

Situating Sanskrit (Texts) in Ayurvedic Education

Across several articles published between 1963 and 1992, Charles Leslie crafted an argument about interactions between physicians and institutions of Ayurveda and colonial biomedicine in India that influenced a generation of scholars.¹ Questions about the professionalization and social representation of Ayurveda, as well as aspects of the education of aspiring physicians, lay at the heart of Leslie's intersecting studies. The historical narrative he created depicts late-nineteenth-century ayurvedic practitioners taking stock of the rise of biomedicine in India and a growing dearth of confidence in indigenous medicines. Entering the last decade of the nineteenth century, Leslie posited, practitioners and supporters of Ayurveda started responding to the growth of biomedicine on the subcontinent by speaking out about the future prospects of India's classical life science. They asked what needed to be done to ensure that Ayurveda and India's other indigenous medicines were not eliminated as an option for healthcare in the twentieth century. Taking a bird's eye view of the late-colonial Indian setting, Leslie explained that four broad-ranging initiatives emerged in the last decades of the British Raj, significantly altering the way Ayurveda would look post-1947. From 1890 until Independence, physicians of Ayurveda formed professional societies; they debated the healing efficacy of Ayurveda versus biomedicine, often in public lectures and print media; they explored how the ayurvedic physician and Ayurveda as a coherent medical system were represented and received in Indian society; and they undertook a self-evaluation and rearrangement of ayurvedic education.

The efforts of these ayurvedic physicians and practitioners of India's other indigenous medicines (especially Unani) initiated and remained at the forefront of the Ayurvedic Revitalization Movement (ARM). Along with Leslie, Paul Brass, Gyan Prakash, K.N. Panikkar, and others have also shown that prominent ayurvedic physicians aligned themselves with Hindu religious revivalists in the

last decades of the Raj. Although the content of their overarching missions might have differed, and at first glance might have seemed to target entirely dissimilar cultural domains—science and religion—the spirit of their ambitions overlapped in significant ways. Similar to the Hindu Nationalists at the turn of the twentieth century who perceived a watering-down or depletion of Hindu customs and mores in India under British rule (1858–1947) compared to an idealized, precolonial past, some advocates of ayurvedic healing at the time regarded Ayurveda as a paltry and depreciated shell of healing knowledge and practice compared to what it was thought to be in premodern times, when the Sanskrit collections of Caraka, Suśruta, and Vāgbhaṭa were compiled. Promoters of Hindu and ayurvedic revivalisms alike argued that foreign rulers in South Asia—Delhi sultans, Mughal emperors, Portuguese, Dutch, and British officials and their businesses and soldiers—had long ago led to periods of suppression, and hence stagnation, of these two pillars of classical Indian culture. Restoration in the modern era of classical Hinduism and Ayurveda, the religion and healing tradition that ostensibly “sprang from inside” (*genus + indu-*, the Latin roots of “indigenous”) the local land, therefore required state support from a new political regime.² A difficult matter to tackle was how these two revivalisms, based on an imagined golden age in India, would run up against the aspirations of British colonial authorities in command of India as the nineteenth century turned into the twentieth.

Meera Nanda argued that British and German Orientalists in the century prior to the British Raj, during the dominion of the East India Company (EIC) in India, provided intellectual stimulus for later efforts to revitalize Hinduism and Vedic sciences, eventually conflated in Hindu Nationalist oratory in the early twentieth century as “Hinduism-as-science.”³ They established an “affirmative Orientalism,” Richard Fox suggested, that was committed to the belief that Indian antiquity had a unique spiritual corrective to post-Enlightenment Europe’s materialism and secularism.⁴ Producing translations and analyses of Hindu texts and scientific works using conceptual categories drawn from classical Greek and Latin scholarship, British Sanskritists like William Jones, Charles Wilkins, and Henry Thomas Colebrooke laid the groundwork for a popular perception of Indian culture and history in the west. The perspectival tone of their scholarship also resonated with Indian anticolonial movements during the Raj: namely, the Orientalist quest to translate knowledge systems of antique India legitimized indigenous efforts to restore the glories of India’s past for anticolonial use in the early decades of the twentieth century leading up to Independence. This revelation, Nanda wrote, “shook the Indian elite out of their slumber, for it gave them a whole different vantage point from which to judge their own present and past,” giving rise, from the mid-nineteenth century through the early decades of the twentieth century, to a number of Hindu-rationalist-humanist reform movements in India.⁵ ARM emerged in this period of imagining an Indian golden age, Gyan Prakash observes, when the idea of Ayurveda as a premodern

Hindu medicinal science retroactively “brought into being the nation for which it assumed a prior existence.”⁶

The history charted by Leslie, Brass, Prakash and, more recently, Jean Langford typically locates the origin of ayurvedic revitalization in the 1890s. At the time, the colonial lens displayed ayurvedic vaidyas as hacks and Ayurveda as quackery, and tightening legal restrictions on the practice of Ayurveda and other Indian medicines led to widespread concern that the practice of indigenous medicines would be banned outright. India was also beset by famine and epidemics of bubonic plague (1896–97) and influenza (1918–19), which exposed Britain’s shortcomings in public health. This provoked Indian practitioners of Ayurveda, Unani, and Homeopathy to intervene with alternative healthcare measures of their own and, under the broader umbrella of ARM, recalibrate for a stronger showing in the twentieth century.⁷ “The outbreak of bubonic plague in Bombay (Mumbai) in 1896 prompted fresh demands for sanitary intervention,” David Arnold observes, and threats of embargo on India’s maritime trade at the Venice Conference in February–March of 1897 forced the British to contain the plague with the “draconian sanitary legislation” of the Epidemic Diseases Act of 1897 (an Act that the Narendra Modi-led Indian government revived in 2020 to deal with the Covid-19 pandemic).⁸

In the wake of the influenza epidemic, Indians started acquiring governmental control in the Princely States and Ayurveda experienced a surge in popularity and legitimization from Indian provincial ministries.⁹ Even still, ayurvedic physicians’ groups and individual spokespeople pressed for the renewal of Ayurveda’s depressed pharmacopeia and ad hoc education from region to region and called for a nationwide reinvention of India’s classical life science.¹⁰ Educational institutions were critical channels to manufacture and transmit ideas about ayurvedic tradition, both looking backwards in time and conceiving a viable future. Many of the debates during ARM asked about how and where aspiring physicians of Ayurveda were taught; what they were being taught about the literary and theoretical foundations of *āyurveda*; whether the lessons for aspiring vaidyas presented an ayurvedic history that was translatable in the English medium and on a par therapeutically with biomedicine; and whether physicians of Ayurveda abided a uniform professional etiquette and method that shaped their interactions with and treatment of patients.

The centuries-old educational institution of the gurukula had been the hub where ayurvedic tradition was formed and conveyed to generations of vaidyas. It was therefore targeted by some reformers as a model to move away from in order to reinvent Ayurveda in the new century. The collegiate system became the new destination to re-present what *āyurveda* was and what Ayurveda could be. Discussions about how well the Sanskrit medical classics suited a modern, forward-looking Ayurveda, and the extent to which this literature should be taught in ayurvedic colleges, sharpened peoples’ attention to the advantages and disadvantages of

fortifying recent past practices of ayurvedic physicians and Ayurveda's premodern literature in this medicine's future.

THE GURUKULA AND EDUCATION IN COLONIAL INDIA

By 1947 India had fifty-seven ayurvedic colleges and fifty-one Ayurvedic hospitals, and there were 3,898 Ayurvedic and Unani pharmaceutical dispensaries throughout the country.¹¹ India's central and state governments built up an ayurvedic infrastructure in the 1950s and 60s comprised of British-style colleges, research centers, pharmacies, and hospitals, and beginning in 1971 the Central Council of Indian Medicine (CCIM) began fixing a national admission policy, syllabus, and exam structure for all ayurvedic physicians-in-training. The collections of Caraka, Suśruta, and Vāgbhaṭa had a place in the new college curriculum. But they were not sources for intense philological study as much as they were subjects of ayurvedic history, and these comprehensive, premodern scientific Sanskrit texts were routinely presented and studied in English and taught through filters of biomedical epistemology and healing techniques.

Changes in the CCIM's national syllabus for ayurvedic colleges have been made between 1971 and the present. The expectation that BAMS students should be able to engage the big trio of Sanskrit classics in the Sanskrit language, as texts whose knowledge can be used to treat patients, before they graduate has gradually decreased during this time. Maarten Bode and Prasan Shankar's interviews with BAMS graduates in Karnataka illustrate that the diminishing emphasis on Sanskrit learning in ayurvedic colleges poses few to no obstacles to the professional careers of ayurvedic physicians, who nowadays frequently knit their ayurvedic practices with biomedical therapies as much as possible to suit their clientele's increasing demands for modern—read: biomedical—drugs and treatments.¹² For students like those in central Kerala whose stories I share in this book, training at an ayurvedic gurukula has the potential to fill a void in their educations that separates the medical work and knowledge they have learned and the healing discourses they see as founding this work and knowledge two millennia ago. To study these premodern discourses in the Sanskrit language in a traditional setting—read: gurukula—ostensibly permits them to approach Ayurveda on its own terms, detached from the influence of biomedical science. One of Bode and Shankar's interviewees in Bangalore expressed the profound difference between Ayurveda and biomedicine rather than their comparability which, as we shall see, was a hallmark argument of some integrationist proponents in ARM:

Ayurveda is different from what we study in pre-college years. It is not a continuation. In the beginning it was difficult to understand the *tridosha* [physiological functions, morbid entities] and how medicines work. Ayurveda is very different from the

modern chemistry, the modern biology and the modern physics we studied before we came to our Ayurveda college.¹³

Close readings of Vāgbhaṭa's *Aṣṭāṅgahr̥daya* in an ayurvedic gurukula like Mookkamangalam reveal the difference in medicines this BAMS student expressed. The gurukula setting exposes students to an organization and presentation of ayurvedic healing that is not only different than "modern chemistry" and "modern biology," but also nudges students to consider the poetics of ayurvedic expression. When I first started visiting central Kerala, for example, Bhaskaran used to teach Biju about Sanskrit grammar by citing Pāṇini and aesthetic theory by expounding Bharata's *Nāṭyaśāstra*. Although the students of Biju that I met in later years typically did not have the breadth of training in Sanskrit language and literature that his grandfather had, and that he and his mother have, Biju's training was grounded on a view that the premodern compilers of the tradition carefully relied on language and feeling to express the theoretical and applied logics of ayurvedic healing, as well as the cosmology and epistemology of *āyurveda*, and its views of individual and social life.

Studies of the gurukula in the history of Indian education are rare. Research on ayurvedic educational history is likewise uncommon, especially during the colonial period. Syed Nurullah and J.P. Naik's *History of Education in India During the British Period*, written in 1943, is arguably still the most comprehensive study of Indian education under colonialism.¹⁴ Based on government policy records of education commission reports, acts and charters, Nurullah and Naik present a somewhat combative view of India's scholastic past, Aparna Basu argued, where schools stood in relation to one another as "government *versus* private, indigenous *versus* Western, and imperialist *versus* nationalist" with seemingly no room for other options.¹⁵ Such binaries reflect an unhelpful penchant among historians of colonialism, Projit Mukharji observed, to see western cultural institutions as "foisted on an unwilling South Asian people." Echoing a major tenet of Subaltern Studies scholarship, Mukharji's work on Daktari physicians, or Indian practitioners of biomedicine, belies imagined colonized-colonizer dyads, which tend to give the false impression that western institutions were "closed systems," unopen to influence from or exchange with local communities and peoples, and vice versa.¹⁶ India's complex, colonial-era medical landscape was not established and cultivated through the wholesale imposition of European biomedicine on local Indian communities and their healing traditions, however. Diverse therapeutic perspectives and practices were at play and in question among both European and Indian practitioners, and the latter were sometimes associated with European physicians in one way or another, as I explain below, though the power and authority shared by both was normally incongruous.

Other studies of education in India, such as those by N.N. Mazumder, R.K. Mookerji, and Hartmut Scharfe, are sweeping interpretations that rely on

periodized views of India's past gathered primarily from texts, and they offer only brief considerations of the history of scientific education during the British colonial period.¹⁷ Because the word "gurukula" was used in the past and continues to be used today as a capacious term to denote any intimate type of scholastic setting with an expert teacher, it is common for studies of Indian education prior to 1947 to acknowledge the historical ubiquity of the gurukula. But most studies fail to give it much critical attention.

Nurullah and Naik recount the story of a revivalist gurukula, Gurukul University, created by the Arya Pratinidhi Sabha in Punjab in 1902 and resituated in Kangri in 1924 under the name Gurukula Kangri Vishwavidyalaya. It was set up as an indigenous counterplan to Macaulay-style education policies that stifled regional traditions and vernacular language use in Indian schools, by attempting to merge the residential qualities of the ancient Vedic gurukula with the research facilities of western-style universities. The initiative sought to allow students to get "the best of both the home and the school."¹⁸ Positioned to strike a balance between the old and the new, Swami Shraddhanand (1856–1926), an Arya Samajist and disciple of Dayanada Saraswati, conceived the university to preserve Hindu religious ideals in the rapidly modernizing and cosmopolitan colonial space of northwest India. Ayurveda and other classical knowledge systems were part of the school's curriculum.

