The Wat Pho Traditional Medical College publishes a number of books on medicine. One of these-Phāetthayasāt songkhrop (The Study of Medicine)-comes in three volumes and comprises 23 medical texts, the royal texts compiled in 1871 by a committee of court doctors appointed by King Chulalongkorn. From these the theory of Thai traditional medicine can be gleaned. And for the majority of Thai students who find the language of the old texts difficult to understand, there are modern handbooks which explain the texts and from which the medical theory and the classification of drugs can be learnt.

The College of Traditional Medicine at Wat Māhathat and other schools also publish text-books and modern handbooks on traditional medicine for their pupils.

My first effort to explain this system of medicine was made with material obtained from the modern handbooks. I then made a careful analysis of one of the original texts included in The Study of Medicine which form the syllabus for the authorised course of study and from which the handbooks are derived. The text examined is Khamphi prathom chinda, a text on paediatrics, which I have called the Thai Book of Genesis. I will refer to it here as KPC.

It seems as though the last word on the theory of Thai medicine will come only when all 23 of the royal texts have been studied carefully. In the meantime it can be said that there is a marked difference between the prominent theoretical content of the modern handbooks and the actual theoretical content of KPC (given that the general methods of diagnosis of children's diseases also apply to adults and I think that this can be presumed). Let me explain.

My conclusions after studying the modern handbooks were that Thai traditional medicine is a simple system of medicine. It is based primarily on the philosophy of Ayurveda, the Science of Life of ancient India, which had its historical beginnings during the same few centuries as the ancient medical systems of Greece and China, about two and a half thousand years ago. Ayurveda attempts to relate the human body and its elements to the macrocosm of the universe, and so it does not adopt a scientific approach to the diagnosis and treatment of disease. It views the body as a co-ordinated whole, classified not according to function, but according to its constituent components. The material components of the body are classified with reference to the predominant element of the four protoelements of which they are composed.
Consequently, in Thai traditional medicine disease is seen as a disturbance of the balance of these elements, manifested by disorders of the various component substances of the body. Such disorders may arise from endogenous causes or from exogenous causes such as changes in climate or environment and factors of age and time of day. Immoderate behaviour of the individual is also taken into account as a causal factor of disease.

Whatever may be the primary cause, the result is thought to produce changes in the function or structure of one or more of three vital constituents of the body—the elements wind, bile and mucus. These disorders of the *tridoṣa* are considered to be the ultimate causes of disease.

Disease is diagnosed after a thorough investigation of the history of the patient and his family, the past and present history of the disease, examination of body and mind, and investigation of the patient’s symptoms. From the information thus obtained, the primary cause of the disease is decided, the name of the disease and the treatment to be given.

Treatment may be given by means of medicine, surgery (of a very elementary nature such as the lancing of abscesses), massage, or by magic spells and incantations. Crude drugs of plant, animal and mineral origin are used, usually in standard combinations and quantities; and the medicinal properties of drugs are determined by their taste.

Despite this heavy emphasis on the borrowed *Āyurvedic* medicine of India, a scanning of the royal texts on medicine indicated that the modern handbooks on traditional medicine might be playing down the existence of an already established indigenous system on to which *Āyurvedic* theory had been grafted.

After studying the text *KPC*, at least as far as this text is concerned I cannot any longer assert that Thai traditional medicine is based primarily on the philosophy of *Āyurveda*. Rather, in *KPC* at least, the few short passages and recipes based on *Āyurveda* 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 *tridoṣa* and the other elements. Although *KPC* is a collection of texts, some possibly of borrowed material from neighbouring countries including India, the *Āyurvedic* passages do not sit well within these texts.

It is true that some of the royal texts lean very heavily towards *Āyurveda*. *Khamphi rōknīthān* is the prime example. But *KPC* reveals the other side; I believe, the indigenous medical theory. Even this is not a single method of explaining disease. There are several components. The most prominent of these I will address. Before doing so I will summarise the main subject matter of *KPC*.

