Change and Creativity in Early Modern Indian Medical Thought

Dominik Wujastyk*

The Wellcome Trust Centre for the History of Medicine at UCL

Abstract. This paper begins with a frame story, the reports on Indian medicine recorded in the seventeenth century travelogue of the British traveller John Fryer. Fryer's observations as an outsider are contrasted with an internal view of the works of three quite different Sanskrit medical authors who were working at about the time of his visit: the *Vaidyajīvana* of Lolimbarāja, the *Rogārogavāda* of Vīreśvara, and the *Āyurvedasaukhya* ascribed to Ṭoḍaramalla. Questions are posed concerning the purposes of these works, their relative popularity, and their reception. Finally, Fryer's failure to penetrate the culture of Sanskritic medicine is highlighted.

1. Introduction

European colonialism established itself decisively in the Indian subcontinent in the period from 1770 to 1830. This period, and the century following it, have in recent years become the subject of much creative and insightful work by medical historians working on the colonial period. The intellectual life of indigenous India up to this time, however, was conducted principally in Sanskrit and Persian in northern India, and in Sanskrit and the Dravidian languages in the south. There is thus a historiographical gap concerning the period preceding that studied by colonial historians. Little attention has thus far been paid to what was taking place in Indian scholarly – including medical – circles immediately before the colonial period. The lacuna is a particularly striking one because the two centuries from 1550 to 1750, just preceding the European colonial establishment, constitute a strikingly creative era in Sanskrit intellectual history (Pollock, 2000, 2001a, 2001b).

In the first few years of the seventeenth century, British merchants such as William Hawkins, Sir Henry Middleton, Thomas Best, Nicholas Downton and Thomas Aldworthe made strenuous but only partially successful attempts to establish trading bridgeheads in the interior of the Indian subcontinent (Prasad, 1980, ch. 5). By 1613 it was becoming

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¹ See, e.g., the work of Arnold (1993, 1996, 2000), Kumar (1995), Harrison (1994), Kumar (1998), and Ernst (1991).

clear to those merchants resident in India that they were not having success in negotiating the rights they wanted with the Mughal rulers in Agra, and that the root cause of the problem was the insufficiency of their social status. What they needed was a substantial personage from back home who could function as a national representative for Britain at the Mughal court. After some debate, King James commanded the respected traveller and diplomat, Sir Thomas Roe, to proceed as his special plenipotentiary to the court Great Mughal at Agra. His specific mission was to obtain the Emperor's sanction for the establishment of English trade in his dominions on a settled basis, and to recover the large sums of money that were owing to the English crown by many of Jehangir's courtiers. He arrived in India in 1615, and it can be argued that this event marked the launch of the diplomatic, commercial, and ultimately military processes which were to lead to the battle of Plassey in 1757 and the eventual establishment of British rule in India.

Amongst the many narrative and descriptive accounts of India written by European travellers in the seventeenth century, that of John Fryer (fl. c. 1650–1733) stands out for its attention to daily life and the Indian environment, and especially for its many comments on the medical situation in India.² Among scientifically important observations made on arrival in India, Fryer noted the value of citrus fruits in curing sailors of scurvy, predating Lind's famous observations by half a century:³

... when half the fleet were disabled by distempers acquired by salt meats, and a long voyage without refreshments.... The first care then was to send the sick men ashore, which it is incredible to relate how strangely they revivifed in so short a time by feeding on oranges and fresh limes....

Fryer travelled in India for nine years, between 1672 and 1681. In general, Fryer's opinion of the indigenous medicine of India was poor (Fryer, 1698, 114):

Physic here is now as in former days, open to all pretenders; here being no bars of authority, or formal graduation, examination or proof of their proficiency; but every one ventures, and every one suffers; and those that are most skilled, have it by tradition, or former experience descending in their families; not considering either alteration of tempers or seasons, but what succeeded well to one, they apply to all.

² See also Fryer, 1979.

³ Fryer, 1698, 16. Cf. Lind, 1753.

Fryer is one of the earliest foreign voices to mention the Indian tradition of animal hospitals, but even here he manages to insert a barbed comment (Fryer, 1698, 53):

[In Tanur, south of Kozhikode,] they have hospitals here for cows; and are charitable to dogs, providing for them abroad, but not suffer them to defile them within doors; being more merciful to beasts than men.

In spite of their critical tone, Fryer's medical observations are valuable as giving insights into the common practice of public physicians of the day. He notes that surgery – beyond amputation – is not practised, and that leeching is used in preference to phlebotomy (Fryer, 1698, 114 f.):

They are unskill'd in anatomy, even those of the *Moors* who follow the *Arabians*, thinking it unlawful to dissect human bodies; whereupon phlebotomy is not understood, they being ignorant how the veins lye; but they will worry themselves martyrs to death by leeches, clapping on an hundred at once, which they know not how to pull off, till they have filled themselves, and drop of their own accord.

Chirurgery is in as bad a plight, amputation being an horrid thing: yet I confess it is strange to see, that what nature will effect on such bodies, intemperance has not debauch'd.

He continues with a criticism of pharmacists, and interestingly notes the preference for pulse diagnosis over urine examination (ibid.):

Pharmacy is in no better condition; apothecaries here being no more than perfumers or druggists, at best; for he that has the boldness to practise, makes up his own medicines, which are generally such draughts, that if their own energy work not, yet the very weight must force an operation.

They pretend to understand the pulse, but the urine they will not look on.

However, Fryer particularly likes to narrate stories of practices that seem strange, and which show physicians conducting procedures that are inexplicable to him, (ibid.):

I have seen a barber undertake the cure of a bloody flux, by pretending the guts were displaced, and laying the patient on his back, and gently tickling his reins, thrust on each side of the *abdomen* with all his strength; then placing a pot filled with dried earth like that of *Samos*, upon his navel, he made it fast by a ligature; and on some bodies thus treated he had gained credit, but this died. *Prosper Alpinus* mentions something like this among the *Egyptians*.

Here they will submit to spells and charms, and the advice of old women.

His allusion to "the advice of old women" was no doubt intended to add to the general impression he gives of an irrational and quack-ridden medical situation.