Hindu nationalist groups and reform movements in the twentieth century, before and after 1947, regularly saw Ayurveda as India's original medicine. Its foundation on classical Sanskrit texts indicated Ayurveda's indigeneity and its antiquity presumably free of western influence. The framing of a religious tradition by its association to science—medicine, astronomy, mathematics, and the like—also occurred in educational centers founded by non-Hindus. Nurullah and Naik discuss Muslim educational experiments, like Deoband and Darul Uloom Nadwatul Ulama in Lucknow, which has taught a blended curriculum of religion and science for over 125 years.¹⁹ More recent times have occasioned further examples of joint religious-science/gurukula-university institutions where Ayurveda is pitched as a cornerstone of the initiative or simply implicated in some way. The Rashtriya Ayurveda Vidyapeeth (RAV) in New Delhi is a well-known case. Founded for the main purpose of teaching Ayurveda, the school began in 1988 with the following mission:

To revive the traditional method of Gurukula system of informal education of India i.e., Guru Shishya Parampara to Ayurvedic graduates after formal education. As people are aware, the present classical texts of Ayurveda, *Charaka Samhita*, *Sushruta Samhita*, *Ashtanga Hridaya* etc. are believed to be the outcome of such informal education. This kind of study is lacking at present in the modern educational institutions where the courses are bound by fixed syllabus, duration of time and many subjects to learn.²⁰

RAV's charge appeals to many of the kinds of students who study in Kerala's ayurvedic gurukulas. It offers graduates of ayurvedic colleges what is sometimes perceived to be an authentic primer on the medicine they have already been licensed to practice by the Indian government, but using the "traditional method" by which this medicine was meant to be taught. The spirit of this mission statement, we shall see, aligns RAV with opponents of the call to restructure ayurvedic education and integrate it with biomedical subjects during ARM. The language of RAV's undertaking acknowledges the reality that ARM introduced in modern India: because the ayurvedic college would mirror the style of biomedical schools, and its curriculum would teach the subjects of biomedicine, a contingent of BAMS degree-holders would regard this education as problematic. At Mookkamangalam I have met many recently licensed physicians of Ayurveda and physicians-in-training still studying at ayurvedic colleges. All of them were seeking the kind of "informal education" of the gurukula that RAV advertises. The outcomes of ARM all but ensured an active place for the gurukula post-Independence, though it would always be considered by the Indian government (and many ayurvedic practitioners) as something of a relic and regional peculiarity.

Aparna Basu's research on the history of Indian education, though nearly half a century old now, remains insightful today for its probing questions and path-breaking attempts at interdisciplinarity. Her work has been especially useful to my conceptualization of the gurukula as a key site of learning in India's past and present, both in Ayurveda and across Indian cultures of learning generally. In the early 1980s, Basu observed that while historians habitually allude to the pervasiveness of the gurukula in India's past, a single sustained study of the gurukula and its pedagogical methods was missing when she was doing her research.²¹ This book fills some of this enduring void, building on the pioneering studies of Charles Leslie and, more recently, Jean Langford, whose *Fluent Bodies* is an outstanding exception to the generally poor quality and scarcity of research on the gurukula in ayurvedic history and education.²² Langford's study includes ayurvedic gurukulas in the north Indian city of Haridwar and at Hindu pilgrimage sites near it. She describes how gurukulas in the first half of the twentieth century operated based on interviews from the 1990s reflecting on educations that took place in the 1930s and 40s. The sections of her book that provide this glimpse into ayurvedic education almost one hundred years ago are lucid and insightful. Langford's study introduces especially important data about the politics surrounding Ayurveda right before Independence and after, when ayurvedic education was already moving toward the college model. The recollections of the people with whom she spoke present previously unknown details about the changes that occurred and the legacy of this transformation in north India.

Much of the research on gurukulas over the past three decades tends to suffer in ways that Langford's *Fluent Bodies* does not. It's not uncommon to encounter

blithe portrayals of the gurukula in Ayurveda as a symbol of the way things were done “in the past,” for example, which can perpetuate a mistakenly homogenized view of ayurvedic educational cultures in the present.²³ It is also striking to read descriptions of gurukulas from north India that, when viewed alongside my fieldwork in the south, illustrate the historical and regional heterogeneity of gurukula cultures, even within Ayurveda and indigenous medicines.²⁴ That said, as the following history of ARM reforms illustrates, gurukula cultures were never uniform. The national movement toward the college model expressly attempted to regulate the variations that naturally arose in gurukulas from region to region and culture to culture, as languages of instruction varied and the texts gurus taught differed from *kula* to *kula*. These differences are important to understanding the ways that Ayurveda has been practiced and transmitted in different locations. They also accentuate the difficulty of writing sweeping historical studies of Ayurveda or even ayurvedic education, especially if this history is imagined as having already ended. Differences in education and practice speak to the multifaceted realities of Ayurveda, its multiple and ongoing histories, and the various modernities that practitioners and patients of Ayurveda have always inhabited and promoted.

Our current understanding of the reforms in ayurvedic education between 1890 and 1970–71, when the CCIM was established and began framing and implementing various parameters and courses of study for ayurvedic colleges, hangs largely on government committee reports and documents prepared by physicians’ organizations that present an imagined ayurvedic edifice that was unified and uniform across the subcontinent and comparable to biomedicine. This is a summative, top-down view, meant to provide a wide-angle vision of Ayurveda as it might have been at one time and could be in the future. The CCIM’s ratification of the college syllabus since the 1970s has reified this bird’s eye view, glossing over regional particularities of training and clinical care like those I observed at Mookkamangalam and Shantimana. On-site research complicates pan-Indian digests, however, and allows us to see how decisions in the nineteenth and twentieth centuries to make Ayurveda modern by modeling biomedicine, while widespread and even popular, were not roundly hegemonic. The time I spent at Kerala’s gurukulas suggests that practitioners of regional traditions in south India have tried and, in some cases, been successful at resisting colonial and postcolonial pressures to translate their practices into methods that are biomedically intelligible, if not compatible and equatable. Historical research that’s informed by “having been there” also productively challenges prior scholarship that views modern Indian intellectuals who take recourse in an institution of India’s Sanskrit-inflected past as, by default, nationalist and chauvinist. Daily activities in an ayurvedic gurukula like Mookkamangalam encourage observers to think with ideas and practices in Ayurveda, not merely as objects of study in and of themselves, but as models for articulating medicine and healing in India’s past and present. They invite us to decenter our inquiries away from biomedicine as the benchmark against which Ayurveda must

be understood and defined, which, as we shall see momentarily, was the overriding zeitgeist of ARM.

DISPLACING THE AYURVEDIC GURUKULA

The gurukulas in north India that Jean Langford described were brick and mortar schools. Former students told Langford they consisted of large student bodies under the guidance of multiple of gurus.²⁵ This description does not evoke an intimate *guruśiṣyasambandham* relationship, but rather the environment of colleges. Given that Langford's informants reflected on educations occurring in the last two decades of the Raj, her portrayal captures a time in ARM when the move away from the gurukula to a collegiate system for training vaidyas was already underway.

South India offers some important and enduring counterpoints to the gurukula transitions seen in Langford's study. Bhaskaran used to say that his teachers used the Sanskrit medical classics as manuals for both how and what they taught. His recollections give us access to over a century and half of oral history about the gurukula curriculum in Kerala. While portions of the collections of Caraka and Suśruta have always been taught, and Bhaskaran certainly drew on them with his students, Malayali students up to Biju's generation have been memorizing the entire *Aṣṭāṅgaḥṛdaya*. To internalize this storehouse of healing knowledge gives vaidyas a great deal of flexibility when working with patients. Mastery of the text allows them to work quickly across the various sections of Vāgbhaṭa's collection; augment it with regional resources in ways that generate unique instantiations of ayurvedic practice; as well as, and most importantly, tailor remedies to particular situations and illnesses. The Sanskrit medical classics contain valuable data for vaidyas-in-training to learn about the array of associations between body, mind, and society that contribute to the production of disease and maintenance of health. In Kerala, a student's guru is him or herself a product of gurukula education and is someone who has enough experience treating patients to be able to present case studies in reference to the literature they read together.

Instructional designs in an ayurvedic gurukula always vary because of things like a guru's specialties (which shape patient demographics), texts studied, and languages of instruction. Even if the root texts of the education are in Sanskrit, a guru's explanations and conversations with students typically occur in local languages. When I first visited Shantimana, for example, Bhaskaran's lesson that day on the *Aṣṭāṅgaḥṛdaya* and two related texts, *Rasaratnasamuccaya* and *Tantrayuktivicāra*, was conducted mostly in Sanskrit, while his daily patient meetings and small talk was in Malayalam. In Kerala, the texts of instruction and clinical use (in any language) exist differently for vaidya-gurus and students. Whereas the vaidya-guru transmits everything orally, most students need to hold hardbound copies of the book being rehearsed, often jotting notes in its margins as they read along with their teacher. Texts for students are also usually linked to the books

they learned about at college. For teachers and the occasional advanced student, however, texts in this setting open up and support multiple ways of knowing and can be performed, and in this way they are fluid and conversational resources open to rearrangement and supplementation with other texts as patient cases dictate. Because most students arriving at Mookkamangalam since 2008 have recently graduated from an ayurvedic college, the handling and studying of physical books has been de rigueur like at most colleges and universities around the world, although this has been changing with the ascension of e-readers and, more recently, as the Covid-19 pandemic has restricted access to hard copies of published research in libraries and bookstores. There is a clear difference between oral and written (or orthographic) approaches to knowledge transfer and acquisition among vaidya-gurus and their students today. This difference is attributable to changes in ayurvedic education between the 1890s–1970s and the desuetude of the gurukula's Sanskrit-based training.

Ayurvedic gurukulas in Kerala have historically been located in the residences of the teachers. Typically each had one guru, and while there might be more than one student studying at a time, the one-on-one relationship between guru and student was considered vital to a successful education. It was customary for students through the mid-twentieth century to attend more than one gurukula for different types of training. Bhaskaran, for example, studied with different gurus for training in Sanskrit language and literature, English language and literature, the Vedas, and other subjects, in addition to studying classical life science in a gurukula with his paternal uncle. When he learned *āyurveda* in the *Aṣṭāṅgahrdaya*, he sat mukhāmukham with his uncle, as vaidyas-in-training in Kerala did with their gurus before him for generations. The gurukulas where Bhaskaran studied, the one he ran at Shantimana, and the one his daughter and grandson oversee today (Mookkamangalam) are at once similar and distinct, revealing a common form of training that is adaptable to the differing interests of each site's physician-teacher. The pedagogical and curricular flexibility inherent to gurukula education, allowing for the intensive study of a particular corpus of texts with one teacher and few classmates, became a lightning rod for those in ARM calling for systematization and standardization in ayurvedic education.

By the last decade of the nineteenth century, the broad shape of ARM's ideological agendas were crystallizing in multiple places and among various groups. While the Mumbai Vaidya Sabhā (Society of Bombay Physicians) was at the vanguard of the nationwide effort to revitalize Ayurveda, other organizations and socially prominent physicians of Indian medicines in the north and south, as I explain below, also shaped the public presentation of Ayurveda and regulation of ayurvedic education. The Mumbai Vaidya Sabhā created assessment criteria and procedural benchmarks for gurukula training that eventually edged out the gurukula as a viable site for ayurvedic instruction and paved the way for the college to be the primary institution for training physicians. In its founding year, 1890,

Sabhā leadership concluded that “Ayurvedic study should be structured in a way that was appropriate to the time, in order to turn out skilled doctors who would be able to both promote Ayurveda and serve the public.”²⁶ The Sabhā regularly issued statements like this to rally practitioners and potential students of Ayurveda to recognize and respond to mounting criticisms of gurukula education as unorganized, with inconsistently defined goals, and an insular worldview. To bring structure and uniformity to ayurvedic education in India, for example, in 1896, Sabhā member Prabhuram Jivanram and his son, biomedical doctor Popat Prabhuram Vaidya, founded the Aryan Medical School in Bombay, purportedly to professionalize vaidyas and modernize the practice of India’s classical life science by integrating aspects of allopathy and Ayurveda in its curriculum.²⁷

In 1907, the Sabhā-supported Mumbai Āyurvedīy Pāṭhaśāla designed a unique curriculum for the Nikhil Bhāratīy Āyurvedīy Vidyāpīṭh (All-India Ayurvedic College), revised in 1908, that set a three-tiered system of examinations for students training under gurus. Tier 1 was *bhīṣak*, exams conducted in vernacular languages. Tier 2, *viśarāda*, consisted of exams conducted in basic Sanskrit. For tier 3, *ācārya*, exams were conducted in advanced Sanskrit. The Sabhā’s efforts to systematize gurukula education impacted the education of vaidyas across India, as indigenous medical organizations quickly began adopting the same three examination ranks. In the south, the All-India Āyurveda Mahāmaṇḍali in Andhra Pradesh was an early organization to adopt the Pāṭhaśāla’s curriculum.²⁸ Notably, the Sabhā’s commission to standardize in-house (*kula*) training that aspiring ayurvedic physicians had been receiving for centuries did not use the compound word *guru-kula* in its publications for the Nikhil Bhāratīy Āyurvedīy Vidyāpīṭh. Ratification of the three exams in the new guru-led lessons set in motion a process of transformation that rendered the older *kula* system obsolete. The highest-tiered title, *ācārya*, is still used by the CCIM, whose syllabus names the ayurvedic college graduate an *āyurvedācārya*.

