

The Intersecting Triad: the Man, the Snake and the State

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Introduction

Identifying certain significant moments in the history of *vishavaidyam* (toxicology) in Kerala is important for locating the transformations, negotiations and strategies of the practice in its inter-action with the State and with similar/other practices. One such vantage point is a debate around the introduction of the Vishavaidya Board in the 1970s to conduct examinations and thereby regulate the traditionally trained *vishavaidyas* (toxicology practitioners). The attempt was met with fierce protests from the formally educated ayurveda students and the State was forced to postpone the announcement of the results of the examination. Another point of debate was whether a *vishavaidyasala* (pharmacy for treating cases of toxicity) should be eligible for grant-in-aid if it also provided treatment for general diseases. A third debate, which is different from the governing process described in this paper, is one on *vishavaidyam* in the 1970s between Adiyodi, a scientist, and Kuttykrishna Menon, a *vishavaidyam* (toxicology practitioner). A further moment of critical review of *vishavaidyam*, much down the years, published by Dr. Manoj Komath, a scientist, in 2011, is also referred to in this paper. These discourses bring out the fissures in the narratives within which the debates are framed in understanding the dynamics and internal logic of native medical practices. This essay uses archival materials along with other secondary sources and interviews with indigenous health practitioners for substantiating its analysis and arguments.

History of *Vishavaidyam*

In order to look into the rationality of a practice, it is important to know the relational co-existence of diverse elements within the common space and the strategies that were developed and transformed in the course of time to maintain this co-existence. For instance, one has to see the emergence and existence of *vishavaidyam* within

the relationship of co-existence between human beings and snakes. From the late nineteenth century onwards, large numbers of snakes were massacred by the people on orders given by the Colonial State. The State gave monetary benefits to people for killing snakes and orders were issued for 'cutting down and clearing away of jungle in the vicinity of village'.¹ The provocation for snake killing was the high rate of death of people and cattle due to snake bite.² Curiously, in Joseph Fayrer's report *On Serpent Worship and the Venomous Snakes of India*, there is little reference to the popular, native, medical practices of *vishavaidyam*. In other colonial documents, one can see descriptive details of serpent worship classified under the category of religion.³ By then the concept of identifying and recognizing certain kinds of knowledge as systems of medicine and certain others as religious practice had set in. Thus, *vishavaidyam* was relegated to the realm of religious practice rather than recognized as knowledge or a form of healing. It was located in the realm of faith and rituals. By the late eighteenth century itself, the dominance of anthropomorphism had altered the perceptions of the relationship between human beings and nature in particular ways that certain animals and reptiles were identified as useless or even harmful to the existence of human beings. Similarly, the anthropomorphic idea of civilization, which was anchored in settled land and agriculture, had reconstituted the notion of habitable (and hence 'useful') land or space where some animals were positioned as domestic animals and some others were termed 'harmful' to human existence.

The changes in the relationship between land, nature and human beings that were consolidated under Colonialism during this period however, often contrasted with the natives' diverse kinds of relationship with nature. The debates among colonial officials over the massive killing of snakes show out their level of ignorance of native cultures. For instance, Beatson, one of the doctors in the Medical Board, opposed the State for offering rewards for snake killing on the ground that this

would induce the natives 'to breed' snakes for obtaining rewards.⁴ Fayrer could counter this view by pointing out that breeding and nurturing snakes was a costly business and hence the natives could not afford it.⁵ Such debates over the killing of snakes have been unaware of the cultures and practices of communities such as the Pulluvar, Vettuvar, etc., of catching snakes and letting them free in the forests or in the sacred groves⁶ where snakes are worshipped. Communities like the Pulluvar, Kakkalars and Kuravars (all classified by the State as Scheduled Castes)⁷ were known for their different kinds of relations with snakes. Pulluvar was the community that had historically had privileges to do *pooja* (worship) and *pattu* (recital) for snakes. Even in the early twenty-first century in Kerala, they could be seen performing the ritual of *pulluvanpattu*, partially as a means of livelihood and partially as a privileged ritual to which they were entitled. Kakkalars were the traditional snake charmers who also performed *vishavaidyam* treatment. But as the community's social status was low, their practice of *vishavaidyam* was regarded as black magic. *Kuravars* used

to catch and sell snakes as a means of livelihood. Each community's relation with snakes, and income generation in terms of this, differed in relation to their social status. Mannarassala and Pampumekattu mana in Kerala are famous ritual centres where snakes are worshipped. They are income generating sources for the Nampoothiris (caste of Brahmins) who manage these spaces and the privileges associated with them.

Vishavaidyam evolved as a medical practice based on the distinct relationship that existed between the various peoples of Kerala and snakes. In the practice of *vishavaidyam*, there was no attempt 'to control, subject or destroy snakes'.⁸ This regional medical practice was integrated to the social order wherein different species were allowed to co-exist and pursue their own ways of life. This social order was against a total subjection of one to the other. S. Raju points out, the 'tussle between the human beings and the snake is resolved through ritualistic rules and games'.⁹ There were a number of practices in Kerala such as *naga pooja* (serpent worship) and *sarpamthullal* (serpent dance)¹⁰ that managed the tensions within the co-existence of snakes and human beings. There had also been several oral narratives like *pulluvanpattu* and folk tales through which these practices were produced, reproduced and their message spread across generations. Through these multiple discourses and practices, a non-hostile relation between serpents and human beings was established as well as maintained. Raju observes that the meanings of these narratives constitute a collective social bond 'defining the contours of social attitude and behaviour'.¹¹ He writes:

