# CHAPTER 1

# A Historical Review of Medicine in Pre-Modern Siam

## Early T'ai Migrations<sup>1</sup>

According to research in linguistics, genetics, and anthropology, the T'ais are believed to have inhabited a homeland in the Tonkin region on the coast of modern Vietnam. Due to population pressures, they are believed to have begun migrating into the modern Chinese province of Yunnan at some unknown point no later than the eighth century C.E.<sup>2</sup> It was not until the twelfth century that the T'ais moved south as well, into modern Laos, Thailand, Burma, and Assam. Pockets of T'ai people continue to inhabit this large geographic area today, where they are known locally as Tai (in Vietnam), Dai (in Southern China), or Thai (in Thailand).

Indianization of Southeast Asia had begun in earnest in the first centuries of the Common Era.<sup>3</sup> By the twelfth century, Indic culture had spread from modern Cambodia to the islands of Indonesia. Before the arrival of the T'ais, the region that would be called Siam (also Syam or Sayam) was dominated by the

<sup>1</sup> This chapter does not intend to provide a comprehensive history of pre-modern Thailand. The reader should refer to Tarling (1992) for this purpose.

<sup>2</sup> See Terwiel (1978a) for a discussion of origins and early T'ai migrations.

<sup>3</sup> Tarling (1992), p. 281.

Mon kingdom of Dvaravati (fl. sixth to twelfth centuries) and the Khmer Empire (fl. seventh to eleventh centuries). Indian and Chinese merchants plied this area continually. Political boundaries throughout the region were fluid, power frequently changed hands, and a diversity of people competed for the region's rich economic resources. Thus, the T'ais moved into a region characterized by cultural and political diversity.

Once they settled in modern day Thailand, the influences on T'ai culture continued to be varied. Theravada Buddhism probably entered from the northwestern Dvaravati (in modern-day Burma). Theravada, or "the Teachings of the Elders," is a form of Buddhism based on a conservative interpretation of the earliest Buddhist texts. From the little surviving evidence of the Dvaravati kingdom (limited largely to archaeological evidence such as coins and sculpture<sup>5</sup>), historians believe that it had close connections with other Theravada kingdoms in South Asia, particularly the Sinhalese kingdoms in modern Sri Lanka. The Siamese T'ais are thought to have converted to Theravada Buddhism under Dvaravati influence shortly after their arrival in the area.

But this was not the only influence on the T'ai people. Mahayana Buddhism and Brahmanism were also formidable Indian influences across Southeast Asia. Despite the dominance of Theravada Buddhism, aspects of these other traditions have to this day been retained in Thai art, architecture, and folk belief. To this day, most Thai temples include in their iconography Indian deities such as Hanuman, Ganesha and Garuda (although these are invariably placed in positions subservient to the Theravada icons). The *Ramakien*, the national epic of Thailand, is none other than the familiar Indian story of the *Ramayana*, which has provided centuries of South and Southeast Asian artisans and storytellers with a source of inspiration (not to mention also inspiring the names of both the

<sup>4</sup> Tarling (1992), p. 295.

<sup>5</sup> See examples of Dvaravati art from Thailand in Fischer (1993).

<sup>6</sup> Griswold and Nagara (1975), p. 32.

<sup>7</sup> See Tarling (1992), pp. 286-304.

kingdom of Ayutthaya and the reign-titles of the modern line of Kings named "Rama"). Unlike in the Hindu tradition, where these figures are all-powerful deities, in Thailand, due to the primacy of Theravada, they are *thewada*, or demigods subservient to and "pacified" by the Buddha. Although they can become wrathful if angered, these gods are frequently "channeled" by spirit mediums who have special relationships with the unseen world, and can be called upon for information or protection in time of need.

### The Sukothai Kingdom

In 1238, the T'ai ruler Si Intharathit established Sukothai ("Dawn of Happiness") in what is now northern Thailand, and began to exercise control over this previously Khmer territory. The Sukothai period is considered by Thais to be the "Golden Age" of Siam, and the third king, Ramakhamhaeng (or "Rama the Brave") is said to have been among the most benevolent and righteous in Siamese history.

At Sukothai, the T'ais seem to have begun what would be a long tradition of eclecticism, incorporating social, political, and cultural ideas from these many sources. However, according to historians A.B. Griswold and Prasert Na Nagara, when compared with later Siamese kingdoms, Sukothai was also perhaps the most T'ai. During this period, according to Griswold and Nagara, the fundamental principles of ethics were established which would influence Siamese law and government over the succeeding centuries, and the T'ais began to experiment with the institutions of statecraft. The basis for the modern Thai script was developed as well at this time.

