

## TO STRENGTHEN AND REFRESH: HERBAL THERAPY IN SOUTHEAST ASIA

PENNY VAN ESTERIK

Department of Anthropology, York University, 4700 Keele St., Downsview,  
Ontario M3J 1P3, Canada

**Abstract**—Throughout Southeast Asia herbal tonic drinks are a long established part of the health adaptation system of both rural and urban households. A recent study on infant feeding practices in urban poor households revealed a differential use of postpartum herbal tonics in Bangkok, Thailand and Semarang, Indonesia. This paper explores the cultural meaning of this difference between comparable groups of mothers, focussing on the colonial and neocolonial development of the medical systems, the transmission of knowledge about herbal therapies, and how the tonics fit into the food-drug classification system in both countries.

*Key words*—Southeast Asia, herbal medicine, infant feeding, comparative studies

One feature of Southeast Asian life noticed by travellers and anthropologists alike is the prevalence and popularity of herbal tonic drinks. Herbal cures are to be expected in rural areas where allopathic medicines are less available and more expensive. But their persistence in large cities is more problematic. Even a superficial observer of urban life in Southeast Asia will notice the refrigerated containers of pale amber liquids which Thai civil servants purchase by the glass before their long bus ride to the suburbs, the vendors whose baskets display a number of liquid preparations for sale, rows of open market stalls selling varieties of dried herbs, roots and seeds, and drugstores selling Western medicines at one-counter and small packets of dried powder at another. A more persistent investigator will uncover the one-room school of traditional medicine in *Wat Pho*, Bangkok, beside the center for traditional massage, the traditional medicine shops tucked in the back of a Bangkok market, and the new factories making herbal tonics advertised on roadside billboards throughout Java.

These herbal medicines are a well-described part of the plural medical system of Southeast Asia [1-5]. Herbal medicines are part of health maintenance systems, not simply treatments for specific diseases. Most references link these traditional folk medicines to the humoral theory of disease, requiring the balancing of heating and cooling substances with heating and cooling conditions of the body. Often this has resulted in the generation of classifications of hot, neutral and cold foods or medicines, an exercise which exacerbates the tendency for health professionals to blame 'traditional food habits' for real and imagined health problems in Southeast Asia [3].

In spite of the historical connections and cultural similarities between different medical traditions in Southeast Asia, there has been little comparative work on the herbal therapies, or indeed, on other

curing techniques used throughout Southeast Asia. Yet there is great potential benefit to be derived from comparing two related but distinct cultural systems. As Mulder found in his comparisons between Java and Thailand, "the resulting contrasts may be conducive to a finer understanding of their peculiarities and characteristics than is possible to achieve by the study of each of them in isolation" [6, p. 68].

The task of comparison is both immense and frustrating, since comparison requires comparable expertise in each culture. Another danger of beginning comparative work is the temptation to speculate prematurely on cultural processes accounting for similarities and differences between two distinct groups. Without some theoretical guidelines there is no natural closure to the amount of evidence necessary to begin comparative work. A third problem constantly plagues comparative work in Southeast Asia, and that is the difficulty of assessing the independence of cases in cross-cultural comparisons—Galton's problem. The extraordinary diversity in mainland and island Southeast Asia often obscures the degree of population movement, historical contacts, trade and shared ideologies throughout the region.

I view Southeast Asia as a single ethnological field of study [7] subject to different historical and political pressures. Against this common Southeast Asian background, we can look for underlying cultural processes which help account for differences in the use of herbal cures in Thailand and Indonesia.

This paper should be read as a preliminary exercise—a necessary beginning for much-needed comparative work in Southeast Asian medical systems, suggesting directions for future research rather than testing hypotheses. The paper explores the meaning of the differential use of herbal therapies in Bangkok, Thailand, and Semarang, Central Java. The question arose during the course of a study of infant feeding practices in the two cities. The study, described in the

next section of the paper, did not focus on the use of herbal medicines. But during the course of interviews about insufficient milk and related ethnographic observations, the differences in the use of herbal medicines in the two cities became apparent. Herbal therapies are available in both centers. What accounts for their differential use among the urban poor in Bangkok and Semarang? To answer this, we need to explore some of the similarities and differences in the Thai and Javanese systems of traditional medicine.

But in order to understand the place of herbal therapies in the health adaptation systems of the two countries, the question must be placed in a much broader context. This paper explores three broad areas for future research in order to interpret the meaning of herbal therapies in Southeast Asia: (1) the colonial and neocolonial development of the medical systems; (2) the transmission of knowledge about herbal cures; (3) the conceptual model underlying the classification of *materia medica*. The last section of the paper raises questions in all three areas, suggesting problems for future research.