*KPC* is a collection of six books concerning creation, including the recreation of the world at the end of the last era, the divine origin of man, and human reproduction; and concerning diseases of infants and children. Each book is reasonably
self-contained; some are subdivided into parts. Recipes for medicine are scattered throughout the text in groups.

**KPC I, 1.**

*KPC* begins with a verse written in the Pāli language and translated into Thai declaring that the author has paid due homage to the Buddha and his contemporary, Jivaka Komārabhacca, who is acknowledged to be the original compiler of this text. Jivaka’s description of the recreation of the world after its destruction at the end of the last era, and story of the divine origin of man then leads to an explanation of human reproduction.

**KPC I, 2.**

Tells of the divine origin of the medical knowledge acquired by Jivaka’s teacher, Rokāmaritin, whose medical texts had been passed down from doctor to doctor since the time of the Buddha Kakkusandha. The remainder is about conception, pregnancy, birth and some common illnesses of newborn infants.

**KPC I, 3.**

Covers the period immediately after a child is born, while the mother is lying by the fire, and details some of the dangers encountered at this time by both mother and child. Next comes advice on burying the placenta and a list of auspicious signs and symbols for each year of the twelve year cycle.

**KPC I, 4.**

A summary of the attributes of good and bad women and how these affect their breast milk.

**BOOK II**

**KPC II, 1.**

The symptoms induced by certain kinds of *pākṣī* the five stages of development in infants which result in the occurrence of ten kinds of *sāng* (children’s disease), the eight attributes of woman, four kinds of birth-place, four types of infant, nine kinds of *sāng* serious diseases of infants and four kinds of *pīsāt*.

**KPC I, 4.** (Inserted in Book II)

On three kinds of women who have unwholesome milk.

**KPC II.**

Describes *sāng ehon*, *sāng daeng*, *sāng fai* (various diseases), and nine kinds of
la and la-ǒng (mouth diseases). This is followed by a description of the seven kinds of birth sāng or sāng of the seven days—sāng fai, sāng nam, sāng daeng, sāng sakō, sāng wūa, sāng chāng and sāng khamōi—including the aetiology of birth sāng, in which each kind of birth sāng is explained in relation to the mother’s symptoms when she is three months pregnant, and in relation to the weekday of birth. Book II concludes with a brief summary of the fevers of infants and mentions seven kinds of sāng.

BOOK III
*KPC III.*

Comprises seven parts, each assigned to a separate form of birth sāng and its associated diseases, presented in order of the day of birth, starting with Sunday and sāng phloeng (fai). These are: Sunday, sāng phloeng (fai), fire sāng; Monday, sāng nam, water sāng; Tuesday, sāng daeng, red sāng; Wednesday, sāng sakō, vigorous sāng; Thursday, sāng kho (wūa), cow sāng; Friday, sāng chāng, elephant sāng; Saturday, sāng chōn (khamōi), robber sāng.

BOOK IV
*KPC IV.*

Contains extracts from supplementary texts providing summaries on birth sāng for the benefit of inexperienced doctors who do not have a thorough knowledge of the texts; and on the origin of the fevers and pustules of sāng.

BOOK V
*KPC V.*

States that children develop parasites in a severe form after birth sāng and its associated diseases have run their course. To ensure that the doctor will know when this occurs, the duration of each form of birth sāng and minor sāng (a complication of birth sāng) is explained. A list follows of 80 parasites, then descriptions of some parasitic diseases.

BOOK VI
*KPC VI.*

On the combination of the body elements at birth and their disintegration at death. Another seven kinds of parasite and an explanation of the body elements and the seasons as the primary causes of disease in children. Abnormalities of the body elements; a further brief explanation of the relationships of birth sāng and associated diseases with parasites; signs of death; and disorders of the urine and faeces. Disorders of the body elements; five kinds of atisan preceding death; further summaries on abnormal urine and faeces; and five kinds of parasitic diseases, usually incurable.
KPC concludes with a reference to the origin of man. There follows an explanation that diseases developed when people changed their eating habits from corn and wheat to prawns and fish and food in its crude, natural state which can be impure or unclean. Finally, another statement is made about the divine origin of the knowledge of medicinal plants.