Inscriptions from Sukothai are regrettably few, the tropical climate and centuries of war having exacted their toll on the

<sup>8</sup> Tarling (1992), p. 169.

<sup>9</sup> Griswold and Nagara (1975), pp. 43-44. Recent scholarship considers much of Ramakhamhaeng's legacy to be legendary.

<sup>10</sup> Griswold and Nagara (1975), p. 67.

material record. Nevertheless, although none remain from this period, it could have been at this time that the first Siamese medical treatises were recorded. The evidence we do have of medical activity in this period is limited to a stone inscription from a neighboring Khmer king, Chaivoraman, that mentions the existence of 102 hospitals called *arogaya sala* established throughout the kingdom, including in the Khmer-held region that today is northeastern Thailand.<sup>11</sup>

### Medical Texts from the Ayutthaya Period

Ayutthaya, a T'ai kingdom founded in 1351 in what is today central Thailand, annexed Sukothai in 1376. Extending into the Khmer regions of Lopburi and U Thong, Ayutthaya became the dominant T'ai kingdom in the region until its fall in the eighteenth century (other important T'ai kingdoms included Lan Na around modern-day Chiang Mai, and the Lao cities along the middle Mekong River).<sup>12</sup>

Although Ayutthaya was founded by a T'ai ruler named Ramathibodhi I, most of its territory had long been under Khmer influence, and the new state was more heavily influenced by the Brahmanic government rituals and Hinduized religion of the Khmers than Sukothai had been. Perhaps because it was established as a center for trade rather than agriculture, Ayutthaya became one of the most successful and cosmopolitan cities in the region. 14

By all accounts, Ayutthaya was a vibrant and wealthy place. Many ethnic groups coexisted in the busy ports and markets of the Ayutthaya kingdom. The ideas that developed in this milieu were, not surprisingly, eclectic and syncretic. Though scant, what historical evidence remains tell us that, reflecting their society

<sup>11</sup> Chokevivat and Chuthaputti (2005), p. 4.

<sup>12</sup> Tarling (1992), p. 171.

<sup>13</sup> Griswold and Nagara (1975), p. 67.

<sup>14</sup> Hodges (1998), p. 82.

more generally, Ayutthayan medicine was also multicultural.

The Ayutthayan medical system was probably not borrowed in its entirety from a previously existing tradition, nor was it necessarily adopted all at once. Indian forms of medicine probably entered Sukothai and Ayutthaya along with other Indic cultural influences from a diversity of sources. As we will see, material from Theravada, Ayurveda, and yoga all would influence medical tradition. However, the knowledge the T'ais brought with them also remained a major factor, and even today indigenous beliefs continue to form an important layer of cosmology and healing among modern T'ai people across Southeast Asia. <sup>15</sup> Contact with Muslim communities, Chinese merchants, Hindu traders, and even European explorers and missionaries during the Ayutthaya period also can not be ignored.

Ayutthaya 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 altogether. Due to the near-complete destruction, we are left with very few texts or other primary materials relating to Ayutthayan medicine. However, at least one important medical text is extant. This text, the *Tamraa phra osot Phra Narai* (*Medical Texts of King Narai*), is 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).

King Narai himself is an interesting figure. In the Ayutthaya King Narai's time, the temple was the seat of education for art, law, history, philosophy, astrology, mathematics, and medicine. The sciences were taught by Brahmins in a traditional model, but King Narai was unusually interested in Western knowledge. During his reign he sought out, and received as gifts from European dignitaries, scientific instruments. However, because

<sup>15</sup> See Terwiel (1978a).

<sup>16</sup> Information in this section from Hodges (1998), p. 87-90.

this interest was restricted to himself, the impact of Western ideas on Siamese society seems to have been quite limited. It would not be until the reign of Rama IV in the Bangkok period that Western science, and medicine in particular, would make a larger impact on Thai society.