*The economy between the serpents and men constitutes a local sphere wherein a corpus of rights, duties, obligations, codes and norms, form an ensemble which makes possible deployment of power. Rarely are these codes of conducts repudiated. Force was not required for the ceaseless maintenance of rules and regulations to modulate individual conduct in the exercise of power and subjection. For power produces reality and truth before proceeding to violence. The acts prohibited and permitted are part of this reality. They get unconditional sanction as every individual's duty and obligation. Their disregard was seen as a lack of responsibility to oneself; to one's own conscience. This strategy produced power as well as subjection.*¹²

Serpents were not merely seen as poisonous reptiles to be avoided or killed, but seen and categorized as good or bad. Cobra, one of the most poisonous snakes, was seen as *nalla pampu* (good serpent which needs to be revered).¹³ In eighteenth century Kerala, many Hindu households had a space in the homestead garden that was emptied and arranged for the dwelling of snakes as a serpent/sacred grove.¹⁴ The significance of *vishavaidyam* is that it evolved and existed in a less-violent and non-coercive form, interrelated to the society's beliefs, strategies and rationale. In extreme circumstances, *vishavaidyam* also



Painting by Joseph M. Verghese

advocated killing of snakes. But this was done through ritualistic methods of *mantram* and *thantrum* (explained in the following paragraph). It is believed that the act of killing of a snake would bring harm to the family of the *vishavaidya*. The act of killing had to be atoned through *pooja*.¹⁵ Here, the emphasis was on the strategies developed for managing fear within reverence for nature.

Vishavaidyam has overlapped with ayurvedic practice, yet has been different from it in many aspects. It includes *marunnu* (medicine), *mantram* (incantation, magical spells) and *thantrum* (a loose translation of the word would be strategy/magic).¹⁶ *Vishavaidyam* has two parts: *visha-vaidyam* (detoxication medicines) and *visha-vidya* (detoxication art or magical spells).¹⁷ Some ayurveda doctors have distinguished *visha-vaidyam* as rational toxicology and *visha-vidya* as psychologic toxicology.¹⁸ However, these rational and psychological attributes have been questioned by some practitioners who argue that these are the conceptual categories used in modern medicine and have entirely different meaning.¹⁹

Ambiguous Boundaries

In the early twentieth century, the princely states, especially the Travancore State,²⁰ supported many *vaidyasalas* (ayurvedic pharmacies) and *vishavaidyasalas* (treatment centres for toxicity) with a monthly grant ranging from Rs. 15 to Rs. 30, and those that obtained this grant were known as grant-in-aid *vaidyasalas*.²¹ *Vishachikitsa* (toxicology) was only one of the eight specialized streams in ayurveda.²² Apart from these eight specialized streams, there were other unique treatments and medicines in *nattuvaidyam* (indigenous medicine/ayurveda).²³ They were *Marmavaidyam* (vital spot massaging and curing), *Netravaidyam* (treatment for eye diseases), *Ottamooli vaidyam* (single remedy for a particular disease) and *Vishavaidyam*. All the four shared their basic tenets with ayurveda, yet included a number of unique medicines, medicinal oils and methods of treatment of their own.²⁴ Though *vishavaidyam* was one amongst the eight specialized streams in ayurveda, it worked as a unique practice in Kerala, with its own medicines and methods of treatment. The fact that there were many grant-in-aid *vaidyasalas* shows that the practice was prevalent across different regions of Kerala.

In the mid-twentieth century, with the institution-alization and modernization of ayurveda, a Vishavaidya Board was constituted for monitoring traditional *vishavaidyam* practitioners, conducting examinations for them in *vishachikitsa*, etc., and thus to regularize a widely accepted popular practice that dealt with critical cases of poison, especially in snake poison. The examination

conducted was mainly to differentiate and legalize qualified and unqualified traditional practitioners through a 'Vishavaidya Visarada Certificate' (VVC). Until the introduction of this examination, those who knew *vishavaidyam* texts such as *Jyotsnika*, *Narayaneeyam* and *Ashtanga Hridayam-Uttarasthanam*, apart from having knowledge of ayurveda, were permitted to practice *vishavaidyam*.²⁵ In 1929, prior to the establishment of the Board, a one-year specialization in *vishavaidyam* had been introduced in the Travancore Ayurveda College (TAC). The students who specialized in this stream were awarded a VVC. In 1946, the Travancore State decided to withdraw this specialized course meant for the formal students of ayurveda. But the State continued to monitor traditional *vishavaidyas* through the setting up of the Vishavaidya Board and its certification process. The government did not make any attempt to legalize or monitor the other seven streams in ayurveda or the other three unique fields, and no other special boards were constituted to regulate *marma*, *netra* and *ottamooli vaidyam*. It was significant that the State showed concern in monitoring only *vishavaidyam*, one amongst the four fields of *nattuvaidyam* and one amongst the eight streams of ayurveda, for a span of 50 years.

With this new initiative, tensions surfaced between the traditional practitioners and the formal ayurveda students from the modern educational institutions. The attempt of the State was to bring parity among the formal/modern and informal/traditional specialized practitioners in *vishavaidyam* through the introduction of an examination and certification. The students of TAC opposed this and sabotaged the examination conducted in 1970 in Trivandrum²⁶ by snatching the question papers and tearing them up.²⁷ The very idea of parity opposes the idea of differentiation that operates between modern ayurveda practitioners and traditional *nattuvaidyas* (indigenous health practitioners). The contradiction here is that while many ayurveda students were willing to enrich their knowledge by informally getting trained under traditional *vaidyas* (indigenous health practitioners),²⁸ they were very particular about maintaining their separate status. In other words, students who studied at the modern ayurveda colleges saw themselves as superior to those who studied through traditional methods.