In a short but interesting account of the Indian sciences of the time, Fryer allows that the Indians are not (Fryer, 1698, 191),

quite ignorant of medicks, though anatomy is not approved, wherein they lean too much on tradition, being able to give a very slender account of the rational part thereof.

Fryer's list of sciences includes, "magick and judicial astrology,...grammar and rhetorick,...elocution, physick, metaphysicks,...music,...". He notes with uncharacteristic admiration that (Fryer, 1698, 191),

arithmetick being the most profitable science, is the best understood by them; to which they have a natural propensity and will in a trice, without the help of pen or ink, cast up the difficultest sums, and never pause upon it.

In this account, Fryer naturally and even unconsciously draws parallels between the types of knowledge he encounters in India, and what is known to him as an educated European. However, there were several sophisticated scientific disciplines in India that had no counterpart in Europe, for example analytical linguistics (vyākarana), liturgical hermeneutics (mīmāmsā), and phonetics (śiksā). Fryer makes no proper mention of any of them. And yet these are intellectual disciplines of the first rank in Sanskritic culture. A scholar distinguished in either of the first two of these sciences, in particular, would be considered by all brahmins to be at the very pinnacle of learning, and would be deferred to by scholars from the greatest centres of learning. Fryer is conceptually blind to what differs too radically in type from the knowledge he is familiar with from his own European heritage. It was not until the nineteenth century that European scholars began to discover the wealth of linguistic learning developed in traditional India.⁴ And in regard specifically to medicine, Fryer shows no awareness of the vast and learned scholarly literature that existed and supported the practice of traditional Indian medicine, nor the systematic theoretical basis for Indian medical practice. He seems to have observed a few nonclassical healers, but to have been unaware of the trained and sophisticated practitioners of what has been termed a medical "great tradition."⁵

⁴ See, for example, Staal, 1972, Robins, 1997.

⁵ See Leslie (1998, 'Introduction'), for a discussion of this term, which he introduced following Redfield (1956).

The cognitive gap that existed between some branches of European and Indian learning accounts for the blindness on the part of European visitors such as Fryer to the culture they described. Added to this is the fact that they did not learn the classical languages of early modern India, Sanskrit, Persian or Tamil, and did not spend the time necessary to master any of the indigenous sciences. Indeed, it was only at the end of the eighteenth century, with the foundation of the Asiatick Society in Bengal, the researches of Sir William Jones and his colleagues, and the realization by Europeans that Sanskrit was a language of great antiquity and sophistication, closely related to Latin and Greek, that progress towards a real understanding amongst Europeans of the many branches of Indian science began. The excitement of these developments was so intense that many believed in the real possibility of a new "Oriental" Renaissance, with the recovery of Sanskrit classical literature playing the role earlier played by Greek in Ficino's Florence (Schwab, 1984).

It is inescapably obvious that in the first decades of full colonialism in the nineteenth century, the harshest colonial Anglicist critics of traditional Indian medicine and other learning, people like Charles Grant and Thomas Macaulay, are also those most profoundly ignorant of its content (Trautmann, 1997, ch. 4 et passim). Conversely, the high-caste Indians at the pinnacle of scholarly intellectual achievement were the very people most likely to have projected an unbridgeable social gulf between themselves and the meat-eating, alcohol-drinking. ritually impure British. Language, at least, was probably not the main problem, since Sanskrit pandits had been learning European languages since at least the early seventeenth century. A Dutch-speaking Brahmin called Padmanābha taught Hinduism to Abraham Roger (d. 1649), the first chaplain at the Dutch factory at Pulicat, Madras, in the 1630s. Padmanābha also produced the first translation from Sanskrit into a European language, a Dutch translation of Bhartrhari's Śatakatraya which was printed at the end of Roger's book.⁶ Just fifty years later, Fryer refers to the substantial linguistic achievements of his brahmin informants, who included speakers many foreign and indigenous languages (Fryer, 1698, 191):

...some of them being masters of Persian, Indostan, Arabick, Sanscript (or Holy language) Portugueze, and all the depending speeches of Indostan, as Duccany, Moratty, Conchany, and the like; besides the Canatick, in which all their sonnets and poesies are expressed, being softer and more melting than the others;

⁶ Rogerius, 1651. Roger's work was translated into French in 1670 (Roger and Grue, 1670). Cf. Yule and Burnell, 1903, xliii, and Cohn, 1987, 141.

The evidence shows that during the seventeenth century some brahmins had added European languages to their linguistic accomplishments. The account of Padmanābha's poetic translation shows that this competence was not limited to commercial or transactional language.

It is possible that materials which may help us to begin answering the question of why the relentlessly negative criticism of Indian intellectual life by the Anglicists met with absolutely no response from within the traditional intellectual establishment may lie in the complex of ideas concerning the use of Sanskrit versus the vernacular, and of public versus privileged knowledge (Pollock, 1998). To put it bluntly, for high-cast Sanskrit scholars, Europeans may have been considered too low in the caste hierarchy to be considered worthy either of learning Sanskrit or of engagement as intellectual equals.⁷ Pingree (1997c, 86 f.) has described how great a struggle it was for 13th century brahmin scholars in Western India to reach the point of engaging publicly with Islamic scholarship in their writings. The astronomer/mathematician Samarasimha, for example, relies on the polysemy of the word yavana to slip Islamic sources into his discourse. The word yavana originally referred to the Greeks and Romans, who were accepted at an early period as valid contributors to the Sanskrit astral sciences; by Samarasimha's time yavana was also used to refer to Arabs or Persians, and by eliding the change in meaning of the word he is able to discuss the Arab/Persian ideas he wishes to tackle. During the Mughal period too, some brahmins opposed any engagement with foreign science (Pingree, 1996), and by the 17th century, the author Balabhadra, facing a similar problem, had to be far more careful in his defence, since scholars who used Islamic scientific sources were being explicitly attacked in brahmin circles. Orthodox brahmins even went so far as to criticize the learning of foreign languages, although as we saw above, some brahmins ignored such strictures.8 Once again, Balabhadra was able to argue from the fact that yavanas appear as ancient authorities in the Sanskrit astral sciences and in some myths. Samarasimha and Balabhadra both added only as a secondary argument that the foreign science they wished to use gave better mathematical results. But the argument from ancient yavana authority was not available for other Sanskrit subjects, like medicine, and the de-

⁷ Deshpande has discussed sociolinguistic attitudes within Indian communities and literatures in a series of publications (e.g., 1979, 1993).

