

# The Practice of Texts

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EDUCATION AND HEALING  
IN SOUTH INDIA



ANTHONY CERULLI

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This open access book has been made possible in part by a major grant from the National Endowment for the Humanities:  
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The publisher and the University of California Press Foundation also gratefully acknowledge the generous support of the Philip E. Lilienthal Imprint in Asian Studies, established by a major gift from Sally Lilienthal.

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*Education and Healing in South India*



Anthony Cerulli



UNIVERSITY OF CALIFORNIA PRESS

University of California Press

Oakland, California

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Suggested citation: Cerulli, A. *The Practice of Texts: Education and Healing in South India*. Oakland: University of California Press, 2022. DOI: <https://doi.org/10.1525/luminos.120>

Names: Cerulli, Anthony Michael, author.

Title: The practice of texts : education and healing in south India / Anthony Cerulli.

Description: Oakland, California : University of California Press, [2021] | Includes bibliographical references and index.

Identifiers: LCCN 2021034609 (print) | LCCN 2021034610 (ebook) | ISBN 9780520383548 (paperback) | ISBN 9780520383555 (ebook)

Subjects: LCSH: Medicine, Ayurvedic—India—Kerala—History. | Medicine, Ayurvedic—Study and teaching—India—Kerala.

Classification: LCC R605 .C478 2021 (print) | LCC R605 (ebook) | DDC 615.5/38095483—dc23

LC record available at <https://lcn.loc.gov/2021034609>

LC ebook record available at <https://lcn.loc.gov/2021034610>

28 27 26 25 24 23 22

10 9 8 7 6 5 4 3 2 1



*For Gabrielle and Arlo*



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## ACKNOWLEDGMENTS

Soon after I first visited Kerala in 2003, I began thinking about writing this book. I know now that ideas for books often come and go, and it's never clear if an idea will emerge as an actual book someday. The enormous amount of time and effort needed to transform ideas into printed books can be so daunting that the work of research and writing never commences or, if it does, it can't be harnessed into a singular vision but ramifies into articles, chapters, and essays instead of a monograph. Since books that take several (or more) years to produce can so easily get sidetracked by personal and professional joys, obligations, and calamities (the review, final stages of writing, and production of this book all occurred during the Covid-19 pandemic), it is something of a marvel to me that I've actually seen this project to print.

Even if book ideas can be as fleeting as a mayfly, lasting just days, many also do enroot and hold fast. The idea that led to this book was planted almost two decades ago, and it began to appear, officially, as my "book manuscript in progress" about a decade ago. In the early aughts, I was enmeshed in my dissertation, exploring ancient Sanskrit literary cultures and Indian ecologies of healing. After spending long stretches of time in south India doing research for that project, sitting with expert physician-teachers reading the *Aṣṭāṅgahr̥dayasaṃhitā* (hereafter *Aṣṭāṅgahr̥daya*) and the *Jīvānadanam*, I always sensed, even hoped, the philological work of my doctoral project would be a first step leading to a larger study that moved from textual analysis and translations to an ethnography of the ways south Indian physician-teachers communicate and use Sanskrit (and Manipravalam and Malayalam) texts to teach students and treat patients today. My textually based dissertation became my first book, *Somatic Lessons*, and that project in many ways was conceived, grew up alongside, and eventually led to this largely ethnographic study.



While the phrase “the practice of texts” in the book’s title succinctly describes many of my own experiences studying Indian medical literatures and healing practices in south India the past twenty years, it is principally meant to evoke two things: the book’s conjoined methodologies of philology and ethnography and the twinned theoretical-applied structure of what I call “gurukula philology” in the education and practice of Ayurveda in modern south India. To arrive at this monographic statement about all these things, I am mindful of the people and institutions I relied on to research, write, and edit this book, and I am thrilled to thank many of them here. First, I am certain that I would never have been able to think through, develop, and ultimately write what appears on these pages without the generosity, intellectual direction, and friendship of dozens of people in south India, especially in Kerala, whom I met while doing research for this project. Out of respect for their privacy and gratitude for their participation in this project, every person (and some identifying place names) have been given pseudonyms. The physicians, students, and scholars who appear in the following pages queried me and shared their ideas about this book as it was in progress; they helped me articulate and refine the idea of “the practice of texts” as a theory and a method; and a few of them commented on drafts of the book’s chapters at various stages of development. I’d like to thank everyone who appears in the book for their time, generosity, candidness, and assistance! But for lack of space, I can only thank three people directly by (pseudo)name.

First, Biju has been a teacher, colleague, and friend to me for almost two decades, and I am forever grateful for his goodwill, kindness, laughter, and conversation these many years. Next, I have known Priyankara for just as long; she has always welcomed me into her home in Kerala, and on every visit she has been hospitable, kind, and helpful as I have tried to understand and represent in my writing the rich history of ayurvedic literature and Ayurveda in south India. And then there’s Unnikrishnan, whom I met more recently than Biju and Priyankara, but still quite some time ago. He is an intellectual powerhouse. He has been so generous with his time and insights about Ayurveda, as well as a terrific collaborator and friend, that I cannot think about medicine in general and the modern practice of Ayurveda in south India without recalling my conversations with him.

Many people helped me with the nuts and bolts of writing and revising this book. I am especially thankful to Brian Collins and Sree Padma Holt for reading the entire manuscript. Each in their own way impacted the book’s overall shape and many of its particular sections. Their practical and indispensable editorial suggestions helped me produce stronger and clearer arguments and a better intermingling of ethnography/theory/philology than I had when they first read the manuscript. Karin Polit’s ideas about medical anthropology greatly influenced how I approached my fieldwork, especially her insights about applying theory to ethnographic observation and generating theory in the field. Lisa Allette Brooks has been a great colleague and frequent interlocutor about this project for at least

a decade; her comments are always incisive, and her work on Ayurveda, Kerala, and Indian medical history is inspiring to me in many ways. Big thanks to Jeremy Manheim for reading through an early version of the (almost) entire manuscript, for helping me with the bibliography, and for pointing out redundancies and omissions in the notes. Many thanks to Shahana Munazir for expertly assembling the book's index. And thank you to the students in my "Ethnography and Asia" seminar at UW–Madison between 2017–2020: you helped me refine several ideas in this book during our many illuminating conversations about ethnography in Asia.

At the University of California Press, I am extremely grateful to Archana Patel for bringing this project to UCP and for her ongoing encouragement, clarity, and guidance from start to finish. To the Press's development director, Steve Jenkins, thank you for helping me secure an NEH Fellowships Open Book award to make this project open access. I am grateful to Cindy Fulton, my production editor, and Catherine Osborne, my copyeditor, for their judicious attention to the book's style and care with its production. And many thanks to Paige MacKay and the staff at Ubiquity Press for expertly preparing this work for open access publication.

Several institutions and foundations in India, Europe, and the United States supported my research and writing while I worked on this book. Directors of research at the University of Kerala (Kariavattom), the Oriental Research Institute and Manuscript Library, and the Government Ayurveda College in Thiruvananthapuram kindly permitted me to use their libraries and archives and interview their students and faculty. The former director of the Kerala Council for Historical Research, Dr. P.J. Cherian, made the resources and space at Vyloppilly Samskrithi Bhavan available to me, and he helped me navigate a number of projects I carried out in Kerala while this book was in preparation. For their financial assistance, I am thankful to the European Institutes for Advanced Study, the Institut d'Études Avancées de Paris, the John Simon Guggenheim Foundation, and the National Endowment for the Humanities. Research grants from Hobart and William Smith Colleges between 2010–2016 and a Florence Tan Moeson Fellowship from the Library of Congress in 2017 were instrumental in bringing this project to completion. At UW–Madison, I would like to thank Florence Hsia in the Office of the Vice Chancellor for Research and Graduate Education; Sue Zaeske in the Dean's Office of the College of Letters and Science; Venkat Mani and Sarah Beckham in the Center for South Asia; and John Dunne and Gudrun Bühnemann in the Department of Asian Languages and Cultures. At different times and in different ways, these colleagues supported me with critical feedback and conversation, and through their respective administrative roles they ensured I was able to travel to south India and have leave time to put the finishing touches on the book.