In 1972, the *vishavaidyam* competency examination was again conducted by the Board, now in Thrissur district, to award VVC to the qualified traditional *vaidyas*. The change of examination centre from Trivandrum to Thrissur was in order to avoid the recurring tensions between traditional practitioners and the ayurveda students of the TAC during the examination. The

examination included oral questions and written papers and was conducted over two days.²⁹ The students of the TAC initiated a protest against the introduction of a competency certificate for the traditional practitioners of *vishavaidyam*, and the government decided to withhold the results of the examination conducted.³⁰ The protesters were not only concerned about the opportunities they would lose because of this certification process, but also about the uniformity of status and degree this would introduce between them and the traditional practitioners. The *vishavaidyas* who had written the test immediately formed a Traditional Vishavaidya Association and presented a memorandum to the government asking for the publication of the results.³¹ The state did not take any action in spite of repeated pleas from the practitioners. Finally, the Association filed a petition in the High Court, which then ordered the Vishavaidya Board to publish the results immediately. The Board published the result in 1974, two years after the examination, in which only ten candidates passed, out of the 800 practitioners who had appeared for the examination.³² The examination was only for *vishachikitsa* practitioners who strictly followed the ayurvedic practice and the certificate given was an 'A' class certificate. Those who relied on other methods, such as using hens or stones³³ for the treatment of poison, did not even get a chance to write the examination. After 1972, no such examination was conducted to test the traditional practitioners of *vishavaidyam*. The Vishavaidya Board set up for this purpose became dysfunctional. By then the separation of traditional and modern *vishavaidyas* was solidified through formalization of institutional education in ayurveda. The number of students who specialized in *vishavaidyam* was also minimal, as by 1970s anti-venom was widely available in modern medical institutions for the treatment of snake poison.

Regularization of a practice is equivalent to legalizing and normativizing a practice. Regularization draws lines of control while setting standards for the normalization of the practice. It decides who should practice, what should be practised, what should not be practised or what should be eliminated in a practice. Regularization also sets the criteria to determine the qualifications of a practitioner. Since it also sets norms to perform a practice in particular ways, regularization does not count the experience and efficacy of a practitioner accumulated through his/her everyday performance and improvisation. Since the practitioners deal with life and death in the case of poison treatment, and there is no legal protection for ayurveda doctors, now both the formal and informal *vishavaidyam* practitioners are generally reluctant to treat acute poison cases. The specialized and unique practice of *vishavaidyam* is at the verge of extinction.

Ayurveda or Vishavaidyam

The second case described below also displays the dilemmas and ambiguities of the State in classifying a practice within the watertight compartment of a specialized stream, *vishavaidyam*, by denying the practitioner a chance to practise *vaidyam* or ayurveda in general. Simultaneously, it demonstrates the confusions of practitioners in negotiating with the governmental process and their struggle to fit in strictly within the boundaries of a particular stream of practice. One could see the bewilderment of the practitioners and the administrators as a dilemma in differentiating *vidya* (art, ability, skill, strategy, knowledge) from *vidyabhyasam*. While the practitioners uphold the idea of *vidya*, which encompasses a whole lot of codes of practices that often overlap with each other, the State asserts the notion of *vidyabhyasam* that divides and classifies practices into strictly bounded areas. Till early twentieth century, the indigenous medical practice did not face such issues of differentiation and classification, even when the *vaidyas* were specialized in one or two streams of ayurveda vis-à-vis *nattuvaidyam*. Rather than being officially recognized as *vishavaidyas*, *balachikitsakas*, *netravaidyas* or *marmavaidyas* through certification, they were popular in a region depending upon their efficacy in their specialization. This popularity did not disqualify them from practising general *vaidyam* or giving treatment for other kinds of ailments. It was the discretion of the patients to choose the *vaidyas* for the treatment of their general ailments. A different kind of informal certification had existed at the level of popular acceptance and this did not fix strict boundaries for the practice. Though there was an idea of specialization here too, at the level of practice, it was not a strictly bounded one.

Kunjukrishna Pillay was a *vaidyan* who had specialized in poison treatment and he had a grant-in-aid *vishavaidyasala* in Pathanamthitta district. From 6th April 1929 onwards, it was aided by a monthly grant from the government. In 1951, he requested the government to consider his *vaidyasala* as a combined one for the treatment of both poison cases and general diseases.³⁴ In his application, the *vaidyan* stated that he hailed from a renowned *vaidya* family and had enough experience to treat general diseases, even though he was 'qualified' only in *vishavaidyam* with an 'A' class VVC. For strengthening his request for a combined *vaidyasala*, he stated that during the inspection of his *vaidyasala* on 16.6.1931, inspector Nilacanta Pillay had expressed satisfaction with the efficacy of the *vaidya*, and had instructed him to send monthly statements to the government including details of treatments for poison as well as general diseases

conducted by him. This is notable because, as per the rules of the grant given to the *vaidyasala*, the *vaidya* had to send only statements of cases of poison treatment to the government as he was meant to treat only cases of poisoning. In another inspection, perhaps in the next year (year or date is not mentioned in his application to the government), the Director of Ayurveda, Narayanan Mooses, observed that such combined statements were not required to be sent to the government. Only cases of treatment for poison were required as it was a grant-in-aid *vishavaidyasala* and not a *vaidyasala* meant for general illness. When Mooses was informed of the existing practice permitted by the inspector and the qualifications of the *vaidya*, he also permitted the continuance of sending combined statements.³⁵