Jean Langford reasons that the Mumbai Vaidya Sabhā created the three examinations because at the turn of the twentieth century there was a widespread lack of respect for Ayurveda among Indian nationalists, who were known to publicly reproach vaidyas trained in gurukulas and the practices they learned in those settings. Even though these physicians were the assumed proprietors of India’s precolonial healing science, Langford noticed that nationalist groups tended to frame ayurvedic vaidyas as a disorganized lot who failed to articulate their work’s “unique connection to Indian cultural identity.” A powerful organization like the Mumbai Vaidya Sabhā, she continues, knew that Ayurveda “could be promoted as one of the contents of national culture only if it were packaged in a standard institutional form.”²⁹ So the Sabhā emphasized Sanskrit at the second and third level exams—*viśarāda* and *ācārya*—to appeal to the nationalists’ desire to connect a premodern and precolonial past with their present, while the institutionalization of the gurukula in the Nikhil Bhāratīy Āyurvedīy Vidyāpīṭh signaled a clear pivot

toward a level of educational administration previously unseen in Ayurveda. In both institutional structure and curriculum, the gurukula course of study was supposed to begin to model British medical colleges. While the *Sabhā* held fast to the belief that a *vaidya*'s ability to work with the Sanskrit medical classics was important to the success of the ayurvedic profession, in practice, as Ayurveda's institutionalization moved away from the residence of the guru into college lecture halls and labs, the Sanskrit-based literature of the tradition began to function as a symbolic cultural marker of an ancient past, and the study of the Sanskrit language was gradually edged from an increasingly institutionalized Ayurveda. The Sanskrit classics were instead translated into English and taught in a new, rearranged format that reflected anatomical and physiological approaches to understanding the body, disease, and treatment in biomedicine. Without a need for a strictly designed Sanskrit-based training of would-be *vaidyas*, in the first half of the twentieth century the gurukula appeared doomed. The ayurvedic physicians whom Langford interviewed in Haridwar saw it that way, too. They identified the CCIM's concerted labors to standardize ayurvedic college syllabuses across the country between 1972–77, following several decades of ARM initiatives to integrate the knowledge in Ayurveda's Sanskrit classics with biomedical buildings and epistemological frameworks, as the beginning of the end of the gurukula in ayurvedic education.³⁰

Proponents of the plan to make biomedicine part of the ayurvedic college curriculum argued that reasserting and bolstering classical Ayurveda in the modern era would usher in a kind of classical renaissance that would revive the days when India's religion was imagined to be Hinduism and its preeminent science was Ayurveda. They took a Hindu nationalist tone heard frequently in contemporary India since the creation of the BJP (Bharatiya Janata Party, "Indian People's Party") in 1980 and its rapid rise to prominence in India as one of the two major political parties in the country. This outlook resembled an earlier Orientalist view that saw advances in science and the arts as the hallmarks of civilized societies. The idea that Ayurveda could be useful to modern-day Indians and germane to ongoing scientific discovery in India—by mixing European medicine and classical ayurvedic methods—carried the dual attraction of signaling a spiritual continuity with a glorious classical past, while also demonstrating the type of self-sufficiency, intellectual progress, and forging spirit that supposedly has underlain every great civilization throughout human history. Charles Leslie argued that this Orientalist-type platform forever altered traditional medical learning in India:

The leaders of the [Ayurvedic Revitalization] movement adopted technology, ideas, and institutional forms from the evolving cosmopolitan system to found pharmaceutical companies, colleges, and professional associations, and to reinterpret traditional knowledge. They translated Sanskrit classics into English and vernacular languages, wrote manuals and modern textbooks for students, and published journals and popular tracts. They lobbied to create state and central government agencies

that would support indigenous medicine. In short, the syncretism between Āyurveda and cosmopolitan medicine which anthropologists first noted in rural India in the 1950s was a far-reaching and long-standing aspect of Indian society, and it has greatly affected the ways that people interpret illness.³¹

At once reaching for Indian classicality while staying firmly committed to biomedical ideas and institutions, ARM's leaders tried to merge the old with the new. This entailed a paradoxical design that sought to preserve classical Ayurveda in the twentieth century by endorsing its foundational bases, namely the *bṛhatṭrayī* of Sanskrit literature, and augment it with biomedical categories, frameworks, and practices. Even for some of the most ardent supporters of integration this was unappealing because it seemed unnecessary to "fix" a medicine that was historically effective on its own terms. Meanwhile opponents of integration worried that Ayurveda would eventually become unrecognizable.

The reality is that the Sanskrit medical classics are not products of tightly contained or parochial studies and discussions. They emerged in South Asia during a period of great cross-cultural movement in the century before and the seven centuries after the turn of the Common Era. The Silk Road trading routes were in full swing across the present-day countries of Afghanistan, Pakistan, and India, bringing traders and Buddhist pilgrims from places like Tibet, China, and Southeast Asia. The ARM integrationist urge in the initial decades of the twentieth century was motivated by an impulse to strengthen Ayurveda, not by closing it off to outside influences, but by engaging and adapting scientific ideas and research methods that could improve an ancient tradition. This kind of adaptive development was not satisfactory for some, however, who viewed the intrusion of allopathic medicine in the ayurvedic college curriculum as corrupting an imagined faultless life science of India's classical past.

The plan to integrate Ayurveda and biomedicine received mounting governmental attention as it became clear the days of the British Raj were numbered. In 1943, the Government of India (GoI) appointed a three-member task force chaired by Sir Joseph Bhore—the Bhore Committee—with the mission of assessing the "real value" of India's indigenous medical systems and their treatment capabilities. In its final report in 1946, one year before Independence, the committee effectively threw up its hands and admitted failure, citing its inability to satisfactorily assess the scope and value of India's pluralistic medical landscape. In place of its original charge, the committee recommended what appeared to be a more tenable plan: state governments should "decide what part, if any, should be played by the indigenous systems in the organisation of public health and medical relief."³² The Bhore Committee's original task was nearly impossible to achieve. Over and above the numerous regional forms of the three largest indigenous medicines, Ayurveda, Unani, and Siddha, there were other types of local therapies, such as Nature Cure, Yoga, Homeopathy, and ritual or religious healing of various kinds, that had to be accounted for

and assessed. Because of the therapeutic varieties in India, the Bhore Committee's recommendation to divvy up the work to the states was sound counsel.

In the same year as the 1946 *Bhore Report*, India had its inaugural Health Minister's Conference, at which a boldly worded resolution was passed to ensure that State Health Organizations would make provisions for training and research in Ayurveda and Unani. The resolution led to the formation of another committee, the Chopra Committee, whose report followed in 1948. The *Chopra Report* was the first thorough and geographically sweeping account of indigenous medicines in India. It promoted the need to advance a fully integrated bio-ayurvedic medicine in India, so-called *miśra* Ayurveda. The committee's first two recommendations were as follows:

[1] For rendering of medical relief, the Western and Indigenous systems should be harmonised.

[2] Synthesis of Indian and Western medicine is not only possible but practicable, though it will be time-consuming and *not* easy. Immediate steps should be taken in this direction.³³

The same spirit of integrationism in the *Chopra Report* continued to dominate the development of the ayurvedic college curriculum in post-Independence India. In the same breath, integrationist defenders, whether speaking from physicians' organizations like the Mumbai Vaidya Sabhā or through government committees, denied that mixing the two traditions acculturated Ayurveda to biomedical standards and insisted that the best way to promote Ayurveda was to ensure that ayurvedic education adopt, where it benefited the Indian medicine, elements of western biomedical science.³⁴

Twelve years after Independence and fifteen years after the *Bhore Report*, in 1959 the GoI's Ministry of Health made its own assessment of Ayurveda, in the *Udupa Report of the Committee to Assess and Evaluate the Present Status of Ayurvedic System of Medicine*, or simply the *Udupa Report*. The chair of this committee, Dr. K.N. Udupa, and his colleagues reflected warmly on the work of the Bhore Committee. They acknowledged the former committee's efforts towards the laborious task of conducting a nationwide assessment of India's indigenous medicines. Most crucially, Udupa and his colleagues wrote, the Bhore Committee deserved appreciation for recommending the establishment of a Chair of History of Medicine in the All-India Medical Institute. This professorship was tasked with the burden of studying "indigenous systems of medicine in view of the importance of investigating the extent to which they can contribute to the sum total of medical knowledge."³⁵ To secure a researcher in this field in a prestigious institution would, they thought, go a long way to safeguard future study, hence also increase awareness, of India's precolonial healing sciences.

With the British out of India for over a decade, it is perhaps not surprising that the *Udupa Report* struck a less obviously integrationist and more independent and

nationalist tone about the future of India's indigenous medicines. After identifying the benefits of ayurvedic medicine throughout the country for tens of millions of sick people, Udupa *et al* offered the following complex advice:

We do not believe, on the other hand, in saying that there is no defect in the present practice of Indian Medicine or that practitioners of the system are up-to-date in their knowledge. But since its utility is well established, it is our duty and also the duty of the State to approach the problem with sympathy and encourage and recognise the system so that it can become more useful to the public. For carrying out all these programmes including research, a large number of men, money and material is no doubt needed. Let us give a full-fledged support and see the results, instead of blindly following and copying the methods followed by the United Kingdom and the United States of America.³⁶

For the most assertive activists among ARM's integrationist organizations, the prospect of gaining state support invigorated their work. The *Udupa Report's* clear message to indigenous practitioners that independent India's government should support its native therapies with workforce and money must have sounded like a long-hoped-for recognition. That the report's last charge was not to follow blindly the United Kingdom and United States speaks to the complex situation practitioners of Indian medicines faced from the time of the East India Company through the Raj. For, from the 1890s on, biomedical standards of research and education were the indexes and measures that many ayurvedic physicians felt compelled to adopt in order for their profession to persevere after 1947. Many of these measures were debated during decades of ARM, considered and recommended in the GoI committee reports of Bhore, Chopra, and Udupa, and ultimately solidified in the Indian Medicine Central Council Act of 1970.

All the while, ayurvedic education was moving away from its textual foundations. The *Udupa Report* suggests that, moving into the 1960s, Ayurveda would have done well to begin anew, by embodying ways to train vaidyas and implement practices for this classical life science based on standards and yardsticks made in India itself. The contemporary ayurvedic gurukula in south India that I discuss in the next three chapters offers some insights into the ways in which Dr. Udupa and his team might have envisioned that type of training and practice.

ARM'S ANTECEDENTS OF BIOMEDICAL-AYURVEDIC INTEGRATION

The seeds that gave rise to the ayurvedic college and the integrationist agenda of ARM were sown before India came under the rule of the British Crown following the Indian Rebellion (or Sepoy Mutiny) of 1857. East India Company (EIC) administrators had explored areas of compatibility between allopathy and Ayurveda (and also Unani) and experimented with small measures to encourage collaboration between practitioners of these medicines. The Native Medical Institute (NMI) in

Calcutta is perhaps the example cited most often by historians. The NMI opened in 1822 as an EIC-supported medical college that, according to D.G. Crawford's *History of Indian Medical Service*, was intended to train doctors in a syncretic arrangement of Indian therapies and biomedicine, with classes held at Calcutta's Sanskrit College for Ayurveda and the Calcutta Madrasa for Unani.³⁷ Similar schools were proposed for Bombay and Madras. But optimism and energy to support NMI's cooperative program in Calcutta started to lapse after thirteen years, and in 1835 NMI was shuttered. The Civil Finance Committee in Bengal declared the institution a financial failure. It regarded the Institute's education as deficient, mentioning a lack of anatomical awareness in Ayurveda and Unani as a major fault in the NMI curriculum.³⁸ Notably, the Institute's downfall happened during the EIC's massive undertaking to Anglicize education in India, a far-reaching process captured in Thomas Babington Macaulay's "Minute on Education" on February 2, 1835.³⁹ Macaulay's "Minute" was a language policy that he and others used to persuade British Governor-General W.C. Bentinck to stop using government funds to preserve Sanskrit and Arabic or to allow vernacular-based instruction in schools and, instead, to ensure that Indians would be educated in English, based on a new English-standard curriculum and in British-style institutions. The shift from Indian modes and institutions of learning to a British model—with vice chancellors, undersecretaries, multiple faculty members, and large student bodies—had a deep and lasting influence on the history of Indian education. "The linguistic change-over in 1835 was astonishingly complete," Aparna Basu observed, and its impact was massive, with consequences that continued to unfold for a very long time.⁴⁰

Surveys conducted by the British in the 1820s-30s suggest that there was actually considerable interest in an English-medium education among the Indian population in the run-up to Macaulay's "Minute," especially among leaders and élites who perceived the colonial language as indispensable to cultural progress. Because NMI was deeply invested in Ayurveda's Sanskritic base, it struggled to adopt an English-language curriculum. The institution might have "reflected the hybrid spirit of the early nineteenth century, where the veneer of cultural 'exchange' between Eastern and Western knowledge about medicine, disease and the body could legitimately characterize the venture," as Rachel Berger writes. But its "inquisitive and expansive liberal interest in multiple knowledge systems collided with a shifting imperial politic that privileged only one kind of learning for both Indians and Europeans alike."⁴¹ So, in 1835 Governor-General Bentinck threw his weight behind Macaulay's vision for Anglophone education, in the service of which NMI's closure was as a significant and necessary enactment. In its place, Bentinck recommended the construction of a new medical college in Calcutta with a completely English-based curriculum. His express wish was that the new school's curriculum distance itself from NMI's integrated syllabus and move toward educating aspiring physicians entirely in biomedicine.⁴²

The earliest biomedical schools in India—École de Médecine de Pondichéry (1823), Calcutta Medical College (1835), and Madras Medical College (1835)—experimented with “bio-indigenous” programs that taught biomedicine while sporadically acknowledging the value of therapeutic contributions from Indian medicines. Most of these projects did not last long, and their syllabi redeployed medical science as it was taught in Europe. Many EIC administrators and physicians who had earlier tried to enfold aspects of India’s indigenous medicines into curricula and practices eventually appeared insincere. Their support of Indian medicines served their own practical needs rather than revealed genuine curiosity and appreciation for these healing traditions. European doctors frequently treated *vaidyas* and *hakims* as assistants, apothecaries, clinical technicians, and the like, but hardly ever as colleagues or collaborators.⁴³ By the mid-nineteenth century, on the eve of India coming under the authority of Queen Victoria, EIC policy did not allow Indian doctors to treat British employees if they had not received at least a minimal amount of biomedical training.