I am grateful to Brill for granting me permission to reprint a revised portion of chapter 1 that appeared in *Asian Medicine* in 2018 as "Politicking Ayurvedic Education." I am also grateful to Springer for giving me permission to reprint revised selections of chapter 3 that appeared in *The International Journal of Hindu*

*Studies* in 2018 as “Gifting Knowledge for Long Life.” Thanks to Minakshi Menon at the Max Planck Institute for the History of Science in Berlin for inviting me to share my research on gurukula philology at a workshop in 2016: that presentation informed my thinking about pedagogy in chapter 2 and became an article that will appear in a forthcoming special issue of *South Asian History and Culture*. I would also like to thank William (“Bo”) Sax for inviting me to present my research on the nature of ritual and medicine in south India at the University of Heidelberg’s South Asia Institute (SAI) in 2013. At the time, my thinking on this topic was little more than a handful of unsown seedlings. The stimulating exchange I had with Bo and his SAI colleagues and students set me off on a number of tangential studies of ritual and medicine, including one on south India in the *Journal of Ritual Studies*, and the result of it all became chapter 4 of this book.

A special word of appreciation goes to my family. My parents, Jill and Lou, have been an endless source of support, encouragement, and sage advice for as long as I can remember. My brother Buck has been an intellectual touchstone for me since we were kids, and he has been a discerning reviewer and conversation partner since the project began. Without question, this book would not have begun, developed, or seen the light of day without the dogged support, patience, and encouragement of my wife, Gabrielle. This book is dedicated to her as well as to my son, Arlo, whose thirst for learning and incredible creativity is infectious and uplifting. I cannot thank both of them enough for their love, camaraderie, and generosity of spirit—in all ways, every day—as this book took shape.

## NOTE ON TRANSLITERATION AND PRONUNCIATION

Most transliterations from Sanskrit, Malayalam, and Hindi in this book are placed in italics and follow the standard lexicographical schemes set by the Library of Congress: <https://www.loc.gov/catdir/cpsol/roman.html>. For non-English words that appear many times, the first instance has been italicized and subsequent occurrences romanized: for example, *mukhāmukhaṃ* > mukhāmukhaṃ, *gurukula* > gurukula, *vaidya* > vaidya, *guru* > guru, and *rogin* > rogin.

Most transliterations in this book are from Sanskrit, whose pronunciation is by and large similar to pronunciation in the Italian language: vowels are open, pronounced by opening the mouth wide and holding the tongue low inside the mouth, and consonants carry the same sound wherever they occur. The following list may be used as a general guide for pronouncing Sanskrit vowels (including diphthongs) and a handful of consonants that might be unfamiliar to people new to Sanskrit and other South Asian languages:

| transliterated letters | pronounced like |
|------------------------|-----------------|
| a                      | u in “jut”      |
| ā                      | a in “father”   |
| ai                     | y in “spry”     |
| au                     | ou in “cloud”   |
| c                      | ch in “cheese”  |
| e                      | a in “skate”    |
| g                      | g in “go”       |
| i                      | i in “lick”     |
| ī                      | ee in “street”  |

| transliterated letters | pronounced like |
|------------------------|-----------------|
| ṅ                      | n in “zing”     |
| ṅ̃                     | n in “venue”    |
| o                      | o in “vote”     |
| ph                     | p in “pin”      |
| ṛ                      | ri in “sprig”   |
| ś and ṣ                | sh in “shimmy”  |
| u                      | u in “future”   |
| ū                      | oo in “drool”   |

A dot placed underneath a transliterated letter—such as ṭ, ṭh, ḍ, ḍh, ṇ—indicates a retroflex consonant, which is a uniquely South Asian sound, with no direct equivalent in English. To pronounce retroflexes, the tip of the tongue curls back to the roof of the mouth when saying these letters.



# Introduction

## *Gurukulas and Tradition-Making in Modern Ayurveda*

I came here to improve my Sanskrit and learn about real Ayurveda, the traditional methods described by Vāgbhāṭa and Caraka. I recently received a BAMS degree from an ayurvedic college. The syllabus for that degree did not teach Ayurveda like it did when my grandfather got his degree. It is half Ayurveda and half allopathy. But I did not get thorough training in either system! That's why I'm here. I want to learn real Ayurveda.<sup>1</sup>

Prathik was a young ayurvedic physician, fresh out of college, and studying one of the Sanskrit medical classics, the *Aṣṭāṅgahr̥daya*, at Mookkamangalam *gurukula* in India's southwestern state of Kerala when he told me this.<sup>2</sup> Prathik and I had spoken about his education over the course of several days, and he was always candid about the differences he saw between the requirements for his BAMS degree—Bachelor's of Ayurvedic Medicine and Surgery—and for those of earlier generations. Even if his grandfather's degree was the result of a collegiate experience similar to his own, with multiple professors, lecture halls, and a large student body, Prathik felt that his grandfather's education was somehow more authentic than the one he got. “My grandfather also learned *nāṭṭuvaidyaṃ* [“country medicine,” Mal.<sup>3</sup>],” he continued, “the kind of Ayurveda special to Kerala. He had regular interactions with traditional teachers who knew both Sanskrit and Malayalam medicine.”<sup>4</sup> When I spoke with Prathik, he was one of several enthusiastic students at Mookkamangalam who were hoping to supplement the half-allopathic/half-ayurvedic education they got at college with training similar to what they imagined earlier generations of ayurvedic physicians had.

For many students and practitioners of Ayurveda I have met at Mookkamangalam over the years—several of whom appear in this book—to study at a *gurukula* means connecting with ayurvedic tradition in a way the ayurvedic college

curriculum does not permit. Learning how to read and understand the Sanskrit classics at Mookkamangalam offers current college students and young physicians a chance to engage the literary foundations of their profession in ways that India's ayurvedic colleges eliminated in a series of reforms in the late-nineteenth and early-twentieth centuries during the Ayurvedic Revitalization Movement (ARM). In the eyes of many students of Ayurveda, a south Indian gurukula like Mookkamangalam teaches and dispenses *āyurveda*, classical life science as we find it compiled in two-thousand-year-old Sanskrit sources, augmented frequently with measures of Kerala *nāṭṭuvaidyam*. In the gurukula settings of central Kerala I visited between 2003–2017, students claim to experience less of an intrusion or even dominance of allopathy (the term often used for biomedicine in India) in the expression of Ayurveda they discovered in the twenty-first century collegiate system.

The Sanskrit term gurukula is found in many Indian languages. A neuter compound noun, it's common to see and hear it rendered in its nominative and accusative (singular) declension as *gurukulam*. In colloquial Malayalam, speakers usually retain a final *anusvāra* or nasal *m*, *gurukulam*, and in modern Hindi the final schwa drops out, giving us *gurukul*. For the sake of consistency, I use the Sanskrit root gurukula to refer to this traditional institution of learning in India, literally a “teacher's (*guru*) residence (*kula*).” Before the twentieth century, a physician of Ayurveda known as a *vaidya* (*vaidyan*, Mal.) was normally educated in a gurukula setting, rather than colleges and teaching hospitals as is now the case.<sup>5</sup> The gurukula is a very old and well-known institution of education in Indian history. It is mentioned in Sanskrit literature as an important scholastic site well before the Common Era, appearing for example as a place of learning in some of the late Upaniṣads (circa 500 BCE).<sup>6</sup> It is recognized in Indian Buddhism, as well as Buddhist traditions beyond South Asia, and it is known in various forms of Tantra and Yoga.<sup>7</sup> Harmut Scharfe identified references to gurukulas in the longer of India's two Sanskrit epics, the *Mahābhārata*, and treatises on *dharma* (*dharmaśāstra*), such as the *Viṣṇusmṛti* and *Yājñavalkyasmṛti*. These sources explain that gurukula students (*śiṣyas*) trained and lived in the residences of their teachers, often shouldering daily academic studies alongside domestic chores expected of any member of the guru's family.<sup>8</sup> As gurukulas specializing in Ayurveda passed into disuse across most of India alongside the rise of the ayurvedic college, among those that persisted in central Kerala the residential component eventually faded out. Although there are fewer students at ayurvedic gurukulas in south India today than there were prior to the reforms implemented after ARM, certain practices described in the Sanskrit classics persisted through the twentieth century and continue in Kerala in the twenty-first.