However, Kunjukrishna Pillay's request was scrutinized by the Director of Ayurveda and the latter, in his letter dated 28.11.51, recommended to the Secretary to the Government to consider the *vaidyasala* as a combined one.³⁶ Even in the wake of this recommendation, the government issued an order on 17.12.51, allowing the *vaidya* to practice only *vishachikitsa*. The Secretary to the Government decided so by explaining that the petitioner had qualification only in *vishachikitsa* with a VVC. This certificate was an 'A' class certificate.³⁷ Pillay surrendered this certificate for obtaining a 'B' class registration in ayurveda. According to the rule, the petitioner was not eligible to conduct a grant-in-aid *vaidyasala* for general treatment as he did not possess 'A' class registration in ayurveda. The report went on to say that considering his qualification in *vishachikitsa* and his long service from 1929 onwards, the government could allow him to continue as a grant-in-aid *vaidyan* only in *vishachikitsa*.³⁸

A series of ambiguities and uncertainties are revealed in the certification process and in fixing qualifications for differentiating indigenous medical practitioners as general practitioners or specialized *vishavaidyam* practitioners. The VVC introduced by the government for *vishachikitsa* was an 'A' class certificate. According to the Travancore Medical Practitioners Act 1944,³⁹ registered allopathic practitioners were given an 'A' class certificate. Practitioners qualified through modern ayurveda educational institutions were also given an 'A' class certificate. The registered practitioners who had learned ayurveda in the traditional way got only a 'B' class certificate.⁴⁰ However, *vishavaidyam* was monitored through another examination and certification within this general registration process. One could say *vishavaidyam* was doubly monitored. The 'A' class certificate awarded to *vishachikitsa* practitioners did not give them an equal standing with either the registered modern medical practitioners or the ayurveda practitioners. That is to say, this 'A' class VVC was neither equivalent to an 'A'

class certificate in allopathic medicine, nor to an 'A' class certificate in institutionalized ayurveda. It was also not equivalent to the 'B' class certificate of traditional ayurveda practitioners. VVC was a certificate given to a specialization within ayurveda. But the Secretary to the government considered the 'B' class certificate in ayurveda as inferior to the 'A' class certificate in *vishachikitsa* and issued an order accordingly. Though the inspectors who visited the grant-in-aid *vaidyasala* and the Director of Ayurveda were aware about the nature and limits of the certification process and suggested favourable orders to Kunjukrishna Pillay, the Secretary, who was not an ayurvedic practitioner, could not see the limitations in reducing an expert ayurveda practitioner to only a *vishavaidya*. Ganesan discusses a similar story from the Madras Presidency, where the graduates of the Madras Ayurvedic College, a private institution, were pitted against the graduates of the government run Indian Medical School. The opposition was over the issue of registration as 'A' class or 'B' class practitioner: "'B' class was unacceptable since it put them on a par with hereditary practitioners of Indian medicine who had no institutional training'.⁴¹ Differentiation is the hallmark in situating the status, superiority and qualification of a practitioner rather than the actual expertise of the practitioner.⁴²

By 1970, the actual control and rationalization of *vishavaidyam* happened at a formal and institutional level. *Vishavaidyam* was taught as a special subject of ayurvedic practice only in the ayurveda colleges. Students gave least preference to specialization in *vishavaidyam*. The risk of death is higher in the case of poison. Also, students get fewer chances to deal with poisoned bodies in the institute as the cases which come to the institutionalized ayurvedic spaces are less in number when compared to those attended by individual *vishavaidya* practitioners.⁴³ Apart from these official interventions to regulate *vishavaidyam*, there were public debates too to irrationalize and delegitimize the practice.

Public Debates

Two instances of public debates on *vishavaidyam* are discussed in this section to take forward the argument being developed through the study of the above mentioned processes of governmental regulations. One was the discussion initiated by a scientist Adiyodi⁴⁴ in the 1960s through the *Mathrubhumi* weekly, a prominent magazine in Malayalam. Kutty Krishna Menon took part in this discussion as a practitioner to defend *vishavaidyam* and to assert that the practice had an entirely different logic because when a practice was assessed within the logic of science it was completely delegitimized as irrational.

The second instance of public discussion was after fifty years, through a book published by Manoj Komath in 2011.⁴⁵ In between Adiyodi's and Komath's critiques, in 1974, Dr. A. V. Joseph also wrote a book on snake-bite (*Sarppadamsanam*), but he did not directly address or critique *vishachikitsa*. Instead, he wrote a section on the superstitions about snakes in which he listed the different beliefs in relation to poisonous snakes.⁴⁶ For instance, he pointed out that rural people had a belief that the broken hood of cobra could fly and bite. He explained instead that the hood or the head portion of the cobra would not fly but it could bite and inject poison for a while even after separation from the body of the snake.⁴⁷ He also reproduced the tables of categories and pictures of snakes from Adiyodi's book.⁴⁸

The main points discussed in the debate between Adiyodi and Menon will be elaborated shortly. When Adiyodi started a series called *The Poisonous Snakes of Kerala* in the 1960s, he was receptive to critiques towards his arguments. After a span of fifty years, when Komath published a book on *Snake Bite and Toxicology*, he did not leave any space for a discussion from the other side of the practice. Komath outrightly rejected *vishavaidyam* as a superstitious and irrelevant practice. By that time, the approach of science in assessing 'traditional' practices had also changed from an authoritative to an autocratic and monolithic activity. While Adiyodi was more accommodating in his critiques of *vishavaidyam*, Komath seemed to be expressing contempt towards a slowly eroding practice by projecting a unilateral argument about scientificity.

Adiyodi had initiated a discussion about the non-rationality of *vishavaidyam* in the *Mathrubhumi* weekly.⁴⁹ K. Menon, a well-known *vishavaidyam* practitioner who wrote *Kriyakaumudi*, a *vishavaidyam* text, responded to Adiyodi in the following issues of the same magazine.⁵⁰ Though Adiyodi criticized many of the 'belief' aspects in *vishavaidyam* practice, he did not completely refute the efficacy of the practice. In that sense, the essays did initiate a discussion among the practitioners, unlike the book of Komath in which he did not leave any space for discussion. Komath refuted the practice completely as irrational and superstitious. The author demanded an explanation for each and every aspect of the practice from the logic of modern medicine/science. The book did not evoke a debate and none of the existing scattered *vishavaidyam* practitioners have responded to the critique till date.