The herbal manuscript does not betray a sign of this Western influence, but rather seems to belong to an older indigenous tradition of herbal prescription. Mulholland briefly describes this text in her outline of the history of Thai medical documents.<sup>17</sup> Mulholland writes that the names and dates cited within the document, and the bamboo manuscript itself, indicate that these recipes were in use in the latter seventeenth and early eighteenth centuries. Inscribed on palm-leaf manuscripts in the eighteenth century, these prescriptions were subsequently found by the medical expert and professor, Prince Damrong Rajanubhap, in the Royal Library and were compiled for publication for the first time in 1917 as part of a cremation text commemorating the death of a well-known Bangkok physician. The Medical Texts of King Narai was apparently a highly valued collection. Many similar texts 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 of prescriptions. This manuscript was also apparently used as a textbook of recipes.<sup>18</sup>

The palm leaf manuscripts of King Narai are representative of a fundamental feature of Thai medicine remarked upon by Brun and Schumacher: the importance of special herbal recipes handed down through generations of healers. <sup>19</sup> This type of manuscript typically comprises a list of individual recipes written on palm leaves and bound together within bamboo covers. According to Brun and Schumacher, these fragile texts are highly valued, and can represent the traditional doctor's most potent healing tool.

<sup>17</sup> Mulholland (1987), p. 7-19.

<sup>18</sup> Chokevivat and Chuthaputti (2005), p. 4.

<sup>19</sup> Brun and Schumacher (1994), p. 44.

The texts are often passed from teacher to student as a set, though each prescription is used separately in practice. These individual prescriptions are often traded among practitioners, who continually seek to acquire more, sometimes by traveling quite widely. The efficacy of a given healer may be measured by the number of prescriptions he possesses, although modern herbalists typically use a handful of especially revered recipes for treatment of most diseases.

Among those who utilize them today, Brun and Schumacher report that these texts are accorded veneration equal to Buddhist *suttas*, or other sacred texts. This is consistent with findings from earlier periods. Daniel Beach Bradley, an American missionary doctor writing in 1865, noted of the medical manuscripts common to his day, "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." Today, these types of manuscripts are typically found among folk herbalists, and no longer play much of a role in the formal TTM system, which relies heavily on printed materials and published books for the preservation and transmission of medical knowledge. <sup>21</sup>

There are no other complete medical texts definitively datable to the Ayutthaya era discussed in the English academic literature other than the King Narai manuscript. However, an important early primary source that is well-known 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 France in 1691 under the title *Du Royaume 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.

<sup>20</sup> Bradley (1967), p. 83.

<sup>21</sup> Brun and Schumacher (1994) discuss these manuscripts in the context of Northern Thai folk herbal traditions.

These passages hint at the character of Ayutthayan medicine. Firstly, de la Loubère mentions the existence of cherished herbal manuscripts such as those just described, and possibly refers to the passing of herbal recipes from teacher to student:

[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.<sup>22</sup>

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

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>23</sup>

From this passage, one can infer that, as he wrote, de la Loubère was witnessing a moment in history when Siamese physicians were being replaced by foreign specialists. From these accounts, we can surmise that the Siamese court at Ayutthaya allowed a tolerant approach to medicine—pragmatism and syncretism being a recurring feature of T'ai culture in any era—not only allowing for the practice of medicine by foreigners, but employing foreign doctors in the service of the king. However, we should note that Indian physicians are conspicuously missing from de la Loubère's

<sup>22</sup> de la Loubère (1969), p. 62.

<sup>23</sup> de la Loubère (1969), p. 62.

list of practitioners. There is thus no indication in de la Loubère's writings that the court medicine of his time was dependent on Indian practitioners, although it is likely that the Siamese and Mon practitioners mentioned were knowledgeable of Ayurveda.

### Medicine in the Bangkok Era

Our window onto early Siamese medicine is admittedly sketchy and vague. It is not until the Bangkok period that a detailed material record of traditional Thai medicine is found. However, from this point the materials are abundant. As outlined above, we really do not know much about Ayutthayan medicine, but what evidence is available (at least in the English-language sources) points toward a picture of an eclectic practice. But, as we will see, if Indian medicine was not hegemonic during the time that Loubère was at court, it certainly became a powerful national symbol in the nineteenth century and came to dominate modern TTM.

After the fall of Ayutthaya, a tumultuous power struggle saw the rise and fall of the notorious usurper Phraya Taksin (r. 1769-1782), who successfully recaptured territory in the North from the Burmese, and attempted to unite the kingdom behind his capital at Thonburi, across the river from modern-day Bangkok. <sup>24</sup> Taksin, who history records as a cruel ruler who imagined himself to be the Buddha incarnate, was eventually dethroned and executed. His general, 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 Lao in 1779.

Within fifteen 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

<sup>24</sup> Historical information in this section is from Terwiel (1983).

glory. The project began by constructing the new royal palace, which was not only a replica of Ayutthaya, 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 Ayutthayan king, but also to affirm that the glorious Siam of days gone by was once again on the ascendant.