A recently completed study of the determinants of infant feeding in developing countries has raised questions that require a closer examination of herbal therapies in Southeast Asia. In 1981–82, an infant feeding practices study, funded by the U.S. Agency for International Development and designed by a consortium of Cornell and Columbia Universities and the Population Council in New York, was conducted in Nairobi, Kenya; Bangkok, Thailand; Semarang, Indonesia; and Bogota, Columbia. Together with local teams in each city, we carried out a multimethod study of infant feeding among the urban poor, including: (1) A cross-sectional household survey of mother and infants (Semarang 1356 cases, Bangkok 1422 cases). (2) A marketing study including retail audits and analysis of the infant food industry. (3) Ethnographic fieldwork in several neighborhoods in each city.

The cross-sectional survey was based on representative cluster samples for both cities. Women from Bangkok were eligible for interview if they had a child under 12 months of age, while in Semarang, mothers with children up to 24 months of age were included. An ethnographic component of approx. 3 months duration provided community and household descriptions from several neighborhoods in each city. Ethnographers observed infant feeding in the household and interviewed mothers about health care, raising infants, and related topics.

The research results are still being analyzed, although preliminary reports are available [8]. The evidence discussed here comes primarily from the ethnographic portion of the study conducted in Bangkok, Thailand and Semarang, Central Java. Quantitative evidence refers to frequencies from the cross-sectional household surveys. Both the qualitative and quantitative evidence are broadly representative of urban poor and middle-income households in the two cities.

Both Bangkok and Semarang are port cities with a substantial population of citizens of Chinese ancestry. Although Bangkok is a much larger city reflecting recent westernization, Semarang is a much older city

with evidence of Dutch colonial presence. Approximately two thirds of the mothers in the cross-sectional survey were between the ages of 20 and 29; in Bangkok, 35% were employed in formal work outside the home, compared to 25% in Semarang; 43% of the Bangkok mothers were born in a city, compared to 54% of the Semarang mothers.

In the Bangkok ethnographic study, mothers made occasional reference to consuming *yā dong* (a mixture of medicinal herbs in alcohol) after childbirth. Because *yā dong* has an alcohol base, it is always classified as a hot medicine. It is used by postpartal women to warm up their bodies after childbirth and to clean out their wombs in preparation for the next pregnancy. The most important part of the cleansing is the removal of the discharge following childbirth, which the Thai mothers described as "like the slosh after washing fish". The women using *yā dong* were recent migrants from Northeast Thailand, and were among the poorest women in the community. In the cross-sectional survey, in answer to an open-ended question about what breastfeeding mothers did when they felt that they did not have enough milk, no mothers reported taking traditional medicines, and only 1.5% took a traditional soup (*gāeng liang*) to increase their breastmilk. In both the community ethnographies and the cross-sectional survey, traditional herbal medicines were of minor importance. The Bangkok mothers had a wide range of other solutions to their breastfeeding problems. These solutions included taking Western allopathic medicines and introducing infant formula, a strategy which eventually increased the problem of insufficient milk.

On the other hand, the mothers of Semarang made extensive use of *jamu*, the generic word for traditional Javanese medicines, for a wide variety of purposes. In the course of ethnographic observations, it was discovered that *jamu* were used as part of the mothers' daily routine. Women reported taking *jamu* to restore their slim figures and help them regain their strength following childbirth. These ethnographic observations were borne out by the cross-sectional survey. For example, 93% of the currently breastfeeding mothers actively tried to increase their milk supply. Of these, 81% regularly drank *jamu* to accomplish this, and most of these (88%) felt that their milk supply increased significantly after drinking *jamu*. Of the women using *jamu*, 59% drank the ready-made tonic prepared by peddlers and 30% used a brand-name powder.

Observations from the infant feeding study hint at substantial differences in the use of herbal therapies in Bangkok and Semarang. In the infant feeding study in Bangkok, traditional Thai medicines were used very rarely, and only by the poorest migrants from rural communities. These women used the Thai medicines as cheaper alternatives to Western medicines. Use of traditional Javanese *jamu* was very high among Semarang mothers and cross-cut socioeconomic status. It did not appear to be used as a substitute for Western medicines, but rather as part of a distinctive parallel system, supplementing other therapies. How do these herbal therapies fit into the health adaptation system in the two countries?

## TRADITIONAL THAI MEDICINES

On a typical day, a walk through *Wat Pho*, Bangkok, will take you past a sleepy, dusty room identified as the Traditional Medical College, founded in 1957. The inscriptions and drawings illustrated on the walls of the temple testify to the complexity and extent of the indigenous therapies of the past—including manipulative medicine, humoral pathologies, medicinal recipes, and special treatments for mothers and children.