In the context of south Indian Ayurveda, the modern guru of classical Indian life science differs from popular understandings of gurus as leaders who “purvey a new age-ish spirituality” or religious practice.<sup>9</sup> The ayurvedic teachers I met in

Kerala and across south India, and the stories of previous generations of ayurvedic gurus I heard about, do not neatly align with Meera Nanda's three influential typologies for the modern Indian guru, for example, which attribute a guru's authority to the performance of miracles (type 1); the ability to exposit Vedic knowledge and parlay it to the business world (type 2); and/or an evangelical-like imparting of Yoga or meditation (type 3).<sup>10</sup> South Indian ayurvedic gurus are not CEO-type figures like those Nanda scrutinizes in modern India, who oversee business empires that attract spiritual explorers shopping around "for just the right guru, often trying out many before settling on one."<sup>11</sup> The ayurvedic gurus in this book jeer at the suggestion their work might be rooted in non-empirical ideas and practices of a spiritual or religious nature. For them and their students, as well as for many of their patients, Ayurveda is fundamentally humoral life science (*doṣika āyurveda*). It is medicine for unwell bodies. Although they have different vocabularies to express how they understand and approach matters of health and disease, when these three groups come together in the gurukula, they do not use language that's religious and spiritual or that glorifies the healer or the medicine in any way. Health and disease are treated as physiological and pathological processes involving the movement and mixing of chemical substances in bodily fluids.

If we set aside the spiritual or religious facets that often qualify the guru in contemporary ethnographic and social-scientific research, some aspects of the day-to-day work of ayurvedic gurus in central Kerala as teachers and as healers—such as their combined ability to, one, master classical textual knowledge and, two, consistently re-use that knowledge in different scenarios—do mirror the propensity of the modern Indian guru's ability to draw on vast learning, improvise, and adapt in sometimes unpredictable settings. Jacob Copeman and Aya Ikegame, for example, argued that the guru is marked by an extraordinary fitness "to respond to the vagaries of situations in ways that allow him or her to be *carried forwards* . . . to 'harvest' situations . . . cross domains and become apt for given situations, drawing in and re-composing diverse aspects of Indian social life in the process."<sup>12</sup> The "expansibility of the guru" and the guru's ability to "harvest situations" in Copeman and Ikegame's theorization presage this book's focus on "the practice of texts" that is taught and modeled by the teachers (*gurus*) in the south Indian ayurvedic gurukula. Beyond description and analysis of guru practice, however, when it comes to the content of the guru's expertise and arenas of influence, scholarship often seeks to understand, and in the process underscores, the religious nature of guru-ship, first and foremost, followed by links to social, political, and economic domains of influence impacted by a guru's spiritual authority. They are thus routinely approached through adjectival lenses that reflect their unique spheres of impact—e.g., political gurus, literary gurus, governing gurus, female gurus, and so on.<sup>13</sup> The title of "guru" as a spiritual leader who holds sway in multiple areas of social life, what Copeman calls "the multifarious guru," begins to look like other

spiritual master-types in long past and recent Indian history with religio-social/political/economic influence, such as the *svāmin*, *sādhu*, *sant*, and *saṃnyāsin*. Gurus as teachers of medicine, shorn of spiritual or religious bearing and weight, who teach students or pupils, not disciples, are something altogether different, at least as the teachers in south India see it.

Prathik was one of four students at Mookkamangalam when I met him. One of his classmates, a Malayali physician named Ganesh, echoed Prathik's disappointment with the structure of the ayurvedic college curriculum and thus the value of the BAMS degree. "What we studied was not real Ayurveda," Ganesh explained. "Were we studying Ayurveda when most of the terminology we had to learn came from the west, not India?"<sup>14</sup> I often heard this sentiment from students at the two gurukulas in central Kerala where most of the fieldwork in this book took place between 2003–2017, Mookkamangalam and Shantimana. When I asked Prathik and Ganesh to elaborate, Prathik, the less taciturn of the two, told me the ayurvedic college syllabus relies on biomedical subjects and evaluative methods that do not appear in the "big trio" (*br̥hatrayī*) of Sanskrit medical classics: *Carakasamhitā*, *Suśrutasaṃhitā*, and *Aṣṭāṅgahṛdaya*. In contrast, at places like Mookkamangalam and Shantimana, where Ayurveda is both taught and practiced, the *Aṣṭāṅgahṛdaya* is the cornerstone of the curriculum and clinical work.

If perceptions about the foundations and history of Ayurveda like those Prathik and Ganesh expressed were common among the students I met at Mookkamangalam and Shantimana, many did not want to articulate their disapproval of the BAMS program apart from approving nods when they heard their classmates speaking with me. None of the students I met completely renounced their degrees or education. Their attendance at these two sites, whether they said so explicitly or not, nevertheless signaled a desire to make sense of their professional commitments in local terms and knowledge rather than force it into a biomedical paradigm. For most of them the latter approach made little sense and was unnecessary. India's classical life science, *āyurveda*, had its own history of development and systematization in expansive Sanskrit "collections" known as *saṃhitās*, beginning with the *Carakasamhitā* around the turn of the Common Era, followed a century or two later by the *Suśrutasaṃhitā* and then the *Aṣṭāṅgahṛdaya* in the seventh century CE. Today the big trio of Sanskrit *saṃhitās* is widely (though unofficially) regarded as Ayurveda's literary canon, and in Kerala the *Aṣṭāṅgahṛdaya* is seen as the most succinct and hence memorizable and teachable of the three classics. This literature tells us that ayurvedic knowledge has been transmitted from teachers to students in intimate gurukula-type settings for centuries. Passed on from gurus to students, it has shaped the mindsets and technical skills of scores of generations of Sanskrit-educated vaidyas, whose healing work has contributed to the wellbeing of countless patients. Students at Mookkamangalam and Shantimana see the Sanskrit classics as the bedrock of Ayurveda and, wherever "real Ayurveda" is thought to operate, the classics are present in practicable ways to educate future physicians and treat patients.

Students of the three gurukula teachers I discuss in this book—Bhaskaran, Priyankara, and Biju—routinely voiced their displeasure that many BAMS students nowadays cannot read, and oftentimes have little interest in learning to read, Sanskrit texts. Many see this lack of interest as a twenty-first century outcome of a trend going back to the 1970s to de-emphasize Sanskrit coursework on the nationwide syllabus set by the Central Council of Indian Medicine (CCIM). A lack of training in the Sanskrit classics at college is a major reason gurukulas like Mookkamangalam and Shantimana have maintained a steady, if at times small, inflow of students seeking to augment their educations with rigorous primary textual studies. Gurukula students, as well as some of the Sanskrit professors and graduate students I have met at ayurvedic colleges in Kerala and Karnataka, tend to agree that Sanskrit education in ayurvedic colleges today, though required on the CCIM syllabus in order to graduate, is not a hallmark of the curriculum but is mostly perfunctory. That is, the goal of the one hundred marks/ninety hours devoted to classical ayurvedic theory and language is meant to enable students to read only portions of the classical sources, such as the *Suśrutasaṃhitā*'s Sārīrasthāna (“Body Section”), arguably Ayurveda’s earliest analogue to biomedical anatomy. This requirement occurs early in the first year of a five-and-half-year course of study (which includes a one-year practicum), and many students do not keep up with this type of textual reading and research afterwards. It is possible to undertake intricate studies of the Sanskrit classics and later ayurvedic sources beyond those required for the BAMS degree in pursuit of postgraduate degrees in Ayurveda Vachaspati (MD, Medicinæ Doctor [Ay.]) and Ayurveda Dhanvantari (MS, Master of Surgery [Ay.]). These three-year degrees utilize blended biomedical-ayurvedic curricula seen at the BAMS level, though they promote greater medical specialization and even allow for the study of ayurvedic business and administration. Philological examinations of ayurvedic texts are largely seen as strictly academic endeavors in India nowadays, and they do not occupy the time or undergird the work of most practicing physicians I met. Many students who have studied at Mookkamangalam and Shantimana see the cursory nod to Sanskrit training on the CCIM syllabus less as a professional necessity and more a reminder of the two-century-long process of ayurvedic institutions adopting biomedical models for knowing and treating the body while, at the same time, attempting to retain at least a veneer of Indian classicality.