Much of Rama I's Siamese renaissance took place at the Wat Phra Chetuphon Wimon Mangkhalaram temple in Bangkok. This temple, commonly known as Wat Pho, is known to have existed as a simple provincial monastery some time before 1688, and was originally named Wat Potharam (hence the modern nickname). When he moved the capital, Rama I established Wat Pho as the primary royal temple, and set out to rebuild and enlarge the facility. Construction at Wat Pho began in 1789 and was ultimately completed in April, 1801. The new royal temple was adjacent to the site of the king's Bangkok residence, and it was similarly constructed on the Ayutthayan model, and with equal grandeur.

Rama I also initiated an era of traditional medical revival.<sup>26</sup> He began to collect at Wat Pho traditional medical formulas and established the Department of Pharmacy (Khrom Mo Rong Phra Osoth) on the Ayutthayan model. His successor, Rama II, continued the efforts to gather medical texts from around the kingdom. In 1816, he passed the Royal Pharmacists Law, which enabled royal pharmacists to freely travel the kingdom in search of medicinal substances.

### Wat Pho, the Medical Library in Stone

Only thirty-one years after the establishment of Wat Pho, the third Chakri king, Rama III (r. 1824-1851) began renovations and enlarged the temple's facilities yet again. At that time, he designated Wat Pho a "democratic university of comprehensive

<sup>25</sup> See Matics (1979) for information on Wat Pho in these paragraphs.

<sup>26</sup> Information in this paragraph from Wibulbolprasert (2005), Chapter 1.

education" designed to house a huge collection of artifacts from across the kingdom at that location.<sup>27</sup> In the words of his grandchild, Prince Dhani Nivat, King Rama III intended for Wat Pho 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>28</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>29</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 1832, texts were etched into marble tablets and various sculptures were commissioned to permanently store this knowledge in a "library in stone."<sup>30</sup>

As one of the traditional sciences, medical materials were established on the grounds of Wat Pho at this time as well. These included statuaries with figures of *ruesri* (hermit-sages) constructed in 1836 by a kinsman of the king, Prince Nagara (*see Fig. 1*). 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 eighty statues first commissioned, only about a quarter of them have survived to today. Among these, there remains only a single example demonstrating massage.<sup>31</sup> The remaining depict individual yogic practice for therapeutic aims, a tradition known today as *ruesri dat ton* (or "hermit's self-stretching"). These statues are paired with inscriptions bearing instructions written by physicians, members of the royal family, government officials, monks, and even the king himself.<sup>32</sup>

<sup>27</sup> Matics (1979), p. 43.

<sup>28</sup> Nivat (1933), p. 143.

<sup>29</sup> Matics (1979), p. 43.

<sup>30</sup> Griswold (1965), p. 319.

<sup>31</sup> Griswold (1965), p. 320.

<sup>32</sup> Matics (1978), p. 254. These inscriptions eventually became separated from the images, but Griswold and Matics have both laboriously reunited the statues with their textual counterparts (see Griswold [1965] and Matics [1978]).



**FIG. 1.** THE ONLY REMAINING STATUES OF RUESRI PERFORMING TRADITIONAL MEDICAL MASSAGE. WAT PHO, BANGKOK.

A manuscript from 1838 which catalogued and explained the statues includes descriptive passages such as these:

We are about to begin describing the system of posture exercises invented by experts to cure ailments and make them vanish away... Stretching out the arms and manipulating the fingers, while sitting with thighs raised upward, will relieve stiff arms. This Rishi (named) Yaga, adopts the cure called "The Four Ascetics Blended Together." The ascetic sitting on a crag with feet pointing downward is named Vyadhipralaya, of world-wide renown. He raises one hand, while massaging and squeezing his elbow with the other, a posture to dispel the stubborn indisposition that makes his feet and hand stiff, and to relax them.<sup>33</sup>

<sup>33</sup> Griswold (1965), p. 321. See this article for more images and captions.

The manuscript continues likewise to describe other various postures and their therapeutic applications.