⁸ Balabhadra's opponents said, *na vaded yāvanīm bhāṣāṃ prāṇaiḥ kaṇṭhagatair api* "One should not speak a foreign language even in a whisper (lit., with the breaths in one's throat)" (cf. Pingree, 1997c, 86).

bates in these subjects remained enclosed within the circles of Sanskrit language and culture.⁹

2. The theory and practice of Indian medicine

By the seventeenth century, Indian students who chose to specialize in medical studies were being exposed to a tradition of sophisticated medical reasoning and theory almost two thousand years old. Great encyclopedias of medicine were composed in the centuries around the time of Christ, and these works brought together not only treatises on anatomy, including embryology, diagnosis, surgery, epidemics, pharmacology, and so forth, but also a philosophy of the origin of the human being, the rules of medical debate, rules on technical terminology and interpretation, and other "meta-medical" materials. 10 All this work was synthesised in the early seventh century AD into the great work Astāngahrdaya by the Sindhi author Vāgbhata. This work became the textbook par excellence for classical Indian medicine, the Sanskrit equivalent of Avicenna's Canon, and perhaps as influential as that work (Meulenbeld, 2002, IIa, 656). The later history of Sanskrit medical literature is a mixture of further works of grand synthesis and the proliferation of works on specialized topics and manuals for the working physician. A notable absence in the literature seems to be manuals for use in the home or by untrained practitioners, a genre that was important, for example, in China. Here we may again be seeing the power of social exclusion implied in the use of the Sanskrit language. However, by the seventeenth century, thousands of Sanskrit medical treatises were available for study by Sanskrit-knowing physicians.

The theories and techniques of Indian medicine were widely known and practised by learned physicians and their staffs and students all over India. Of course, as in all parts of the world, there were many quacks and charlatans, and it seems likely that Fryer's observations of medical practice were limited to such people, especially since he juxtaposes his descriptions of physicians with those of jugglers, fakirs, and yogis.¹¹

⁹ Pingree (1997c, 87–90) lists many Sanskrit words from the science of casting birth horoscopes which are direct phonetic transcriptions of Arab/Persian words. Minkowski (2003) has recently discussed the use of Persian terminology in Sanskrit commentarial Sanskrit. Parasher (1991) provides a comprehensive survey of Indian attitudes to foreigners up to about CE 600.

¹⁰ For fuller characterisations see Wujastyk, 1993, 2003b, 2003a.

¹¹ Fryer was of course not the first to notice quacks in India. The issue of quack physicians is as old as medicine, and was recognised and discussed explicitly

3. Inside the Tradition

Three very different Indian medical works, composed in the sixteenth and seventeenth centuries, may serve as examples of the kinds of literature that were being created at that period, and of the types of ideas that were circulating amongst medical intellectuals with whom Fryer so singularly failed to make contact. One of these works was extremely popular, the other two relatively rare, and it is interesting to speculate on the reasons for the different receptions of these works.

3.1. Lolimbarāja and his Vaidyajīvanam

Lolimbarāja lived and worked in Junnar, still a thriving town about 100km inland from Bombay, in the years just before 1600.¹² He was a high caste brahmin, from a family of Maharashtrian priests and scholars known for their study of one of the most orthodox of Hindu texts, the Mādhyandina recension of the Śuklayajurveda. In his personal devotions, he was dedicated to the goddess Saptaśṛṅgī, who has a shrine in the nearby district of Nāsik, and is well known even today throughout western India.

Lolimbarāja wrote poetry that was good enough to be anthologised widely, and composed in both the Sanskrit and the Marathi languages. According to the epithets he used of himself, he enjoyed reasonably high office at court, and he also had a knowledge of music.

So far, Lolimbarāja appears as an establishment figure of traditional values and achievements. But his choice of wife shows another side to his character. Lolimbarāja married the daughter of a Muslim *sūbedār* or provincial governor, called Murāsā. After marriage, according to the custom of Western India, Murāsā adopted a new name, Ratnakalā. And under this name, we come to know her slightly through the poems written to her and about her by her husband. Lolimbarāja repeatedly praised her beauty and her learning, and went so far as to compose an entire poem, the *Camatkāracintāmani*, cast as a dialogue with her.¹³

within the Indian medical tradition itself from its inception until recent times. See, e.g., *Carakasaṃhitā* (*sūtrasthāna* 29.9, Ācārya, 1981, 183), and the *Ṭoḍarānanda* (*āyurvedasaukhya* 1.57–69, Dash and Kashyap, 1992, 2.69–72); cf. Jolly, 1994, §19). False physicians are also satirized in various genres of non-medical Indian literature, e.g., in poetry compilations such as the *Subhāṣitaratnabhaṇḍāgāra* (Nārāyaṇa Rāma Ācārya Kāvyatīrtha, 1952) and in the medieval Telugu *Vaidyahāsyamu* (see Hymavathi, 1993, 170): see further Meulenbeld, 2002, Ib, 59, n. 710 and Siegel, 1985.

¹² The following account is based on a study of Lolimbarāja's *Vaidyajīvanam* and on Meulenbeld, 2002, IIa.257–62.

¹³ Another of Lolimbarāja's works, the *Ratnakalācaritra*, is an macaronic poem describing his longing for his wife, and the erotic pleasure of his union with her (I am

Lolimbarāja's medical interests seem to have been inseparable from his love for Ratnakalā, since the *Camatkāracintāmaṇi* is a series of replies to her questions about medical matters. Nevertheless, the poem is not dull by the standards of its day, and includes skilful verses combining medical lore with the praise of female beauty, verses which were cited in at least three well-known works of later years.