A composite medical-educational-political history thus lies at the heart of this book, and I approach this narrative on two major fronts. First, I describe the broad-sweeping changes in ayurvedic education between the 1890s and 1970s, and I explain how these late- and postcolonial reforms re-positioned the Sanskrit classics as objects of historical study in the training of ayurvedic physicians. Second, I draw on my observations at ayurvedic gurukulas and colleges in south India to reflect on the continuing twenty-first century legacy of educational reforms for ayurvedic practitioners who have attempted to embrace and, wherever possible, use the texts, techniques, and knowledge of the classical past in their current



professional pursuits. The book's combination of history and ethnography and its attention to the often-political matter of taking recourse in Sanskrit literature for scientific aims in contemporary India constructs a previously untold narrative, with conversations and insights drawn from the field, about the impact of a European tradition of healing and model of education on Ayurveda and ayurvedic schooling in late- and postcolonial India. It therefore addresses the entwined histories of medicine and education in modern India and medical education in postcolonial contexts generally.

I refer to the method of instruction and techniques of patient care in the south Indian ayurvedic gurukula as *the practice of texts*, which underlines the book's two principal themes of education and healing. My fieldwork in Kerala reveals that traditionally trained Malayali physicians of Ayurveda see the Sanskrit medical classics as practicable compendia whose knowledge is designed for everyday use in the diagnosis and treatment of illnesses and bodily disorders. Students and teachers at gurukulas who appear in the book understand their education and the healing they do to be closely aligned with expressions of pedagogy and treatment in the classics, and these views, I argue, are an applied critique of the modern curriculum that took shape in the twentieth century and persists today in India's ayurvedic colleges.

Explorations of gurukula instruction and clinical care in chapters 2 through 4 suggest that the practice of texts, as Lévi-Strauss expressed, is a specialized discipline that's good to think with (*bon à penser*). That is, although the following chapters contribute to scholarship in the history of education, history of medicine, and medical anthropology in India and South Asia, a theoretical exploration of the practice of texts in the south Indian medical context will, I hope, also resonate with analyses, questions, and arguments in these fields in other colonial and postcolonial contexts. The practice of texts is an epistemological-applied method that illuminates the enduring presence and performance of classical literature in present-day south India. The scholastic mastery and improvisatory application of Sanskrit literatures in healing situations in the ayurvedic gurukula present relationships and practices about language, health, and learning that can help us extend and challenge prior scholarship about the nature of philology, knowledge production, education, and healing in India, and more broadly across postcolonial societies.

#### BACKGROUND AND GROUNDWORK

In the last decade of the nineteenth century, to come to terms with the fact that biomedicine was a healthcare juggernaut in India, practitioners of Ayurveda began forming professional organizations and, at times, linking their missions with anticolonial movements and nationalist groups. Conversations and debates that occurred as the nineteenth century gave way to the twentieth fueled ARM

in the five decades preceding Independence in 1947, crowning in the 1970s with the CCIM's fixing of the nationwide college syllabus. Reforms enacted during ARM established the British-style college as the principal institution for educating ayurvedic physicians and shaped the design of the modern curriculum, which mixes subjects, theories, and practices from classical *āyurveda* and modern biomedicine. In the next chapter, I reflect on this history and explore how key groups and individuals in ARM grappled with and designed the future of India's indigenous medicines in the twentieth century. As British colonial rule in India looked increasingly implausible in the early twentieth century, biomedicine was already the region's modern establishment medicine and was evidently going to remain that way for the foreseeable future. During ARM, practitioners of South Asian medicines like Ayurveda and Unani responded to the successes of biomedicine on the subcontinent by adopting biomedical models of healthcare and education. These adjustments, many ayurvedic physicians argued, were indispensable if Ayurveda was going to remain relevant. Chapter 1 sets up the historical context for discussions about gurukula education, philology, and clinical care in subsequent chapters, each of which is based on themes that framed my fieldwork—in Kerala primarily, but with some excursions and many ties to people and institutions in Karnataka and Tamil Nadu—over fourteen years (2003–2017) at ayurvedic gurukulas, colleges, research centers, hospitals, and pharmacies.

Narratives from the field create portraits of individuals and communities of ayurvedic practitioners and students who are at once obvious heirs to the intellectual patrimony of ARM and yet are also activists whose work and attitudes about Ayurveda exhibit novel ideas about practicing Ayurveda in India today without conceding the life science of the Sanskrit medical classics against the benchmark of biomedical healing. Each chapter draws on episodes I observed at Mookkamangalam and Shantimana and addresses a particular aspect of gurukula practice: pedagogy and learning (chapter 2); knowledge exchange (chapter 3); and the relationship of ritual and healing (chapter 4). The fifth chapter draws on the foregoing discussions about education and clinical practices to consider how the practice of texts supporting healthcare in the gurukula constitutes a formative process that imagines and ultimately creates its main objective, wellbeing, which begins, is instantiated, and ultimately ends with the tradition's principal concern of healing: the patient.

The parts of this book that are based on my observations of the practice of texts in the south Indian ayurvedic gurukula emerged organically alongside the largely philological project that occupied most of my graduate school research and continued through the publication of my first book, *Somatic Lessons*.<sup>15</sup> On my first research visit to Kerala in 2003, I was struck by the ways that the ayurvedic practitioners I met, most of whom worked out of their houses—that is, unaffiliated with private and governmental hospitals, colleges, and clinics—used some of the same texts I was translating and analyzing in my dissertation. I saw them teaching

the big trio texts and applying these sources over and again, apparently re-creating them in different arrangements and intertextual conversations (often together with Malayalam and Manipravalam texts) to, on one hand, meet the various needs of their patients and, on the other hand, tailor lessons for their students. The uses and fluid “lives” of these texts fascinated me, and I decided on that first trip to document what I was seeing and, if possible, return at a later date to formally research the ways in which texts were practiced to teach and heal. This book is the outcome of my return to the topic, the practice of texts, across nearly a decade and a half.

I did not come to the realization that texts in Kerala’s gurukulas were put to use and studied differently than I was accustomed to studying Sanskrit texts by mere happenstance. Prior to arriving in Kerala in 2003, I had been visiting an in-patient ayurvedic hospital in northwestern Tamil Nadu, near the Kerala border, to study with Professor Shastri. He was a recently retired professor of Ayurveda who was directing a new research center at the hospital, and he was well-connected in the ayurvedic communities of Kerala, Tamil Nadu, and Karnataka. Prof. Shastri taught me about a method of teaching *āyurveda* explained in the *Carakasamhitā* that I came to learn is commonly used in Kerala’s ayurvedic gurukulas. In Malayalam it’s known as *mukhāmukhaṃ*, “face-to-face [instruction].” I discuss this pedagogy at length in chapter 2. Because he belonged to a generation of south Indian ayurvedic physicians for whom it was not unusual to receive training in both colleges and gurukulas, and since he had also been an ayurvedic college professor, Prof. Shastri had a nuanced and multilayered perspective about the impact of reforms in ayurvedic education during ARM and why, at least in India’s southern states, some of the classical practices described in Caraka’s collection have endured in the twenty-first century. In many ways he influenced my early understanding of education and philology in the ayurvedic gurukula, and after our lessons concluded, he introduced me to several students and practitioners in both the gurukula and collegiate networks, some of whom I write about in this book. Crucially, he facilitated my initial meetings with Bhaskaran, Priyankara, and Biju.

When I reflect on the evolution of this book, it is clear to me now that the urge to do fieldwork and observe how classical Sanskrit healing knowledge is transmitted and used in contemporary India started to intersect with my philological study of *āyurveda* the day I met Bhaskaran in 2003. At the time, Bhaskaran was the sole guru at Shantimana in the Palakkad District of central Kerala. I was told before I met him, and I came to learn on my own over the years, that he was famous throughout Kerala for his contributions to snakebite and other poison therapies (*viṣacikitsā*). Patients from nearby and sometimes quite far away travelled to receive treatment from him for toxicological matters and any number of other ailments. And though he trained and worked outside of the official ayurvedic college and hospital network, most college professors, students, and physicians from Kerala whom I met knew or had heard about him and his work. Bhaskaran died in

2015 at the age of ninety-eight, and his doctoring and instructional work tapered off considerably in the last five years of his life. When I first met him, however, he was on the cusp of eighty-seven years and as lithe and lucid as someone twenty years younger. He wore a plain white mundu (*munṭu*, Mal.) around his waist and, like many Malayali men, he often and adroitly altered between wrapping up it above his knees and dropping it down to his ankles depending on whether he was sitting or standing and moving about. He was nearly bald, and his unshaven cheeks often seemed as though he was in the early stages of growing a beard. He wore no shirt over his hairy grey chest when I first met him, and his Brahmin thread (*yajñopavīta*) was evident draped across his left shoulder. With few exceptions, whenever I would see Bhaskaran between 2003 and 2015, this was his usual getup.

