-19 Brun and Schumacher, p. 44

traded among practitioners, who continually seek to acquire more, sometimes by traveling quite widely. These fragile texts are highly valued, and represent the traditional doctor's most potent healing tool even today. The efficacy of a given healer may be measured by the number of prescriptions he thus commands, although modern herbalists typically use a handful of especially revered recipes for treatment of most diseases. 13 Among Thai doctors, these texts are accorded veneration equal to Buddhist suttas, or other sacred texts. Dan Beach Bradley, a missionary doctor writing in 1865, noted of the medical manuscripts, "there is a similar air of sanctity thrown over Siamese medical books, as there is over their religious books; and almost as soon would they discredit the latter as the former."<sup>14</sup>

The Tamraa phra osot Phra Narai was apparently a highly valued collection. Many prescriptions were owned by the royal family and the royal physicians, but the name and the contents of this particular manuscript imply that this was King Narai's personal collection. Its apparent antiquity would only have increased the text's prestige. Mulholland writes that the dating of the text and the manuscript indicate that these recipes were in use through the latter seventeenth and early eighteenth centuries, and that

<sup>&</sup>lt;sup>13</sup> Brun and Schumacher, p. 44 Bradley, p. 83

two centuries later, despite the destruction of Ayudhyā, they were still being copied and used.15

Another important document from Ayudhyā is an eyewitness account of Siamese culture and customs written by Simon de la Loubère, a French envoy who visited for four months from 1687-88. His work was published in 1691 under the title Du Royaure de Siam, and republished in English in 1693 as The Kingdom of Siam. Although he devotes little space to the practice of medicine—and what he writes is somewhat disparaging—de la Loubère includes several intriguing passages. First, he mentions the existence of cherished herbal manuscripts such as those just described. As we have already seen, the passing of herbal recipes from teacher to student is a distinctive feature of Thai medicine today, and this apparently obtained to seventeenth-century Ayudhyā as well:

[The Siamese] trouble not themselves to have any principle of Medicine, but only a number of Receipts, which they have learnt from their Ancestors, and in which they never alter a thing. 16

More importantly, perhaps, is de la Loubère's description of the eclectic and multi-ethnic approach to medicine at the Siamese court:

Mulholland 1987, p. 12
 de la Loubère, p. 62

The King of Siam's principal Physicians are Chineses [sic]; and he has also some Siameses [sic] and Peguins [Mon]: and within two or three years he has admitted into this quality Mr. Panmart, of the French Secular Missionaries, on whom he relies more than on all his other Physicians. The others are obliged to report daily unto him the state of this Prince's health, and to receive from his hand the Remedies which he prepares for him. <sup>17</sup>

One can infer that de la Loubère was witnessing an important moment in Thai medical history when Siamese physicians were being replaced by foreign specialists. Nonetheless, although he notes that the king's principal doctors are Chinese and European—which leads one to doubt the relevance of traditional Thai medicine at court in the immediate period de la Loubère was writing—other statements in his report hint that practices similar to what we know today as traditional Thai medicine were in fact evident at Ayudhyā.

It is not until the Bangkok period that a detailed material record of traditional Thai medicine is found, but from this point the materials are abundant. If Thai medicine was not relevant during the time that Loubère was at court, it certainly became a powerful national symbol in the nineteenth century. After the fall of Ayudhyā, a tumultuous power struggle saw the rise and fall of the notorious usurper Phraya Taksin (r. 1769-1782), who successfully recaptured from the Burmese territory in the North and attempted to unite

<sup>&</sup>lt;sup>17</sup> de la Loubère, p. 62

the kingdom behind his capital at Thonburi, across the river from modern-day Bangkok. Taksin, a cruel ruler who imagined himself to be the Buddha incarnate, was eventually dethroned and executed, and his general, the renowned Chao Phrya Chakri, assumed the Thai kingship in 1782. Posthumously named King Rama I (r. 1782-1809), the founder of the Chakri dynasty was legendary already in his own lifetime for having captured the Emerald Buddha, the most valued Buddhist icon in Siam, from the Laotians in 1779.

Within 15 days of his coronation, Rama I established a capital across the river at Bangkok. There, he began a program of cultural revival with the intention to restore Siam to its former glory. The project began by constructing the new royal palace, which was not only a replica of Ayudhyā, but which utilized the actual bricks salvaged from the ruins of the old Siamese capital. This was an intentional symbolic act conveying not only Rama I's intention to rule as an Ayudhyān king, but also to affirm that Siam was once again on the ascendant.<sup>18</sup>

Much of Rama I's Siamese cultural renaissance took place at the Wat Phra Chetuphon Wimon Mangkhalaram (Pāli: Jētavana Vimāna Mangalārāma) temple in Bangkok. This temple, commonly known as Wat Phō, is known to have existed as a simple provincial monastery some time before 1688, and was originally named Wat

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<sup>&</sup>lt;sup>18</sup> Terwiel 1983, p. 73

Potharam (hence the modern nickname). 19 When he moved the capital, Rama I established Wat Phō as the primary royal temple, and set out to rebuild and enlarge the facility. As the new royal temple was adjacent to the site of the king's Bangkok residence, it was also constructed on the Ayudhyān model, and with equal grandeur.<sup>20</sup> Construction at Wat Phō began in 1789 and was ultimately completed in April, 1801.

After only 31 years, the third Chakri king, Rama III (r. 1824-1851) began renovating and enlarging the facilities yet again. At this time, he designated Wat Pho a "democratic university of comprehensive education" and began to compile a huge collection of artifacts from across the kingdom at that location.<sup>21</sup> In the words of his grandchild, Prince Dhani Nivat, King Rama III intended for Wat Phō to be the "seat of learning for all classes of people in all walks of life" which would "expound all branches of traditional knowledge, both religious and secular."<sup>22</sup> At a time when skills were traditionally handed down through the family, the king's effort to bring together the arts and sciences at this one educational facility was unprecedented.<sup>23</sup> As part of this project, the king ordered the compilation of the seminal texts of all the scholarly traditions of Siam and the development of authoritative textbooks in these various fields. Beginning in

<sup>&</sup>lt;sup>19</sup> Matics 1979, p. 1

<sup>&</sup>lt;sup>20</sup> Matics 1979

<sup>&</sup>lt;sup>21</sup> Matics 1979, p. 43 <sup>22</sup> Nivat, p. 143

<sup>&</sup>lt;sup>23</sup>Matics 1979, p. 43

1832, texts were etched into marble tablets and various sculptures were commissioned to permanently store this knowledge in a "library in stone."<sup>24</sup>

Medical artifacts established on the grounds of Wat Phō included statuaries with figures of rsis (or ascetics) constructed in 1836 by a kinsman of the king, Prince Nagara. The inscriptions which originally accompanied the statues were written by physicians, members of the royal family, government officials, monks, and even the king himself.<sup>25</sup> Arrayed in postures from both hatha yoga and Thai massage, these statues are portrayed wearing *dhotis* of the Indian style, with matted hair in the fashion of Hindu ascetics.<sup>26</sup> Indian influence can also be seen in the appearance among these figures of Hanuman, the hero of the popular folk-tale, the Ramakien.<sup>27</sup> Unfortunately, the original plan to execute the statues in metal did not come to pass, and the more perishable stucco was used. Thus, of the 80 statues first commissioned, only about a quarter have survived to today, and there remains only a single example demonstrating massage.<sup>28</sup>

The sources preserved at this "library in stone" also included numerous diagrams depicting pressure points and sen lines used in traditional massage. These figures were etched into marble tablets (accentuated with black ink), and labeled with verses

Griswold, p. 319
 Matics 1978, p. 254. These inscriptions had long been separated from the images, but Griswold and Matics have both laboriously reunited the statues with their textual counterparts. (See Griswold 1965 and Matics 1978.)

<sup>&</sup>lt;sup>26</sup> Matics 1977, p. 147

<sup>&</sup>lt;sup>27</sup> Matics 1978, p. 263

explaining their content. The tablets—dozens in all—were displayed in two medical pagodas on the grounds of Wat Phō. Gardens of rare medicinal herbs from around the kingdom were also planted around the grounds of the temple.

Under the direction of the chief physician to the king, Phraya Bamroe

Rachabaedya, <sup>29</sup> the extant manuscripts and fragments from Ayudhyā were also compiled at this time, along with thousands of herbal recipes from physicians across Siam. <sup>30</sup> These were likewise preserved in marble and displayed alongside the massage diagrams. These tablets included hundreds of recipes dealing with childbirth, pediatrics, and cures for many diseases, including smallpox and tuberculosis. <sup>31</sup> The medical information was presented "in conspicuous and convenient places, so that whosoever will, may freely copy them and treat their diseases accordingly." <sup>32</sup> Prince Nivat writes that Rama III envisioned this project as a meritorious act of benevolence to assist his subjects by making them aware of the most efficacious medical texts in the kingdom. <sup>33</sup>

Mulholland (1987) has written a detailed history of the subsequent publication of these medical texts in the nineteenth and twentieth centuries, and only a summary of these events need concern us here. The authoritative compilation of the royal herbal texts

<sup>&</sup>lt;sup>28</sup> Griswold p. 320

<sup>&</sup>lt;sup>29</sup> Apparently by this time, the king's primary physician was Siamese(!).

<sup>&</sup>lt;sup>30</sup> See Mulholland 1979a, p. 13-14 and Matics 1978, p. 254.

<sup>&</sup>lt;sup>31</sup> Matics 1977, p. 146

<sup>&</sup>lt;sup>32</sup> Bradley p. 85.