Lolimbarāja's most famous poem is without doubt the Vaidyajīvanam or A Doctor's Livelihood. Manuscripts of this work abound in Indian libraries even today, and it is quite normal for a university or institute library to have between a dozen or a score of manuscripts on its shelves. Trivandrum has 10 MSS, the LD Institute in Ahmedabad has 10, Kathmandu 38, the Sarasvati Bhavan in Benares has 38, 8 in the Bodleian, and even the Wellcome Library in London has more than a dozen copies. ¹⁴ There are a dozen commentaries on the *Vaidyajīvanam*, including two by Jaina monks, and the work is widely cited by later authors. It has been published at least 26 times since the first edition of 1861, the most recent known to me being dated 1998 and 2000. Several of these editions have appeared in numerous reprintings, and many are accompanied translations into vernacular languages (Meulenbeld, 2002, IIb.282-3). In short, Lolimbarāja was probably the most successful and widely-read medical author (after Vagbhata) from the fifteenth to the eighteenth centuries.

The Doctor's Livelihood consists of 238 verses, divided into five chapters, on fevers, diarrhoea, cough, consumption, and aphrodisiacs. The topics of these chapters provide a valuable insight into the primary medical concerns of the day. The work consists chiefly of herbal recipes designed to cure these ailments. Thus, a worming recipe consists of the following combination (v. 4.6):

Make a decoction of ginger, long pepper, black pepper, myrobalans, Easter tree, neem tree bark, margosa, neem [root], turpeth root, sweet flag, and black catechu. Taken with cow's urine, this powerfully removes worms in large numbers.

grateful to Madhav Deshpande for an account of the contents of the work; further references given by Meulenbeld (2002), IIb.281, note 378). Della Casa (1998) translated extracts from Lolimbarāja's Kṛṣṇa poem, the *Harivilāsa*, into Italian, although he believed his author to be distinct from the medical one.

¹⁴ Figures taken from MESS, the *Medical Sciences in Sanskrit* database of Sanskrit medical manuscripts, works and authors, a project at the Wellcome Centre for the History of Medicine at UCL. For an exported version of some of the data, see http://sunsite.berkeley.edu/Philobiblon/mess-phsea.html. The data is also included in the Sanskrit Knowledge Systems project's Bio-Bibliographical Database at http://dsal.uchicago.edu/sanskrit/.

trikatutriphalākalimganimbatrivrdugrākhadirodbhavaḥ kasāyaḥ/paśumūtrasamanvito nipītah krmikotīr api hanti vegato'yam//

In spite of the utility of the work's recipes, the reader's attention is mainly struck by the many erotic and even lascivious verses in the work, closely entwined with the medical material. Some verses are merely saucy, as when Lolimbarāja says that he can write verses whose sweetness challenges that of the lips of beautiful women. V. 1.2:

I worship that jewel amongst fair-eyed women, who delights the eye, who lives in the seven peaks, who has eighteen straight arms, who is the the happiness of Lord Śiva. Through devotion to her, O you whose breasts are jugs, I can compose in just half an hour a hundred verses which capture the judgement in any competition with the nectar of the lower lip of a beautiful woman

ratnam vāmadṛśām dṛśām sukhakaram śrīsaptaśṛṅgāspadam spaṣṭāsṭādaśabāhu tad bhagavato bhargasya bhāgyam bhaje yadbhaktena mayā ghaṭasthani ghaṭīmadhye samutpādyate padyānām śatam aṅganādharasudhāsparddhāvidhānoddharam

The alliteration so obvious in this verse is a pervasive feature of Lolimbarāja's poems.

Taste in poetry is of course culture-bound and subjective. But some of Lolimbarāja's verses could today be called uncouth, such as when he says that good men suffering from fever should reject medicine prescribed by stupid doctors just as they would an wife addicted to coupling with other people (1.9):¹⁵

auṣadhaṃ mūḍhavaidyānāṃ tyajantu jvarapīḍitāḥ/ parasaṃsargasaṃsaktaṃ kalatram iva sādhavah//

Or again, when he remarks with surprise that a bitter decoction alleviates the bitter taste in the mouth caused by fever, a fact as surprising as the pleasure that women get when their breasts are squeezed hard (1.37):

mama dvayam vismayam ātanoti tiktākaṣāyo mukhatiktatāghnaḥ/nipīḍitorojasarojakoṣā yoṣā pramodam pracuram prayāti//

Perhaps slightly more charming, to modern tastes at least, is his recommendation of a snuff based on asafoetida which relieves a four-day recurrent fever (1.55):

... just as effectively as gazing at the faces of amorous young women relieves one of good intentions.

cāturthiko naśyati rāmaṭhasya ghrtena jīrṇena yutasya nasyāt/līlāvatīnām navayauvanānām mukhāvalokād iva sādhubhāvah

¹⁵ This verse also appears in the anthology *Mahāsubhāṣitasangraha* (Sternbach, 1974, 8257) and is cited by Siegel (1985), 178.

Lolimbarāja is not shy about the erotic and romantic aspects of his work, and indeed he claims that people will not be able to appreciate his work at all if their hearts are not attached to beautiful young women, and sunk in the ocean of romantic literature (v. 1.6):

Those whose hearts are not attracted to lovely young women, not sunk in the ocean of fine literature, how can they understand my work, any more than blind people can understand the flirting of courtesans?

yeṣāṃ na ceto lalanāsu lagnaṃ magnaṃ na sāhityasudhāsamudre/ jñāsyanti te kiṃ mama! hā prayāsān andhā yathā vāravadhūvilāsān//

Another claim that he makes is that his work is completely unoriginal. Indeed, he says that there is nothing whatsoever in his medical poem that has been dreamed up in his own skull (v. 1.5: *svakapolakalpitam ihāsti na kimcit*). However, apparently forgetting this claim only a few verses later, Lolimbarāja presents a relatively simple herbal drug against bilious fever with the claim that it renders the more traditional recipes of the ancients unnecessary (v. 1.22):

aho kimartham bahubhih kaṣāyaih parāśarādyair munibhih pradistaih/

chinnāśivāparpaṭatoyapānāt pittajvarah kim na sarīsarīti

We see here the invocation of both oldness and newness as important promotional values. It is interesting to see this trope in pre-modern literature, a trope which is of even greater importance and pervasiveness in commercial marketing at the turn of the third millennium, especially in the sale of counterhegemonic medicines. ¹⁶ The appeal to tradition is the norm in Sanskrit culture, but it is noteworthy that Lolimbarāja implicitly invoking the concept of novelty in his rejection of the formulae of Parāśara and other sages.