While Adiyodi uses the regionally available names to describe the snakes of Kerala, Komath uses mainly English names and only the standardized Malayalam names. Adiyodi uses the local names of the snakes shared by the *vishavaidyas* which reflect the nature of

snakes and their venom and the time taken in the spread of the venom in a body. For instance, Adiyodi uses the regionally available names for king cobra – *karinadan*, *krishnasarppam*, *karimjati*, *malanjati*, etc. – instead of the standardized Malayalam name, *rajavembala*.⁵¹ Komath uses only king cobra and *rajavembala* to describe this snake.⁵² Even while asserting his scientific explanation, Adiyodi incorporated all these regionally or locally available usages, thus partially acknowledging not only the local usages but also the local knowledge enmeshed in the language. While Adiyodi critiques the *mantram* (magical spell, incantation) in *vishavaidyam* and keeps silent about the medicine treatment, Komath refutes the practice altogether as unscientific and illogical.

Adiyodi had raised a point about the non-objectivity and inaccuracy of the description of snakes in *vishavaidyam*.⁵³ Menon replied to Adiyodi arguing that *vishavaidyam* was not *sarppasastram* (science about/of snakes) at all. He said that it was a practice that prescribed hundreds of cures for poisons. Knowing *sarppasastram* was good for a practitioner but it was not essential for treating the cases of poisoning.⁵⁴ According to the practitioners, the conditions to learn and practice *vaidyam* did not emphasize acquiring a set of *a priori* knowledge about the external cause of poison, nature of snakes or other creatures, their habits and habitats, etc. All these could be deduced through the symptoms articulated on the living body of a human being.

Later, Vaidya Bhooshanam Raghavan Thirumulpad, a well-known ayurveda practitioner, in his introduction to Menon's book *Kriyakaumudi* republished, observed that the description of snakes was not a concern of *vishavaidyam* and it was an endeavour of the biological sciences:

*Learning about the categories of the snakes does not contribute to the ability in treating poisons. For that, even knowledge about the poison does not contribute much. The changes occurring in a body when affected by poison, the appropriate medicines required at that time and the suitable practice at that time are the subjects of a vishavaidyam. The objective knowledge about snakes and poison may perhaps be an additional knowledge in that situation...The research on those treatments should be done on each experience.*⁵⁵

Thirumulpad further states that snake bites occurring in different weeks of the month required separate treatment and this has been described in *Kriyakaumudi*.⁵⁶ He says that there is a chapter in *Ashtanga Samgraham*, *Uttarasthanam* (Chapter 47, *Vishopayogeeyam*), which describes the way poisons can be used as medicine for treating different diseases.⁵⁷ Thirumulpad makes it clear through the following statement that the logic of *vishavaidyam* is different from the logic of modern medicine:

Vishachikitsa was never meant merely treatment for snake poison. There is nothing in the world that cannot be turned into poison when not properly used or misused...At times even mother's milk becomes a poison. And it can be cured by knowing the symptoms. Instead of curing the poison, if one suppresses the symptoms with medicine, immediate relief may be gained, but the poison causes many side effects (dhooshivisham) expressed as different ailments...The modern opinion is that these are allergic responses and not side effects of poisons. But (our) experiences prove that allergies could be cured through the treatments for dhooshivisham and insect poison⁵⁸... In vishavaidyam treatment, the medicines that are used in the treatment of poison destroy the environment that promote the existence and actions of poison in the body, and convert the non-digestive poison into digestive form⁵⁹ ... When the poison is converted into digestive form, it loses the strength to affect the dhatus.⁶⁰ All this means that agadam or medicines used in poison treatment will act properly only in living bodies. So, the lack of objective and accurate knowledge about the size and species of poisonous creatures did not affect the diagnosis and treatment in vishavaidyam.⁶¹

Notions of classification

In *vaidyam*, the fundamental basis of all actions (*karmam*) is a living human body. When a matter (*dravyam*) is termed as hot (*ushnam*), it is not an indication of the basic nature of that *dravyam*. When that *dravyam* is consumed by a person, and if it creates heat in the human body, then its nature is *ushnam*.⁶² The central point of *ushna-sheetham* (hot-cool) is the normal temperature of a human body.⁶³ Poison or medicine or food affects a living body in such a way that its nature changes as per the predominant humourous constitution of the body and the digestive process. It works differently in each living body based on the dominant nature of *vata*, *pitta* or *kapha prakriti* or the humourous constitution.⁶⁴ Though the equilibrium of bodily humours is the necessary condition for health, in every person one or two of the humours become predominant. For instance, a person with *vata prakriti* or *vata/air* as the dominant humour cannot withstand cold weather and is prone to diseases such as rheumatism and pain.⁶⁵ A person with *pitta/fire prakriti* will be short tempered, and her body will be hot in nature. A person with *kapha/water prakriti* is prone to infections easily.⁶⁶