The day I met him we barely talked. As I explain in chapter 2, he was teaching the *Aṣṭāṅgahr̥daya* to his grandson Biju that day. It was the first time I saw mukhāmukham instruction in practice, and it was the most formal and structured instance of “face-to-face” pedagogy that I have seen to date. The rapport between Biju and his grandfather—his ayurvedic guru—was filled with the kind of tension that often accompanies formal scholastic performance and testing. But there were no raised voices, and Biju was not obviously agonizing with worry or self-doubt. He was clearly a stellar and advanced student, and Bhaskaran was an unmistakably seasoned and kind guru, albeit quite demanding of exactitude when warranted.<sup>16</sup>

Two days after I met Bhaskaran, I met his daughter (and Biju’s mother), Priyankara. She was the principal guru at Mookkamangalam gurukula in Kerala’s Thrissur District at the time. At no more than five feet tall, with a slight figure nearly always wrapped in a plain white sari, evergreen smile, affable eyes behind thick lenses set in heavy black frames, and a calm voice, Priyankara appeared to coordinate the many workers, animals, buildings, and patients on the Mookkamangalam estate effortlessly. The first time I met her, and just about every time I saw her over the following five years, she told me she was ready to hand over the doctoring and schooling reins to Biju. “I am partly retired,” she’d say. And then, in 2008, I learned that Priyankara’s eyesight was deteriorating. I was in the Coimbatore District of Tamil Nadu and had called Mookkamangalam ahead of a short stretch of fieldwork the following week to make sure they were expecting me and would be ready for my visit. Priyankara answered the phone. After we exchanged pleasantries, she said she wouldn’t be home when I arrived. Before I could ask why, she handed the phone to Biju, who said, “Yes, yes, we look forward to your visit. Call me when you get to Guruvayoor. My mother is sorry she won’t be here. Her eyes are not well, and she is going to Bangalore to see a doctor. She finds it hard to keep up with the young students, patients, plus all of the housework.”<sup>17</sup> The handling of day-to-day teaching and healing at Mookkamangalam had fallen to Biju around this time, and when I eventually arrived at Mookkamangalam, Priyankara’s absence was conspicuous. I thought a lot about my interactions with her over the previous five years, and I realized that she was always very busy whenever I visited, endlessly

tucking the sides of her long salt-and-pepper hair behind her ears. Cleaning, cooking, seeing patients, and helping young ayurvedic physicians master Vāgbhaṭa's *Aṣṭāṅgahr̥daya*, she seemed to multitask gracefully through each day with care and attention.

Between 2003–2017 I did fieldwork in Kerala nine times, with one period lasting nearly a year and most lasting about two months. Many of those periods were spent in the Thrissur and Palakkad Districts with Biju, Priyankara, Bhaskaran, and their revolving door of student cohorts. In the early days, if I wasn't in central Kerala, I was probably in Thiruvananthapuram, where I did research at the Government Ayurveda College, Kerala University and the Oriental Research Institute and Manuscript Library, and the Kerala Council for Historical Research. But the lion's share of my time in Kerala was spent at Mookkamangalam, where I observed the ebbs and flows of daily life for Biju and Priyankara. Thus, most of the ethnographic vignettes in this book involve them and their students in the Thrissur District. Bhaskaran used to visit his daughter's family often, especially as his work as an educator and healer lessened year after year until his death. I actually saw and spoke with him more times at his daughter's home than at Shantimana.

Without fail, Biju and Priyankara accommodated my requests to read texts with them, and they allowed me to observe and query them and their students about the textual training and patient interactions that went on every day at their gurukula. I see now that my original philological interests in ayurvedic literature were sound preparation for this book, since the texts were not just connected but actually vital to the ongoing clinical and educative labors at Mookkamangalam. I argue in chapter 2 that years of visiting this gurukula have also revealed a type of philological practice and engagement with healing literature that is quite different from philology as I had come to understand it as a student in the American academy. At Mookkamangalam, philology is a social and operational form of textually based inquiry. "The texts I teach students, some of the same texts I've read with you," Biju told me in 2017, "were not created for university professors or scholars." His view, instilled in him by his grandfather, was that the Sanskrit medical classics and Kerala's *nāṭṭuvaidyaṃ* literature are functional assets. They are sometimes challenging grammatical treatises and often fascinating compendia of somatic information that illuminate the development of India's scientific and medical history. "But these are," he stressed, "imperfectly understood if they are not learned as working tools."<sup>18</sup> For some time before I set out to write this book, even while I was committed primarily to doing text-analyses of India's classical medical literature, I felt compelled to continue visiting Biju, Priyankara, and Bhaskaran as often as I could. It was clear to me the texts I was reading were only one aspect of the philological project in the ayurvedic gurukulas of central Kerala. The process of teaching students to master texts that are indispensable to healing; learning to apply these texts to patient cases; and even a patient's reception of the texts' ideas are all important parts of philological labor in this context. The texts always stand

in relation to what can be done with them, how the vaidya practices them and how she expects her patients to continue the lessons of her practice after they leave the gurukula. An ethnographic angle, it turns out, is essential to capture philological discipline in this setting.

Nearly every time I visited Mookkamangalam and Shantimana to read, parse, and translate Sanskrit and Malayalam texts, I was also a participant-observer of the educational and clinical work that transpired on site each day. Biju, Priyankara, and I never read nor discussed texts merely as texts per se, in the sense of physical objects meant exclusively for reading and study. Whomever happened to be reading with me was typically also seeing patients throughout the day, and our lessons were interlaced by patient visits and illness testimonies, which were followed by the drafting of prescriptions and conversations about how to prepare and take the recommended medicines. On rare occasions, a patient might show up at Mookkamangalam in very dire straits, unconscious or semi-conscious, in which case snakebite was often the cause, and the gurukula would quickly begin to buzz with life-saving activity. I address these kinds of occasions in chapter 4. But it suffices to say here that those incidents were few and far between during my visits to central Kerala. Most days were teaching days first and foremost, punctuated now and again by patient arrivals. Instead of life-threatening snakebites, most patients I observed suffered from dermatitis and skin disorders, non-fatal spider bites, and intestinal maladies. And while the arrival of a patient interrupted activities in the classroom, under the skilled direction of a guru like Bhaskaran, Priyankara, or Biju, a patient visit was always an organic and necessary part of gurukula philology. Doctoring patients at Mookkamangalam and Shantimana is vital to—or better, an extension of—textual practice. It's part of the textual teachings of the guru. Both aspects are fundamental to “the broader concern with *making sense of texts*,” as Sheldon Pollock frames the philologist's most essential task.<sup>19</sup>

From my first to my last visit to Mookkamangalam and Shantimana, students were always around, observing and learning how vaidyas trained outside of the ayurvedic college system understood, explained, and practiced Ayurveda. These young men and women had many of the same textual questions that I had for Biju, Priyankara, and Bhaskaran. But they had additional and sometimes pressing interests about how to apply the lessons and knowledge in the classical texts to meet the needs of the ayurvedic clinic. Thus, whenever patients would arrive and announce themselves on Mookkamangalam's veranda, students of Priyankara and Biju would studiously follow their gurus from the classroom, where they had been reading and discussing Sanskrit words and sentences, to meet the patients and attend to the issues they presented. Bhaskaran, Priyankara, and Biju's comingling of vaidya-work and guru-work riveted me from day one, as much as, if sometimes not more than, the content of the texts I happened to be reading with them. I routinely characterize this dual professional skillset with the title *vaidya-guru*, “physician-teacher,” throughout this book, although I also occasionally refer

to them by only one or the other title if the context pointedly showcases their work and interactions with patients in the gurukula clinic (*vaidya*) or work and interactions with students in the gurukula classroom (*guru*).