This organized system of knowledge, once transmitted through the royal courts and Buddhist monasteries, no longer guides either rural practitioners or their urban counterparts. Nevertheless, the full set of medical texts assembled over the past few centuries and continuously updated is available here for reference. All new prescriptions must be registered at the college to guarantee the continued authenticity of the text [9]. These texts are kept in glass cases behind the head teacher (who is addressed as doctor), and contain the written formulae (*tamrā yā*) to which doctors and students may refer if necessary. The primary function of the texts is to link the literate medical tradition, represented by these ancient documents, with modern-day practitioners.

Traditional Thai medicine is recognized by the Thai Ministry of Public Health as the practice of healing based on traditional texts rather than science. The system is clearly humoral; however, it is not identical to the Greek, Islamic, Ayurvedic or Chinese systems. It is more likely an indigenous system influenced in practice by these other historical traditions. Most significant is the association of traditional medicine with Buddhism. Monks, particularly forest monks, were the repositories of much of the practical healing knowledge passed on to lay healers. The oldest Pali texts, containing the rules of the monastic order (the *Vinaya* texts) identify five basic medicines (ghee, honey, butter, oil and molasses) and specialized medicines from roots, fats, leaves, fruits, resins, salts, and astringent decoctions, used to treat diseases caused by imbalances of the 42 elements classified as earth, water, fire or wind [10]. Diseases originate from disturbances of bile, wind or mucus [9, p. 86].

The head teacher of the Traditional Medical College identified medicine (*yā*) as anything which can be eaten to improve one's health. *Yā* is considered one of the four essentials of life. Medicines are classified according to three principal tastes, hot, cold, and bland, and nine medicinal tastes: sweet, astringent, 'intoxicating', bitter, spicy, fat or oily, cool and fragrant, salty and sour. A bland or neutral taste is also recognized. Persons consuming mixtures of Thai medicine in any form are warned simultaneously to alter their eating patterns lest the medicine and food act in an antagonistic manner. In fact, eating mistakes are considered the cause of many physical symptoms.

Like Indonesian *jamu*, Thai traditional medicines come in liquid form, pill form, and as a salve or powder to pat on the body (*yā thā*). The liquid forms are produced by boiling in water, or pickling in alcohol, saline solution, or rice water. Herbs are considered to be more effective and faster acting

when dissolved in alcohol rather than water. Traditional medicines are also valued for their smell.

Unlike Indonesian *jamu*, Thai traditional medicines build on and incorporate essentials from the Chinese pharmacopoeia. Informants identify Chinese medicine as being more bitter than Thai herbal medicines and occasionally identify a specific mixture made from herbs and fruits imported from China. Chinese pickled medicines are particularly popular in rural villages where they may replace the traditional lying by the fire after childbirth. Also popular after childbirth is a powdered mixture of 17 herbs, *yā daeng phamā* (red Burmese medicine), which is dissolved in water and taken as a tonic beverage several times a day.

The Ministry of Health licenses several different kinds of drugstores in Thailand according to the pharmacy law, which, as of September 1986, is still not being enforced. Class one drugstores sell foreign medicines and some Chinese medicines, and must have a registered pharmacist. In 1974, the services of a pharmacist could be purchased for 1500 baht (U.S. \$75.00) per month [11]. Class two sells foreign and Chinese medicines and 'should' have a pharmacist. Class three pharmacies sell traditional Thai medicines only and require someone trained in traditional Thai medicine to be in attendance. After passing a government exam in traditional medicine, the candidate receives a certificate from the Thai Traditional Medicine Association. Since most of the pharmacies in Bangkok are owned by Chinese, Chinese medicine is excluded only from class three pharmacies. There are very few class three pharmacies in Bangkok today.

The doctors at the Traditional Medical College are not in great demand as teachers, nor are they actively seeking students. But the knowledge of traditional Thai medicines is being transmitted in other ways. Compendia of basic recipes are available at *Wat Pho* and local markets. A recent book by Dr Oey Ketsing, (*Useful Village Medicine*, lists 'proven recipes' for conditions such as skin problems, colds, arthritis, red eyes, indigestion, constipation, insomnia, toothache, bad breath, fainting, and worms, among others. Conspicuously absent compared with older booklets and with the Javanese *jamu* booklets are the many recipes for tonics related to women's reproductive careers.