At the same time, he attempts to attract the reader to his work with a series of further temptations. First, he promises a livelihood to poor doctors (v. 1.3), a promise proclaimed in the work's very title, *A Doctor's Livelihood*:

By the grace of Divākara, with a yearning for the patient's health, I briefly compose this poem which gives a livelihood to good physicians.

divākaraprasādena rogyarogyasamīhayā/ samāsena vayam kurmah kāvyam sadvaidyajīvanam

¹⁶ The term "counterhegemonic medicine" was introduced by Ramsey (1999) after a useful critique of terms such as "alternative", "complementary" and other terms to describe medical practice outside state support and control.

He also explicitly recommends that physicians should be well paid (1.45):

You owe your very soul to the physician who can release you when you have been seized by the python of complete humoral failure. What is a little gold by comparison?

tridoṣājagaragrastam mocayed yas tu vaiydarāt/ātmā'pi tasmai dātavyah kim punah kanakādayah

One can easily imagine physicians piously repeating such verses to their patients after a successful therapy. Lolimbarāja also promises to reveal the whole secret of the true medicine that was originally declared out of compassion by the ancient authorities (v. 1.5). Of course, everyone loves a secret.

With his heady mixture of sex, romance, medicine, and clever poetry, Lolimbarāja produced a text which spread widely across the centres of learning in India, and has remained a medical best-seller into the third millennium. An English translation was published in Benares in the year 2000.

3.2. VĪREŚVARA AND HIS Rogārogavāda

In complete contrast to *A Doctor's Livelihood* stands a short polemical tract that seeks to engage intellectually with the principal doctrines of classical Indian medicine, and to overthrow them completely: the *Rogārogavāda* or "Debate on Illness and Health". ¹⁷ The author, Vīreśvara, tells us that he composed the work in 1669 (shortly after Fryer left India), and that he was a resident of the ancient provincial town of Kāyatha, near modern Udaipur in Rajasthān. ¹⁸ He was brahmin and the pupil of a teacher called Vihārīlāla Miśra, who came from Agra. ¹⁹ Vīreśvara is not shy about his talents: he tells us that his teacher was surrounded by the very cream of brahmin students, but that of all of them there was just one who was superior to all the others: himself! And his work, he claims, will cause the professors of all sciences to fall silent: he has produced a new and amazing wonder.

¹⁷ References are to Wujastyk (in preparation). Cf. Meulenbeld, 2002, 328, 490

¹⁸ The facts are more complex than I suggest above. The text of the *Rogāroga-vāda* calls Vīreśvara's home "Iṣṭakāyatha". An emendation might allow us to consider "Iṣṭikapatha" which is mentioned as a Kashmiri toponym in the *Nīlamatapurāṇa* v. 122 (http://www.koausa.org/Purana/Verses101-200.html). On the other hand, "Kāyatha" is an ancient town near Udaipur (David Pingree, personal communication, with reference to Ansari and Dhavalikar, 1975).

¹⁹ The manuscript of the *Rogārogavāda* calls Vihārīlāl's home town "Argalāpura"; I am grateful to Prof. David Pingree for identifying this as Agra.

vihārīlālamiśrasya argalāpuravāsinaḥ//
gauḍasya śiṣyatāṃ yātāḥ bahavo brāhmaṇāḥ parāḥ
tanmadhye śreṣṭhatāṃ yāto ekam evāham adbhutaṃ//
ksantavyam sarvaśāstrajñaih matkrtam kautukam navam// 5//

For all his bluster and arrogance, Vīreśvara has indeed produced an unusual and interesting work. He systematically takes the principal theories of pathology in classical medicine, and refutes them one by one. Thus, he deals with humoral imbalance, diseases caused by bad *karma*, accidents, secondary diseases, hereditary diseases, birth defects, contagion, and corruptions of the humours and the body tissues. For example, Vīreśvara points out a fatal contradiction in the classical theory of humoral disease as follows. The greatest authorities define disease as identical to an inequality in the humours. And yet, in other places they say that the humours may naturally exist in different quantities, without causing illness, such as when phlegm naturally predominates at the start of the day, or after a meal. This is not to say that one is always ill after a meal. And so the central doctrine that humoral inequality is identical with disease must be wrong.

Having used similar artful arguments to refute each of the categories of disease causation in turn, Vīreśvara then presents his own theory of general pathology, which is that diseases come and go for no apparent reason, just like the rising and setting of the stars, or the turning of a needle of a compass. Disease, he says, is any pain of the mind, body, or sense organs, and it arises for no reason. It is essentially random.

punaryathā vātacakra-śītoṣṇavarṣa-vidhujalabudbuda-hīnayoga-mithyāyogāti-yoga-rātrisutānekavāra-prabodha-ketūdayapatana-nakṣatrapatanādyāḥ akasmād bhavanti tathaiva sarve rogāḥ akasmāt sambhavanti//

In short, Vīreśvara attempts to mount a serious challenge to the foundational doctrines of classical medicine.²⁰ His challenge may appear quixotic, but it is nevertheless offered in a spirit of intellectual rigour and debate which speaks of an original if impulsive mind. We don't know Vīreśvara's age at the time he composed his work, but the fact that he speaks of himself as first amongst the students of his teacher suggests that he may have been a young man. Indeed, he may have been an angry young man, since he is not content merely to refute

²⁰ Vīreśvara is not the first medical author to engage in theoretical polemics. Naraharibhaṭṭa's *Vāgbhaṭakhaṇḍanamaṇḍana* (after the mid-thirteenth century (Meulenbeld, 2002, Ia, 676 f.)) is a work defending Vāgbhaṭa's *Aṣṭāṇgahṛḍaya* against the attacks of critic called Sauravidyādhara. And an old tradition of medical debate is very evident in the earliest saṃhitās of Caraka and Suśruta.

the doctrines of his elders, including Vāgbhaṭa; he repeated calls their opinions "the babbling of lunatics":²¹

Therefore, this is not a definition of disease; it resembles the babbling of lunatics.

tasmād idam rogalakṣaṇam na bhavati, mattapralapitam ivāva-bhāsate//

The style and argumentation of the *Rogārogavāda* strike the reader as irascible and intemperate; it may even be that the work was a prank, although carried through with conviction. But "Intellectual life is first of all disagreement" (Collins, 1998, 1) and Vīreśvara, disagreeing with almost every basic tenet of classical medicine, certainly offered an intellectual contribution to the history of medical thought in early modern India.