<sup>&</sup>lt;sup>33</sup> Nivat, p. 143

began in 1895, during the reign of Rama V (r. 1868-1910), when by royal decree all known traditional medical manuscripts and fragments were copied, compared, and revised by a committee of court doctors at Wat Phō.

Definitive recensions were drawn up at this time for use by the royal physicians, but the royal texts were largely unavailable to the public until 1908, when they were published by Prince Damrong in several compilations: the *Tamrā phēsat* ("Texts on Medicine"), the *Phāetthayasāt songkhro* ("The Study of Medicine"), and an abridged version of the above titles for students, the three-volume Wētchasu'ksā phāetthayasāt sangkhēp ("Manual for Students of Traditional Medicine"). 34 Unfortunately, with the exception of one selection from the *Phāetthayasāt songkhro* translated by Mulholland (1989)<sup>35</sup> and scattered short quotations in other academic works, these texts have yet to be published in English. In the 1957, these three texts were authorized by the Ministry of Public Health to be used by the Medical College at Wat Phō for their traditional medical curriculum. Licensed traditional medicine schools across Thailand continue to utilize these texts as the cornerstone of their training programs today. (The Shivagakomarpaj school's manual, excerpts of which are presented in the tables accompanying this paper, is based on a derivative of this work.)

Mulholland 1979a, p. 83
 This is the so-called *KPC* discussed below.

### Medicine and Buddhism

Received wisdom says that the medical system enshrined at Wat Phō was handed down from a handful of sages to modern times in an unbroken lineage through Theravāda Buddhist texts and oral tradition. The date for the transmission to Thailand from India is given traditionally as the third century B.C.E. when the Mauryan king Aśoka is said to have sent two missionaries, Soṇa and Uttara, from India to *Suvṇṇnabhūmi* (the "Golden Land," thought to be the modern Burma), where they converted 65,000 people and spread the Buddhist doctrine.<sup>36</sup> Thus, the traditional medicine of the *mō bōrān* is usually understood by its practitioners to be a direct lineage dating from the historical Buddha's lifetime, and this mythology plays a crucial role in unifying the practitioners of Thai medicine.

The principal figure in Thai medical lore is Jīvaka Komārabhacca, claimed by Thai doctors as the founder of their healing tradition. Jīvaka is a minor figure in the Pāli texts, the Theravada Buddhist canon in use throughout Southeast Asia and Sri Lanka. There are several mentions of him in the *suttas* (a division of the canon cataloguing the teachings of the Buddha), including two texts entitled *Jīvaka Sutta: Anguttara Nikāya* 

<sup>&</sup>lt;sup>36</sup> Lamotte p. 293. The notion that Aśoka ever in fact sent emissaries to Burma has been contested by scholars for many years. Lamotte cites Coedès (1948), who claims a 500 C.E. date for the introduction of Buddhism to mainland Southeast Asia, but I believe it will be evident from the discussion here that even this time-frame is doubtful for the introduction of traditional medicine in its current form.

viii.26, in which Jīvaka is given instruction on what it means to be a devoted lay follower, and *Majjhima Nikāya* 55, in which he asks the Buddha about vegetarianism. In numerous other sources, Jīvaka is mentioned as being the owner of a mango grove in Rājagaha called Jīvakārāma, which he offered for the use of the monastic order (*saṃgha*). He also is said to have donated his professional services to ailing monks. The main source of legend affirming Jīvaka's status as an outstanding physician appears to be Chapter 8 of the *Mahāvagga* ("Large Section") of the Pāli *Vinaya* (the book of monastic discipline), which presents a biography including details of his training in medicine and various healings with which he is credited.

The purpose of the story in the *Mahāvagga*, appearing in a section dealing with the types of cloth that is allowable to monastics, is ostensibly to recount the origins of the Buddha's decision to allow the laity to make this type of donation. However, embedded within this narrative are several important medical episodes which speak of the type of practices prevalent in the fourth century. The six episodes recounted include Jīvaka's administration of medicinal ghee via the nasal passages, performance of abdominal surgery, and an instance of trepanation<sup>37</sup>, and includes mention of Jīvaka's cure of the

<sup>&</sup>lt;sup>37</sup> The opening of one or more holes in the skull with an instrument, in this case, to release several worms which were trapped in the patient's brain.

Buddha, who on one occasion suffered from an imbalance of the *dosas*, or "peccant humors."

Thus canonized in the Pāli materials, Jīvaka's fame followed along with Buddhism as it spread throughout Asia in the common era, and disparate accounts of his exploits are found in the later Sanskrit and Chinese scriptures, each colored by the medical practices of these different cultures. That these Jīvaka stories were particularly popular among lay Buddhists is indicated by the fact that by the time these texts had traveled to China, the biography had been extracted from the *Vinaya*—which was prohibited to the laity—and set out as a separate *sutta* text to be accessible to all. (Two versions of this text exist today, the *Nai niu ki yu yin yuan jing* and another entitled *Nan niu ki po jing*, in which the protagonist is born with acupuncture needles in his hands.<sup>38</sup>)

Only in Thailand, however, is Jīvaka honored and in fact propitiated as the semi-deified "patron saint" of medicine. To this day, he plays a major role in the cult of healing of the  $m\bar{o}$   $b\bar{o}r\bar{a}n$ . The cult of Jīvaka involves aspects of orthodox Buddhist religious practice and, I would argue, comprises a major part of the identity of the traditional Thai healer. Without exception, every healer that I have visited in Thailand has possessed a statue or image of Jīvaka, usually seated or standing on the altar alongside the icon of the Buddha, in recognition of his position as the practitioner's

primary *ajahn* (teacher or guru). This is equally the case for the unlicensed practitioners of non-orthodox forms of healing and for formally trained physicians and teachers of the authoritative schools. A Jīvaka icon is also placed in prominent locations in many monasteries and temples, for example presiding over the main entrance to the national temple, Wat Phra Kaew.

Interviewing informants in Chiang Mai, I have found that Jīvaka is believed to benevolently intercede on a patient's behalf, and is also said to transmit healing "through" the hands of the traditional Thai healer. Many healers pray to Jīvaka for help in healing work, and patients often pray for a cure. When visiting a traditional hospital, it is customary to visit the pagoda housing the Jīvaka statues and pay homage upon entering and leaving the facility. At most Chiang Mai and Bangkok traditional medicine hospitals, schools, and massage clinics, the teachers, students, and patients gather together once or twice a day to recite a prayer to Jīvaka in a ceremony of wai khru, or "homage to the teacher." This prayer is recited in Pāli, as are all formal Buddhist prayers, and is usually preceded and followed by short passages paying homage to the Buddha, the Dhamma, and the Sangha, the "Three Jewels" of Theravada Buddhism.

In practice, there is a high degree of integration of the Jīvaka cult with popular Buddhism. The *wai khru* ceremony at the Shivagakomarpaj hospital, for example, takes

<sup>&</sup>lt;sup>38</sup> Zysk 1998, p. 151n9

place in a small pagoda which houses Buddhist icons, statues of Jīvaka and other *ṛsis* (or sages), and ritual paraphernalia typical of Thai temples such as fortune-telling sticks, sacralized water (*nam mon*), and *bai si* (banana leaves folded into elaborate pagoda-like structures). The *wai khru* itself, performed morning and evening at the beginning and end of the workday, opens with two common Buddhist chants heard at some point during virtually all formal Theravāda ceremonies in Thailand. These phrases, chanted in the traditional monotone voice of the Theravāda monastic tradition, are the "Homage to the Buddha":

namo tassa bhagavato arahato samma sambuddhassa: "Homage to the Blessed, Noble and Perfectly Enlightened One." 39

and the "Homage to the Triple Gem":

araham samma sambuddho bhagava, buddham bhagavanta abivademi. svakkhato bhagavata dhammo, dhammam namassami. supatipanno bhagavato savakasangho, sangham namami: "The Lord, the Perfectly Enlightened and Blessed One—I render homage to the Buddha, the Blessed One. The Teaching so completely explained by

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<sup>&</sup>lt;sup>39</sup> Saddhātissa and Walshe, p. 3

him—I bow to the Dhamma. The Blessed One's disciples who have practised well—I bow to the Sangha.",40

These Buddhist phrases are followed by a chant paying homage to Jīvaka unknown to the orthodox Theravada tradition outside of the medical field, but which draws upon Buddhist language and stock phrases. This chant is found in various forms throughout Chiang Mai and Bangkok, but invariably lauds Jīvaka as a moral follower of the precepts, and is replete with praise of the Buddha. The following stanza appears at the beginning of every version of this recitation I have seen:

om namo shivago sirasa ahang karuniko sapasatanang osata tipamantang papaso suriyajantang komarapato pagasesi wantami bandito sumetaso aloka sumanhomi:<sup>41</sup> "Homage to you Shivago, I bow down. You are kind to all beings and brings to all beings divine medicine and shines light like sun and moon. I worship he who releases sickness, wise and enlightened Komarabaccha. May I be healthy and happy."42

The wai khru specific to the Shivagakomarpaj hospital continues:

piyo-tewa manusanang piyo-proma namutamo piyo-naka supananang pinisriyong namamihang namoputaya navon-navean nasatit-nasatean a-himama navean-nave

Saddhātissa and Walshe, p. 3
 Source: Shivagakomarpaj Traditional Medicine Hospital's Student Manual
 Translation by Wijitha Y. Bandara, personal communication.

napitang-vean naveanmahako a-himama piyongmama namoputaya na-a nava loka payati winasanti. He is pleasant to gods and human beings, pleasant to Brahma, I pay homage to the great one. He is pleasant to naga and supanna.... I pay homage. Homage to the Buddha.... Honor to the Buddha. May all diseases be released.