On the construction of these statues, the manuscript continues:

[In 1836] the King gave the command to his kinsman Prince Goemamün... to assemble craftsmen... to cast statues of the Eighty Experts displaying the posture exercises. When the statues were finished and painted in color, they were set up in the proper sequence around [Wat Pho], accompanied by inscriptions on the walls giving the name of each one of them and their technique of curing ailments. All of this was done so as to be useful to people of every rank like a donation of medicine. Thus has His Majesty increased the store of His merits, and made His fame to shine until heaven and earth come to an end.<sup>34</sup>

These statues are examples of the importance of Indian medical knowledge in Bangkok-era Siam. The connections with Indian medicine are overt. These figures are portrayed wearing dhotis of the Indian style, with matted hair in the fashion of Hindu ascetics. Indian influence can also be seen in the appearance among these figures of Hanuman, a character from the popular adaptation of the Indian folk tale, the Ramayana (Th. Ramakien).<sup>35</sup>

The medical artifacts preserved at this "library in stone" also included numerous diagrams depicting pressure points and *sen* lines (more or less analogous to Indian *nadis* or Chinese meridians in function—see discussion in Chapter 5) used in traditional massage. These figures were etched into marble tablets, accentuated with black ink, and labeled with verses explaining their content. The tablets—dozens in all—were displayed in two medical

<sup>34</sup> Griswold (1965), p. 321.

<sup>35</sup> Matics (1978), p. 263.

pagodas on the grounds of Wat Pho, surrounded by gardens of rare medicinal herbs from around the kingdom (see Fig. 2).



**FIG. 2.** MASSAGE EPIGRAPHS DEPICT THAI MASSAGE *JAP SEN* POINTS AND *SEN* LINES. MEDICAL PAGODA. WAT PHO, BANGKOK.

Under the direction of the chief physician to the king, Phraya Bamroe Rachabaedya, <sup>36</sup> the extant medical manuscripts and fragments from Ayutthaya were also collected at this time, along with thousands of herbal recipes from physicians across the kingdom. <sup>37</sup> These were compiled and preserved in marble. 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>38</sup> In the words of a contemporary observer, the medical information was presented "in conspicuous and convenient places, so that whosoever will, may freely copy them and treat their diseases accordingly." <sup>39</sup> Prince

<sup>36</sup> Apparently at this time, the king's primary physician was Siamese.

<sup>37</sup> See Mulholland (1987), p. 13-14 and Matics (1978), p. 254.

<sup>38</sup> Matics (1977), p. 146.

<sup>39</sup> Bradley (1967), p. 85.

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>40</sup>

### Publication of Medical Texts

Traditional medicine and modern medicine were divided into two separate tracks during the reign of Rama IV (1851-1868), and from this point onwards, TTM was increasingly committed to writing. Mulholland has written a detailed history of the publication of medical texts in the nineteenth and twentieth centuries, and only a summary of these events is repeated here. The authoritative compilation of the royal herbal texts began in 1895, during the reign of Rama V (r. 1868-1910), when by royal decree all known traditional medical manuscripts were copied, compared, and revised by a committee of court doctors at Wat Pho. These manuscripts were used by the first medical school, an institution associated with the Chulalongkorn University (est. 1889) and based at the Sriraj Hospital in Thonburi, across the Chao Phrya River from the capital.

Definitive recensions were drawn up at this time for use by the royal physicians, but the texts were unavailable more widely until 1908, when they were published by Prince Damrong in several compilations: the *Tamra phesat* ("Texts on Medicine"), the *Phaetthayasat songkhro* ("The Study of Medicine"), and an abridged version of the above titles for students, the three-volume *Wetchasu'ksa phaetthayasat sangkhep* ("Manual for Students of Traditional Medicine"). <sup>42</sup> The voluminous contents of the *Phaetthayasat songkhro* are outlined in Appendix A at the end of this book.

The mid-twentieth century saw the establishment of the medical college at Wat Pho, and in 1957, the three texts mentioned

<sup>40</sup> Nivat (1933), p. 143.

<sup>41</sup> See Mulholland (1987), Chapter 1.

<sup>42</sup> Mulholland (1979a), p. 83.

above were authorized by the Ministry of Public Health to be used by the newly-founded college for the traditional medical curriculum. With the most recent editions published in 1992-93, licensed traditional medicine schools across Thailand continue to utilize these texts as the cornerstone of their training programs today. The Thai Food and Drug Administration also continues to use these texts for the registration of traditional medicines.<sup>43</sup> The Shivagakomarpaj Traditional Medicine Hospital's student manual, excerpts of which are presented in the tables in Chapter 4 and in Appendices B and C, is based on a derivative of this work. Nevertheless, despite their importance to Thai medicine for both practitioners and historians, with the exception of one selection from the *Phaetthayasat songkhro* translated by Mulholland<sup>44</sup> and scattered short quotations in other academic works, these texts have yet to be published in English.

<sup>43</sup> Chokevivat and Chithaputti (2005), p. 4.

<sup>44</sup> Mulholland (1989). I will discuss this text in Chapter 7.