Like the nature of the body, the genus of the snake, scorpion, rat, spider, poisonous plant, etc., is also determined through the symptoms articulated within the body of a bitten/affected person. Snakes were not previously classified and named in order to initiate a treatment for their poison. The work of classification is only a second-order activity, and is less important than the signs manifested on the surface of a functional body. There is no attempt to ascribe meanings *a priori*, from a fixed frame of classification and naming. For instance, snakes are described as four types based on the symptoms

that manifest on the body of a snake-bitten person. They are cobras (*moorkhan*), vipers (*mandali*), kraits (*rajilam*) and *vendiran* (no specific snake, explained a little later). The bite of cobra aggravates *vata* humour and affects the nervous system. The bite of viper aggravates *pitta* and affects kidney, and the bite of krait aggravates the *kapha* nature of the body. But the bite of *vendiran* aggravates a combination of these humours. As per the symptoms manifesting on the body of the bitten person, the bite of *vendiran* shows the characteristics of a hybrid poison.⁶⁷ The hybrid nature of a snake or *vendiran* is a disputed category in modern medicine. Practitioners of modern medicine do not believe in the existence of such a hybrid category of snakes.⁶⁸ But in *vishavaidyam*, the category of snake is not important. Rather the symptoms produced in the body of a snake-bitten person shows the characteristics of a hybrid poison which leads to the naming of the snake. The symptom articulated within the living body is more important than the name or the classification of the snake.⁶⁹ All these aspects noted above show that the internal logic of *vishavaidyam* is different; and that attempts to decipher the practice by applying the logic of modern science end up in producing confusions and contradictions amongst the newly educated practitioners, scientists, doctors as well as the administrators.

Notes

1. Sir Joseph Fayrer, *On Serpent Worship and the Venomous Snakes of India* (London: The Victoria Institute, 1892), 105. Fayrer was the President of the Medical Board at the India Office.
2. *Ibid.*, 104. In 1889, it was reported that 22,480 human beings and 3,793 cattle were killed by snake bite all over India, and the State spent Rs. 23,556 to kill 578,415 snakes. In the next year, 21,412 human beings and 3,948 cattle were killed by snake bite and 510,659 snakes were killed in retaliation at a cost of Rs. 19,004.
3. *The Census Reports of Madras Presidency, Cochin and Travancore*, 1871 to 1891.
4. Fayrer, *On Serpent Worship*, 109.
5. *Ibid.*, 109.
6. See S. Raju, 'Narratives, Sign and Social Order: Nagam and the People of Kerala', *Studies in History*, 1991/2010, 7-37; and K. P. Padmanabha Menon, *History of Kerala*, ed., T. K. Krishna Menon, Vol.4. (New Delhi: Asian Educational Services, 1924/1986), 457-98. Sacred groves or serpent groves (*sarpakavus*) were believed to be the dwelling place of snakes and gods. Felling of trees was not permitted there. The *kavu* was usually located in the south-west corner of a homestead garden. Selling or buying of land that housed a *kavu* required the performance of many rituals and hence could be done only as a last resort. Though serpents and *kavus* were outside the legality of land transfer deeds, they were inside the ritualistic and religious space that

- often overlapped with the legal space. Raju surmises that this restriction would have checked the frequency of land transaction in the early nineteenth century.
7. Fayrer, *On Serpent Worship*, 97. Fayrer did mention in his report that the people who caught and 'destroyed' the snakes are lower castes.
 8. Raju, 'Narratives', 7-37.
 9. Ibid.
 10. *Sarpamthullal* is a most elaborate and expensive ritual, and only performed in special cases.
 11. Raju, 'Narratives', 7-37.
 12. Ibid., 7.
 13. Fayrer, *On Serpent Worship*, 97. He noticed this as 'the cobra is an object of superstitious awe to the hindus'.
 14. Menon, *History of Kerala*, 475.
 15. Interviews with *vishavaidya* practitioners Appooty, Kondotty; Vimala and Brahmadathan, Thrissur, November 2010.
 16. Menon, *History of Kerala*, 465.
 17. *Vidya* is not always magic, it could be translated as art, ability, skill, strategy (*thantrum*), knowledge etc.
 18. Krishnakumar, 'Practice of Agada', P. Unnikrishnan, et al., eds., *Toxicology: Ayurvedic Perspective* (Kottakkal, Kottakkal Ayurveda College, 2002), 201-202.
 19. Interview with Brahmadathan Namboothiri, Ayurveda/*vishavaidya* practitioner, Thrissur, November 2010. He strongly opposed this attribution of psychologic toxicology to *visha-vidya*. He said that attributing either psychology or spirituality to *visha-vidya* is a wrong understanding of it.
 20. Before the formation of a united Kerala in 1956, the state was divided into Travancore and Cochin, two princely states, and British Malabar, the northern part of Kerala, which was under the Madras Presidency.
 21. *Administration Report of Ayurveda College* (Travancore, 1937-38), 167-184. Even in 1973, out of the 289 grant-in-aid *vaidyasalas* that functioned in the united Kerala, 154 were *vishavaidyasalas* and 2,49,735 patients were treated in them. Also see *Administration Report of the Kerala State*, (Trivandrum: 1973-74), 122-138.
 22. *Kayachikitsa* (general medicine), *Shalya thantra* (surgery), *Salakya thantra* (ENT treatment), *Balachikitsa* (paediatrics), *Agada thantra* (toxicology), *Bhutavidya* (psychiatry), *Rasayana thantra* (geriatrics) and *Vajikarana thantra* (aphrodisiacs) are the eight specializations in ayurveda. They are not equivalent to the specialization process in modern medicine. Usually a *vaidya* family specializes in one of the streams apart from its knowledge of the general treatment of diseases. So, the students who studied under these gurus had a chance to learn more about one or two of the streams.
 23. Till early twentieth century, the term *nattuvaidyam* was widely used in Travancore, Cochin and Malabar to denote ayurveda. All *vaidyas* were known and called as *nattuvaidyas*, but they become demarcated into *nattuvaidyas* and ayurveda doctors by the late nineteenth century. In 1915, the Ayurveda Patasala of Travancore was under the supervision of *Nattuvaidyasala* Superintendent,
- as mentioned in P. K. Mohanlal, *Keralathile Ayurveda Vidyabhyasam (Ayurveda Education in Kerala)* (Trivandrum: State Institute of Language, 2014). The department that dealt with ayurveda was named as *Nattuvaidyasala* Department in Travancore and Cochin and Department of Indian System of Medicine (ISM) in Madras Presidency, as mentioned in Mohanlal, *Keralathile*; and *The Report of the Committee on the Indigenous System of Medicine* (Madras: The Usman Committee Report, 1923). By the second decade of the twentieth century, a Department of Ayurveda was constituted, and all files pertaining to *nattuvaidyam* began to be dealt with by this department. Inspection Reports of the Superintendent of *Nattuvaidyasalas* (indigenous pharmacies) in the 1920s and different government documents show this shift.
24. N.V. Krishnankutty Varier, ed., *Ayurveda Charitram* (History of Ayurveda) (Kottakkal: Kottakkal Aryavaidya Sala, 1980/2002); and E. Unnikrishnan, *Keralathile Nattuvaidyam* (Indigenous Medicine of Kerala) (Kottayam: D.C. Books, 2011).
 25. Mohanlal, *Keralathile*, 16.
 26. Travancore was named as Trivandrum in 1956.
 27. Interview with Dr. Raghavan Vettath, a veteran *vishavaidyam* practitioner, Guruvayur, January 2015. Raghavan Vettath was one amongst the traditional *vishavaidya* who had appeared for the examination. Also, interview with Dr. Mohanlal, the first Director of Ayurveda Education, Trivandrum, June 2015.
 28. Many *visha* and *marma vaidyas* whom I interviewed were giving training to ayurveda students who had degrees from the ayurveda educational institutions. Brahmadathan Nampoothiri of Thrissur, Basheer *vaidyan* of Kozhikode and Manmadhan *vaidyan* of Nilambur were informally teaching some ayurveda graduate students in their *vishavaidyasalas* or residences.
 29. Interview with Raghavan Vettath.
 30. Ibid.
 31. Ibid. Raghavan Vettath, now 82 years old, was one of the organizers of the association which initiated the filing of the petition in the court.
 32. Raghavan Vettath was one among the candidates who passed in the examination. He has proudly exhibited the framed certificate on the wall of his consultation room.
 33. There were other methods of treating poison cases, especially snake bite, by using hens (*kozhi chikitsa*) and stones made of medicines and herbs (*kallu chikitsa*).
 34. *Bundle No.627, Health, Labour and Education (Travancore) File No. 10024/1951, Sub: Recognition as a combined vaidyasala for treatment of general as well as vishachikitsa* (Trivandrum: Kerala State Archives, 1952).
 35. Ibid.
 36. Ibid.
 37. Ibid.
 38. Ibid.
 39. The Travancore-Cochin Medical Practitioners Act 1953 was implemented only after 1954.