## TRADITIONAL JAVANESE MEDICINE

Traditional Javanese healing emphasizes herbal therapies and massage. Both therapies require continued attention to everyday behavior such as interaction with relatives and friends, and composition of meals. Unresolved conflict and ingestion of foods that do not agree or fit with a person's constitution can reduce the effectiveness of these therapies. Traditional healers are gaining increased respect as other indigenous Chinese, Ayurvedic, and Islamic medical traditions have been legitimized by the authorities [12, p. 33]. Perhaps the most pervasive evidence of this flourishing tradition is the use of Javanese *jamu*. *Jamu* manufacture is a dynamic and growing industry in Java. Boedhihartono writes that "the tradition of herbal medicine has been successfully commercialized

by entrepreneurs, as is shown by the booming sales and advertising for such brands as 'Air Mancur,' 'Nyonya Meneer,' 'Jamu Cap Jago'...." [12, p. 22]. New *jamu* factories were opening regularly near large cities like Jakarta and Semarang in the early eighties.

Among the mothers of Semarang using *jamu* for increasing their breastmilk, 12% boiled the herbs themselves, 59% purchased the herb mixtures from a *jamu* peddler, and 30% used a variety of brands of packaged *jamu*. These statistics at best capture only one pattern of *jamu* use among Semarang women. There are undoubtedly a number of different patterns of *jamu* use among women in Semarang. Some suggestions of these alternative uses come from interviews with a young *jamu* peddler in Semarang; other clues come from a commercial *jamu* manufacturer.

#### *Jamu Gendongan*

Parti, a 17-year-old unmarried woman from a village near Solo, has been selling *jamu* in Semarang for 5 years. She learned her trade from her mother and other *jamu* sellers in the village. Parti lives in a rented room near the central market of Semarang and sells *jamu* to city dwellers who come from her region. If she has any problems, she returns home to Solo and consults with her teachers.

On a typical day, she goes out early in the morning to sell *jamu* and returns home when her nine bottles are empty to prepare more *jamu* for the following day. She states that her customers drink her tonics because they want to be healthy and strong. *Jamu*, according to Parti, is made from products of the earth which provide extra strength to humans. First, she buys special roots from the local market. Next she washes, peels, chops, grinds and mashes the roots. Finally the mash is filtered twice and the liquid is squeezed out. These concentrated liquids are then mixed with water.

Her round basket contains eight or nine bottles of the most popular mixtures. Sometimes she will mix the contents of two bottles, creating a drink with different properties. Although reluctant to reveal the precise contents of her special herbal beverages, Parti identified some of her *jamu* by general term or by ingredient. For example, one day she carried two bitter *jamu* popular with men for building strength, a special recipe of bitter herbs to make women cheerful, bright and slim, a sweet herbal wine popular for general fitness and early pregnancy, a mixture of rice water and roots which acts as an appetite stimulant, a sour mixture of turmeric and tamarind particularly pleasing for women during the menstrual period and early pregnancy, a sweet *jamu* for after childbirth, a mixture made from chili which 'cools women' and promotes breastmilk production, and a mixture of bitter roots which can be taken for a variety of purposes to cool the body.

*Jamu* herbs can also be used in baths, patted on the skin in a thin cosmetic-like layer or a thick paste, or pre-chewed and force-fed to children. The latter two methods are identified by Semarang mothers as traditional methods for treating infant illnesses, less popular among 'progressive' modern women.

As in Thailand, the oral transmission of knowledge of herbal medicines is not the only way this knowl-

edge can be acquired today. Booklets such as *Traditional Javanese Jamu Recipes* provide complete recipes and instructions for making *jamu* at home. The books contain suggested treatments for specific diseases (from skin diseases and diarrhea, to syphilis, T.B., and epilepsy) in addition to a wide range of special *jamu* for women for use during menstruation, pregnancy, and following childbirth.

#### *Nyonya Meneer*

Nyonya Meneer, a popular medicinal herb industry in Semarang, advertises a wide range of ready-made *jamu* in liquid, powder, paste, capsule and pill form. According to their prospectus, most of their products are either marketed to women, or are cures for female-specific ailments. Only seven of 105 prescriptions are directed to men to restore strength, increase sexual ardor, reduce weight, or cure prolapsed testicles. Forty-one preparations relieve specific mild or acute symptoms or diseases such as hemorrhoids, cough, dizziness, VD, jaundice, bronchitis, colds, beri-beri, and ulcers. The remainder are specifically designed for women, generally to enhance their sexual appeal, maintain their strength, beauty and freshness, and regulate their reproductive functions.