So who read Vīreśvara's work? To my present knowledge, there are only four pre-modern manuscripts of his work extant in the world today, although a few more may come to light in time. One is in the collection of the Bhandarkar Oriental Research Institute in Pune, two are in the Sarasvatī Bhavan Library in Varanasi, and one is in the Rajasthan Oriental Research Institute Library in Alwar. This distribution of the manuscripts is not without significance. Alwar is in Rajasthan, and therefore close to where Vīreśvara lived and worked. And Pune and Varanasi were perhaps the two greatest intellectual centres of Vīreśvara's day. So, although the manuscript evidence is exiguous, we may presume that at least some serious scholars read the work, and considered it important enough to copy and carry to these centres of learning.

3.3. Todaramalla and his Āyurvedasaukhyam

Todaramalla was born in the mid-sixteenth century in Leharpur,²³ in Oudh, a town in the Sitapur District of UP, north of Lucknow.²⁴ Born into an honourable and once wealthy branch of the Taṇḍana family of kṣatriyas, his father died when he was still young, having impoverished the family apparently through extreme generosity to the poor. Ṭoḍaramalla therefore entered service under Akbar as a minor clerk. His

²¹ Or even, "of drunkards".

 $^{^{22}}$ MS BORI 910/1887–91 (Sharma, 1939, no.233); MS RORI, Alwar 428 (Peterson, 1892, no.428); MSS Sampurnanand Sanskrit University, Sarasvati Bhavan kramasaṃkhyā nos. 45214, 45215. The Munich manuscript (Jolly, 1912, 395) is an apograph of the BORI MS. Cf. Raghavan et al. 1949–, 2.222, 226.

²³ Sometimes "Laharpur".

²⁴ Sources on Todaramalla and further reading can be found in Vaidya, 1948, Pingree, 1994, and Meulenbeld, 2002.

martial family background and personal skills in finance and diplomacy led to his rapid promotion. After a series of military and governmental successes, Todaramalla emerged as Akbar's leading general, finance officer, and eventually Vakil or Prime Minister. His contemporaries respected and admired him more than liked him. He was viewed as being pious to the point of obsession, although also courageous and honest.

In 1572 Ṭoḍaramalla gathered a group of Benares scholars together and requested that they compose a giant compendium of Hindu culture and learning. The project was almost certainly headed by Jagadguru Nārāyaṇabhaṭṭa (b. 1513/14), one of the most outstanding Benares pandits of the sixteenth century, who was personally known to Ṭoḍaramalla, having defeated the pandits of Mithilā and Bengal in a sabhā at Ṭoḍaramalla's Delhi home.²⁵ It was completed by the time of Ṭoḍaramalla's death in 1589.

The resulting work was an extraordinarily large encyclopedia entitled the *Ṭoḍarānanda*, or "Ṭoḍara's Joy". Its 23 huge books or *saukhyas* ("happinesses") comprise a textual assemblage approximately the same size as the *Mahābhārata* (without the *Harivaṃśa*). The text of the *Ṭoḍarānanda* as a whole is loosely and sometimes quite clumsily assembled. The editors of the work must have asked younger pandits or scribes to copy out marked passages: some manuscripts actually retain the the words "*ity ārabhya. . . ity antam*", "from here to here" blindly in the body of the text. After being copied for about a century in Benares, ²⁶ the main group of manuscripts of the *Ṭoḍarānanda* entered the famous Benares library of Kavīndācārya, and on its later dispersal most were acquired by Mahārāja Anup Sinha and added to his Sanskrit library in Bikaner, where they lie today. ²⁷ About 100 manuscripts of various chapters remain in Benares, and few exist elsewhere.

The subject matter is predominantly dharmaśāstra and related matter, but there are also important books on jyotiṣḥśāstra and on āyurveda. The latter book, the *Āyurvedasaukhya*, in 97 "thrills" (harṣas), was assembled from quotations from numerous sources, probably relying heavily on Bhāvamiśra's *Bhāvaprakāśa*. It has been proposed that Bhāvamiśra was a resident of Benares at the time and had many hundreds of pupils.²⁸ If this were the case, he or his pu-

²⁵ The relationship between Nārāyaṇa and Ṭoḍaramalla is described by Nāryāyaṇa's son, Śaṅkarabhaṭṭa, in his *Gādhivaṃśānucarita* cited by Vaidya, 1948, xxviii; but see also Benson, 2001, 113.

 $^{^{26}}$ Manuscripts say, "kāśyāṃ śrīviśvanāthasaṃnidhau likhitam", "copied in Kāśī, by the Viśvanātha Temple" (Vaidya, 1948, xxix).

²⁷ Vaidya, 1948, xxx. Pingree (1997a) provides a brilliant reconstruction of the formation of Anup Sinha's library.

²⁸ Dattārāma (fl. ca. 1882/1923), speaking as a representative learned vaidya in 1895, says that Bhāvamiśra was born in the country of the Madras (around

pils may well have been drafted in to work on the $\bar{A}yurvedasaukhya$, although there is no explicit evidence for this.²⁹ The content of the $\bar{A}yurvedasaukhya$ is not of itself particularly original,³⁰ but it is a useful record of what texts and authors were available to Benares pandits in the sixteenth century.

Todaramalla died in 1589, in Akbar's capital, Lahore, having been refused permission by the emperor to return to Benares to die in the holy city of Śiva.