40. P. Vinayachandran, *Kerala Chikilsa Charitram* (History of Medical Treatment Practices in Kerala) (Kottayam: Current Books, 2001), 206.
41. Uma Ganesan, 'Medicine and Modernity: The Ayurvedic Revival Movement in India, 1885-1947', *Studies on Asia* 1 (1) (2010): 108-31.
42. *The Report of the Committee on the Indigenous System of Medicine (Part I)* (Madras, 1923), found that actual prohibition of unregistered practitioners as found in many states of the U. S. A. was not suitable for India, '...what may now be attempted is only to secure certain rights and privileges to the Registered as in the United Kingdom'. The report further stated that before insisting on medical registration, it was essential to establish an adequate number of medical schools and colleges to produce efficient practitioners, 26-27.
43. Interview with Sankaran Nampoothiri, Jaunary 2012. Nampoothiri learned ayurveda from an ayurveda college. He learned *vishavaidyam* from his father, Avanaparambu Nampoothiri, a traditional and well-known *vishavaidyam*. But Nampoothiri does not practise *vishavaidyam*.
44. Adiyodi obtained his M. A. in Zoology from Madras University and Ph. D. in Reproductive Physiology from Kerala University. He served as the Dean of Science in Calicut University (1988-1991), Vice Chancellor of Cochin University of Science and Technology (1994-1996) and member of the Union Public Service Commission (1996-2001). He was also the founder member of Kerala Sastra Sahitya Parishad, the largest organization for the promotion and popularization of science.
45. Manoj Komath is a scientist at Sree Chitra Tirunal Institute for Medical Sciences and Technology.
46. A. V. Joseph, *Sarpadamsanam* (Snakebite) (Trivandrum: State Institute of Languages, 1974), 82-87.
47. *Ibid.*, 83.
48. *Ibid.*, vii.
49. K. G. Adiyodi, 'Nammude Vishavaidya Granthangalum Vishachikitsa Sampradayangalum' (Our Toxicology Texts and Toxicology Schools), *Mathrubhumi* weekly, January 6, 1963, 40:43, 25-29; Adiyodi, 'Keraleeya Vishachikitsa' (Toxicology of Kerala). *Mathrubhumi* weekly, April 21, 1963, 41; 5, 26-29.
50. K. Menon, 'Keraleeya Vishavaidyam' (Toxicology of Kerala), *Mathrubhumi* weekly, December 9, 1962, 40:39, 19-20, 27; 'Vishavaidyathepatti Veendum' (Again on Toxicology), *Mathrubhumi* weekly, February 17, 1963, 40:40, 19-27; K. Menon, 'Vishavaidyathepatti Kurachukoodi' (A bit more on Toxicology), *Mathrubhumi* weekly, June 30, 1963, 41:15, 14-17.
51. K. G. Adiyodi, *Keralathile Vishappambukal* (Poisonous Snakes in Kerala) (Calicut: Mathrubhumi Books, 1965/2005), 56.
52. Manoj Komath, *Pambukatiyum Vishachikitsayum* (Snakebite and Toxicology) (Trivandrum: State Institute of Languages, 2011/2014).
53. Adiyodi, *Keralathile Vishappambukal*, 17-18.
54. K. Menon, *Kriyakaumudi* (*Bhashavishavaidyam*) (Toxicology) (Kottayam: National Book Stall, 1986), 883-884.
55. *Ibid.*, xi-xxv. All translations from Malayalam are mine unless otherwise mentioned.
56. *Ibid.*, xvii.
57. *Ibid.*, xvii.
58. *Ibid.*, xi.
59. *Ibid.*, xxii.
60. *Dhatu*s in ayurveda are seven elements of the body, skin, blood, flesh, fat, bone marrow and semen.
61. Menon, *Kriyakaumudi*, xxiii.
62. Raghavan Thirumulpad, *Ayurvedathiloode* (Through Ayurveda) (Trivandrum: Desabhimani Book House, 2007/2010), 52.
63. *Ibid.*; Interview with Dr. Prasad, January, 2013, Thrissur.
64. There are three humours in the body, *vata*, *pitta*, *kapha* (which are often wrongly translated as wind, bile and phlegm. Dr. Valiathan translated these three humours as wind, fire and water). See this in M. S. Valiathan, *The Legacy of Caraka* (Hyderabad: Orient Longman, 2003/2007). They are aligned with opposite qualities such as hot-cold, wet-dry etc., and the equilibrium of these humours maintains health. Wind, fire and water do not indicate the very nature of these phenomena. Wind helps all kinds of internal and external movements, fire helps digestion and water nourishes the body and activates the mobility of wind. See G. Srinivasa Murti, *The Science and the Art of Indian Medicine* (Madras: Theosophical Publishing House, 1948), 88-91. The basic tenets of *nattuvaidyam* are more or less based on the same concepts of humours which rely on the fundamental macro and microcosmic connections between human beings and the cosmos in which they live.
65. Thirumulpad, *Ayurvedathiloode*.
66. *Ibid.*
67. Menon, *Kriyakaumudi*; Raghavan, *Ayurvedathiloode*.
68. Adiyodi, *Keralathile Vishappambukal*; Komath, *Pambukatiyum Vishachikitsayum*.
69. Kochunni Thampuram, *Prayogasamuchayam*, *Bhasha Vishavaidyam* (Confluence of Practices, Toxicology) (Thrissur: Bharatha Vilasam Press, 1956); Menon, *Kriyakaumudi*.