This ceremony thus incorporates formal Buddhist rites and Theravāda imagery to reaffirm the central role of Buddhist faith and lore in the practice of Thai medicine. In fact, one of the main teachings of the traditional medical school at the Shivagakomarpaj hospital is that religious practice—and by this it is undoubtedly meant Theravada Buddhist ritual—is one of the major disciplines of Thai medicine, alongside herbalism/dietary regimen and massage/acupressure. The "three branches of Thai medicine," as they are called, are represented in the architecture of the facility itself, which houses a massage school and clinic in the north wing, an herbal dispensary and herbal sauna to the south, and a pagoda containing the main shrine to the Buddha and Jīvaka centrally located in-between the two. The very placement of the shrine at the midpoint of the complex points to a self-consciousness about the centrality of Buddhist religion in the practice of traditional medicine.

## A Thai Ayurveda

So little is known about medicine at the time of the Buddha that it is difficult to draw conclusive correlations with modern Thai medicine to verify the claims of legend. We do not know exactly what kinds of practices were current in Jīvaka's time other than the few episodes in the Vinaya, and the Pāli includes limited examples of pharmacological substances, only passing reference to etiology, and virtually no explanation of medical theory. 43 Despite overt identification with Theravada Buddhism, however, analysis of the practices and teachings of the authoritative schools demonstrate few connections with the medicine of India in the fifth century B.C.E. When placed side by side with the few relevant passages from the Jīvaka biography, the practices of the  $m\bar{o}$ bōrān seem to have little similarity to those portrayed in the Vinaya. Nowhere in Siamese medicine does one find evidence of major surgery—much less the cases of trepanation or abdominal surgery the Jīvaka biography attests—which one would expect if Pāli Buddhist medicine were the basis of the tradition.

On the contrary, comparative analysis of the Thai texts reveals clear parallels between Thai medicine and the later Āyurvedic tradition which arose in India out of medieval medical and religious practices. The Āyurvedic tradition is centered around a

<sup>&</sup>lt;sup>43</sup> We must remember that the Vinaya chapter, after all, was intended not as a medical document, but as an explication of a point of monastic discipline.

literary tradition comprising texts such as the *Caraka Saṃhitā* (compiled in present form in the third century C.E.) and the *Suśruta Saṃhitā* (c. 500 C.E.). Although the later Āyurveda grew organically out of early Buddhist medicine, these *saṃhitās* became authoritative during a period when Pāli Buddhism was no longer extant in India, and belong to a corpus of texts associated with Tantric Mahayana and the emergence of classical Hinduism at least eight or nine centuries after the lifetime of Jīvaka.

In the common era, medical theory developed its own body of literature and became part of the scriptural tradition of Buddhism. The large Buddhist universities in India and Central Asia, such as at Taxilā, Nāgārjunikoṇḍa, and Nālandā, taught medicine as one of the five recognized secular sciences (*vidyāsthāna*) of the monastic establishment. Religious texts such as the *Yogācārabhūmi-śāstra* (composed in India 300-350 C.E.) included explicit medical information, and many works from the medieval period, such as the *Sutra of Golden Light*, integrated medicinal herbs and talismans into elaborate Tantric rituals. Yogic and Āyurvedic knowledge heavily influenced Tantric Buddhism and resulted in hybrid Sanskrit texts such as the *Hevajra Tantra* and the *Kālacakra Tantra*, with their syncretic networks of invisible vessels and esoteric energies permeating the physical body. With Buddhism on the decline in India, the Hindu tradition

<sup>&</sup>lt;sup>44</sup> Exact dating of these texts has been controversial. In this paper, I follow Wujastyk 2003. <sup>45</sup> Zysk 1998, p. 47

incorporated Ayurveda and continued to develop this system throughout the following centuries. By the twelfth and thirteenth centuries, Hindu texts such as the Goraksha-Paddhati had articulated the system of nadis and cakras currently in use by the hatha-yoga system.46

The influence of Tantric and *hatha-yogic* practices on Thai medicine can be seen clearly in traditional Thai massage therapy, which is practiced today by both licensed doctors and less qualified practitioners at beauty salons and spas across the country. Therapeutic Thai massage focuses on the assumption of postures directly related to those in hatha yoga, as can be seen by comparing modern training manuals with classic yoga texts. Another important feature of Thai massage is the stimulation of pressure points (jap sen) along the body's 72,000 vessels, or sen. 47 In addition to the well-known postures (Skt. āsana) the hatha yoga system also espouses a system of vessels (called nadis) and numerous pressure points (called *marman*). Although they do not always run exactly the same course, several of the vessels share closely cognate names and similar locations in the two systems. For example, pingala nadi (Skt.) correlates closely with sen pingala (Th.) which terminates at the right nostril, ida nadi (Skt.) with sen itha (Th.) which terminates at the left, and suśumna nadi (Skt.) with sen sumana (Th.) which follows the

Feuerstein, p. 400
 Lit. filaments, fibers, threads, or tendons. (McFarland)

spinal cord.

Much of the Thai theory of herbal prescription also shares clear links with medieval Āyurvedic medical tradition. Mulholland (1979a, 1979b) and Brun and Schumacher (1994) offer good introductions to Thai medical theory based on authoritative texts, and I will not repeat much of their work here. In summary, Thai texts classify 42 parts of the human body by their relation to one of the primordial elements (that)—earth, air, fire, water, or ether—as shown in **Table** 1. 48 These elements are considered in Thai medicine to be the "foundation of the whole body and the foundation of life."49 It is interesting to note with regards to the elements that Thai texts disagree on the number of elements, some settling for five and others for four (omitting Ether). Passages from the Pāli canon use the four elements repeatedly as conceptual tools and meditational aids, but to my knowledge, a system of five elements is not mentioned anywhere in the Pāli Buddhist texts. However, in Āyurvedic texts from the common era, one finds both a four-element and a five-element system in use, confirming that the Thai tradition probably draws from the Ayurvedic in this fundamental detail.

As in Ayurveda, the Thai elements—whether four or five—are manifested in the human body in the form of three dosas (Skt. doshas), or "humors." The first, di, or bile,

<sup>&</sup>lt;sup>48</sup> Mulholland 1979a, pp. 88-95. <sup>49</sup> Ratarasarn 1996, p. 62

correlates to the Fire element. Lom, or wind, correlates to Air. Finally, salēt, or mucus, correlates to the Water element. (As in Indian Ayurveda, the Earth and Ether elements are not generally seen as being responsible for disease.)<sup>50</sup> In both systems, the balance of the three dosas is considered of utmost importance to optimal health and longevity. Likewise, in both Thai and Ayurvedic etiology, the dosas can be upset through climate change, food intake, emotional or psychological factors, heredity, allergic reactions, environmental factors, astrological forces, and sorcery, among other influences, and they can be therapeutically manipulated through the use of dietary regimes or medicinal herbs.<sup>51</sup>

The correlations are not just theoretical: the Thai and Ayurvedic pharmacopoeii are decidedly similar as well. A system of classification of pharmacological substances by flavor is utilized in Thai medicine to provide the fundamental connection between specific symptoms and the prescription of herbal remedies. By most accounts these flavors represent the core theory of the mō bōrān.<sup>52</sup> While these flavor categories are absent in the Pāli, they are central to the prescriptive theory of classical Āyurvedic sources. The Avurvedic tradition established with the Carakasamhitā maintains six flavors while the Thai system maintains nine, but these lists nevertheless are exceedingly similar:

Compare Mulholland 1979b p. 30 and Tatz p. 67
 Ratarasarn 1996, Chapter 2
 Ratarasarn 1996, p. 62

Ayurvedic: bitter, sour, sweet, pungent, salty, astringent

Thai: bitter, sour, sweet, pungent, salty, astringent, toxic, oily, cold<sup>53</sup>

Beyond the theoretical structures, when looking at the medicinal substances used in both traditions, many parallels appear despite the different flora and fauna found in India and Thailand. In **Tables 2-4**, selections from the Shivagakomarpaj student manual are presented. As this text is a condensed version of the Ministry of Public Health's Tumea Phadphanboran Tuapai, Saka Vedhakram and Saka Phesadhakram, texts used across Thailand to prepare students for the national examination, we can infer that the contents give a sampling of the pharmacopoeia current among modern mō bōrān with formal training. Even judging from this one small sampling of Thai medicine, the parallels with Indian herbalism are clear. **Table 2** lists the primary therapeutic substances defining specific categories of herbs, the most important herbs in use for each category. Among the 30 specific plants named, all but nine are found in the classical Āyurvedic pharmacopoeia the *Madanapālanighantu*, from 14<sup>th</sup> century India.<sup>54</sup> If we account for regional variation of species, this number shrinks to three. These are

Mulholland 1979a, pp. 108
 See Dash 1991

Capsicum spp., Canastosporum australe, and Citrus hystix—two plants imported from abroad by Europeans, and a third indigenous to Southeast Asia.