4. Discussion

Why was the *Todarānanda* composed? Bizarrely, for a text of this length, it claims to be offering a brief and convenient summary of matters:³¹

By his command, the essence of Suśruta and the others has carefully been extracted. Everything good has been collated, pure and clearly expressed, in this book called *Toḍara's Joy*. It is brimming with all the important topics.

... tadājñayā suśrutādisāram uddhṛṭya sādaram// 7// nibadhyate hitaṃ sarvaṃ viśadākṣaranirmalam/ granthe'smin todarānande sarvārthaparibrmhite//8//

But this is a standard authorial trope, and can be dismissed. Slightly more provocatively, it is also claimed that a new work is necessary since the old classics are hard to understand:³²

modern Sialkot and the surrounding regions between the Rāvī and the Chenāb rivers) and settled later in Vārāṇasī, where he became a renowned physician with four hundred pupils (āsīn madre janapade vipro vidvatkulottamah/ śiromaṇiḥ sadbhiṣajāṃ dhanvantarir iva kṣitau// śāstrāṇāṃ pāradṛk samyak bhāvamiśreti nāmakah/ vārāṇasyām avasthāya bhūmipānāṃ mahātmanām// bahūnāṃ bahudhā samyag rujāṃ kṛtvā pratikriyām/ pratiṣṭhāṃ mahatīṃ bhūmau labdhavān sādhupūjitaḥ// śiṣyān adhyāpayāmāsa yo vedaśatasaṃkhyakān/ mahāratnāni coddhṛtya āyurvedamahāmbudheḥ/ graṃthaṃ bhāvaprakāśākhyaṃ lokānāṃ hitakāmyayā praṇītavān prayatnena vaidyānām upakārakam// āyurvedaprabaṃdhānāṃ granthaḥ sacaramaḥ smṛtaḥ/ (Dattārāma Srikṛṣṇalāla Māthura, 1904, v. 1, 36. Cf. Meulenbeld, 2002, IIb, 271, n. 194).

²⁹ The relationship between these two works is still unsettled: Meulenbeld, 2002, IIa, 246, 295 f.

³⁰ Meulenbeld, 2002, IIa, 292ff., lists the noteworthy features. The *Āyurvedasaukhya* ascribes to Caraka and Ātreya a passage on pulse diagnosis, a passage which is found in none of the editions of the *Carakasaṃhitā*, nor in any text before the *Śarngadharasaṃhitā* (ca. 14th century).

³¹ Āyurvedasaukhya 1.7–8 (Dash and Kashyap, 1992, v. 2, 53).

³² Āyurvedasaukhya 1.5 (Dash and Kashyap, 1992, v. 2, 52).

The old śāstras are hard to go through and their topics are scattered. King Ṭoḍaramalla has studied them all and then ordained that everything be united in one place and be made easy to understand.

prācīnaśāstrāṇi sudurgamāṇi bhinnaprameyāni nirīkṣya samyak/ekatra sarvaṃ bhavatāt subodhaṃ mataṃ kṛtaṃ ṭoḍaramalla-bhūpaih//5//

This appeal to novelty of expression combined with an implied respect for tradition is again fairly standard in the later Sanskrit literature.

More interesting and revealing is the statement that Todaramalla sponsored the work in order to rescue the Vedas from the deluge of foreign culture: 33

He sponsored the work to rescue the Veda which was sunk in the deluge of foreigners.

yena mlecchapayodhimagnanigamoddhārakriyā kāritā/

And when the text says of Todaramalla that:³⁴

In him was the sun of sovereignty that cleanses the world, which had been blotted out amongst royalty by the cruel and dark age of Kali.

rājanyeṣu tamomayena kalinā krūreṇa nimlocito yasminn abhyudito jagadvimalayan sāmrājyatigmadyutih/

it is hard not to see in the expression *rājanyeṣu*, "amongst royalty", a veiled reference to the royal family of the reigning emperor Akbar, Toḍaramalla's patron and prince, as the incarnation of the *kaliyuga*.

In the account of Abul Fazl, it was Ṭoḍaramalla who insisted on the introduction of Persian instead of Hindī as the administrative language of Akbar's court.³⁵ In spite of this, at a personal level he stayed firmly within his family's long tradition of vaiṣṇava faith, as a staunch devotee of Kṛṣṇa. Ṭoḍaramalla was noted for pious religious acts such as sponsoring the digging of wells, the building of gardens and temples, and the setting up *mūrtis* of Kṛṣṇa. He was also known for his large personal collection of Kṛṣṇa images, which was praised by his pandit friends:³⁶

He collected in his house a large number of idols of Kṛṣṇa, the chastiser of demon Murā.

samakarod asau saudhesv antar muramathanamūrtīś ca vividhāh/

³³ From the introduction to the *Varṣakṛṭyasaukhya* (Vaidya, 1948, xxx).

³⁴ Sargasaukhya 1.1.15 (Vaidya, 1948, xxii, 5).

³⁵ Vaidya, 1948, xxiii, 390.

³⁶ Sargasaukhya 1.1.18 (Vaidya, 1948, xxii, 5).

But Todaramalla's Hindu piety was gently mocked by the Muslim Abul Fazl:³⁷

Once when accompanying Akbar to the Punjāb, in the hurry of the departure, Todarmal's idols were lost; and as he transacted no business before his daily worship, he remained for several days without food and drink, and was at last with great difficulty cheered up by the emperor.

Can we see Ṭoḍaramalla's creation of the Ṭoḍarānanda purely as a response to the perceived threat of the dominant Muslim culture? P. V. Kane has noted that the very large number of digests composed in this period would suggest that one of the main concerns of Hindu thinkers of this time was the preservation of their cultural heritage. K. M. Pannikar, Prime Minister of Bikaner in the 1940s, sponsored the first edition of part of the Ṭoḍarānanda, curious to find evidence of modernization of Hindu thought due to the close association between Ṭoḍaramalla and Akbar. But after becoming more acquainted with Ṭoḍaramalla's compilation he made the following remarks:³⁸

The egalitarian conception of Islam and its proselytising activity had created for Hinduism special problems which could not be overlooked. The reaction of Hindu lawgivers to this challenge was in general to make Hinduism more rigid and to re-interpret the rules in such a way as to resist the encroachments of Islam. It is perhaps this defensive attitude towards society that is responsible for the orthodoxy of views which is the characteristic of the Dharma Śāstra literature of this period.