Bibliography

- Administration Report of Ayurveda College, Travancore, 1937-38.*
- Administration Report of Ayurveda College, Trivandrum, 1973-74.*
- Administration Report of the Kerala State, Trivandrum, 1973-74.*
- The Report of the Committee on the Indigenous System of Medicine, Madras, 1923.*
- Adiyodi, K. G. *Keralathile Vishappambukal*. (Calicut : Mathrubhumi Books, 1965/2005).
- Fayrer, Sir Joseph. *On Serpent Worship and the Venomous Snakes of India*. (London: Adelphi Terrace, The Victoria Institute, 1892).
- Ganesan, Uma, 'Medicine and Modernity: The Ayurvedic Revival Movement in India, 1885-1947', *Studies on Asia* 1(1) (2010): 108-31.
- Jha, V. N. *Language, Grammar and Linguistics in Indian Tradition*. (New Delhi: Centre for Studies in Civilizations, 2010).

- Joseph, A. V. *Sarpadamsanam*. (Trivandrum: State Institute of Languages, 1974).
- Krishnakumar, 'Practice of Agada' in *Toxicology: Ayurvedic Perspective*, ed., Unnikrishnan, P. et al. (Kottakkal: Kottakkal Ayurveda College, 2002), 201-202.
- Komath, Manoj. *Pambukatiyum Vishachikitsayum*. (Trivandrum: State Institute of Languages, 2011/2014).
- Menon, Padmanabha K. P. *History of Kerala, Written in the Form of Notes on Canter Visscher's Letters from Malabar, Vol.4*. (New Delhi: Asian Educational Services, 1986).
- Menon, V. M. Kuttikrishna. *Kriyakaumudi (Bhashavishavaidya)*. (Kottayam: National Book Stall, 1986).
- Mohanlal, P. K. *Keralathile Ayurveda Vidyabhyasam*. (Trivandrum: State Institute of Languages, 2014).
- Murti, G. Srinivasa. *The Science and the Art of Indian Medicine*. (Madras: Theosophical Publishing House, 1948).
- Raju, S. 'Narratives, Sign and Social Order: Nagam and the People of Kerala', *Studies in History* 7(1) (1991): 7-37.
- Thampuram, Kochunni. *Prayogasamuchayam, Bhasha Vishavaidya*. (Thrissur: Bharatha Vilasam Press, 1956).
- Thirumulpad, Raghavan. *Ayurvedathiloode*. (Trivandrum: Desabhimani Book House, 2007/2010).
- Unnikrishnan, E, *Keralathile Nattuvaidya*. (Kottayam: D.C. Books, 2011).
- Valiathan, M. S. *The Legacy of Caraka*. (Hyderabad: Orient Longman, 2003/2007).
- Varier, N. V. Krishnankutty, *Ayurveda Charitram*. (Kottakkal: Kottakkal Aryavaidya Sala, 1980/2002).
- Vinayachandran, P. *Kerala Chikilsa Charitram*. (Kottayam: Current Books, 2001).