This title is more than a descriptive marker for ayurvedic experts trained in a Kerala gurukula; it highlights the dual nature of this book's formation and execution. The textual materials I initially brought with me to Kerala, as well as those that I discovered there, had to be read, understood, and discussed to fully grasp that texts in the ayurvedic gurukula are fundamentally practical. Textual studies of the Sanskrit medical classics in the context of the gurukula, in other words, are crucial not simply because they reveal meaning and information about illness and healing, but because they are taught to help the physician attend to the variability and chance uncertainty of the clinical setting. The former is part and parcel of the latter. Drawing on my sustained if periodic participant-observer point of view between 2003–2017, to make sense of the ethnographic observations about the uses and functions of texts in the gurukula in chapters 2 through 4, it's been critical to reflect and analyze from a point of understanding and appreciation of the history, contents, and forms that texts, as such, can take in this setting.

There is a natural back-and-forth between the history in chapter 1 and the theoretical reflections on the activities at Mookkamangalam in chapters 2, 3, and 4. Many of the pedagogical practices of the Kerala gurukula in the twenty-first century are imprinted by the modern history and classical literary bases of Ayurveda, constructing a present-day context that reflects the continuing impact of educational reforms on the lives of Malayali *vaidya-gurus* and their students. I have tried to pattern the relationship of ethnographic, theoretical, and historical writing in this book according to an association that Kirin Narayan described as the relationship between scene and summary in cinematic writing and filmmaking. Narayan adapted this approach from the memoirist Judith Barrington and applied it to her own fieldwork descriptions.<sup>20</sup> Scenes, she explains, are ethnographic. They allow us to draw near to people and places, encouraging us to peer through entryways and apertures into spaces where people are situated, talking, and working. Well-crafted scenes capture the activities and speech of a person as well as the physical and vocal reactions of the people that person is with. In Narayan's deft hands, scenes draw us into the spaces people occupy, and they afford readers an opportunity to observe like voyeurs or flies on the wall. Historical writing of the type in chapter 1 is different: it is summary. Rather than close-ups, summaries offer series of extending long-shots taken from variable distances. Scenes are linked to and should be placeable within the summary, Narayan explains, like a cinematographer takes a layered and progressively summative long shot: "embracing first the whole house, then the street, then the neighborhood, and then becoming an aerial shot, it takes in the whole city and maybe the surrounding mountains too."<sup>21</sup> If summaries of history condense stretches of narrative action into single shots (a chapter, as it were), scenes attend to particular moments of narrative action. When



they are stitched together, the cinematic style of writing that Narayan endorses produces scenes that lend depth and thickness to summaries, while the summaries structure, historically emplace, and add narrative cogency to individual scenes.

### AYURVEDA, PHILOLOGY, AND GURUKULA PHILOLOGY

Revisiting gurukulas and ayurvedic colleges in Kerala across two decades, in person and while preparing this book with my field notes, audio interviews and video recordings, probing and detailing the things I have seen vaidya-gurus do with texts as clinicians and educators, I find myself returning again and again to a type of textual reading–cum–practice that undergirds the entire ayurvedic gurukula enterprise: a commitment to deploy texts. At a place like Mookkamangalam, the curriculum amounts to a rigorous and impactful form of philology, with the patients, the sick and unwell, as beneficiaries. Vaidya-gurus teach students how to read and understand texts with the expectation that mastery of knowledge promulgated in one or more medical sources will necessarily lead to workable practice of that textual knowledge to effectuate healing. The Sanskrit medical classics are understood to be under-utilized if they are not rehearsed and drawn on as the basis for therapy. The achievement of the full range of things vaidya-gurus can do with the texts of their tradition to examine bodies, heal, and promote wellbeing is built upon and ultimately a manifestation of their ability to make sense of texts.

Many of the students and gurus I met between 2003–2008 at Shantimana and Mookkamangalam knew the contents, even by heart in some cases, and potential uses of Vāgbhaṭa's *Aṣṭāṅgahṛdaya*. During these five years, I visited Kerala every year, staying on twelve months in 2004–2005; other visits lasted anywhere between two weeks and three months. On a typical day, I read the *Aṣṭāṅgahṛdaya* with Priyankara and Biju, while one or two of their students would observe us, occasionally joining our readings and conversations. I studiously jotted notes in the margins of the texts I brought with me, and later in the evenings, back in my room, I prepared translations of the verses we had read earlier in the day. It would have been apparent to any onlooker that I handled and related to a text differently than Priyankara and Biju did. For me, a Sanskrit text like the *Aṣṭāṅgahṛdaya*, which I wasn't able to study with a specialist at my university, was like a literary puzzle. Its pieces and therefore meaning tended to fall into place primarily via untangling grammar and vocabulary. My ability to make sense of this text was mostly contingent on language rules that I had studied in classrooms, often while also reading *nyāya*, *kāvya*, the Vedas and Purāṇas, or the epics (i.e., not ayurvedic literature), using the "classic" Sanskrit textbooks used by instructors at many universities in the United States: Perry's *Sanskrit Primer*, Macdonell's *Vedic Grammar*, Whitney's *Sanskrit Grammar*, Lanman's *Sanskrit Reader* and, by the time I was in the field in Kerala in the early 2000s, the Goldmans' *Devavāṇīpraveśikā*.



In 2003, I learned that Priyankara and Biju had memorized the entire *Aṣṭāṅgahr̥daya*, and their best students could recite large portions of it from memory. They not only had more experience than I did with this classical source, but they also had a very different kind of experience with it. For these vaidya-gurus and their students, the text's multiple meanings all drove toward a purpose that was not just literary, in a bookish sense, as much as it was technical and operational. For them, the end of the text, as it were, the reason it was compiled in the first place, and the whole point of scrutinizing it, rested on its practicality. Whereas I made notes in my copy of Vāgbhaṭa's classic to ensure I had a chronological and intertextual sense of its verses and chapters, those who were skilled enough volleyed the knowledge of the *Aṣṭāṅgahr̥daya* synchronically, combining information not only from different chapters of the text itself but also from other Sanskrit and Malayalam sources they regarded as relevant to the particular topic or lesson being considered that day. They recited and discussed the text with the goal of mastering it for the purpose of treating the ailments of their patients. At the time this seemed like, and indeed it is, an entirely straightforward pursuit for a physician. The *why* that motivated *how* Priyankara and Biju made sense of the *Aṣṭāṅgahr̥daya*, however, cast in sharp relief some differences in our respective philologies. Language and grammar mattered for both of us, naturally. But this Sanskrit medical source was far more than a scholarly product in need of historical contextualization and explanation, the primary aims of my close reading. Priyankara and Biju helped me in these pursuits, to be sure. But the *raison d'être* of education at Mookkaman-galam and Shantimana was—and it continues to be for Biju's work with students today—to actuate curative uses of the knowledge of the texts, in effect to practice texts. This applied element leads to concrete results: healing is the overall goal and, for patients, recovery is surely the most desirable outcome of meeting with a physician. Applicability here also points to gurukula philology as a potent pedagogy, useful to understand how old texts have been and are used in India and what philology as a discipline in this setting means and is, and how it might help us rethink it as a method in other contexts. Namely, it is a regimented and controlled engagement with textual traditions that is learned through reading, memorization and inquiry and, of necessity, also entails practice.

The turn away from intensive study of Ayurveda's classical literature in ayurvedic colleges through the greater part of the twentieth century basically rendered the practice of texts motivating gurukula philology moribund in Ayurveda in most of India. The discipline has persisted in Kerala's gurukulas, and the textual practice that I describe in this book reflects the south Indian ayurvedic practitioner's approach to her or his work. On my view, these practitioners do the work of philologists, though perhaps they do not do the kind of philology we might think of in Europe and the United States, the type of philology, for example, that many classicists and Sanskritists in European and North American academia do. I take philology to be an appropriate label to describe what unfolded when I watched

Bhaskaran teach the *Aṣṭāṅgahr̥daya* to Biju at Shantimana and Priyankara treat patients at Mookkamangalam. All three—Bhaskaran, Priyankara, and Biju—are philologists for reasons that conform to definitions of philology arising out of scholastic traditions in Europe, where the modern practice of philology (and allied fields, such as comparative linguistics) emerged and developed, as well as scholastic traditions in India, where the study of texts and their histories and cultures has been around for a very long time. They do much the same work that famed and pioneering European philologists like Lockwood, Tolkien, Champollion, and Nietzsche did, albeit they work exclusively with Sanskrit, Malayalam, and Mani-pravalam literatures. (Biju has further expanded his repertoire to include Hindi and English sources as well).