Books I and VI, on the whole, appear to be compilations of extracts from other texts; Books II, III and IV, apart from the first few pages of Book II, describe birth sāng and associated diseases; and Book V is chiefly concerned with parasitic diseases.

Let us now look at the diagnostic patterns discernible in the descriptions of some of the diseases of infants and young children included in KPC.

Birth sāng, sāng of the seven days, is what KPC is really about. This sāng is a congenital disease because it starts in the womb. It affects all children, none escape. Some are affected all their lives.

Diagnosis is made on the basis of the symptoms of the mother when she is three months pregnant, which point to a particular form of birth sāng. This, in turn, indicates the day of conception and predicts the same week-day as the day of birth, by which the disease is named. This is illustrated in the following quotations from KPC III, 1 and I, 2.

Birth sāng affects all infants while in the womb, when the mother is three months pregnant and the foetus has become differentiated to have the five parts. At that time one pustule of birth sāng will develop, the type depending on the day of birth. If it is the time of the waxing of the moon, the pustule will be above the navel; if the moon is waning it will be below the navel. If it is a girl the pustule will be on the left side; if a boy, on the right side and it will grow there until delivery. To diagnose which kind of sāng the foetus has, the mother’s symptoms should be investigated...

When a mother has been pregnant for three months and she has gastric pain, dizziness, swelling of the backs of the hands and of the legs from the feet up to the iliac region, general fatigue and muscular pain, insomnia, and pustules the size of corn kernels on her palate, it should be realized that the child was conceived on a Tuesday and will be born on a Tuesday, because sāng dāeng is the main illness of such a child and it presents itself in this way in the mother.

Two versions of the mother’s symptoms are given. Although there are some differences in these, they do have a great deal in common and can be seen to have been
derived from the same source. When they are examined closely, most of the mother’s symptoms are found to be typical of the common disorders of pregnancy known to Western medicine - morning sickness, fluid retention and so on. Some suggest possible infections.

As has already been mentioned, there are seven kinds of congenital disease or birth sāng, one for each day of the week. There are several descriptions of each form, mainly collections of symptoms of all kinds likely to occur in children, from skin diseases to dysentery and internal abscesses. Some are illustrated by drawings purporting to show what some of the internal conditions look like. All these diseases are believed to be developments of the original pustule or abscess which developed in the foetus at three months.

Following or during the course of birth sāng complications set in. Once again, a different name and description for each day of the week. This could be called minor sāng. On the whole, some kinds of birth sāng are more severe than others, but when the combined effects of the birth sāng and minor sāng of any one birth day are compared with those of another, it is difficult to distinguish them as far as symptoms are concerned except for the degree of severity of some forms.

There are certain other diseases associated with each form of congenital disease, a particular variant in each case as with minor sāng. These are mouth diseases called la and la-pōng, and a group of diseases which appear to affect the nervous system. These last belong to the class of lom diseases and include tetanus. Eventually, after about five years, when this pattern of early childhood diseases has run its course, it is supplanted by severe parasitic infestations also associated with particular kinds of birth sāng and the effects can continue throughout life. (See Table 1.)

The inadequacies of this system of classification of diseases in children have not escaped the authors, who have offered alternatives such as the interchangeability of some kinds of birth sāng and minor sāng. And any number of variations of minor sāng, la and la-pōng can be associated with any kind of birth sāng. The system devised conflicted with the practical experience of the doctors. Even so, it is a novel system with no relationship whatsoever to Āyurvedic theory.