Likewise, looking at the more comprehensive lists in **Tables 3-4** we find that of the 123 named medicinal substances (counting repeated entries each time they appear and accounting for regional species), 92 (or 75%) appear in the Āyurvedic text. Not only are the individual herbal substances similar, but they are in both systems categorized similarly by flavor. Furthermore, Thai herbs are often compounded in combinations familiar to Indian Āyurveda. The famous Āyurvedic recipe for *Triphalā* (or "Three myrobalans," which consists of *Terminalia belerica*, *Terminalia chebula*, and *Phyllanthus emblica*—the beleric, chebulic, and emblic myrobalans), for example, is frequently found in Thai medical manuscripts.<sup>55</sup>

The above comparison shows that despite the distance and time separating the modern Thai manual from the medieval Āyurvedic text, considerable overlap still is evident. Of course, in this comparison, I am using a single Thai and a single Āyurvedic source. A full catalog of the traditional Thai pharmacopoeia does not exist. Nor do we have any comparative works on Thai and Indian Āyurvedic prescriptions. I would suspect, however, that future research will confirm my impression that modern Thai

<sup>&</sup>lt;sup>55</sup> Mulholland 1979b, p. 35

medicine as taught by the authoritative schools is closely analogous to the Ayurvedic samhitās in both etiology and prescriptive theory.

Thai medicine need not have been derived directly from the Caraka and Suśruta, and as Mulholland writes, "it would not be unreasonable to presume a common antecedent" for at least some of the Thai texts and sections of the samhitās. 56 However, the prevalence of non-Theravada theories—such as flavors, vessels, and yogic postures in Thai medicine leads the historian naturally to the conclusion that much of the principal features of what is known as traditional Thai medicine dates to a period well after the time of the historical Buddha and of Jīvaka. Furthermore, that these medical beliefs belong to a Mahayana or Hindu cultural sphere indicates that they most likely were introduced to Siam separately from Theravada Buddhism, and that these different traditions most likely underwent some form of synthesis after their introduction to Siam. This theory is bolstered by the fact that Ayurvedic knowledge is usually not found among healers outside of the literate elite tradition. In the remoter villages, different non-Āyurvedic ideas are usually employed.<sup>57</sup> These same villagers, on the other hand, have been practicing Buddhism for hundreds of years, which indicates that Buddhism and medicine did not penetrate Siam hand in hand.

Mulholland 1979a, pp. 94See Brun and Schumacher.

At the very least, it should be clear that the story of the transmission of Indian medical knowledge can not be as linear as legend would have us believe. Modern  $m\bar{o}$   $b\bar{o}r\bar{a}n$  are practicing a system of medicine closely related to medieval Indian  $\bar{A}$ yurveda, and quite distinct from the practices found outside elite circles. How this system gained ascendancy is taken up in the last section of this paper.

#### Eclectic Practices and Influences

Despite its apparent theoretical consistency and its support from elite institutions, the Ayurvedic-inspired system just presented is not the only (or the most significant) influence on medicine in Thailand. One rarely mentioned source of considerable influence was the Khmer Empire. The Khmers, with their knowledge of Mahayana Buddhism and Tantric Hinduism, and their political dominance in Southeast Asia, were among the principal intermediaries between India and early Siam, and there is some cause for speculation that the transmission to Siam of much of the Indian medical material occurred through the Khmer regions, probably in the Ayudhyā period. Throughout the early kingdoms, the Thais continually looked to Khmer models of statecraft and rulership, even while differentiating themselves from the Khmer through the adoption of Theravada Buddhism. H. G. Quaritch Wales has pointed out the similarities between modern Thai political institutions—particularly royal ceremonies and their Khmer antecedents, and there is no reason to think that these correlations are recent.<sup>58</sup> Even in the seventeenth-century, Ayudhyā exhibited many similarities with Angkorian society, government, and ritual, indicating that these influences were most likely a part of life in this city from the beginning.<sup>59</sup>

<sup>&</sup>lt;sup>58</sup> See Wales 1977<sup>59</sup> Griswold and Nagara, p. 69

Khmer influence remains important in modern Thailand both at the state and the popular level. Many aspects of Mahayana Buddhism and Khmer Brahmanism have been retained in Thai art, architecture, and folk belief, in addition to state ceremonies. To this day, most Thai temples include in their iconographic program Hindu deities imported from the Khmer such as Hanuman, Ganesha and Garuda—although these are invariably placed in positions subservient to the Theravāda icons. The *Ramakien*, the national epic of Thailand, is none other than the familiar Indian story of the *Ramayana*, which has provided centuries of Southeast Asian artisans and storytellers with a source of inspiration (not to mention also inspiring the names of both Ayudhyā and the Chakri line of kings). Unlike in the Hindu tradition, where these figures are deities, in Thailand, due to the primacy of Theravāda, they are more akin to folk-heroes.

Medieval Khmer medicine is only now beginning to be understood, but recent work by Keith Rethy Chhem indicates that there may be many parallels with Thai. A cursory glance at the pharmacopoeia presented in a Khmer manuscript translated by Chhem, entitled *neḥ tāmmrāp kpuon thnāmm kae' rog dān 4* ("Here is the Medical Treatise to Cure the Four Diseases"), confirms links with both Indian and Thai medicine. The organization of the manuscript is identical to that of typical Thai herbal

manuscripts<sup>60</sup> and is based, like many Thai texts, on the four element theory.<sup>61</sup> There are similarities in content as well as structure: of the 126 herbal substances identified in this manuscript by Chhem, half are found in the Shivagakomarpaj text (accounting for closely related species), while there are 69 which appear in the *Madanapālanighantu*. These tend to be the same herbs, indicating a shared pharmacopoeia between India, the Khmer Empire, and Siam.

Again, this comparison is based on only one text from each tradition, and much more research is needed to determine the similarities between the medical practices of the Khmer and Siamese empires. However, additional support for speculation about their connection comes from the role that Khmer symbolism and imagery played and continues to play in Thai healing. Until recently, most Siamese medical and religious texts were written on palm leaf manuscripts in the Pāli language using the Khmer script (khom): it was only in the Bangkok period that the Thai script began to be used to write herbal texts. To this day, the Khmer script is held by Thais to be particularly sacred or magically powerful. In fact, in modern times the script is central to the Thai cabbalistic art of protective amulets, charms, and prophylactic tattoos. These often consist of elaborate geometric designs reminiscent of Tantric mandalas, replete with symbolically-charged

<sup>&</sup>lt;sup>60</sup> Chhem p. 35 <sup>61</sup> Chhem, p. 34

syllables from the Khmer alphabet, pseudo-deities such as Hanuman, and animals such as lions, tigers, and turtles.<sup>62</sup>

.Although we lack the textual records, it is not difficult to postulate a scenario where important Āyurvedic medical texts and yogic practices accompanied Hindu and Mahayana culture as they were introduced to the Siamese. That the Siamese would have attributed much of the tradition to the Buddha's physician in order to give it an air of legitimacy would be expected. In the same way that Hindu deities subsequently became subservient to the dominant order, Āyurvedic medicine thus imported could have been recast in a Theravāda context by association with Jīvaka.

In addition to the Khmer Empire, another possible source of influence on Siamese theory and practice would have been Chinese medicine. The Chinese were a constant presence in Southeast Asia throughout the periods under discussion, and some scholars believe that their presence in the area's commercial centers predated the arrival of the Tais themselves. Contact with China is reflected in Sukhodaya pottery styles, and by the Ayudhyā period, the Chinese population in the city included merchants, traders,

<sup>&</sup>lt;sup>62</sup> Among my informants in Chiang Mai, there were none who could accurately read more than a few syllables of these Khmer writings, although the overall meaning of an individual tattoo or charm was well known to many. This indicates that these designs are less important for their actual content than for their more general acquired meaning and their association with Khmer mystical symbolism.

<sup>&</sup>lt;sup>63</sup> Skinner, p. 1

scholars, artisans, actors, pig-breeders, and notably physicians. <sup>64</sup> This minority forms a large percentage of the population today, and Chinese temples and public religious festivals are a visible feature of a Thai city of any size. 65 In the field of medicine, the Chinese have had notable impact on modern Thailand. Many well-known Chinese herbs such as ginseng (Panax ginseng) are commonplace in virtually all Thai herbal dispensaries. While they do not appear in the Tables that accompany this paper, I have seen Chinese remedies prescribed at the Shivagakomarpaj Hospital as well. Furthermore, many Thai herbalists utilize Chinese diagnosis such as analysis of the irises, tongue, and pulse in their herbal practices.

How early Chinese influence can be seen in Siamese medicine is unclear. I have already noted the fact that de la Loubère numbered Chinese physicians among the king's retinue. Some two centuries later, Daniel Beach Bradley cites in his papers several recipes such as the following, which bears a strikingly Chinese stamp:

One portion of rhinoscerous [sic] horn, one portion of elephant's tusk, one of tyger's [sic], and the same of crocodile's teeth; one of bear's teeth, one portion composed of three parts bones of vulture, raven, and goose; one portion of bison and another of stag's horn; one portion of sandal.<sup>66</sup>

Skinner, p. 15See Coughlin, 1960

<sup>66</sup> Bradley, p. 86

With the inclusion of so many exotic animal parts—a practice not typically found in Āyurveda—it is likely that this recipe is an example of Chinese medicine.

Perhaps even more important is the influence of Chinese medicine on therapeutic Thai massage. As it is practiced today, *nuad boran* ("ancient massage") encompasses a broad range of techniques which vary considerably across the countryside. Many forms of Thai massage resemble quite closely a number of other East Asian practices such as *anmo* and *shiatsu*. Even while claiming a theory consistent with Āyurvedic philosophy and using some Sanskrit terminology, the *sen* channels used at the various massage schools often bear more similarity to Chinese meridians than to Indian *nadis*. Most modern Thai massage schools, including notably Wat Phō and Shivagakomarpaj, freely utilize Chinese reflexology and acupressure point charts in their curriculum.