If biomedical physicians in India occasionally tried to learn about Indian medicines and use aspects of those medicines in their clinical work in the first half of the nineteenth century, from the 1860s until the second decade of the twentieth century British administrators implemented broad measures to construct biomedical dominion on the subcontinent.⁴⁴ Colonial doctors called for strict regulations, and in some cases total bans, on the practice of Ayurveda and Unani.⁴⁵ These demands abated slightly after the Mont-Ford Reforms of 1919, which allowed for some, albeit limited, autonomy for provincial governments to manage the practice of indigenous medicines on their own terms.⁴⁶ From the 1920s onward, increased political support for homegrown therapies expedited the formation of advocacy groups that promoted Indian medicines, such as the Board of Indian Medicine in North India’s United Provinces.⁴⁷ Earlier examples were also seen in the Princely States, such as Hyderabad, where in the 1890s a formal administrative body for Unani and Ayurveda was created. But before the Mont-Ford Reforms, formal oversight of such operations was often missing. Even still, for many supporters of Ayurveda, the Mont-Ford Reforms ushered in a diarchic attitude in Indian society on the future sustainability and even necessity of India’s indigenous medicines. A lot of people were surprised to discover, Ralph Crozier noted, that “many Indian political leaders [were] no more sympathetic to the claims of Indian national medicine than the British had been.”⁴⁸ High-profile members of the Indian National Congress Party, including M.K. Gandhi and Jawaharlal Nehru, downplayed Ayurveda as an insufficient and antiquated form of curative knowledge and, as David Hardiman proposes, by the 1930s–40s “most Congress leaders were maintaining that the future health of India depended primarily on biomedicine.”⁴⁹

Between the 1860s and 1919, discussions about how to retool ayurvedic education were scattered among regional organizations like the Mumbai Vaidya Sabhā, Akhil Bhāratīy Āyurvedīy Mahāsammelan, and Keralīyā Āyurveda Samājam, and

spearheaded by forward-thinking physicians accomplished in both Ayurveda and biomedical science. In south India, the efforts of P.S. Varier, Adya Anantacharyaru, and D. Gopalacharlu, much like the pioneering advocacy of Gananath Sen in Bengal, contributed to ARM and Ayurveda's survival amid governmental cynicism about its value in modern India. These groups and figures in ARM called for a thorough rethinking, and reinvention, of ayurvedic "tradition" that could, in the new century, accommodate the formal integration of Ayurveda and biomedicine in an educational system designed to produce generations of ayurvedic physicians who could skillfully work in both healing traditions.⁵⁰

The modern ayurvedic college syllabus is the product of the Indian Medicine Central Council Act of 1970, which gave the Central Council of Indian Medicine (CCIM) exclusive power to shape the course of study for all aspiring vaidyas. The CCIM's early syllabi from 1971 through its first decade of existence stand as evidence of ARM's maturation, and today it is clear that ARM's integrationist agenda was successful at incorporating biomedicine into the ayurvedic college curriculum. Recent research, however, including the previously cited work of Maarten Bode and Prasan Shankar, Shailaja Chandra, and my own participant-observation at ayurvedic gurukulas in south India, also suggest that many graduates of ayurvedic colleges feel shortchanged by the combination of the two medicines in their BAMS studies. Several college graduates I met at Mookkamangalam told me that the amalgamation of biomedicine and Ayurveda at their colleges produced cohort after cohort of ayurvedic physicians with mastery over neither Ayurveda nor biomedicine. The BAMS degree gives these ayurvedic physicians a basic, perhaps even solid understanding of biomedicine; an Anglicized re-creation of classical Ayurveda; and only a nominal appreciation for the Sanskrit medical classics. Similarly, Shailaja Chandra's 2011 study, "The Status of Indian Medicine and Folk Healing," quotes an ayurvedic college graduate lamenting that BAMS students today graduate "almost empty handed at the end of the programme."⁵¹

For many young ayurvedic physicians in south India today, discontent with training at ayurvedic colleges stems from the absence of adequate Sanskrit studies on the BAMS syllabus. I heard this view many times at Mookkamangalam, and the studies of Chandra and Bode and Shankar also bear out this sentiment. A group of four students I met at Mookkamangalam in 2011 (among them Prathik and Ganesh, whom I quoted in the introduction) collectively opined about the difficulty of pursuing a BAMS degree in twenty-first-century India, where, as Ganesh saw it, "sixty percent of the ayurvedic education was spent learning the same curriculum as the one at medical colleges [allopathic MBBS-granting schools]."⁵² Prathik and two other students, Raju and Virendra, both from north India, nodded in agreement as we sat under a whirring fan in the sitting room of Biju's home, where we'd often gather as the day's humidity lifted and the sun descended behind the paddy. I sat in that room many times with Biju alone and with different ensembles of his

family and students, me typically atop a sturdy wooden hanging bed called an *āṭṭukaṭṭil* (Mal.), and the others on wooden and plastic chairs or the room's slatted sofa bed with the cotton mattress rolled up as a backrest. We invariably discussed Ayurveda. But in this space at the end of a long day's work, when patient arrivals were few and far between, things tended to be less formal and conversation more freewheeling. In Biju's sitting room, we talked about everything from politics to sports, religion, and family life in India and the United States. In 2004, I learned the nuances of cricket in that room, and across the years I stole many post-lunch naps on the *āṭṭukaṭṭil*.

With each new student cohort at Mookkamangalam that I met since 2003, that sitting room was a place where I could ask pointed questions about the activities of the day and the motivations of the students to study with Biju and his mother. It was also the place for Biju and his family and students to question me and probe my reasons for being there year after year. The four men I met in 2011 allowed me to watch their lessons with Biju and observe their conversations with patients for several weeks before Ganesh flatly told me that his BAMS degree was more biomedical than ayurvedic. I asked him if he was being hyperbolic at all, and, either way, if he viewed this as positive or negative in the end. Raju interrupted before Ganesh could answer, pointing out that the CCIM syllabus actually lends their degree more authority than if it were singularly Sanskrit-based learning, giving the BAMS holder greater recognition and acceptance among the general public and maybe, based on some of their professors' collaborations with people overseas, in the global marketplace of medical ideas and research. A few of their seniors, such as Gopal, who introduced me to Bhaskaran in 2003, had parlayed their BAMS degrees and time studying mukhāmukhaṃ with Priyankara into prestigious and lucrative consulting positions with European clients eager to learn about "traditional Ayurveda" as it's laid out in the collections of Caraka and Suśruta. "The western structure and influence of medicine on the ayurvedic syllabus," Ganesh eventually added, "keeps the BAMS degree relevant, and it shows people inside and outside of India that Ayurveda is progressing and changing to keep up with international expectations for medicine."⁵³ The creation of places like the Kerala University of Health Sciences in Thrissur, which combines Ayurveda, biomedicine (including nursing and pharmacology), dentistry, Siddha, and Naturopathy all under one roof, reinforces this perspective.

"Why, then," I asked Ganesh, Raju, Virendra, and Prathik, "did you come to Mookkamangalam if your BAMS degrees have value in India and abroad?" I nudged the four physicians-cum-students to explain why a biomedically-heavy education at the ayurvedic college is problematic and Biju's instruction appeared to somehow function as an antidote to the problems they saw with the BAMS degree. Raju swiftly remarked that "it is about the *saṃhitās*, studied in the Sanskrit language." These students did not go to a gurukula only to learn and make a

lasting connection with what they see as the anchor of their profession's history. To learn Ayurveda mukhāmukhaṃ-style with Biju, in a gurukula setting, distinguishes these young physicians and their healing knowledge from practitioners of biomedicine in India, Europe, and North America as well as from other ayurvedic physicians, Raju explained, "who have not sat with a master teacher of Ayurveda." He continued:

The BAMS degree teaches the Sanskrit classics as history. Here we learn and use these sources every day. Without a deep knowledge of them, we obtain degrees in Ayurveda and feel disappointed about the future of our practice. It doesn't look like the tradition we chose to study.⁵⁴

The disenchantment of these four physicians is not shared by most ayurvedic college graduates in India, however. "The irony of Ayurvedic education," Bode and Shankar concluded in their study in Bangalore, "is that though there are around half a million [BAMS] graduates, most of them practice biomedicine" after graduation.⁵⁵ Unlike the students I met at Shantimana and Mookkamangalam, most of whom told me that they were drawn to gurukula studies to supplement what they perceived as incomplete college educations, the reality is that many BAMS graduates in the current century originally hoped to get into one of the highly competitive biomedical colleges in the first place but did not earn a seat. So they opted for a career in Ayurveda instead. For these physicians, the blended syllabus of the ayurvedic college provides a kind of back door to practice biomedicine.

THE CASE FOR INTEGRATION

The type of Ayurveda that is institutionalized across India's ayurvedic colleges, structured and articulated in the CCIM syllabus, is the outcome of many successes, failures, and concessions during ARM. Between 1890 and 1920, members of ARM initiated fresh and compelling ways to represent Ayurveda to the Indian public. But the movement did not progress with one vision and one voice. It was hardly "a simple, linear isolated process of reviving a pristine, pre-colonial indigenous system," as Uma Ganesan observes, but in fact connected a complicated network of people and organizations, some of which were allied with the (often Hindu) nationalist movements of the day.⁵⁶ People backing integration had to simultaneously appreciate and deride colonial medicine. The unassailable development of biomedicine in India by the beginning of the twentieth century required practitioners of Indian medicines to both differentiate themselves from colonial doctors and find workable ways to combine their healing concerns and practices with those of biomedicine. According to Charles Leslie, the process of integration was basically a *fait accompli*. Ayurvedic vaidyas and Unani hakims had no other choice than to adopt many theories, procedures, and instruments of biomedical science. They had "to do this while maintaining the appearance of loyalty to the categories

of ancient [Indian] thought and humoral pathology.” This exercise in cognitive dissonance, Leslie reasoned, “required monumental acts of self-deception.”⁵⁷

Not everyone who saw the writing on the wall—that the *āyurveda* of the Sanskrit classics was moribund moving into the twentieth century unless vaidyas reformulated it to make sense and operate according to biomedical standards and organization—thought the only conclusion was institutionalized integration of Ayurveda and biomedicine in the ayurvedic college. Ralph Crozier chronicled two opposing groups in the movement: those “who thought traditional medicine could be modernized and those who did not.”⁵⁸ The noticeably smaller of the two groups was a literalist clique fixed on reinstating an alleged precolonial *śuddha* Ayurveda from an imagined golden era, a past that predated Muslim and European empire and imperialism in South Asia. This Ayurveda emerged in the Sanskrit language around the turn of the Common Era with the production of the *Carakasamhitā*. It was taught in gurukulas, where healing knowledge was transmitted by gurus who were practicing vaidyas who could unpack its complicated tracts and theories, and model for their students how to use this knowledge to heal. The more sizable group Crozier described accepted and sought to advance the proposal of reforming Ayurveda by finding ways to combine the best aspects of Ayurveda and allopathy, resulting in so-called *miśra* Ayurveda. This required defending the contemporary utility and translatability of classical *āyurveda*.