Yet Bhaskaran, Priyankara, and Biju also extend the educational discipline to the sphere of practice in ways that European and North American philological scholarship typically has not. They practice the texts they study and make their knowledge performable and, ideally, transformative for the ill and physically impaired. The target community of their educational and healing practices also sets textual practices in the south Indian ayurvedic gurukula apart from some philological customs forged outside of South Asia. Gurukula philology is ultimately for patients, known as *rogins* in Sanskrit: “diseased people.” Who these people are and how they are implicated in the practice of texts is a critical and recurring theme in chapters 2 through 5.

In the next chapter, I discuss the creation of ayurvedic college education and present historical causes that drove some recipients of BAMS degrees to study *āyurveda* in Kerala’s gurukulas. The subsequent chapters on pedagogy, knowledge exchange, and ritual then illustrate how vaidya-gurus in Kerala see their work as concerted and ongoing attempts to implement classical knowledge in the present-day. Philology is the discipline of study that most closely captures the nature of their work and yet, at the same time, the vaidya-guru’s labor expands our understanding of this language and literature-based discipline. And while I appreciate Michael Witzel’s observation that “to merely mention the word [philology] is already the kiss of death in some circles,” it is a critical conceptual lodestone for this study. My impulse to identify a particular ayurvedic philology that is forged in the gurukula through extensive training in textual editions and interpretations of texts for the purpose of healing arose somewhat intuitively in response to my early academic training in the United States.<sup>22</sup> As opposed to the particular instantiation of philology in the south Indian ayurvedic gurukula, the framework for philology that I learned in school was largely shaped by the field of Classical Indology. Just as Witzel commented that one of his colleagues at Harvard “once explained philology to [him] as ‘the study of a word,’” suggesting the discipline’s historical linguistics and etymological-heavy preoccupations, I frequently confronted approaches to the study and understanding of Indian texts with the same attention to linguistic minutiae at the expense of larger questions about the production, reception, and

uses of the texts in the past and/or present. For his part, Witzel propounded a view that pushes back against and counters such a narrow form of textual examination, expanding the exegetical project in general and the Classical Indological worldview in particular, preferring “to define [philology], as . . . ‘*kulturwissenschaft* based on texts,’ or ‘the study of a civilization based on texts.’”<sup>23</sup> I would tailor Witzel’s definition to suit the south Indian ayurvedic gurukula, and say that philological work is the study of the human condition based on texts in order to induce wellbeing. While the second chapter contains the most straightforward and sustained discussion of gurukula philology in the book, the other field-based chapters on knowledge exchange in the doctor-patient encounter and the performative aspects of healing are equally grounded on the uses of textual meaning that vaidya-gurus deploy when they practice texts. In anticipation of specific expressions of the practice of texts later on, I would like to now briefly explore the kinds of usable meanings I have seen vaidya-gurus generate from texts for the purpose of treating patients.

Philology has a rich history in Europe, deriving its name from Greek *philologia*, which conveys a sense of loving reason or words and, by extension, a love of literature and learning. The term retained the meaning “love of literature” when it entered English in the sixteenth century via Middle French *philologie*. As an academic discipline, in the nineteenth century, philology came to mean the study of the historical development of languages, and in Europe and North America it has frequently encompassed literary criticism, history, and linguistics. In the context of South Asian languages and texts, in the wake of trailblazing studies by William Jones (1746–1794), Henry Thomas Colebrooke (1765–1837), August Wilhelm Schlegel (1767–1845), and others, as well as the formation of the Asiatic Society in Calcutta in 1784, the philological study of classical Indian languages became unplaced and movable. “Europeans no longer had to go to India to learn from pandits,” James Turner observed, producing at once an apparent gain for the study of Indian literature and culture and a significant loss: “Henceforth European Sanskrit philology was largely cut off from the wells of Indian learning that had irrigated it in its infancy. The Calcutta orientalist [like Jones and Colebrooke] who survived India took their Sanskrit learning back to Britain with them.”<sup>24</sup> Then, sparked by an increasing preoccupation with Sanskrit in European universities and alongside the creation of academic associations like the Société Asiatique (1822), Royal Asiatic Society (1824), American Oriental Society (1842), and Deutsche Morgenländische Gesellschaft (1845), Classical Indology developed as a philological field dominated by textual criticism and the manufacture of critical editions (based on, for example, variant readings of manuscripts, conjecture and emendation, and historical linguistics). This type of scholarship foreshadowed the area-studies paradigm that blossomed post-World War II, contributing to the expansion of “European perspectives on the history and civilizations of the world.”<sup>25</sup> The movement of premodern Indian texts outside of South Asia also had the effect of narrowing Classical Indology’s ambit of analyses to deemphasize, if not sometimes

exclude, in-depth consideration of the ways that premodern texts enjoy continued use among Indian scholars and professionals in the present day. Sanskrit grammars and comparative Indo-European textbooks were produced in Europe and North America, and increasingly scholars studied India's literary past with Indo-European linguists in their home countries, learning about Indian society and culture in books, oftentimes beside linguistically-related literatures from ancient Iran and Europe for comparative purposes, without needing to travel to the subcontinent.

My description of philology in south India's ayurvedic gurukulas diverges in some measure from philology as it's often seen in Classical Indology. It rests on an interdisciplinary view of the discipline that resembles recent iterations of *Modern* Indology more than *Classical* Indology, especially in the former's attempt to triangulate classical and vernacular texts with contemporary anthropology, sociology, and politics. It may be true that some Indologists trained in the Classical fashion, going back to Jones and Colebrooke and including some scholars today, have done and do augment their research with ethnography. Trips to "the field" often involve visits to manuscript libraries and archives, collecting by handwritten transcription, photocopy, and photograph various details about primary source materials. Sometimes Classical Indological publications are prefaced with accounts of authors' meetings with traditional Indian pandits who specialize in the subjects and literatures in the texts they are studying and critically editing. But the sustained fieldwork common in social and cultural anthropology, the type forged by Malinowski and cultivated by Boas and his students, has not been and isn't *de rigueur* in Classical Indological scholarship today. Conversely, the combination of fieldwork with language analysis is fundamental to Modern Indology. My description of the practice of texts as gurukula philology among south Indian *vaidya-gurus* thus contributes to what might be called new directions in Modern Indological scholarship.

The type of philology I depict here is drawn from prolonged periods of participant-observation among Malayali *vaidya-gurus*, their students, and their patients. The collective readings and interpretations of ayurvedic literature these people do in the gurukula, to first learn language and meanings contained in texts, is only the beginning of their philological practice. Insights into the language and meaning of texts open up and help us begin to address questions of "literary history, customs, institutions, etc.," in much the same way that Ferdinand de Saussure understood philology to operate in his posthumous *Course in General Linguistics*.<sup>26</sup> For Saussure and other nineteenth and twentieth century scholars of language in America and Europe like Leonard Bloomfield and Saussure's student, Antoine Meillet, philology was tantamount to the study of culture via literary documents (reiterated by Witzel's *kulturwissenschaft* based on texts).<sup>27</sup> The focus on cultural awareness derived through texts led Saussure to comment in a letter to Meillet that philology was about much more than language in texts. It involved discovering information about "certain people having certain origins," which pointed, he wrote, to "this

almost ethnographic side [of philology] that keeps me interested.”<sup>28</sup> The culture that ayurvedic literature articulates and to which Kerala’s vaidya-gurus belong and contribute is an assemblage of people who heal and who need healing. They are physicians and patients, people who escort patients to meet physicians, and families and communities who may help patients recover and have an interest in seeing patients move from illbeing to wellbeing. It’s in the interpersonal relationships of these people who come together under an ethos of healing, governed by principles of sickness and health, patienthood, and wellbeing, that the vaidya-guru’s improvisatory handling of texts in an ever-changing clinical site morphs into an interpretation and social performance of those very same texts to assess and treat patients. This latter component, to the extent that it (ever) plays a role in Classical Indological studies of Ayurveda, often appears as conjecture or rehearsal of what the texts say they should be used for. And it typically stops there.