Clearly, then, there is much of Thai medicine which has been introduced from abroad. However, important features of Thai medical practice prevent us from labeling it as merely a "corrupt" form of Indian, Khmer, or Chinese medicine; nor can it be considered simply a combination of the three. Modern Thai healers—even formally trained traditional physicians—in practice often utilize indigenous plants which are not found in other parts of Asia, and often use Tai criteria such as astrology, spirits (*phi*), and

other local lore rather than Chinese diagnostics or Āyurvedic elements and *dosas* when prescribing herbal remedies.<sup>67</sup>

Alongside the licensed and government recognized  $m\bar{o}$   $b\bar{o}r\bar{a}n$  exist many other types of  $m\bar{o}$ , including the  $m\bar{o}$  du (fortune teller or astrologer),  $m\bar{o}$  khwan (soul doctor),  $m\bar{o}$  nuat (massage therapist),  $m\bar{o}$  phi (spirit medium),  $m\bar{o}$  phi pob (exorcist),  $m\bar{o}$  song (diviner),  $m\bar{o}$  wicha (controller of magical power),  $m\bar{o}$  ya (herbal doctor), and many others. Most modern Thais consult an unorganized panoply of specialists—including these  $m\bar{o}$ , monks, shamans, bone-setters, and others—when illness or misfortune falls. The majority of the population additionally utilizes numerous forms of professionally-prepared charms, amulets, and tattoos as prophylaxis against evil, and utilize magical symbols (yan) as means to ensure health and longevity. These so-called folk practices owe much to the indigenous Tai beliefs, ceremonies, and ritual paraphernalia shared with other groups of Tais throughout the remoter regions of Southeast Asia, some of which have never been exposed to much Indian culture.

Despite these eclectic influences, the primary materials used in the education of traditional physicians in Thailand today do not on the whole reflect these Khmer,

Chinese, or Tai beliefs, but rather emphasize a system based almost exclusively on

<sup>&</sup>lt;sup>67</sup> Brun and Schumacher, 1994

Heinze 1977, p. 56. The word  $m\bar{o}$  in all these instances can be translated as "doctor" or "healer."

Āyurveda. Missing from the corpus of medical texts therefore are the various non-Indian influences that formed Siamese medicine over the centuries. As the "orthodox" medicine enshrined at Wat Phō became increasingly centralized and regulated, non-standard practices were increasingly marginalized. These "unorthodox" practices have not disappeared, however. On the contrary, while the centralized "royal" tradition has been codified and regulated by the Wat Phō temple and by the relevant government offices, these alternative forms of medicine—usually referred to as "rural" after Brun and Schumacher, despite the fact that they are just as prominent in cities—have continued to thrive among rich and poor alike. Existing as a separate stratum, these diverse healers are known collectively as  $m\bar{o}$  ratsadon or  $m\bar{o}$  tjaloe (which Heinze translates as "folk-practitioner" ), and include among their ranks not only wandering mendicants and poor villagers, but also businessmen, policemen, and government officials. 71

Far from being marginalized, in everyday terms, these so-called folk-practitioners are, in my opinion, more representative of Thai medicine than the  $\bar{A}$ yurvedic tradition. Despite the best efforts of the government, studies conducted by scholars reveal that these  $m\bar{o}$  still represent the most popular approach to medicine across socioeconomic lines.<sup>72</sup> Many patients consult both traditional and magical healers (and also Western-trained

<sup>&</sup>lt;sup>69</sup> Terwiel 1978a

<sup>&</sup>lt;sup>70</sup> Heinze 1977, p. 56

<sup>&</sup>lt;sup>71</sup> See Heinze 1997 for biographies of several Thai spirit mediums.

biomedical doctors, although these are considered by many less-affluent Thais only as a last resort<sup>73</sup>), and see each as serving quite separate purposes. Golomb reports that Thais often feel that orthodox traditional medicine and Western *farang* medicine are best for physical ailments, and indigenous shamanic traditions are best for what we would label as psychological and spiritual needs.<sup>74</sup>

Medicine in Thailand, according to Golomb, is thus as pluralistic as it ever was, and Thais are, in his words, "conditioned to avoid total reliance on any single therapeutic approach." The prevalence of these heterodox practices has continued to be an embarrassment to the medical establishment and other elites who wish to promote the authoritative system of medicine formally enshrined at Wat Phō as *the* traditional Thai medicine, but among my informants in Chiang Mai—even those formally trained in orthodox medicine—there were none who did not participate to some extent or another in these types of practices. Often the so-called royal and rural practices are found synthesized in the practice of a single individual. Among the staff at the Shivagakomarpaj hospital, for example, I met an astrologer, a palm-reader, and many who wore protective amulets while they worked. Other *mō nuad* in Chiang Mai are renowned for their abilities

<sup>&</sup>lt;sup>72</sup> See Golomb 1985 and Hinderling 1973

<sup>&</sup>lt;sup>73</sup> Boesch p. 33

<sup>&</sup>lt;sup>74</sup> See Golomb 1985, 1988

<sup>&</sup>lt;sup>75</sup> Golomb, 1985, p. 146

to communicate with spirits and to perform exorcisms, even while their primary practice is therapeutic massage.

# The Struggle for Orthodoxy

Contemporary Thai healing is marked by eclectic practices despite the efforts of the authoritative schools to "Indianize" Thai medicine in recent times. In the nineteenth century the government began efforts to regulate and license practitioners of traditional medicine at the national level, and to move toward a policy of enforcing standardization at the expense of Thailand's diverse local traditions. This orthodoxy identified Thai medicine explicitly with Ayurveda, and marginalized practitioners of non-Ayurvedic healing. This process is quite clearly seen in a remarkable Thai text preserved at Wat Phō. This text— the *Khamphī prathom chindā (KPC)*, translated in its entirety in 1989 by Mulholland—is unique as it does not correspond to any Ayurvedic practices and appears to have no correlation with any other known system. The KPC describes the origins of man, conception, and childbirth, and the various diseases of women and children. The primary concern of the text, however, is with the sang, or astrological congenital diseases and weaknesses which afflict children. According to this theory, children will be susceptible to certain categories of diseases and will benefit from certain herbal therapies depending on their day of birth.

Mulholland has written that the sāng is "a novel system with no relationship whatsoever to Ayurvedic theory," and which she feels preserves indigenous Tai beliefs. 76 Mulholland herself, long having considered Thai medicine to be fundamentally Indic, reluctantly concludes of her own translation: "At least as far as this text is concerned, I can no longer assert that Thai traditional medicine is based primarily on the philosophy of Āyurveda.",77

Despite its decidedly non-Āyurvedic content, however, the KPC, being a pediatric text, is traditionally attributed to Jīvaka, and has been whitewashed with an orthodox veneer in a striking example of the Indianization process by which non-conformist texts acquired legitimacy within the orthodoxy. The first section of the treatise contains an explanation of the birth of the man which is completely at odds with Buddhist mythology. Nonetheless, most of the herbal substances mentioned are catalogued by Āyurvedic criteria.

The KPC opens with the "Homage to the Buddha" (already quoted above in the context of the wai khru ceremony), and proceeds with the following benediction:

namassitvā ca devindam devarājasakkam iva jīvakakomārabhaccam lokanātham tathāgatham paṭhamacintāragantham bhāsissam chandasomukham saṃkhepen kittayitam

Mulholland 1988, p. 179
 Mulholland 1988, p. 175

pubbe lokānam nāthatthanti: "I have paid homage to the Lord Buddha, the refuge of all the world, and then I made special obeisance to the honoured doctor Jīvaka Komārabhacca whose greatness may be compared to that of the illustrious Lord Indra, the greatest of all the kings of the gods. Here is the special text on medicine on which the Khamphee shanthasaat is based. It was composed by master Komārabhacca long ago. In brief so that it may help all people it is set out below."<sup>78</sup>

Other accretions have attempted to inject Ayurvedic theories into the text. Of these, Mulholland has written:

In KPC... the few short passages and recipes based on Ayurveda which do occur seem to have been superimposed at the beginning or end of sections of an already established text. The text KPC stands up on its own without the foreign accretions of the tridosha and other elements.... The Ayurvedic passages do not sit well.<sup>79</sup>

Although the dates of the above interpolations are not known, it is clear that at some point an effort was made to bring a clearly non-Ayurvedic text in line with a medical tradition which valued conformity with Indian philosophy and Theravada Buddhist mythology. That a text with presumably indigenous origins would have been altered in this way indicates that the Indianizing forces were stronger than the Thai

Mulholland 1987, p. 15
 Mulholland 1988, p. 175

preoccupation with preserving the wisdom of their ancestors in pristine unadulterated form, noted by nearly all observers of Thai culture.<sup>80</sup>

Theravada Buddhism had been the dominant religious tradition in Siam since the founding of Sukhodaya, and it is therefore no surprise that efforts would be made by physicians throughout the centuries to legitimize diverse Thai medical practice through association with Jīvaka, the Buddha's physician in the Pāli scriptures. This fusion of medicine with the state-sponsored Theravada Buddhist institutions served to legitimize diverse practices from many sources and also placed medical knowledge under the control and supervision of central religious authorities, and thus is to be expected during the Bangkok era's reassertion of Siamese institutions. However, while the role of Buddhism as a unifying force is clear to see, the case of Ayurveda is somewhat more challenging. Why do the authoritative schools emphasize Ayurvedic theory and Indic heritage at the expense of indigenous knowledge, while practices which are non-Ayurvedic and non-Indian clearly continue to play a role in the contemporary practice of traditional medicine?