The *Ṭoḍarānanda* is not the only giant encyclopedia of the sixteenth century which might support this view of the reasons for creating such works. The *Paraśurāmapratāpa* was another huge work with a strong medical component compiled from numerous sources by Kūrmasūri, under the patronage and name of Pratāpanṛpati between 1531 and 1550 at Ahmednagar.³⁹ This project too took place at a Muslim court, that of Burhān Nizām Shāh, who is also known to medical history as the patient and personal friend of the famous Portuguese physician from Goa, Garcia da Orta.⁴⁰

³⁷ From the *Aīn-i-Akbārī* cited by Vaidya, 1948, 387 ff., from the translation of Blochmann and Jarrett, 1894, 33.

³⁸ K. M. Pannikar, in the "Foreword" to P. L. Vaidya's edition of two *saukhyas* of the *Todarānanda* (Vaidya, 1948, xv).

³⁹ Meulenbeld, 2002, IIa, 270.

 $^{^{40}}$ See, e.g., Wujastyk, 2002. Other early encyclopedias of medical importance include the $M\bar{a}nasoll\bar{a}sa$ ascribed to Someśvara (composed 1130/31), the Laksmanotsava ascribed to Laksmana (composed 1449/50), the Rasakautuka by Mallārinābha (composed 1682/83), the $Bh\bar{a}vaprak\bar{a}sa$ of Bhāvamiśra (composed 1550–1590), the

The *Ṭoḍarānanda* is quintessentially a "top-down" composition. Sponsored for ideological reasons by a high official at a Muslim court, it is not very readable, not very interesting, and extremely long. The survival pattern of manuscripts tells us that it continued to be studied in Benares for a generation or two after its composition, and then lapsed into obscurity.

By contrast, the *Vaidyajīvanam* is a more personal production. Written by a virtuoso Sanskrit pandit, it is provocative, cheeky, and entertaining, while all the time providing practical medical information. It is also short. The work is stamped by the personality of its author, who was also tightly integrated into Muslim culture through his marriage and professional appointment. This work attained huge popularity which continues to the present day.

Finally, the *Rogārogavāda* made almost no impression at all on the Indian scholarly world of the seventeenth and eighteenth centuries. No doubt its provocative and self-assured young author would have been stunned, not to say thrilled, to know that his work would be discussed three and a half centuries after his time. Flawed in several respects, it remains a fascinating work for its originality and for the argumentative and iconoclastic impulse which informs it. Perhaps the very fact that Vīreśvara was prepared to speak of Vāgbhaṭa as a "prattling madman" put his work beyond the pale of scholarly acceptance. But it would have to have been read before being rejected on such grounds, and the paucity of surviving manuscripts suggests that perhaps it was already rejected by those would would normally have paid for scribal copying.

In different ways, all three works make the appeal to novelty as a literary and intellectual virtue. But the most successful of these works, the *Vaidyajīvanam*, makes this appeal in the the most muted way, and the least successful makes it most stridently.

There are obviously many questions raised by these very different types of medical composition. We need to understand more about both the medical needs and the literary tastes of the sixteenth and seventeenth centuries if we are to make more progress in accounting for the success of a work like the *Vaidyajīvana*. We need to discover more about the milieu which gave rise to Vīreśvara's attack on the logic of medical doctrine, and to find out whether other such attacks were taking place elsewhere. Amongst European historians at the moment there is a vogue for a new kind of history: the history of emotions. If only it existed, this kind of history of emotion applied to India would be most helpful for understanding the nuances of reception and reaction in the

Vīramitrodaya of Mitramiśra (composed 1610–1640), the *Śivatattvaratnākara* of Basavarāja or Basava Bhūpāla (completed in 1709), the *Bṛḥannighaṇṭuratnākara* of Dattarāma (published 1895–1923).

literary and scientific world of early modern India. It would be helpful, for example, for answering our contemporary and trans-cultural questions about the dissonance we can feel when reading the apparently arrogant claims of authors like Lolimbarāja and Vīreśvara about their own stature and importance, and understanding what the claims meant in their own time, and how they would have been received by the contemporary early-modern audience.

Sheldon Pollock has argued that concurrently with the spread of European power in the mid-eighteenth century, the dynamism and creativity in several fields of Sanskrit learning began to diminish. By the end of the century, the tradition of Sanskrit systematic thought which had, in Pollock's telling phrase, constituted for two millennia or more one of the most remarkable intellectual formations in world history, vanished as a creative force in Indian life, to be replaced by other kinds of knowledge based on different principles of knowing and acting in the world (Pollock, 2001a). Only eighty years after the death of Nāgeśa Bhaṭṭa, the greatest Indian intellectual and polymath of the eighteenth century, on the occasion of the first human dissection by an English-educated brahmin, it was possible for a British commentator on medical education to declare that the Indians had risen "superior to the prejudices of their earlier education and thus boldly flung open the gates of modern medical science to their countrymen".⁴¹

John Fryer never became properly aware of the world of Sanskritic culture that existed in India at the time of his visit. His chapter on the brahmins' "aptness to learn languages, and skill in philosophy" rapidly lapses into sensational accounts of fakirs and yogis. His general observations are interesting and useful, but limited to those of a cultural outsider. The the accounts of the Chinese pilgrims who visited India a thousand years before Fryer, or of Al-Bīrūnī, five hundred years before him, all show a much deeper penetration of the Indian sciences and arts.

Perhaps new research into indigenous scholarly work in seventeenth and eighteenth century India can achieve two goals: first to clarify the extent and inner dynamic of Sanskritic intellectual activity at the time, and second to begin at last to show that for all its value, British education and knowledge was not entering a void or stagnant scholarly context in India. An active and substantial intellectual world largely unknown to Europeans existed all around them.

⁴¹ Cited by Arnold, 1993, 58.

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Address for Offprints: Dr Dominik Wujastyk
The Wellcome Trust Centre for the History of Medicine at UCL

24 Eversholt Street London NW1 1AD UK