Eight products are designed to regulate menstrual periods and 'preserve the charm' of young women beginning to menstruate. These products are linked to the primary function of *jamu*: to freshen, beautify and strengthen women so that they may be youthful, fit, and 'stay like teenagers' to their husbands. Approximately 20 preparations serve these functions, and, in addition, there is a complete set of *jamu* for new brides. Twelve products are recommended for early and later pregnancy, childbirth, increasing milk flow, and for 40 postpartum days. The last mentioned *jamu* are also available as complete 'sets'. There are two products which serve to diminish fertility and space out pregnancies, one to increase fertility, one for lactating mothers, and one for children who sleep poorly and are fussy. Neither Parti nor the commercial *jamu* producers (nor any women interviewed) referred to products to regulate menstrual periods of space pregnancies as abortifacients; this would be a logical topic for further research. Nyonya Meneer is only one of many manufacturers of *jamu* providing products in the Semarang area.

#### TOWARDS INTERPRETATION

First, consider some similarities between the herbal traditions of Thailand and Java. Herbal therapies are available in both rural and urban contexts and are potentially important components of self-directed cures. Both are available in homemade and commercially produced form. Both are relatively inexpensive compared with Western biomedicines, although some Thai-Chinese cures are expensive.

Both Thai and Javanese herbal therapies are based on the humoral theory whereby foods, diseases, and medicines are categorized as possessing varying degrees of heat. Some users and practitioners, particularly in Thailand, relate herbal cures to the elements of earth, water, wind, and fire (Thai, *din, nam, lom, fai*), with linkages to the wind element most explicit;

while others express a more general understanding of the need to restore balance in the system by altering the amount of heating and cooling substances ingested. In both systems, experimentation and modification to suit person, season and problem is standard [3]. Both systems are probably broadly related to the Graeco-Arabic and Ayurvedic textual traditions, with some Chinese influence. The potential for an indigenous Southeast Asian tradition exists but is incompletely researched and perhaps ultimately unknowable.

Both traditions can be divorced from religious and supernatural elaboration. That is, herbal therapies can be viewed as pragmatic, 'matter of fact' everyday behavior, more like eating chicken soup than taking communion. On the other hand, both traditions can be a part of curing rituals and linked to Buddhist and Islamic texts and ideology. Both Thai and Javanese herbal traditions use some of the same ingredients; ingredients such as rice water, chili peppers, ginger, tamarind, cloves, and cinnamon occur also in condiments and regular meals. The herbal mixtures are generally very diluted with water or alcohol, difficult to overdose, and generally act quite slowly on the system. Finally, in both areas, the most consistent and widespread use of herbal tonics appears to be in connection with women's reproductive careers. In Thailand, this is more significant in rural than urban areas.

The herbal therapies in both countries are not only part of distinct health adaptation systems, they are also embedded in complex cultural processes which must be deconstructed to understand broader context. Three broad areas are examined below. We examine first the colonial and neocolonial context to look for possible historical explanations for the differential popularity of herbal therapies in the two urban centers, and second, the transmission of knowledge about herbal therapies. Finally, in order to understand the classification of *materia medica*, we need to examine the conceptual model underlying the categories of food and medicine.

#### COLONIAL AND NEOCOLONIAL IMPACT ON HEALTH CARE SYSTEMS

Perhaps the most important set of factors accounting for how herbal therapies are integrated into the health adaptation systems of Thailand and Indonesia is the nature of colonial and neocolonial contacts with these countries. To understand this impact we must examine not just the indigenous herbal tradition but the contemporary European traditions which influenced Thailand and Indonesia.

Western biomedicine was first brought to Thailand by Christian missionaries. It had little impact on the country until the reign of Rama IV (1851-1868), when Dr Bradley became the King's personal physician. When Bradley came to Thailand in 1835, he introduced new surgical and obstetrical techniques and encouraged the use of inoculation and vaccination against smallpox. Even if Bradley was occasionally unable to 'cure' a patient, Thai royalty continued to support him and sent members of their families for smallpox vaccinations [13, p. 86]. Even Buddhist monks accepted his medical care [13, p. 69]. By 1868,

most of the court physicians had been trained in the Western tradition [13, p. 168]. Thus, the Western biomedical tradition became established quite late in Thailand, and it spread through the royal court physicians. For example, the foreign minister encouraged Bradley's experiments to produce smallpox vaccine in return for his preparation and publication of "a treatise about inoculation for native physicians" [13, p. 86]. This biomedical knowledge, associated with the royal court, probably became a part of the valued 'royal style' through which commoners emulated practices of the royal court [14].

Biomedicine is no longer associated with Christian missionary activities, although mission hospitals still provide important medical services in Thailand. When the first government medical school, Siriraj, was opened in Bangkok in 1889, Western therapies were taught side by side with indigenous Thai therapies, including herbalism. After Rockefeller Foundation funding of Thai medical education in the 1920s, indigenous medical therapies were excluded from the curriculum: "The differentiation of modern medical professionals from the group of traditional healers occurred as a result of the development of Siriraj hospital and medical school under Rockefeller Foundation auspices" [15, p. 120].