The Bengali kaviṛaj Gananath Sen (1877–1944) was a key figure in north India backing ayurvedic reform in the twentieth century. As the inaugural dean of the Ayurveda Faculty at Benares Hindu University (BHU); twice president (1911 and 1931) of the Akhil Bhāratīy Āyurvedīy Mahāsammelan (All-India Ayurvedic Congress); and an Indian physician revered by British authorities with the Sanskrit honorific *mahāmahopādhyāya* (“very great teacher”), he had widespread access to professional and public platforms.⁵⁹ His commanding speeches and writings formed the basic tenets of ARM’s pro-integrationist agenda. Among his most widely quoted statements on the matter, his 1916 keynote address at BHU’s founding ceremony at once asserted the timelessness and value of “Hindu Medicine (or Ayurveda as it is technically called)” for humanity and demanded the tradition’s reform. “When the greater part of the world was submerged in the abyss of ignorance,” he said, gesturing to the collection of Suśruta, it was “the Indian sages who first understood the necessity of dissection of the human body in the education of Physicians and Surgeons.”⁶⁰ To the European colonial doctors and scholars “who have mentioned Ayurveda only to condemn it,” he pointed out that if they simply had a working knowledge of Sanskrit, like compatriots in India had of French and German, they would see the commensurability of ayurvedic and allopathic theories and practices.⁶¹

Its brilliance and saving grace against “the charge that Ayurveda is not a progressive system,” lay within *āyurveda* itself, as established in the Sanskrit texts of the classical era. Sen thought that “effete material [had] crept into and mutilated

Ayurvedic literature . . . which any opponent of Ayurveda could take the pains to gather to scandalize” the tradition. This material “is nothing but interpolation,” he wrote, and “is like the chaff that must be eliminated if the nutritious grains are wanted.”⁶² Jean Langford reads this as a coded message to revive “classical” Ayurveda as a national medicine that was fixed in ancient texts, despite the fact that what was touted as nutritious tended to “overlook intervening centuries of Ayurvedic practice, with all its regional variations, innovations, and fruitful exchanges with Unani and other healing practice.” Sen’s metaphor echoed a lot of revivalist discourse in ARM, Langford continues, which thus “also delineated Ayurveda as the exclusive province of a group of high-caste, Sanskrit-literate pundits,” so that “separating the wheat from the chaff was also a matter of separating the elite from the riffraff.”⁶³ The so-called riffraff, for Sen, were most vaidyas and kavirajs at the end of the nineteenth and beginning of the twentieth centuries. In the face of the powerful and expanding biomedical establishment in India, these practitioners produced “idle pupils or compounders in many cases who are fit to be mercilessly condemned.” They were indolent and conservative and their work stalled progress in the tradition, which, he proclaimed, was “contrary to the liberal spirit of Ayurveda” and had to be overcome to ebb confusion and suspicion about it among the public and colonial authorities.⁶⁴

Gananath Sen’s vision of Ayurveda sought to rally his BHU audience around the flag of ayurvedic revivalism with grand overtures: “We shall not cease in our efforts till we get back our treasures and leave them to posterity re-polished and replenished for the benefit of the world.”⁶⁵ For Sen, a re-polished and replenished Ayurveda had to be *miśra*, and mixed Ayurveda was achievable only if the technical language of Ayurveda made sense in the biomedical idiom. To demonstrate that Ayurveda was analogical to biomedicine, he labored to show that foundational theories in the Sanskrit classics, such as *tridoṣavidyā*, were translatable into English. He believed that rendering classical ayurvedic principles in English, using modern allopathic paradigms, and instilling that translation in the curriculum of the ayurvedic college would advance Ayurveda in the twentieth century as India’s new national medicine. Translation was supposed to facilitate integration.

Sen had his opponents, though, who thought this project would create more confusion and misunderstanding about the value of classical *āyurveda*. In Bengal, for example, Projit Mukharji identifies the writer Shyamadas Bachaspati and his physician son Bimalananda Tarkatirtha (the apparent inspiration for Tarashankar Bandyopadhyay’s award winning novel *Arogya Niketan*) as Sen’s chief detractors.⁶⁶ But these two left behind scarce published material to help us understand their defense of a *śuddha* type of Ayurveda, unlike the Punjabi physician-scholar Pandit Shiv Sharma (1906–80), who did. Sharma resisted translation efforts like Sen’s, defending the view that the practice of Ayurveda ought not adopt or take recourse in any allopathic concepts or therapies. In 1963, he was an integral member of a Gujarat Ministry of Health and Labor sub-committee, the Shuddha Ayurvedic

Education Committee, chaired by Mohanlal P. Vyas. The committee's self-imposed burden is clear from the opening statement of the *Vyas Report*:

... to draw up a curriculum and syllabus of study in pure (unmixed) Ayurveda extending to over four years, which should not include any subject of modern medicine or allied sciences in any form or language.⁶⁷

Much of the *Vyas Report's* position on the ayurvedic college syllabus, as Dominik Wujastyk explains, was written entirely in Sanskrit.⁶⁸ Working in the original language of the ayurvedic classics mattered deeply for champions of *śuddha* Ayurveda, and the untranslatability of *tridoṣavidyā* was frequently a case in point about why translations in other languages were problematic. In the widely read, *The System of Ayurveda* (1929), Sharma deliberately “tried not to confuse the term ‘humour’ with the *doṣha* as the former is extremely inadequate to convey the full sense of the latter, which is more scientific, though a bit more complicated of the two.” When, he lamented, “foreign scholars have misguided themselves by considering the two terms identical,” they fail to capture the connotative power of Sanskrit to blend metaphysical and physical meanings in single ideas. “This misconception ... accounts for the uncalled for contemptuous and unhealthy criticisms levelled against Ayurveda by certain writers, mostly foreign.”⁶⁹

Shiv Sharma acknowledged Gananath Sen's great toil to show the compatibility of Ayurveda and biomedicine. He shared Sen's appreciation for the far-reaching and effective medical knowledge the classical Sanskrit authors conveyed, and after a twenty-five-page explanation in *The System of Ayurveda* of how *tridoṣavidyā* antedates and covers biomedical theories of endocrinology and bacteriology, he suggests it also bests them: “*Tridoṣha* as it is today, and as it has ever been, is a genuine combination of the two Western theories in their most salient forms.”⁷⁰ Translation of the Sanskrit language of *āyurveda*, he ultimately believed, distorts the completeness of this healing tradition. Sen made similar arguments, suggesting, for example, that the progenitors of humoral theory in ancient Greek and Roman medicine “borrowed the idea [of the humors] from Ayurveda, [and] probably failed to grasp the true meaning of the theory.”⁷¹ But most pro-integrationists were also dogged pragmatists, and Sen was no exception. They wanted to imagine a contemporary and future life for the healing magnificence of classical *āyurveda* in modern India, and to do that they felt they had to demonstrate the tradition's congruity with, and ability to adapt to, biomedicine by making itself intelligible in biomedical terms.⁷² Sen thus unabashedly formulated capacious English equivalencies (not translations) for the *doṣas*: typically translated as the “wind humor” in English, he declared *vāta* to be the “function of life as manifested through cell development . . .”; *pitta* was not the “bile humor,” but rather “the function of metabolism and thermogenesis . . .”; and to *kapha*, ordinarily the “phlegm humor,” he ascribed “the function of cooling and preservation (thermotaxis or heat regulation). . . .”⁷³

Sen's work was influential and taken up by many others alongside and after him. By the time the ayurvedic college syllabus was undergoing ratification in 1971 by the CCIM, just like the one used in ayurvedic colleges today, BAMS students were required to study biomedically-named subjects like anatomy, physiology and pharmacology. These are not independent divisions of medicine in the Sanskrit classics, even if, clearly, bodies, biology, and the actions of drugs are crucial to classical *āyurveda*. Efforts to reorganize the Sanskrit *saṃhitās* using biomedical terminology complicates this and reveals the fraught nature of translation. Historically these divisions were not taught as independent units in south India's ayurvedic gurukulas, which instead operate according to a curricular logic that examines and explains health and sickness less by dividing up knowledge of the body and healing, and more by a layered philological method that teaches ways of knowing, or epistemologies like *tantrayukti*, for identifying illness and remedying ailing bodies based on symptoms and factors of social and geographical conditions.⁷⁴ In the collegiate system that sprung up in metropolises of the Raj in the first four decades of the twentieth century, reaching fifty-seven urban-based colleges by the time of Independence, branches and sub-branches of biomedicine were given Sanskrit names, and this convention is still in place today.⁷⁵ Thus the CCIM syllabus in the twenty-first century has courses on *racanā śārīra vijñān* (anatomy), *kriyā śārīra vijñān* (physiology), and *dravyagūṇa* (pharmacology).⁷⁶ Although the courses were always conducted in English, and to many these Sanskrit-veneered names were obvious neologisms, this categorical presentation had (and has) the effect of yoking biomedicine with Ayurveda's antique Sanskritic core. Translating English subject names into Sanskrit also gave (and gives) biomedical terms an air of compatibility with Indian indigeneity and suggested (and suggests) a complementarity of the two traditions.⁷⁷

If Gananath Sen's argument and pathway forward for Ayurveda's integration with allopathy, and his imprint on the eventual CCIM college syllabus, was by and large unexcelled, his blueprint for modern Ayurveda was indebted to other similarly minded and influential revivalists writing on the matter before him, such as H.H. Maharaja Thakore Shri Sir Bhagwat Singhji Sagramji Sahib Bahadur (1865–1944), Maharaja of Gondal from 1869–1944 (hereafter, Bhagvat Singhji). Born in the small princely state of Gondal of the Kathiawar Agency of the Bombay Presidency in British India, Singhji was a highly educated and cosmopolitan young man. He attended college in Rajkot between 1892 and 1895, after which he went to medical school at the University of Edinburgh, obtaining an M.D. and an M.A. in surgery, and later receiving an appointment as a fellow in Edinburgh's Royal College of Physicians. He was a devout Hindu and a biomedical doctor, and his writing embodies the nationalist conflation of Hinduism and science as well as the integrationist agenda of ARM.

With a rhetorical style reminiscent of Orientalists a century earlier, in 1896 Singhji wrote a widely fêted book, *A Short History of Aryan Medical Science*. The book is a clarion call to celebrate what he saw as *the* ancient healing tradition of

India, as it's expounded in the Sanskrit medical classics and, given this medicine's potency, to revive it as India's national medicine moving into the new century. The book provided intellectual fodder for the type of ayurvedic revivalism that Gananath Sen promoted and supplied expressions of Vedic science and Hindu nationalism that resonated with some in the socio-religious reform and independence movements in the last quarter of the nineteenth century. The book argues that the Aryans were presumed heralds of India's ancient civilization, and they were "the most enlightened race in the dawn of history."⁷⁸ Not only did they establish the oldest Sanskrit literature, the *R̥gveda*, providing the ritual and discursive bases for modern Hinduism, they also existed, Singhji declared, "when the state of civilization was so perfect, and when all sorts of useful sciences were regularly studied." Hence, "there should be no wonder if the science of Medicine too received its share of attention. The Science forms part of the Vedas, and is called '*Ayur Veda*' or 'Science of Life.'"⁷⁹ *Aryan Medical Science* presents a narrative that was recast among anticolonialists and nationalists during the last decades of the Raj. In brief, the idea is that beginning in the Vedic era, peaking with the Sanskrit epics, the *Mahābhārata* and *Rāmāyaṇa* (ca. 300 BCE—300 CE), Ayurveda was a pure and faultless Hindu healing science.⁸⁰ Singhji portrayed Ayurveda up to the tenth century CE as a productive form of healthcare that flourished under the patronage of Hindu kings. But "during Mahomedan rule (A.C. 1001–1707)," he argued, "Indian medicine began to show signs of decay [because] no art or science can flourish without the moral and material support of the government of the day. The Mahomedan conquerors brought with them their own Hakeems or doctors," lending their support to a different and relatively new healing tradition on the subcontinent, Unani, instead of India's alleged native Hindu medicine, Ayurveda.⁸¹ Extensive Muslim rule in India led to a drawn-out period of underdevelopment in Ayurveda. As the Delhi Sultanate (1206–1526) gave way to the Mughal Empire (1526–1857), Singhji's narrative eventually has Unani edged out by biomedicine, initially when the EIC's presence expanded across the subcontinent and then when the British Crown took control of the region.⁸²

Singhji made the case that to thrive again in the twentieth century Ayurveda needed to regain the social significance it had in the premodern past, when India was a Hindu nation ruled by governments that supported Hindu science. For him an obvious, though by no means simple, solution was to re-claim control of the subcontinent in the name of Hinduism, recreating the celebrated era of the Aryans. Even if ayurvedic revitalization was merely a secondary offshoot of Hindu nationalism, as David Arnold has suggested, it was a potent anticolonial arrow in the quiver of nationalist movements. As the medical science of the Aryans that classical Hindu kings sustained, Ayurveda became an easy variable to plug into a calculation concluding that India before the Muslims and Europeans was a Hindu nation. By reproducing a literal Hindu-dominant *stān* in the modern era, Singhji's thinking went, the scientific splendors of the Vedic civilization, like Ayurveda, would blossom again. Most ayurvedic practitioners at the time realized

the proposition of ousting the British to establish a Hindu Raj in the new century was naive and, more importantly, culturally tone deaf: to the religious diversity in South Asia; to the region's modern traditions of medicine and science that were forged in cross-cultural exchange; and to the increasingly powerful oppositions to colonialism in the region following the 1857 Indian Rebellion, remembered by generations of anti-colonialists as India's "First War of Independence," in pursuit of self-rule and secular democracy. A less all-or-nothing plan was in order, and in spite of his own effusive overtures to Aryan (neo-Hindu) medical ingenuity, Singhji struck a pragmatic balance by the end of his book. He did not call for an overthrow of colonial medicine as much as he attempted to craft a plan to preserve and sustain India's classical life science by making it intelligible in a new, up-to-date cosmopolitan idiom.