No doubt, aspects of Indic medicine were present in Siamese medicine from early times, as they were in most Southeast Asian culures. As discussed above, these probably arrived in Siam via its Mon and Khmer neighbors. However, these concepts were

<sup>&</sup>lt;sup>80</sup> Mulholland 1987, p. 12

probably never central to the practice of medicine before the reconstruction of Wat Phō. Despite the paucity of information on the practice of medicine at Ayudhyā, several important clues point to a tentative conclusion that Āyurvedic knowledge was not at this time an important feature of Thai medicine. First, de la Loubère's comment that the king's doctors were predominantly Chinese leads us to doubt the existence of a "royal" tradition of native medicine at Ayudhyā. Further comments, already partly quoted above, reveal his impression that the Siamese doctors with whom he did have contact did not emphasize theoretical knowledge:

Medicine can not merit the name of a Science amongst the Siameses.... They trouble not themselves to have any principle of Medicine, but only a number of Receipts, which they have learnt from their Ancestors, and in which they never alter a thing.<sup>81</sup>

Consistent with this observation is the fact that the oldest texts extant from the Ayudhyā period do not include any theory, but simply present a series of recipes containing the name of the disease, a list of the associated symptoms, and the method of preparing the prescription. This type of manuscript, as already discussed above, continues to be of primary importance among the rural practitioners of Thai medicine, who often do not have any awareness at all of the complex Āyurvedic etiology underlying the practice of

Thai medicine today.<sup>82</sup>

It is also significant that de la Loubère's comments on massage indicate he probably witnessed an indigenous form of massage rather than the *hatha-yoga* style more well known today. While Bangkok and Chiang Mai today each have their own variant styles of massage based on *hatha yoga* stretching and manipulation of vessels and acupressure points, other areas of the rural northwest maintain a form of massage performed entirely with the feet by walking on the client. Although of course this can not be definitively proven, it was probably this form of massage that de la Loubère meant when he wrote the following passage in the seventeenth century:

When any person is sick at Siam he begins with causing his whole body to be moulded by one that is skillful herein, who gets upon the Body of the sick person, and tramples him under his feet.<sup>83</sup>

Since there are virtually no sources of information on Thai massage practices before the nineteenth century other than de la Loubère, it remains impossible to say more about the origins of this practice, but this "trampling massage" is quite similar to those found in

<sup>&</sup>lt;sup>81</sup> de la Loubère, p. 62

<sup>&</sup>lt;sup>82</sup> See Brun and Schumacher for examples of indigenous etiology and nosology quite at odds with Āyurvedic theory.

<sup>83</sup> de la Loubère, p. 63

Burma and among the Tai people throughout Southeast Asia and is presumably of indigenous origin.

I believe that at some unknown time—falling chronologically between de la Loubère's account of Siam in 1687-88 and the publication of the Royal texts in 1871—an increasing emphasis was placed on the role of Āyurvedic theory and yogic practice as the core of Thai medicine. As I mentioned above, aspects of Indian medicine were probably part of Siamese culture previously, but these came to the fore at the time of the reconstruction of Wat Phō. The decision was made at this time to codify and enshrine traditional medicine at the "university in stone" as one of the authentic Thai arts and sciences alongside painting, sculpture, astronomy, mathematics, and Buddhist philosophy. But it is not the practices of the Tai, nor the Khmer, nor the Chinese which were engraved in stone and preserved for posterity at Wat Phō: it was the practices with Indian pedigree.

Why would this be done, and why at that time? Chief among the proponents of this movement toward empiricism and orthodoxy in traditional medicine would have been the Chakri kings, whose efforts to control medical practice most likely mirrored the process, discussed by B.J. Terwiel, by which they have attempted to purge heterodox folk beliefs and practices among Buddhist monastics in favor of more rational and

philosophical approaches.<sup>84</sup> My hypothesis is that the Chakri dynasty, faced with the monumental task of rebuilding not only a kingdom but also an entire culture that had been undermined by Burmese attack and European colonial ambition alike, considered the Indianization of Thai medicine to be central to its efforts to legitimize Thai medicine and traditional culture as a whole.

External forces pressed in on the fragile new kingdom during the early Bangkok period, including not only continual Burmese incursions in the North, but also the increasing threat of European colonization. <sup>85</sup> The Siamese state was also affected by forces from within. An already large Chinese population centered in the capital and major commercial centers continued to grow in numerical and economic strength. Missionaries, royal advisors, merchants, and mercenaries from England, France, Holland and elsewhere, had comprised a volatile element of Siamese society since the sixteenth century.

The artifacts from Wat Phō give historians a window onto the process by which the Chakri kings struggled both to legitimize their new dynasty and to unify the populace behind their program of cultural renewal. The Chakri kings, with some Chinese blood and Western education, seem to have been influenced in their reconstruction efforts by

<sup>&</sup>lt;sup>84</sup> See Terwiel 1976.

<sup>&</sup>lt;sup>85</sup> Terwiel 1983 cites several occasions in the early 1800s on which British envoys threatened to bring Siam into the British Empire, and the presence of the French was also considered a constant

their contact with these other cultures: European models of universities served as the basis for the reconstructed Wat Phō, and many of the artifacts housed within demonstrate Chinese stylistic characteristics. Ref However, the impetus behind the reconstruction project appears to have been a growing sense of Siamese nationalism, and a desire to compete directly against these foreign cultural pressures. The renaissance begun with Rama I's rebuilding of the capital on the Ayudhyān model now had culminated in an attempt to showcase Thai culture as an ancient and legitimate heritage worthy of being enshrined and displayed alongside the great cultures of the world. A revival of Thai medicine was seen as part of this effort.

The standardization of medicine and a consistent medical philosophy were seen as necessities if Thai medicine was to be upheld as a viable and equally legitimate alternative to both Western and Chinese medicine (both of which apparently had enjoyed more royal patronage at Ayudhyā if we believe de la Loubère). Indic ideas were most likely already well represented within the Siamese medical corpus, but as we have seen, Āyurveda was most likely not the dominant theoretical model that it is today.

Nonetheless, Āyurvedic theory would have been the logical choice for the task of rebuilding Thai medicine as a new rational healing model. In contrast to indigenous Thai

threat.

<sup>&</sup>lt;sup>86</sup> See Matics 1978 for a detailed catalogue of the objects at Wat Phō.

<sup>&</sup>lt;sup>87</sup> See K.I. Matics 1977 and 1978 for a complete account of the renovations of Wat Phō.

herbalism, which probably offered little or no overarching explanatory model, or Chinese medicine, which was associated with a rival state, Āyurveda would have been attractive. Āyurveda was empirical, extensive, ancient, and had the additional benefit of its association with Buddhism and Brahmanic state rituals.

Those who would place the mō bōrān on par with their Western scientific counterparts as representatives of two equal systems of healing had to dissociate Thai medicine from its so-called "superstitious" elements, and the decision to prioritize Āyurvedic medicine by enshrining it as the traditional medicine of Thailand has had lasting effect on the history of medicine in the past 170 or so years. Recent strengthening of training requirements and legislation criminalizing the practice of medicine by unlicensed mō bōrān in the 1990s has called attention to the fact that this process of defining and legitimizing Thai medicine is still ongoing even today. The indigenous folkpractitioners of non-orthodox Thai medicine are for the most part now operating without legal status. Many practitioners—in fact, the vast majority of healers in Thailand—have learned hereditary forms of healing handed down orally for generations through family lineages and are now breaking the law when they practice their arts. While the Thai government has not always strictly enforced the licensure laws, my informants have told me that in cities such as Chiang Mai with many tourists, unlicensed massage clinics and spas have been required to close or pay bribes to government officials to stay operational. This requirement often puts enormous financial strain on the most traditional practitioners, who often do not charge for their healing services.

This struggle can also be seen playing itself out in the contentious rivalries between Wat Phō and regional schools such as Shivagakomarpaj. While the Wat Phō medical school enjoys the prestige of being affiliated with the temple that houses the famous artifacts, it has sought to parlay this status into domination of the national curriculum for mō bōrān. The Shivagakomarpaj school has for decades taught a slightly different form of massage than Wat Phō, and has promoted Northern Thai regional medical knowledge as a valuable tradition. However, in the past few years, even this authoritative, licensed school has come under pressure from authorities in Bangkok for deviation from standard curricula.<sup>88</sup> Moving forward, one of the stated goals of the Ministry of Education is to fully standardize the practice of medicine, and require a high degree of conformity from all schools. The shape of this curriculum is still to be determined, and the authoritative schools have been wrangling over these details for the past few years. No doubt, Wat Phō will play a central role in this debate, and the final result will most likely continue the trend toward identification with Ayurveda begun in the nineteenth century.

<sup>&</sup>lt;sup>88</sup> Personal communication with Chaichakan Wasan, Director of Shivagakomarpaj Traditional Medicine Hospital.

## Conclusion

The fact that traditional medicine is officially defined as one of two equally valid systems alongside Western biomedicine, and the fact that the training and practice of traditional doctors has reached this degree of regulation at the national level demonstrates the success of the Chakri dynasty's centralization process. Historically, a feature of European colonialism and Western-influenced modernization was the denigration of traditional medical knowledge as "superstitious" and "backward." The two most wellknown examples of indigenous Asian medical tradition, Indian Ayurveda and Traditional Chinese Medicine, both suffered several generations of repression by British colonial and Communist Party policy respectively. Although isolated traditional doctors still may have existed throughout the period of persecution, these practices were fully resurrected as respectable healing systems only in the late twentieth century as a part of broader anti-Western nationalist movements. Thailand never experienced a period of colonial domination, and thus a different dynamic obtained. However, as is evident from the extant historical documents, traditional Thai institutions suffered a marked loss of prestige in the late seventeenth century with the increasing European presence in the Siamese capital. As we have already seen, de la Loubère's accounts of the royal court tell us that Thai medicine was secondary to Chinese and, increasingly, Western competition. After the defeat of Ayudhyā by Burma and the complete destruction of the capital, the

whole of Siamese culture was under siege. Siamese medicine was resurrected as an integral part of a cultural renewal in the early nineteenth century with the intent to catalogue, celebrate, and preserve traditional arts in the face of this external threat.