At the same time, British patent medicines were being imported into Thailand via Singapore [16]. These were advertised and imported for the foreign community in Bangkok, but as Thailand was never colonized, the impact of this foreign community was probably not all that great, since in the 1880s there were less than 300 Europeans in Bangkok [17, p. 4].

This experience with British and American experts could have affected the herbal tradition in Thailand in a number of ways. First, the new medical education which excluded traditional therapies and 'medical assistants' resulted in a decrease in the number of traditional practitioners such as midwives, herbalists and masseurs in the capital city. The lack of formal training in the literate textual tradition might have increased the differences between the royal court tradition and the rural monastic and lay traditions of healing. But the association of Western biomedicine with the royal courts would tend to increase its popularity and value among commoners. This positive approach to Western medicines and therapies (without threatening Thai theories of disease causation) encouraged a very open market for medicines. Medicines were valued for their strength, and some Western medicines available in the late 1800s, such as quinine and chloroform, were probably seen as more effective drugs for specific problems than herbal mixtures. It is likely that Western medicines replaced certain herbal cures, since herbal medicines were evaluated as weaker and less effective than Western medicines.

The spice trade, particularly peppers, cloves, and nutmeg, initially brought the Dutch to Indonesia. European medicine was introduced to Indonesia in 1626 with the appointment of Jacob Bontius, whose task was to oversee medical services in the country [18]. At this time, herbal therapies and humoral explanations still dominated the European tradition. The great Dutch physician, Hermann Boerhaave,

(1668–1738) strongly influenced clinical practice in Europe. His textbooks describe purging, cupping, and the use of herbal plasters and salves, all therapies compatible with Javanese approaches to curing [19]. As the founder of the botanical gardens at Leiden, Boerhaave and his students might have had a great deal of interest in the *materia medica* of the Javanese. We may hypothesize that there was a potential for interchange between the Dutch and Javanese herbal traditions in the 1700s. At any rate, others have commented on how well the Javanese learned certain medical lessons from the Dutch, "... perhaps because they fitted in with traditional Javanese notions" [19, p. 16].

In spite of the early contact between the Dutch and Javanese health adaptation systems, there is little evidence for flooding of Javanese markets with Dutch commercial medicines. In fact, the Dutch were quite unconcerned with improving health services in Java until the Ethical Policy of 1901 brought increased concern for public welfare in Indonesia. In general, the Dutch were more interested in Java as a source of natural resources than as a market for Dutch imported goods.

Much more detailed historical research is necessary to document the interplay of local and colonial therapies in Java. An initial examination suggests that indigenous therapies such as massage and herbal medicines were tolerated by the Dutch. One legacy of the Dutch tradition was institutional support for home births, reflected in current practices both in Indonesia and in the Netherlands, where over half the mothers give birth at home [20, p. 188]. In the infant feeding study in Semarang, 53% of the index mothers gave birth at home, attended by traditional midwives, trained midwives, or doctors. A second legacy may have been a more regulated pharmaceutical industry than in Thailand.

The colonial and neocolonial legacy affects current health policy in both countries. The pressure to develop indigenous Thai and Javanese practitioners and therapies comes more from international agencies such as WHO than from Thai and Indonesian institutions. International agencies have funded projects to upgrade the skills of traditional midwives, but even rural women are turning to Western clinic births and rejecting the services of the traditional practitioners [21]. In 1983, UNICEF proposed a project to incorporate traditional medicine through the Primary Health Care System, but the project, which aimed to analyze, cultivate, and distribute medicinal herbs, was turned down. The sixth 5-year health development plan (1987–1991) makes brief mention of traditional medicines but appears to view them primarily as a possible means of reducing the need for imported drugs [22]. In short, the Thai national health campaigns do not idealize indigenous traditions such as herbal therapies, and Thai public health officials have generally looked down on traditional healers. Their approach to integration has been to co-opt traditional practitioners to dispense modern biomedical drugs and information [5, pp. 189–90].

Thailand, in the words of Sulak Sivaraksa, has "been enamoured of all things western for a long time. As we were never a colony of the West it is still

harder to cure this illness and thus we regard the ex-colonial countries as being baser than we are" [23, p. 156]. Thailand, viewing itself as 'free', has never had to 'prove' its identity or distinguish itself conceptually from its masters. Perhaps Java, in an effort to stress its independent identity, has reached back more self-consciously into traditional Javanese culture and promoted traditional Javanese therapies such as *jamu*. While the second International Congress of Traditional Asian Medicine, held in Surabaya in 1984, distributed beautiful booklets sponsored by Mustika Ratu *jamu* company, it would be hard to imagine an international medical conference in Thailand advertising traditional Thai herbal medicines. However, a large well-publicized national fair stressing traditional medicine was held in 1985.