Aryan Medical Science presents numerous contestable assertions about the antiquity of India's healing expertise, predating medical knowledge in Europe, and about Ayurveda serving as a source of medical knowledge for Arabic medicine as well.⁸³ The book also shows Singhji's practical awareness of his cultural surroundings and the spirit of ARM. He knew Indians were growing comfortable with biomedical therapies. Although in Singhji's hands the matchless Aryan foundations of modern Ayurveda appeared to offer effective healthcare equal to (if not superior in some cases, such as certain forms of surgery established in the *Suśrutasamhitā*) anything Hippocrates or Galen drummed up, by the end of his book his call to resuscitate the former glory of Aryan medical science in India strikes a distinctly integrationist tone. His writing becomes less strident and more conciliatory, and his rhetoric resembles the speeches and public tracts that energized ARM at the turn of the twentieth century. Compromise and entreaty dapple his prose:

The aim and object of the two systems are the same. . . . Let the Western and Eastern Schools of Medicine then join hands and reconcile themselves to each other wherever possible. Let them meet as friends, and not as foes or rivals. Under the present circumstances, the East has much to learn from the West, but the West, too, may have something to acquire from the East, if it so chooses. If the medical Science of India, in its palmy days, has directly or indirectly assisted the early growth of the Medical Science of Europe, it is but fair that that the latter should show its gratitude by rendering all possible help to the former, old as it is, and almost dying for want of nourishment. The Indian Medicine deserves preservation and investigation.⁸⁴

Singhji and others after him widened their aspirations so that practitioners could imagine Ayurveda in a polyperspectival and internationalist spirit. In his BHU lecture, Gananath Sen also clearly saw the need for collaboration between practitioners of the two medicines: "An open-hearted and liberal co-operation of both [practitioners of Ayurveda and allopathy] should be a source of great help to the profession as a whole and to the sufferers entrusted to our care."⁸⁵ *Aryan Medical Science* likewise attempts "to re-establish Ayurveda as the popular and culturally appropriate alternative to allopathy," as David Arnold reads it, while at the

same time “seeking to supplant what was seen as ignorant and superstitious folk practices.”⁸⁶ At the end of the day, Singhji was an integrationist. His shift from a staunchly homegrown position colored by nostalgia and notions of premodern Indian exceptionalism to a visualization of Ayurveda and biomedicine as friendly and compatible traditions gestures to the integrationist agenda during Ayurveda’s revitalization. The aim was pragmatic, always seeking to ensure Ayurveda had a meaningful position in Indian society in the approaching century.

The oratorical tone Singhji and Sen set for the revitalization of Ayurveda shaped a view of coexistent if not cooperative development of biomedicine and Ayurveda for the Indian population’s healthcare needs. Their observations were considered progressive among many in the ayurvedic community. Several people and institutions in south India advanced ARM in similar ways, underscoring integrationism as the most forward-thinking prospect to maintain India’s indigenous medicines alongside biomedicine well into the twentieth century. Among them, the industrious careers of three people stand out, for their work launched indigenous physicians’ organizations, research networks, and schools that concretized *miśra* Ayurveda across India’s southern states.

Kerala lays claim to India’s first ayurvedic college, Government Ayurveda College of Thiruvananthapuram, as it is known today. Started by students of the famous Malayali vaidya Paccumootatu, by most accounts the school was founded in 1889 as the Āyurveda Pāṭhaśāla of Travancore.⁸⁷ The name was changed in 1917 to His Highness the Maharaja’s College of Ayurveda. Up to this time, leadership of the Āyurveda Pāṭhaśāla of Travancore was overseen by the so-called Nattuvaidyasala Superintendent, a position that reflected three decades of the institution’s mission to create a curriculum with parity and coherence across classical Sanskrit-based *āyurveda*, ARM’s mixed curriculum for Ayurveda, and therapeutic specialties unique to Kerala (*nāṭṭuvaidyam*, Mal.). The Nattuvaidyasala Superintendent became the Director of Ayurveda together with the institutional name change in 1917, effectively removing the curricular distinctiveness of the Travancore school and aligning it at the administrative level with educational trends to standardize Ayurveda countrywide.⁸⁸ The Travancore Āyurveda Pāṭhaśāla initially offered a four-year degree known as the “Vaidya Test” that was open to upper-caste students exclusively.⁸⁹ Practitioners with prior training in gurukulas were permitted to take the Vaidya Test, indicating to the institution’s initial openness to experiment with a polyvalent understanding of and approach to learning Ayurveda. In the mid-1890s, when the Mumbai Vaidya Sabhā and indigenous physicians’ organizations in north India were hard at work articulating and advocating ARM’s integrationist agenda, ayurvedic physicians in Kerala were already working on best practices for a mixed ayurvedic education in the next century.⁹⁰

Few ayurvedic leaders contributing to ARM not just in the south, but across India, matched the labors of Kerala’s P.S. Varier (1869–1944). In his youth, he studied Ayurveda in a gurukula with a famous Namboodiri physician, Kuttanchery

Vasudevan Mooss, and by age seventeen he had also been trained in biomedicine. By age thirty-three, in 1902, he developed the now-famous ayurvedic dispensary Ārya Vaidya Śāla in Kottakkal, which since its inception has been the touchstone for ayurvedic pharmaceuticals in India and abroad.⁹¹ In that same year, with a group of Malayali activist-vaidyas, Varier secured financial backing from the Zamorin of Calicut, Manavikrama Ettan Raja, to establish the Ārya Vaidya Samājam. This “community of esteemed physicians” (*ārya vaidya samājam*) offered gurukula instruction and clinical care at Ārogyacintamaṇi, the pharmacy of Vellanisherri Vassunni Mooss in Chalappuram. In 1913, the Samājam was renamed Keraliyya Āyurveda Samājam, accentuating the type of ayurvedic healing, unique to Kerala, the community endorsed. Varier assumed leadership of the Samājam at this time, and its headquarters was moved from Chalappuram to Cheruthuruthy, located between the Princely States of Kochi and Malabar, where India’s first ever public ayurvedic hospital is reputed to have opened on the banks of the Bharatapuzha River.⁹²

Throughout his lifetime, Varier was outspoken about the need to improve ayurvedic education and eliminate negligence among vaidyas in his home state, and he was a staunch champion of *nāṭṭuvaidyaṃ*, often known today as “Kerala Ayurveda.” To guarantee that ayurvedic physicians in Kerala could be trained according to his own high standards, in 1917 he founded the Āryavaidya Pāṭhaśāla in Calicut, which he financed with resources from his pharmacy in Kottakkal. In 1924 he moved the Pāṭhaśāla to Kottakkal, renaming it Vaidyaratnam P.S. Varier (VPSV) Ayurveda College, and eventually adding a Charitable Hospital to its campus. Today Kottakkal’s VPSV Ayurveda College is affiliated with the University of Calicut, and it is widely recognized as one of the premier institutions in India to study Ayurveda. Like several of the Mumbai Vaidya Sabhā’s founding vaidyas,⁹³ P.S. Varier is remembered in Kerala and throughout India as a key figure, a “critical insider,” as Varier’s biographer Gita Krishnankutty put it, within the ayurvedic community who helped save the tradition from becoming outdated in the twentieth century. Because of his erudition and wide-ranging medical interests, his message of medical reform and integration made sense to Indians and non-Indians alike. He had the acuity to identify aspects of Ayurveda that were failing and the wherewithal to cultivate resources to rejuvenate the tradition by “integrating it with western epistemology,” in language that portrayed Ayurveda as indispensable to Indian character and culture.⁹⁴

In Kerala’s neighboring state to the north, Karnataka, from 1892 Mysore’s “Indigenous Hospital” provided both ayurvedic and Unani medicines to patients. The hospital was received positively by indigenous physicians and Kannadigas at first. Over time government pressure to be more progressive forced hospital administrators to adopt an integrated approach to healthcare in step with ARM’s vision for a mixed Ayurveda that, Guy Attewell observes, produced “an ‘indigenous’ medicine aligned with disciplines of modern medicine.”⁹⁵ To this end, the spirited Kannadiga integrationist and social worker, Adya Anantacharyaru (1883–?), helped systematize Ayurveda in Karnataka alongside the nationwide project.

He was one of the founders and a former president of the Nikhila Karnāṭaka Āyurveda Maṇḍala (All-Karnataka Ayurveda Group), which promoted India's indigenous therapies, chiefly Ayurveda but also Yoga, by ensuring they adhered to western scientific standards. Anantacharyaru published a Kannada version of the ayurvedic journal co-founded by P.S. Varier, *Dhanvantari*, and he translated the Sanskrit classics into Kannada. In 1954, he founded an Ayurvedic College and the Nutan Ayurvedic Pharmacy at Bijapur, and in 1967 he was honored by the Karnataka Government with the state's second highest civilian award, the Rajyotsava Prashasti Award, for his tireless social activism and commitment to the advancement of Ayurveda.⁹⁶

To the east of Karnataka, in Andhra Pradesh, the scholar-reformer Divi Gopalacharlu (1872–1920) had been a student of Ayurveda at Mysore's Sanskrit College in the 1890s. He travelled widely in colonial India, observing and documenting the different types of ayurvedic practices and research across the country before becoming the resident physician of the Theosophical Society of Bangalore. He made his name at the end of nineteenth century by creating and manufacturing two botanical therapies—*haimādi pānakam* and *śatadhauta ghṛtam*—which saved countless people from dying during the plague that ravaged Bangalore in 1898–1899.⁹⁷ Gopalacharlu also set up an ayurvedic research laboratory and pharmacy in Madras, called Āyurvedāśrama, where his research team tested the efficacy of ayurvedic drugs that were shipped to the lab from all over India. He started Āyurvedāśrama as a resource to look for concrete evidence that the Sanskrit medical classics contained rigorous and valid therapeutics on par with biomedicine.⁹⁸ Gopalacharlu and his colleagues were careful to present the foundations of Ayurveda in straightforward English terms without resorting to technical jargon and Sanskrit terminology. This tactic engaged rather than alienated European doctors, and it opened up space to make the case that Ayurveda could be rendered intelligible and shown to have methods of investigation and knowledge proportionate to biomedicine. As Attewell describes it, Gopalacharlu's "institutions and innovations stood for 'progressive' ayurveda, a modernity for ayurveda which recognized the values of western medicine but was not subordinate to it, if anything its claims were superior."⁹⁹ Always trying to represent Ayurveda as an equal to biomedicine, Gopalacharlu echoed the discursive style of many of ARM's leading contributors who struggled to oppose European biomedicine (even if only symbolically), while at the same time going to great lengths to professionalize vaidyas according to biomedical standards of research and clinical practice. Unlike some of his integrationist peers in south India, however, Gopalacharlu's legacy is also academic and philanthropic: he left a generous amount of money in his will to fund university chairs in Ayurveda and scholarships for students at Government Ayurvedic Colleges in Mysore and Madras.¹⁰⁰

If spokesmen like Singhji, Sen, Varier, Anantacharyaru, and Gopalacharlu provided the discursive grist for ARM's efforts, the movement's millwork was often carried out by professional organizations that could levy their cultural and

political capital to introduce on-the-ground changes in ayurvedic education and healthcare. Aside from the societies with which each of the three aforementioned men from south India were involved, the Mumbai Vaidya Sabhā was enormously influential in shaping of the public's reception of Ayurveda and the institutionalization of ayurvedic education into a collegiate scheme as the nineteenth century faded and the twentieth began. The Sabhā itself was modeled like a British colonial organization. It had an elected president and two under-secretaries, who oversaw the mobilization of ayurvedic physicians across India, with perhaps the largest inroads of influence in Maharashtra, Gujarat and Kerala, to create biomedical-style pharmacies, hospitals, and colleges. The Sabhā took a consistently hardline integrationist stance, pragmatically claiming that any attempt to flat-out oppose the supremacy of colonial medicine was futile, since, as Madhuri Sharma noted, the biomedical institution in India operated with "the moral and economic force of imperialism."¹⁰¹ At the end of the nineteenth century the economic force and moral dynamism of biomedicine had already won over many Indians, who during the Raj had accepted and come to expect western models and standards of sanitation, vaccination, and healthcare and, contrastingly, increasingly objected to practices and therapies of India's indigenous medicines. The Sabhā's efforts to assimilate curricular aspects of biomedicine in the educational ambit of Ayurveda were critical to manage the worsening popular opinion of ayurvedic physicians, who since the 1860s had been regularly condemned as quacks by colonial administrators and doctors. In 1907, to control and shape Ayurveda's public-facing image, the Sabhā helped establish the Akhil Bhāratīy Āyurvedīy Mahāsammelan (All-India Ayurvedic Congress), which rapidly became, and remains today, one of the most influential ayurvedic associations in India.¹⁰²

Since the start of the Mumbai Vaidya Sabhā in September 1890, integrationism in ayurvedic education continued apace in colleges with mixed curricula. But in 1912 the ability of practitioners of India's indigenous medicines to treat patients was greatly curtailed. That year the GoI passed the Bombay Medical Registration Act, reviving a proposal from 1909 which threatened the legality of non-biomedical therapies. The effect of the act on the state of indigenous medicines in colonial India, K.N. Panikkar wrote, was devastating.