Medicine as a object of national pride need not surprise us at a time when Siamese culture was held up as both an ancient and legitimate alternative to Western culture and science. The result is that, on its face, Thai medicine is an increasingly intellectual, literate, rational endeavor with increasing standardization.

This drive toward standardization has resulted in the increasing identification of Thai medicine with Āyurveda. Many of the texts on herbal medicine in use by the formally trained practitioners are based in large part on an etiology heavily influenced by Indian medical theory though they associate themselves with Theravada Buddhism to acquire legitimacy. The most highly valued texts—those used to prepare students for the national examinations—consistently represent the Indic heritage of the Thai medical tradition at the expense of the indigenous elements. The standardization of healing practices under the rubric of "Thai traditional medicine" in the modern era has attempted to fix this living tradition within a rational theoretical framework and to locate the tradition within authoritative schools which can be licensed and controlled at the national level. But, while the philosophical core of Thai medical theory—the elements, doshas, flavors, nadis, marmans, etc.— are representative of Āyurvedic etiology and therapy,

these concepts are often an Āyurvedic veneer applied over an eclectic diversity of practices.

Thai medicine has never been completely homogeneous in theory or practice, and it certainly is not today. Though it has become commonplace to refer to "Thai Āyurveda," the process of Indianization has yet to purge Thai medicine of its Khmer, Chinese, and Tai practices. Mulholland cites estimates of up to 9000 legally-qualified mō bōrān in 1979, but this number does not include the vastly more numerous non-legallyqualified mo mentioned above. 89 While the identification of Thai medicine with Āyurveda has marginalized these unlicensed practitioners and relegated them to the status of "rural folk-healers," their non-Indian practices remain today the dominant form of helaing in Thailand. These practices remain largely unknown outside of Thailand, and represent a very fruitful field for further study. Thai medicine remains a syncretic combination of classical Asian healing techniques and also a distinctively Thai art, and it should be studied as such: not as a branch of Ayurvedic or Indian tradition, but as a vibrant and viable cultural heritage in its own right.

<sup>&</sup>lt;sup>89</sup> Mulholland 1979a, p. 81

# TABLE 1: The elements (that) in the parts of the human body 90

## Earth (20)

Hair, body hair, nails, teeth, skin, flesh, tendons, bones, marrow, spleen, heart, liver, fascia, kidneys, lungs, colon, intestine, undigested food, waste matter, brain

#### Water (12)

Bile, mucus, pus, blood, perspiration, fat, tears, lymph, saliva, clear mucus, synnovial fluid, urine

#### Air (6)

Air which starts at the feet and rises to the head, air which starts from the head and descends to the feet, air in the abdominal cavity, air circulating in the intestines and stomach, air circulating throughout the body, the breath which is inhaled and exhaled

## Fire (4)

Body heat which warms the body, body heat which is hot and uncomfortable, heat which causes senility and withering, the heat to digest food (metabolism?)

#### Ether (10)

Two eyes, two nostrils, the mouth, the two excretory organs, the reproductive organs

<sup>&</sup>lt;sup>90</sup> Source: Mulholland 1979a, pp. 88-95

# TABLE 2: Flavors and elements in traditional Thai medicine<sup>91</sup>

The Five Elements and their Associated Flavors:

<u>Element</u>	<u>Flavors</u>	Examples
Earth	Astringent, sweet, oily, salty	Piper sylvaticum
Water	Sour, bitter, toxic	Piper sarmentosum [Wild pepper]
Air	Hot	? [Kaosatat]
Fire	Aromatic, bland	Plumbago zelyanica Linn (root) [Plumbago]
Ether		Zingiber officinal [Ginger]

The Nine Flavors (plus Bland):92

<u>Flavor</u>	<u>Indications</u>	<b>Examples</b>
Astringent	Liver, digestion	Tamarindus indica [Tamarind] bark, Andrographis paniculata [Chiretta]
Sweet	Energy	Saccharum spp. [Sugar cane], melon, honey
Toxic <sup>93</sup>	Parasites	Datura metel [Datura], Papaver somniferum [Opium]
Bitter	Lungs, fever	Tinospora tuberculata Beumee [Heart-leaved moonseed]
Pungent/Hot	Colds	Capsicum spp. [peppers], Aegle marmelos [Bengal quince], Acorus calamus Linn. [Calamus], Syzygium aromaticum [Cloves], Ocymum sanctum [Holy basil]
Oily/Nutty	Energy, joints, muscle	Nelumbo nucifera [Lotus] seed, nuts, Castanospormum australe [Black beans], Artocarpus integrifolia [Jackfruit] seed, Tamarindus indica [Tamarind] seed
Aromatic	Heart, "bad blood"	Nelumbo nucifera [Lotus] and Jasminum spp. [Jasmine] flowers, powdered and eaten.
Salty	Constipation, gas	Salt, seafood
Sour	Fever, "bad blood"	Citrus aurantifolia [Lime], Citrus hystix [Kaffir lime], Tamarindus indica [Tamarind] fruit, Mangifera indica [Mango], Ananas cososus [Pineapple] (also good for kidneys)
Bland	Poisoning, chronic thirst	White vegetables, Cucurbita spp. [Pumpkin]

<sup>&</sup>lt;sup>91</sup> Source: Chaichakan. Sections of Shivagakomarpaj's manual for students of Thai Medicine were translated by the author with the assistance of Pikul Termyod and Tananan Willson of the Lek Chaiya Massage School in Chiang Mai, Thailand. The original material is presented in tabular format such as these, although I have replaced the headings with my own.

<sup>92</sup> The tenth Thai flavor, bland, is invariably included but is not usually counted as a tenth, perhaps because it represents a lack of flavor.

<sup>&</sup>lt;sup>b3</sup> The Thai term mao  $b\bar{u}a$  is translated by Mulholland (1979a, p. 86) as "poisonous, intoxicating, and/or addictive," and according to her, "normally refers to drugs which act on the central nervous system."

TABLE 3: Herbal remedies by flavor<sup>94</sup>

Herb	<u>Part</u>	Method	Indications
Astringent (faat) Rheum palmatum Linn. [Rhubarb] Rhus verniciflua [Lacquer tree]			Nausea, blood in vomit, hemorrhoids, bloody eyes, diarrhea Diarrhea, joint pain
Garcinia mangostana [Mangosteen]	Skin		Hemorrhoids
Senna spp.  Acacia catechu (Linn. f.)	Bark		Infection of mouth, throat, tooth/gums, general topical cleanser Diarrhea, topical cleanser
Willd [Catechu] Oroxylum indicum Vent.	Bark	Decoction	Diarrhea, chills, post-partum
[Oroxylum] Tamarindus indica	Bark	Bath	Topical cleanser
[Tamarind]			•
"	Pod	Decoction	Diarrhea
Sweet (waan) Rock sugar Saccharin Sugar Saccharum spp. [Sugar cane] Brown sugar Milk Saccharum spp. [Red sugarcane] Glycyrrhiza glabra [Licorice] Honey		In water " " " In water	Health, energy, fever, throat Mucous in throat, emaciation Health, energy, heart, throat Heath, energy, heart, fever, bladder, fatigue, mucous in throat, cough Health, energy, fever Skin, health Health, energy, fever, blood, mucous Throat, mucous, cough Asthma, health, longevity
Toxic (mao būa) Rheum palmatum Linn. [Rhubarb] Cannabis sativa [Marijuana] Datura metel Linn. [Datura]	Seed	Decoction, Powder, Topical	Brain, heart, indigestion, hemorrhoids  To cause hunger in cases of emaciation.  Use small amounts.  Fever, rash, ringworm, skin parasites

94 Source: Chaichakan. Information missing from table was not available or missing from original.

? [Luk saba] Streblus asper Lour. [Toothbrush tree] Diospyros mollis [Ebony tree] Papaver somniferum	Seed Seed	Powder Smoked	Food poisoning, depression Ringworm, bone poisoning, muscle, teeth. (Also, can brush teeth with this.) Tapeworm  Diarrhea, cough, anesthesia
[Opium]		Smoked	Diamieu, coagn, anesanesia
Phyllanthus acidus Skeels [Star Gooseberry]	Fruit		Swollen lymph nodes, tapeworm, fever
Sulfur		Topical	Skin parasites, mangy dogs.
Bitter (khom)	D 1		
Tinospora tuberculata Beumee [Heart-leaved moonseed]	Bark		Fever, malaria, lymph, fire element diseases, chronic thirst
Eurycoma longifolia Jack	Root		Food poisoning, persistent cough with fatigue, fever
Sapindus rarak A. DC. [Soap nut]	Seed		Fever, food poisoning
Crocodile	Bile		Bad blood, post-partum, vertigo
? [Rakngayom]	Root		High blood pressure, lymph, worms, intoxicating substitution for cannabis.
Hot (phet)	<b>T</b>		
Piper nigrum [Black pepper]	Fruit		Flatulence, mucous in throat, paralysis
Plumbago zelyanica Linn [Leadwort], Plumbago rosea Linn [Rose leadwort]	Root		Stimulating digestion, warming the body, stimulating fire element
" -	Bark		Bad blood, amenorrhea
Piper sarmentosum [Wild pepper]	Bark		Mucous, congested lungs, flatulence, indigestion
Moringa oleifera Lom. [Horseradish tree]	Bark		Flatulence, indigestion
Ferula foetida [Asafoetida] Acorus calamus Linn. [Calamus]	Rhizome		Flatulence, indigestion, mucous, brain Flatulence, indigestion, water element. Also apply topically to broken bones.
Syzygium aromaticum [Cloves]	Flower	Decoction	Stomach ache, flatulence, frostnip, lymph, uterus, toothache
Ocymum sanctum [Holy basil]	Leaf/root	"	Stomach ache, nausea, promote digestion