#### TRANSMISSION OF HERBAL KNOWLEDGE

A second area to explore concerns the changing methods of transmitting herbal knowledge. Jack Goody, in his study of the effects of literacy on cognitive processes, demonstrated the close relation between prescriptions and recipes in the European literate tradition [24]. Both are lists of ingredients with rules for their combination. Both are collected, classified, and serve as reference books for culinary and medical specialists. Yet both specialists may attempt to restrict information to an 'in-group'. Familiar examples include physicians' handwritten prescriptions and symbols to pharmacists, and recipe exchanges for special dishes whereby the recipient never seems to be able to reproduce her neighbor's 'perfect dish', perhaps because her neighbor 'forgot' to mention one ingredient.

In the European tradition, Sass argues that the Middle English word *cury* not only meant cookery, but cure as well [25, p. 9]. Goody notes that medicinal and cooking recipes were first printed and produced together, although the original medical meaning of recipe was soon replaced by culinary usage [24, p. 136].

Goody also points out in that Asian and European societies, both hierarchically organized, control of diet was viewed as a medical treatment. In those societies, foods and medicines were equated. He contrasts this with African cuisines where cures were obtained by ingesting separate special substances as medicines, rather than as ingredients in ordinary meals [26, p. 117].

According to Goody's argument about the effects of literacy, recording recipes and prescriptions encourages experimentation, comparison, and improvements, while spreading the specialist's knowledge to nonspecialists. A change in one ingredient in a list might result in a new prescription. On the other hand, the written Thai texts, originally the property of court physicians, may be a more conservative tradition than recipes transmitted orally.

Today, in both Thailand and Java, knowledge of herbal medicines are transmitted in both oral and written form. Recipes for *yā dong* and *jamu* are handed down from mother to daughter in rural communities. These are the products carried by local vendors like Parti throughout Java. At the same time,

groups who wish to preserve indigenous medical traditions are collecting recipes and printing them in low cost booklets. Two examples referred to in this paper include *Traditional Javanese Jamu Recipes*, and (*Useful*) *Village Medicine* by Dr Oey Ketsing.

These written 'cookbooks' depersonalize the knowledge, leaving no necessary mark of the teacher and lending a universal quality to the document. Students of Thai traditional medicine can purchase texts, memorize them, and take licensing exams without ever having taken courses at the College of Traditional Medicine. These reference books change the nature of teaching.

Oral transmission in Java from mother to daughter encourages more detailed knowledge of procedures, since students learn fewer recipes but participate directly in their production. Apprentices may be unaware of alternative recipes or contradictions in diagnoses because they have been taught secretly by different practitioners. The exception to this is the extraordinary case of the Traditional Khmer Medical Centers set up in the Cambodian refugee camps in Thailand. Here practitioners who formerly practised independently have been brought together by the refugee crisis and practise together, openly discussing their diagnoses, comparing therapies, and reaching consensus about treatments [27].

Elsewhere in Southeast Asia, the recording of herbal treatments in writing has acquired additional meanings. In Viet Nam, health cadres are given the task of writing down family remedies and recipes. The cadres make an inventory of recipes which are then sent to higher levels for examination and classification. Recording these remedies is considered a political and social task. In exchange for the oral recitation of family remedies, the state makes a written record and guarantees proper health care services. Currently in Viet Nam and Cambodia, the Socialist search for proving the efficacy of the people's wisdom underlies the approach to herbal therapies, as traditional medicine is stripped of 'superstitious' beliefs [28, p. 26].

Written recipes may encourage closer scrutiny into scientific efficacy of herbal mixtures. Herbal mixtures have been blamed for acute renal failure, and fears of poisoning from heavy lead, arsenic, or mercury as a result of ingesting herbal remedies which circulate in Singapore and other Chinese communities in Southeast Asia. In Thailand and Indonesia, Health Ministries are anxious to be able to guarantee some form of quality control over the production of herbal medicines. However, modern entrepreneurs are no doubt watching for the commercial possibilities of traditional mixtures. In India, for example, a private company made a careful study of an Ayurvedic galactagogue to determine its commercial possibilities [29].