Apart from constituting a medical council, the Act provided for the registration of medical practitioners. Only those who were registered under the Act were now to be considered competent to issue medical certificates or eligible for appointment to public offices. The registration was open only to 'Doctor, Bachelor and Licentiate of Medicine, and Master, Bachelor and Licentiate of Surgery of the Universities of Bombay, Calcutta, Madras, Allahabad and Lahore and holders of a diploma or certificate from a government medical college or school.' The Act thus constituted a body of 'legally qualified medical practitioners' exclusively trained in western medicine.¹⁰³

The Bombay Act delegitimized the practice of Indian medicines and thus barred indigenous practitioners from state support. This prospect was alarming for those,

like Bhagvat Singhji, who thought the lack of state support in the medieval period explained Ayurveda's disuse and lack of development. If the Act did not ban the practice of Indian medicines outright, to bar these healing traditions from state sponsorship did block practitioners of these traditions from gaining legal approval. Because the Act appeared when India's indigenous physicians were working to reverse their increasingly negative public reputations, its potential effect on popular confidence was seen as especially worrisome.

After the Bombay Medical Registration Act, many ayurvedic physicians felt that future administrative actions would become more aggressive and eventually even outlaw the practice of Ayurveda. The Bombay Act was a clear sign that integration was inevitable, and K.N. Panikkar helpfully reminds us that ARM progressed by "opposing the cultural ambience created by colonial medicine," while at the same time "incorporating elements of western knowledge perceived as superior and yet undeveloped in the indigenous system."¹⁰⁴ Accordingly, even while some felt "so marginalized that they sought survival more in resistance than in collaboration," Deepak Kumar has shown that most Indians felt that "total acceptance of new knowledge did not mean total rejection of the old and favoured a new synthesis of western and indigenous medical systems."¹⁰⁵ But if ARM was going to grow and earn governmental support for its schools and practitioners, three broad problem areas were quickly highlighted as important to fix.

First, the image of the ayurvedic physician needed public rebranding. At the beginning of the twentieth century, the "traditional vaidya" was often portrayed as amateurish and unaware of the knowledge contained in the Sanskrit medical classics—knowledge that by itself, ironically, at this time was also seen as insufficient to be a competent physician of Ayurveda. In 1916, P.S. Varier wrote that ayurvedic reform was long overdue in a stinging editorial, "Āryavaidyaparīṣkāraṁ" ("Reform of the Esteemed Medicine"), in *Dhanvantari*, the Malayalam journal he founded in Kottakkal in 1903 with his cousin, P.V.K. Varier. "The esteemed medicine must update" (*āryavaidyatte pariṣkarikkanaṁ*, Mal.), he stridently begins the piece, after which he moves on to say that vaidyas of his day were not as proficient with the Sanskrit language and Sanskrit medical literature as they were in previous generations. Many were ill-informed about ayurvedic theory and methods, he wrote; they circulated prescriptions that were poorly prepared, often borrowed, composed of unknown or inadequate substances; and they administered their remedies to unsuspecting patients. In contrast to the basic tenets of the Sanskrit classics, he lamented that the early twentieth century vaidya had become a moneygrubber, not a healer, and thus the Indian population had every right to dismiss Ayurveda as illegitimate if its practitioners continued down their then-current paths.¹⁰⁶

Second, the materia medica needed to produce first-rate ayurvedic drugs was of poor quality or simply unavailable. The 1923 *Usman Report of the Committee on the Indigenous Systems of Medicine* commissioned during the diarchic Madras Presidency addressed this matter head on. In this report, committee chair, hakim

K.B. Muhammad Usman, and his team described a scenario in which a lack of state sponsorship had hindered the ability of ayurvedic pharmacists to cultivate, mix, and disseminate high quality medicines. At the same time, expanding state-supported biomedical dispensaries outshone ayurvedic pharmacies and took away much of their business.¹⁰⁷ In south India, P.S. Varier's pharmaceutical project, Ārya Vaidya Śāla, experienced similar problems early on, anticipating the *Usman Report's* bleak outlook for the future production and manufacture of ayurvedic drugs. Varier worked with special herb collectors and growers to procure the best available herbs in Kerala. But rapid development in the state and neighboring Karnataka and Tamil Nadu caused the destruction of many of the plants he insisted were necessary to produce the best remedies. Thus, in 1934 he set up a 115-acre garden about thirty kilometers from the Ārya Vaidya Śāla where he would produce the precise plants he wanted. This garden continues to supply the Kottakkal pharmacy with over four hundred botanical varieties that go into the dispensary's pharmaceuticals, all of them carefully cultivated according to Varier's initial demands. Today Ārya Vaidya Śāla's medicines are widely acknowledged as the most reliable and consistently manufactured ayurvedic pharmaceuticals in India.¹⁰⁸

But few drug manufacturers in India have been able to match the consistently high standards that Ārya Vaidya Śāla has managed, and it is common to experience inconsistent qualities of ayurvedic drugs from one pharmacy to the next in individual states and across the country. Ārya Vaidya Śāla is a particular source of pride among Malayalis, and most of the ayurvedic physicians and students I write about in this book have told me that they prefer not to use any other ayurvedic drugs. The reputation of the pharmacy's superior medicines actually extends well beyond India, and one can get them fairly easily in North America today. Nevertheless, the problem of poor ingredients and inconsistent remedies that P.S. Varier identified a century ago has not been fixed in the long wake of ARM. It persists today in large part because there are innumerable manufacturers claiming to produce ayurvedic drugs and no national regulatory body that rigorously oversees manufacturing and pharmacy standards in Ayurveda in India.

Third, Ayurveda's educational system was considered outdated, ineffective, and far too reliant on the Sanskrit classics to be relevant. As we have seen, many believed that to standardize and institutionalize integrated Ayurveda in the twentieth century, the two-thousand-year-old gurukula model of education had to be replaced by British-style colleges for training physicians. In contrast to the gurukula's use of the Sanskrit classics for education and treatment, colleges were designed as suppliers of a revitalized and modern Ayurveda that was equally indigenous and precolonial as well as cosmopolitan and competitive with biomedicine. For many physicians and students of Ayurveda today, at colleges and gurukulas, what's often seen as ayurvedic "tradition" is directly linked to the Sanskrit classics. Gurukulas in Kerala continue to teach the classics and use them to treat patients, whereas a requirement expecting any kind of mastery of Ayurveda's classical literature has

all but dropped out of the college, where the Sanskrit classics are taught as history rather than self-sufficiently usable literature, symbols of India's premodern healing virtuosity rather than practical resources for everyday consultation and clinical use.

INTEGRATIONISM TODAY

Thus far, this chapter has focused primarily on the past. These historical considerations are useful to make sense of what I have observed in the field in south India since 2003. What began as an ethnographic project intended to describe and analyze the practice of texts in contemporary Ayurveda—or, to explain what vaidya-gurus in south India do with Sanskrit texts when they train physicians and treat patients—merged with a study of the role of Sanskrit studies at ayurvedic colleges and gurukulas, and then led me to the political underpinnings of the present ayurvedic college syllabus in India. I conclude this chapter by reflecting on the people and the field that informed and led me to the foregoing historical study. If, as I hope, history can illuminate the political practicalities underlining the colonial and postcolonial past of ayurvedic education, fieldwork can show how traditions are formed in the nebulous spaces of national and local memories and reveal how these memories suggest that people always inhabit multiple modernities as they bring events of the past to bear on their lives in the present.

Because intensive training in the Sanskrit classics is no longer part of the ayurvedic college curriculum, many of the gurukula students in south India I met claim that intensive study of Vāgbhaṭa's *Aṣṭāṅgahr̥daya*, in a traditional setting and manner—face-to-face (*mukhāmukham*) with a guru, re-creating the *guruśiṣyasambandham* described in old texts—might begin to rectify what they consider to be gaps in their ayurvedic knowledge. Any breach that is detected in the education of the twenty-first century ayurvedic college, as cohort after cohort of students at Mookkamangalam impressed upon me, is born of the CCIM's syllabus. This course of study retains a place for Sanskrit studies that is largely nominal, and what remains in the education of ayurvedic physicians today is there merely to underscore the tradition's predominance and development in premodern India.

Three of Biju's students at Mookkamangalam in January of 2013 tried to illustrate for me the lasting impact of ARM's integrationist advances in the nineteenth and twentieth centuries by explaining the minimal attention given to Ayurveda's classical literature in the current BAMS degree. They told me a story about a case in 1997–1998 when the required Sanskrit exam and one hundred hours of Sanskrit coursework on the CCIM syllabus were suspended at an ayurvedic college in Karnataka. "Because the college's administrators got so many objections from students about the [Sanskrit] requirements," explained Smita, a twenty-five-year-old Malayali woman, "they were compelled to listen." Smita had been studying with Biju for three and half months when she told me this. She had tried to get into a

biomedical college but didn't earn a seat, and thus took enrollment at an ayurvedic college near her hometown of Ernakulam. A career in Ayurveda as a back-up plan to a failed attempt at a biomedical education is fairly common in south India today. The fact that many ayurvedic college students did not have their hearts set on studying Ayurveda, Smita told me, explains why the idea of having to learn Sanskrit to study selections of old texts that might not be useful to one's future career is often onerous for BAMS students. Relentless student objections to the Sanskrit requirement pressed the Karnataka college to "determine that the Sanskrit exam and coursework were unnecessary, because," she continued, "the administration said Sanskrit was a 'non-medical subject,'" adding air quotes to underscore her disagreement with the college leadership's position. "So, they removed that requirement from the syllabus!" exclaimed Yashoda, who had also been at Mookkamanglam the past three and half months studying with Biju. She was a year younger than Smita, also from Kerala, and Smita's former classmate at college. She added that "the decision to remove the Sanskrit requirement was well-received by most students . . . *until* . . ." She paused, with an uneasy smile on her face, glancing at Smita. She seemed unsure about whether to continue the story. But Smita nodded, nudging Yashoda to continue. ". . . *Until* those students graduated and tried to register as doctors with the Karnataka Practitioner's Board. It did not recognize their degrees because they hadn't written the Sanskrit exam."¹⁰⁹

Smita and Yashoda tried to recall specific details about this incident, which occurred when they were both quite young. What they knew about it was gathered second-hand. Biju and a third student, George, a recently married, late-twenties Malayali grad student at an ayurvedic college in Thrissur, explained that the students who were denied their licenses protested vociferously. "It was actually an unfortunate scene," George said. "The students might not have wanted to study Sanskrit, but the school shouldn't have compromised. Eventually, the story reached a senior member of the Karnataka Legislative Assembly, who opened an investigation." Biju added that he remembered hearing about the Sanskrit exam debacle when it was happening. In 2013 when I was learning about this story for the first time, Biju had been the doyen guru at Mookkamangalam for about five years, allowing Priyankara to teach and see patients part-time. He filled the role of guru assertively and energetically. He was thirty-four years old, but in 1997–1998 he had been nearly twenty and already had several years of gurukula training with Bhaskaran. The Karnataka case had intrigued him. "My mother and grandfather spoke about it," he told me. "The way the college distanced itself from Sanskrit, in defiance of the CCIM, it was big news." Biju and each of his students knew or knew about someone who was associated with the event. George made sure I understood that the students involved in this scandal in Karnataka were understandably distressed, that the incident even all these years later was not good for their careers.¹¹⁰ After explaining that I understood, and I would treat the story with discretion, the topic had clearly run its course. We moved on to a patient

case study that Smita wanted to discuss with Biju. Only later, after the students left and Biju and I were alone talking informally before I left for the night, did it resurface.

When Biju's students had retired for the day, if we weren't relaxing in his sitting room, around dusk he and I regularly took walks through the rice paddy that stretched on and on behind his house, winding all the way to Thrissur City. That's what we did after George, Smita, and Yashoda went home that evening. I walked along that paddy trail alone and with Biju dozens of times, occasionally also with his students and others. I'll never forget the first time I walked through Mookkamangalam's mango grove to the paddy trailhead. I was with Biju and his sister Devika, who gently warned me to watch out for snakes, which apparently dart here and there across the trail when the sun starts to go down. It's not uncommon for people to get bitten, she casually informed me, adding that many snakes in this region of central Kerala are poisonous. Though I never actually encountered a snake on this beautiful trail behind Mookkamangalam, Biju often pointed out many that somehow seemed to escape my view. So, I always sensed their presence and felt a little vulnerable to the possibility of a snakebite with my feet covered only in flip-flops.