Outside this complex of diseases but recognized within the same system are diseases believed to be caused by spirits. These might be māesa’s, saphan or various kinds of paksi. Then there is the form of the child - mahatsarūp, athitsarūp, haritarūp or manutsarūp - which has its effect on that symptoms that might develop.
Table 1: Classification of children's diseases

*Sang* (Children's diseases)

<table>
<thead>
<tr>
<th>Birth <em>sang</em> of each day of the week</th>
<th>Sunday</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
</tr>
</thead>
<tbody>
<tr>
<td>phloeng <em>(fai)</em></td>
<td>nam</td>
<td>dāeng</td>
<td>sakō</td>
<td>khō (wūa)</td>
<td>chāng</td>
<td></td>
<td>choi (khamōi)</td>
</tr>
<tr>
<td>krai</td>
<td>fāi</td>
<td>krane</td>
<td>kratang</td>
<td>khō (phū'ak)</td>
<td>kradūk</td>
<td>nāngrin</td>
<td></td>
</tr>
<tr>
<td>utthaya-kān</td>
<td>sāeng</td>
<td>utthaya-kān</td>
<td>ninlakanti (niara-phloeng)</td>
<td>maha</td>
<td>sāeng</td>
<td>phrachan</td>
<td></td>
</tr>
<tr>
<td>plēo fai fā</td>
<td>kāeo</td>
<td>kāeo</td>
<td>phloeng</td>
<td>mek</td>
<td>arit</td>
<td></td>
<td>plēo fai fā</td>
</tr>
<tr>
<td>lom</td>
<td>wichian</td>
<td>morakot</td>
<td>phrachan</td>
<td>hatsa-kin</td>
<td>kumphan</td>
<td>bātthayak</td>
<td>champrāp</td>
</tr>
</tbody>
</table>
Where are the body elements and the tridosa of Ayurveda? As mentioned earlier explaining children's diseases in these terms are inserted from time to time, usually at the end of long sections on birth sang and seemingly out of context. The greatest occurrence of Ayurvedic theory is found amongst the extracts from supplementary texts included in Book VI, at the end of KPC. While most of the descriptions of diseases in terms of the elements speak of sang, a few attempt to incorporate these ideas with the concept of birth sang. Others include references to spirits or relate to the physical appearance of the body, the form. At no time are Ayurvedic ideas adapted to explain the diseases associated with birth sang, which is understandable, since Ayurveda reduces most illnesses to three—those resulting in disorders of the tridosa, wind, bile and mucus.

In this text the medical theory based on the Ayurvedic system of medicine, relating disease to disorders of the body elements and the tridosa, as taught in Thai schools of traditional medicine now, is secondary to the theory of birth sang or congenital disease. Ayurvedic ideas have been superimposed on an indigenous, calendrical theory of children's diseases owing nothing to Ayurveda. This suggests that the sang theory was in use before the Thais adopted Ayurvedic ideas and could predate the arrival of the Tai in what is now Thailand.

There is yet another component in the indigenous medical theory revealed in KPC. This is the pragmatic approach to diagnosis. This method has two forms of expression—in simple symptomatic description and in terms of birth sang. It is within this category that we find the rationalization which overcomes the rigidity of the birth sang theory, insisting that the doctor should be careful in his diagnosis of a particular form of birth sang, being guided primarily by the symptoms observed in the child rather than its birthday. The uncomplicated diseases of infancy and the minor upsets that occur at the times of change in a baby's development are also described in this straightforward manner, and in Ayurvedic terms as well. The effects on the infant of the way it is born and the quality of the mother's milk are also described pragmatically.

The treatment of diseases is covered fully in KPC, again using the birth sang theory, Ayurvedic theory and at other times practical experience.

In this text there is only one reference to the use of massage. Ritual and incantations are used at times, but most of the treatment suggested is with medicines administered internally, applied externally or burnt for the purpose of fumigation. The ingredients are of animal, mineral and vegetable origin, most being plant material.

Jean Mulholland
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ENDNOTE: The points raised in this paper have been elaborated in my earlier publications. A list is attached. A complete translation of the text, *Khamphipratham chinā* is to be published this year as *Herbal Medicine in Paediatrics: translation of a Thai Book of Genesis*. Asian Studies Monograph, New-Series, No.10. Faculty of Asian Studies, ANU, Canberra.