#### CLASSIFICATION OF FOODS AND MEDICINES

To understand herbal therapies in Bangkok and Semarang we need first to redefine the domain of inquiry to reflect Southeast Asian conceptions of food and medicines. It is common for Westerners to separate food, cosmetics, and drugs into non-overlapping categories; food tastes good, medicine

tastes bad, and cosmetics are commercially produced. However, vitamins, food supplements, diet foods, and oatmeal and honey face masks blur these distinctions and reflect the conceptual model more common in Southeast Asia. In Southeast Asia, the domains of food, cosmetics, and drugs overlap significantly, and taste and smell are attributes guiding the use of all three. For example, sweet and fragrant substances are often used as a basis of love magic, much like "edible perfumes" [5, p. 144]. Other combinations are used for external application in the form of pastes, mixtures for baths and steam baths, and balls of herbal medicines used with massage.

A complete understanding of the Southeast Asian herbal tradition requires more analysis of the dimension of smell and the application of cosmetics. Cosmetics, many of which contain products which could be used internally or externally, bring the wearer's appearance in line with the cosmos, making the wearer orderly, attractive, and 'right' [14].

Cosmetics containing edible herbs raise additional questions about the relation between herbal medicines and sexual allure. Is it possible that in Indonesia, the herbal medical tradition is reinforced by women's desire to strengthen relationships with their husbands?

Limiting the discussion to the dimension of taste, we find that the boundaries of food and medicines are not all that clear. Taste contrasts—sweet, bitter, sour, salty, hot, cool, etc. are derived from herbs, spices, resins, oils, leaves and roots in a variety of combinations. The same ingredients, for example, may be found in food dishes like curries to be served on rice, and in powdered or pressed pills clearly considered as medicine. Between these two extremes are a wide range of relishes or condiments, soups, and teas taken as part of meals, and other infusions, tonic drinks, and herbal medicines taken to maintain or restore health.

The same principles guide the ingestion of all these edible substances, and similar consequences follow whether ginger and garlic, for example, are ingested as part of a meal or as a medicine. Of course, the physiological effects of tonic drinks or herbal infusions may depend as much on placebo effects and the ingestion of quantities of boiled liquids, as on the pharmacological properties of the herbs. This is an important question for future research. Ingesting herbal mixtures requires simultaneous changes in daily food consumption, lest the medicines and foods be antagonistic. For example, a teacher at the Traditional Medical College in Bangkok advised reducing the intake of white cabbage, bitter gourd, and bamboo shoots when taking certain herbal mixtures.

The main point here is that negotiations about items ingested to maintain health and treat diseases occur all along this continuum. Failure to recognize this results in viewing food in terms of dietary restrictions and medicine in terms of cures, thus obscuring the complexity of the relation between food, medicine, and health.

Etkin and Ross [30] have argued for the importance of considering both herbs classified as medicines and those same herbs as they appear in the local diet. The same herb may be used both as a medicine

and in a staple dish or relish of the local diet. In order to assess the possible synergistic or antagonistic effects of any single herb, both dietary and medicinal usages of all plants must be considered.

The flavor principle is a useful concept for understanding herbal therapies in Southeast Asia. The unique combination of flavoring agents is defined by Rozin as part of the structure of cuisine [31]. We might go one step further and ask whether these flavor principles developed from medicines. Zysk has noted that the basic *materia medica* described in the *Vinaya* texts of Theravada Buddhism are like food additives and condiments rather than 'drugs' in a medical sense [32]. Several roots used in Indonesian cooking are described in cookbooks as having medicinal flavor (e.g. Java root, Laos). In fact, Southeast Asian cuisine is characterized by the adoption of irritants. Consider, for example, the importance of ginger, garlic, red onions, tamarind, turmeric, and chili in both the medicinal and culinary traditions of Southeast Asia. The issue is not whether they are foods or medicines, but rather that they are all part of the same system which strengthens and refreshes the body.

#### CONCLUSION

Herbal therapies are available throughout mainland and island Southeast Asia. They appear to be more popular and better promoted commercially in the cities of Java than in Bangkok. Yet in both places they are part of the system of self-directed cures available in particular to women. In spite of the different political and economic pressures on the two countries, the herbal traditions persist, since allopathic medicines have no comparable products which are geared to women's reproductive activities in quite the same way. The products are well entrenched in both the formal and informal economies, and are easily incorporated into the cycle of domestic food production and consumption in both countries.

In this paper I have suggested several cultural processes which should be examined comparatively to help account for similarities and differences in the use of herbal tonics in Thailand and Indonesia, and raised questions for other scholars, particularly historians, to explore. Comparative work is particularly challenging in Southeast Asia where different historical experiences and political structures obscure similar ecological and cultural processes. By examining these processes in more detail, we may be able to identify trajectories influencing the integration of indigenous and Western therapies throughout the region.

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