Oily (man)			
Sesamum indicum [Sesame]	Seed	Eat	Health, joints, body warmth. (Also, leaves can be steamed and wrapped around
Nuts		"	sugar and coconut.) Body warmth, muscle, joints, health, energy.
Castanospormum australe [Black bean]		"	Joints, body warmth
Green lentils		"	Joints, body warmth
Anacardium occidental	Nut	"	Skin disease, rash, infection, dry skin,
[Cashew]	Cood	"	bones.
Nelumbo nucifera [Lotus]	Seed		Muscles, skin, joints. Beneficial for pregnancy.
Artocarpus integrifolia	Seed	"	Health, longevity
[Jackfruit] Rice		"	Joints, fatigue. Beneficial for pregnancy.
Tamarindus indica	Seed	"	Health, worms
[Tamarind]			
A			
Aromatic (hom) Jasminum spp.	Flower	Decoction	Fever, thirst, heart, eyes
Mimusops elengi Linn.	TIOWCI	"	Fever, joints, anger, insanity, heart
[Bulletwood]			rever, joines, unger, mountey, near
Mesua ferrea Linn. [Ironwood]		"	Fever, weakness, fatigue, eyes, high blood pressure
Michelia champaca Linn. [Champak]		"	Fever, heart, fatigue, weakness
Canaga odorata Lam. [Ylang-ylang]		"	Health, heart, vertigo
Jasminum spp.		"	Pregnancy, heart, fever, blood, mucous
Telosma odoratissima		"	Lungs, fever, mucous, blood
G.1. (11)			
Salty (khem)		Eat	Eves lymnh museus
Salt from the sea Salt from the earth		Eat "	Eyes, lymph, mucous Constipation, kidney stones, too much
Sait from the earth			grease in stomach
Water with basic pH		"	Cleanse stomach, kidneys, bladder, kidney stones, indigestion
Horseshoe crab	Claw	"	Beneficial for children and post-partum women, general health.
Rays/skates	Tail	"	women, general neath.
Cuttlefish		"	Gums, acne, mouth sores
Oyster	Shell	"	Take ground shell for kidney stones, flatulence, indigestion.

Sour (som)			
Citrus aurantifolia [Lime]	Juice	Drink	Mucous, blood, cough, skin, acne
Citrus hystix [Kaffir lime]	"	"	Menstruation, mucous
Tamarindus indica [Tamarind]	"	"	Blood, constipation, before and during delivery.
Bouea macrophylla Griff [Gandaria]	Fruit	Eat	Mucous in throat, mouth, blood, constipation, fever
Ananas cososus [Pineapple]	Fruit	"	Kidney stones, kidneys, bladder, mucous, uterus
Alum powder [derived from aluminum oxide.]		Drink in water	Bladder, eyes, ear infection, apply directly to unhealthy loose teeth.
Phyllanthus acidus Skeels [Star Gooseberry]		Eat	Fever, mucous, chicken pox, chronic thirst
Bland (sukhum rot)			
Neptunia plena [Water mimosa]	Fruit	"	Take foam that collects on outside of skin of fruit for fever, food poisoning.
White vegetables		"	Eyes, food poisoning
Coccinia indica Wight & Arn [Ivy gourd]			Food poisoning, purgative
Graptophyllum pictum [Caricature plant]			Fever, chronic thirst, chicken pox, food poisoning
Clay, rich in aluminum		Powder	Apply with water to skin for rashes, overheating.
Thunbergia laurifolia Linn [Purple Allamanda]	Bark	Decoction	Fever, hang-over
Cordyline fruticosa A. Cheval [Ti plant]		Decoction	Gargle with decoction for infected or bleeding gums, bad breath. Drink tea for chicken pox, fever.

TABLE 4: Herbal remedies by symptom<sup>95</sup>

<u>Herb</u> Digestion	<u>Part</u>	Method
Cymbopogon citratus [Lemongrass]	Leaves/stalk	Decoction
Syzygium aromaticum [Cloves]	Flower	Decoction/Powder
Zingiber officinale [Ginger]	Rhizome	Decoction
Allium sativum [Garlic]	Bulb	Food
Languas galanga Sw, Alpinia galanga Stunz	Rhizome	Decoction
Amomum xanthioides Wall [Cardamom]	Seed	Powder
Amomum krervanh [Cardamom]	"	Decoction/Powder
Gas/Flatulence		
Ocymum sanctum [Holy basil]	Leaves	Decoction
Boesenbergia pandurata	Rhizome	Decoction
Holtt [Finger root] Zingiber zerumbet Rosc. Smith [Zerumbet ginger]	"	Decoction
Piper Sylvaticum	Flower	Decoction
? [Heawmoo]	Root	Decoction
Citrus aurantifolia [Lime]	Skin	Decoction, or add to curry
Fever		
Tinospora tuberculata Beumee [Heart-leaved moonseed]	Stalk	Decoction
Eurycoma longifolia Jack	Root	Decoction, drink morning and evening
Andrographis paniculata [Chiretta]	Stalk/leaves	Decoction (also stalk can be chewed for toothache)
Tiliacora triandra Diels	Root	Decoction, drink 3 times daily
Skin Infections		
Cassia alata Linn	Leaves	Apply topically
[Candelabra bush] Allium sativum [Garlic]	Bulb	"
i mani saaram [Same]	2410	

<sup>95</sup> Source: Chaichakan.

Rhinacanthus nasutus (L.) Ro

Kurz

Languas galanga Sw,

Alpinia galanga Stunz

[Galanga]

Root/leaves/stalk Tincture in alcohol

Rhizome

Diarrhea

Punica granatum Skin (dried) Decoction, or eat with water and slaked lime

[Pomegranate]

Garcinia mangostana " Decoction

[Mangosteen]

Tamarindus indica Bark Decoction

[Tamarind]

Mesua sapientum [Banana] Fruit Eat unripe

Acacia catechu (Linn. f.) Sap 1 tsp., boiled in water

Bark

Willd [Catechu]

Psidium guajava [Guava] Leaf Decoction from 10 flame-roasted leaves, or

mash unripe fruit in water, drink Decoction from flame-roasted bark

Sesbania grandiflora (Desv.)

Linn. [Corkwood tree]

Constipation

Senna spp. Leaves Decoction or powder (especially beneficial for

elderly)

Cassia alata Linn. Flowers/leaves Eat fresh flowers, or make tea from leaves

[Candelabra bush]

Cassia fistula Linn. [Golden Seed Boil with salt and eat

shower]

Bridelia burmanica Leaves Roast 15 leaves, decoct with salt and drink in

morning or before sleep

Tamarindus indica Fruit Eat

[Tamarind]

Cassia siamea Lamk. Stalk Decoction before meal and/or before sleep.

[Siamese cassia]

Cassia tora Linn. [Foetid Seed Decoction from dry-roast dried seed

cassia]

Tapeworm

Diospyros mollis [Ebony Fruit Mash fresh fruit with coconut milk and drink.

tree] Adult dosage

Adult dosage: 25 fruits, children:1 fruit for each year of age. Do not use with children

under 10

Artocarpus lakoocha Roxb. Pod Boil pod, collect foam on top, make powder, mix 1 tsp with cold water. (Don't use warm

mix 1 tsp with cold water. (Don't use warm water to avoid nausea.) Take before meals.

Combretum quadrangulare Kurz [Combretum]	Seed	Grind finely, eat 1 tsp on fried eggs.
Curbita spp. [Pumpkin]	"	Grind 60 g in 500 cc water. Drink 3x at 2 hour intervals.
Tamarindus indica [Tamarind]	"	Dry roast 30 seeds, soak in water until soft. Eat.
Punica granatum [Pomegranate]	Bark of tree or skin of root	Decoction, taken in morning. (May cause headache or nausea.)
Quisqualis indica Linn. [Rangoon creeper]	Seed	Decoction. Adult dosage: 5-7, children: 2-3.
Nausea/Vomiting		
Ocymum sanctum [Holy basil]	Leaf	Decoction
Zingiber officinale [Ginger]	Rhizome	Decoction
Piper sylvaticum	Flower or fruit	Decoction
Cymbopogon citratus [Lemongrass]	Stalk	Decoction
Morinda citrifolia Linn. [Indian mulberry]	Fruit	Decoction from 2 handfuls of flame-roasted fruits.
Food Poisoning/Hives		
Garcinia mangostana [Mangosteen]	Skin	Powder from flame-roasted skin. Drink with hot water.

Skiii	hot water.
Wood	Boil to make a thick paste. Take 1/2 tsp in hot water.
Root	Decoct from root, fresh and flame-roasted, or dried.
Rhizome	Flame roast and decoct.
Skin of fruit	Decoction
	Wood Root Rhizome

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