Biju and I entered the rice fields that evening as the sun's heat lifted and the sky dimmed. White egrets dotted the wavy green rice stalks. Unprompted, he returned to the story about the ayurvedic college in Karnataka. He could tell I had been intrigued when Smita brought it up, and he wanted to round out some of the details that his students had left out. He told me that the students and administrators at the school were ultimately relieved to resolve the issue, and the BAMS degrees were finally certified. "Of course, the students still had to fulfill the Sanskrit requirement on the syllabus," he added, as if to signal that for all the non-use of Sanskrit at ayurvedic colleges today, the language and literature continues to carry cultural weight. He told me the college eventually agreed to conduct separate exams in Sanskrit ex post facto for the students affected by, on his view, "the administration's initial poor decision." The students' grades were retroactively added to their transcripts, and each of them were properly registered with the Practitioner's Board. Whether this incident was an isolated event, or if it in fact occurred in the way it was reported to me, I still have not been able to determine. All of Biju's students during my stay at Mookkamangalam in 2013 knew something about this story, though none of them seemed to have all the details. They were fairly certain about the story's veracity, and even though at least four other people I asked about the story confirmed its authenticity, at present I have not been able to find any solid evidence of the story in print. Since 2013, I have heard stories of other ayurvedic colleges whose administrators have done similar things. The Karnataka case, however true it is, points to a general reality, and perhaps more importantly *a perception about a reality*, regarding the place of Sanskrit in ayurvedic education today: serious study of Ayurveda's classical literature has greatly diminished in

ayurvedic colleges, and many college administrators and students do not see this as a problem.

Attempts to lessen or jettison Sanskrit studies from ayurvedic colleges at the end of the twentieth century are unsurprising when a large percentage of their students chose Ayurveda as a career only after failing to matriculate into biomedical schools. For these students, the biomedicalization of Ayurveda is desirable and, increasingly, beneficial to careers that will utilize biomedical *materia medica* and tenets of allopathy as much as, if not more than, classical *āyurveda*. Time spent with Ayurveda's classical literature, particularly in a difficult language with which students nowadays often have little or no ability when entering college, can interfere with this desire and eventuality. The circulation of the Karnataka story, irrespective of its reliability, appears to be a contemporary expression of earlier struggles to visibly lessen the theoretical and practical distance between allopathy and *āyurveda*. A story about college students and administrators downplaying the utility of Sanskrit in the BAMS degree is part of the long-unfolding narrative in India about whether or not epistemic aporia between these two medicines can be resolved under the title "Ayurveda." In the 1970s, the CCIM employed ayurvedic physicians to engineer a syllabus, for example, with theoretical and technical equivalencies among the two medicines by translating resources from Sanskrit into English, whereas earlier ayurvedic reformers took the opposite tack by translating English resources into Sanskrit, such as the "Sanskritized" textbooks of P.S. Varier and Gananath Sen, to which I return momentarily. Concern about the workability of such translations has been at the heart of ARM since the founding of the Mumbai Vaidya Sabhā, and it endures among teachers and students today in south Indian gurukulas and colleges. To what extent can there be equivalence between two long-established and widely practiced medicines, one of which (biomedicine) became the modern establishment medicine in India by the forces of imperial ambition and colonialism, in a single medicine comprised of both (Ayurveda)? Then as now, the question of translating ayurvedic and allopathic principles and practices into Ayurveda is a predominantly medical matter. But approaches people take to address this matter also consistently stress the profound political implications that revitalizing India's classical life science over the past century have entailed.

The process of translation started in the first half of the twentieth century in a spirit similar to the one the CCIM would take decades later, but the approach and ultimate public appearance was quite different. P.S. Varier's two-volume *Brhaccārīraṃ* (*Great Body*, 1942 and 1969), is among the best-known examples of European and North American biomedical anatomy translated into Sanskrit. This work is detailed and extensive, and it was likely inspired by Gananath Sen's earlier publication, *Pratyakṣaśārīraṃ* (*Perceptible Body*, Vol. 1, 1913, Vol. 2, 1941), which Sen designed as an anatomy primer for the syllabus of the All-India Ayurvedic College that organizations like the Mumbai Vaidya Sabhā and the All-India

Ayurvedic Congress tried to construct.¹¹¹ *Pratyakṣaśārīram* is an apparent partial translation and adaptation into Sanskrit of Henry Gray's *Anatomy of the Human Body* (1858), Sir Henry Morris's *Anatomy of the Joints* (1879) and *A Treatise on Human Anatomy* (1893), and Samuel O.L. Potter's *A Compend of Human Anatomy* (1903).¹¹² Sen's rationalization for producing the book echoes much of the same groundwork that Bhagvat Singhji's *Aryan Medical Science* does. Namely, he regarded Ayurveda as Hindu medicine, and he was compelled to take it upon himself, using his own money, to advance ARM by promoting the integration of *āyurveda* and biomedicine without apologizing for the alterations to the Sanskrit classics that might arise. The presence of Sanskrit in *Pratyakṣaśārīram* positioned modern Ayurveda as homegrown, premodern, and precolonial, even if the content of the language he presented was not part of the classical Indian knowledge system it looked to be on the surface. Sen envisioned the project as practical and constructive, though in the end the book was mildly controversial and never attained wide readership.¹¹³ In the book's introduction, Sen's aims are nothing if not lofty, as Rachel Berger notes, echoing the aims of the All-India Ayurvedic Congress for education reform, social development, and the general "welfare of the people," neither capitulating to nor retreating from biomedical influence on the subcontinent.¹¹⁴ He imagined he was rewriting a future for ayurvedic education in the language of his homeland, Sanskrit, while utilizing biomedicine as a means to help India's classical life science progress.

Scholarly and popular discussions about how the Sanskrit language has been used in modern India are often fraught because of the near complete appropriation of the Sanskrit tradition by Hindu fundamentalists in the twentieth and twenty-first centuries.¹¹⁵ In the wake of the BJP leader L.K. Advani's Rath Yatra in 1990, which led to the destruction of the Babri Masjid, and the 2002 Godhra Train Burning and the ensuing massacre of Muslims in Narendra Modi's BJP-governed Gujarat, justified criticisms of violent Hindu fundamentalisms are commonplace among scholars of South Asia.¹¹⁶ In particular, there has been a noticeable uptick in academic disquiet about Sanskrit and Sanskritic traditions as historically dangerous tools of Hindu nationalism and fundamentalist groups. Objections in scholarship to the political deployment of Sanskrit generally signal opposition to such things as communal orthodoxy, insularity, and attempts to create an Indian nation characterized by Hindutva, or Hindu-ness. Public oppositions to the nationalism of Hindutva groups continues today and are as loud as ever, often led by university students, while the national government led by Prime Minister Modi since 2015 has progressively implemented its majoritarian ideology of Hindutva and marginalization of minority groups, often targeting Muslims, with relative impunity. Many of the changes and advancements in the articulation and expression of Ayurveda—from ARM, to the CCIM syllabus, to the current education of physicians in colleges and gurukulas in south India—are marked by successes won alongside Indian nationalist and Hindu revivalist movements in the nineteenth and twentieth centuries. As

Simona Sawhney notes of modern intellectuals and writers who have used Sanskrit to highlight the political import of their work, for different reasons at each stage in Ayurveda's history, "we detect that the turn to Sanskrit texts was perceived as a necessary task, even a culturally and politically urgent one."¹¹⁷ While Sanskrit on the ayurvedic college syllabus has become a *symbol* of Indian curative science more than an *operative language* of texts that conveys practicable knowledge, my fieldwork suggests that for some south Indian physicians of Ayurveda it also exists otherwise. Most of the students and teachers I met who spend time with the Sanskrit medical classics—adhering to what might be characterized as *śuddha* or pure Ayurveda—study and memorize these texts as manuals for implementation in the medical clinic. Whether Sanskrit literature is deployed as a cultural icon in the college or as a conduit of healing knowledge in the gurukula, among the students and physicians I write about in this book, we might recognize the combined study and use of a Sanskrit knowledge system like *āyurveda* as a contemporary type of activist negotiation of the inheritance of biomedicine in India.

Equally for agents of ayurvedic integrationism since 1890 and student-practitioners at gurukulas in south India, the entrenchment of biomedicine in India helped them achieve important goals. Integrationists eventually gained strong backing from the independent GoI, and in the second decade of the twenty-first century India boasts 350 ayurvedic colleges and many more hospitals and pharmacies.¹¹⁸ Practitioners at gurukulas like Shantimana and Mookkamangalam cannot claim achievements on par with proponents of integration. But they have continued their practices unimpeded for decades, seeing patients and educating ayurvedic physicians. Some have earned impressive reputations, garnering the attention of patients, scholars, and physicians across India and around the world. Both groups point to the multiple modernities and traditions cohabiting the broad camp of Ayurveda today. Exponents of both so-called pure and mixed Ayurvedas, as well as those who do not adhere to either camp exclusively, like Smita, Yashoda, George, and others I met in Kerala, are imbricated within both and continually impress "new points of inflection on [Ayurveda] by demanding that it deal with new actors, new operations, and unprecedented and flexible forms of accumulation."¹¹⁹ Students who study at gurukulas in Kerala in addition to receiving BAMS degrees see both sites of their education as important to the development of Ayurveda in ways that are as linked and faithful to Ayurveda's classical past as possible and equally in step with advances in science in the transnational world in which they live.

The active incorporation of a premodern Sanskrit knowledge system into a contemporary worldview and practice involves a process of what Simona Sawhney refers to as "activist reading" of one's tradition. It requires that one read old texts while self-consciously keeping potential ends of that reading in play in the present. To be sure, this type of hermeneutics can have—and indeed has had—devastating consequences, such as the already-mentioned razing of the Babri Masjid in

Ayodhya on December 6, 1992. Sawhney's thoughtful study of the various uses of Sanskrit in modern India in the work of Rabindranath Tagore and Mahatma Gandhi, however, suggests that activist uses of Sanskrit literature, when they do not disregard "the letter of the text in pursuit of action and the truth," are also important to acknowledge "in the context of contemporary India, where the fate of the present seems to be inescapably linked to available readings of early texts."¹²⁰ We must also be careful, Sawhney cautions, not always to see dependence on historical knowledge in the present as automatically antimodern, nationalistic, anticosmopolitan, and dangerous. *It has been those things in India* (and elsewhere). But sometimes this type of interpretation is off the mark, and it misunderstands and mischaracterizes certain groups' engagements with their pasts.

Many of the students and teachers at gurukulas in Kerala are activist readers, slow readers, philologists and philologists-in-training, who participate in an unremitting intellectual exchange that is ultimately not adequately captured by clear-cut notions of pure and mixed Ayurveda. We could look back further than the British colonial periods of the EIC and Raj that I have discussed in this chapter to demonstrate the point that mixed or cosmopolitan medicine in India is actually very old news. We could cite other and older transnational medical encounters in which the tradition of Ayurveda and ayurvedic practitioners were equally influenced and influential, such as Hendrik van Reede's seventeenth century classic, *Hortus Malbaricus*, and Garcia d'Orta's sixteenth century *Conversations on the simples, drugs and medicinal substances of India*. The arrival of Unani in South Asia with the Delhi Sultanate and its flourishing under the Mughal Empire ushered in expansive and enduring and processes of trans-Asian medical exchanges on the subcontinent, whose historically interdependent expressions and co-developments often got (and sometimes still get) clipped and packaged into narratives of mutually exclusive healing traditions and practitioners of so-called Hindu medicine (Ayurveda) and Muslim medicine (Unani). Further back in time, the cosmopolitanism that's at issue today in discussions about what to do with the Sanskrit classics in the training of ayurvedic physicians also connects to the early centuries of the Common Era in India, when and where relationships advanced among itinerant physicians from South, Central, and East Asia, belonging to Hindu, Buddhist and Jain religious traditions, and elements of their healing practices were codified into the medical classics that we have today. Medical cosmopolitanism in India is hardly new.

Bringing current ethnographic accounts of an old educational institution—the gurukula—to bear on our understanding of ayurvedic medical history offers new insights into the ways that ayurvedic practitioners continue to negotiate the legacy and current experience of multiple Ayurvedas in India. In the gurukulas of central Kerala, premodern Sanskrit knowledge espoused by vaidya-gurus mingles with regional specializations and knowledge produced through ayurvedic college coursework that students bring with them, while new relationships with

ever-changing actors (students, patients, scholars) constantly remodel Ayurveda in ways that do not necessarily rest on assimilation or refer to western constructs.¹²¹ Where some scholars have seen ideological ossification, rigid adherence to tradition, or alleged pure Ayurveda in gurukulas operating today, I suggest something different is afoot. The gurukulas I observed produce students who exemplify a new kind of mixed movement in modern Ayurveda, somewhat akin to what Laurent Pordié calls “neo-traditionalism.” A neo-traditionalist medicine is characterized by

a diversification of healers’ activities and a multiplication of legitimating instances, their proximity to biomedicine on the practical, epistemological and symbolic planes, or the fact that they would be both subject to and participants in globalization (deterritorialization of actors and practices, modern transnationalization of knowledge) and that they would make systematic use of ‘tradition’ to legitimate new practices.¹²²

Gurukula students of Ayurveda appearing in this book are part of a new generation of physicians whose commitment to being informed professionally entails the regular deployment of classical knowledge in their contemporary practice. This knowledge is relevant to the work they go on to do after leaving the gurukula at private clinics and hospitals, as professors at ayurvedic colleges and researchers in medical labs, and sometimes as purveyors of ayurvedic tourism. The blending of the long-standing and reticulate healing knowledges that these students learn and experience is at once fundamentally textual and practical. The vaidya-gurus of Shantimana and Mookkamangalam work with and expand the various layers of India’s classical life science by teaching it and, more importantly, by showing students how to use it. Their pedagogy is gurukula philology. It is steeped in texts that will be mastered, as well as dismantled and refined, daily, in order to heal.