The performative expression of first-order textual scrutiny is an essential part of gurukula philology. On the one hand, it is an ethnographic and interpersonal direction that vaidya-gurus imbue in their philological labor. On the other hand, for the scholar, being there (participant-observation) is critical to grasp the full extent of the social and cultural import of the combination of education and healing that motivates the practice of texts. It is not enough to read about it in the classical Sanskrit and regional medical literatures. Vaidya-gurus actively comment on and attempt to bring understanding of what constitutes wellbeing to sick people and the communities they live in. Texts aid the vaidya-guru to think ethnographically about the experiences of illness and patienthood and then operationalize healing knowledge to try to reverse the pathology of disease and ameliorate the patient’s embodied ontology of sickness. The direct link of the second-order, performative component that we see in the practice of texts in the ayurvedic gurukula was transformed and essentially eliminated from ayurvedic practice as it came to be taught in the modern college curriculum. It continues in parts of Kerala, however, and as I explain in the following chapters the vaidya-guru’s practice of texts implicates and illuminates multiple literary histories, rituals, and social customs that underscore the changing import and history of Ayurveda’s position as an institution of healing in India. Comprehensive cultural interpretation and involvement agree with the nature of this life science (*āyurveda*), which is, moreover, why I consider Bhaskaran, Priyankara, and Biju to be philologists and why, as noted above, the practice of texts can be good to think with to explain and understand aspects of south Indian society.

Bhaskaran, Priyankara, and Biju take part in and shape a social and cultural economy of meaning-making when they read, interpret, and practice texts. In so doing, they *do philology* in the form of mukhāmukhaṃ (face-to-face) learning and healing. These practices rest on a tripartite disciplinary skillset comprised of the central philological undertakings in Sanskrit literary cultures identified by Sheldon Pollock: text constitution and editing, analysis and interpretation, and emendation

and literary criticism.<sup>29</sup> These tasks are expressed in semi-analogous Sanskrit terms in the *Carakasamhitā* as *vākya*, *vākyārtha*, and *arthāvayava*. As I explain in the following chapters, the vaidya-gurus and students I observed in south India are philologists in the emblematic Indian model of the commentator, whose chief concern is to interpret texts and teach others how to read and interpret texts.<sup>30</sup> Yet, when Bhaskaran, Priyankara, Biju, and their students practice texts, they also philologize with a commitment, ultimately and necessarily, to create commentaries that are therapeutic in ways that bring about real and physical transformation. Commentaries in the south Indian ayurvedic gurukula are cumulative and intertextual. Due to the improvisatory social nature of the gurukula's clinical space, they are oral and conversational and thus also evanescent (although in recent years there have been efforts to put some of Bhaskaran's commentaries into writing).<sup>31</sup> In the presence of a new patient the vaidya-guru's interpretation and expansion of Vāgbhaṭa's *Aṣṭāṅgahr̥daya* or Nārāyaṇa's *Jyōtsnikā*, for example, function both as a secondary and a primary knowledge form (*vidyāsthāna*).<sup>32</sup> In the former instance (commentary as secondary knowledge), the vaidya-guru expresses already established technological knowledge, reaffirming a history of medical commentary that has come down from earlier practitioners and teachers. In the latter instance (commentary as primary knowledge), the vaidya-guru draws on her own patient case histories and a rhizome of root sources to create extemporaneous and epistemically creative assemblages of knowledge to treat daily encounters with new illnesses, relationships, and situations. Similar to Witzel, Pollock's understanding of philology echoes Saussure's assessment a century earlier about the value of the discipline to humanistic inquiry, and in the spirit of their articulations I propose that the philological practices underlying education in the south Indian ayurvedic gurukula are designed to confront, wrestle with, and in the end use three fundamental types of textually-derived meaning.

The first is textual meaning. We have to read texts to determine this type of meaning and, as is often the case with Sanskrit scientific literature, support our readings with existing commentaries on root texts. What message(s) does a text convey? We might be able to pick up this information at a glance or by skimming. But here, and in the ayurvedic gurukula, textual meaning springs from the kind of philology that Roman Jakobson famously described as "the art of reading slowly."<sup>33</sup> This is the face-value meaning of texts, what texts say. The *Aṣṭāṅgahr̥daya* is the Sanskrit classic that Kerala's vaidya-gurus teach, and it is the text they cite most often when they treat patients. They also rely on local healing traditions, most of which have both oral and written lines of transmission. But when they teach and cite vernacular literatures, they put them in conversation with the *Aṣṭāṅgahr̥daya* and the other Sanskrit classics as a way to explain the core literature of *āyurveda*. In the process, they also amplify and extend the ayurvedic corpus as needed to meet specific questions and problems that arise in the clinical setting. Proficiency across multiple sources enables vaidya-gurus to explore and explain what

the *Aṣṭāṅgahrdaya* means, discover alternate readings, and at times create their own commentaries on Vāgbhaṭa's classic. When they teach this and other texts, seasoned vaidya-gurus help their students to understand what the texts mean in context—in the past, when they were produced, as well as today, as they practice them with patients. Reception and interpretation of the texts they teach (attested in commentarial tracts, for example) is also part of a vaidya-guru's attempt to clarify the cultures in which ayurvedic texts were created, much like Witzel's idea of *kulturwissenschaft*. Vaidya-gurus not only read texts slowly to suss out meaning, in other words; they also read and explain them as historically manufactured cultural products.

Arising organically from textual meaning derived from slow readings, the philological work of vaidya-gurus also generates contextual meaning, which is the second type of meaning-making at play in gurukula philology. A determination about the values and uses of texts for the historical actors who composed them reveals this type of meaning. Commentaries are essential here, and indeed some of them are as well-known as the core texts upon which they comment. The meeting of classic and vernacular literatures is also important. Commentaries on Sanskrit sources—which are frequently written in Sanskrit, although in Kerala some are composed in Malayalam as well—over time create a type of meaning that reflects the historical phases of the tradition, helping us to identify, as Pollock put it, “the history of textualized meaning.”<sup>234</sup> This, in turn, opens up the prospect of identifying radically different, and perhaps unexpected, landscapes of culture, systems of power and negotiation, and institutions of authority in which the knowledge in the texts we read were (and perhaps still are) embedded. The ongoing apprehension and explanation of contextual meaning in the Sanskrit classics and regional medical sources in the teaching-healing efforts of vaidya-gurus effectively contribute to a recreation of contextual meaning, day after day, in response to and alongside earlier actors from older and other cultural contexts where the wellbeing and vagaries of the human condition were the cynosure for producing knowledge about healing, just as they continue to be for the vaidya-guru today.

The third type of meaning reflects the positionality of the reader vis-à-vis the text, and it involves a degree of self-assessment. In the south Indian gurukula, this arises when vaidya-gurus interrogate their own prejudgments about illness and wellbeing, about the lineages within which they have been trained, and the relationships of their patients and students to the texts they use in their teaching and treatments. For those who work closely with texts, this register of meaning-making implicates personal milieus in ways contextual meaning does not. It asks us to pause when we read and reflect on texts, to ask ourselves if we are reaching real historical understanding, while at the same time not falling prey to the idea that we may somehow remove ourselves from the texts we read and interpret. In the Pollockian version of philology, this type of meaning-making urges slow-reading philologists to reflect on the motivations and hoped-for outcomes of their work.



It presses them to probe the various ways in which the materials they read and interpret are useful *to them*. Self-awareness is thus key here, as is constant self-enquiry: How do the claims of the past in the texts we read impinge on us and our relationships and commitments today?<sup>35</sup>

The first two types of meaning-making are evident in mukhāmukhaṃ instruction at Shantimana and Mookkamangalam, as I explain in chapter 2. The third is less obvious in the ayurvedic gurukula, although it is immensely important to an observer's investigation of what vaidya-gurus do (and say they do) with texts. Philological practice described by Pollock, Jakobson, and Saussure provides an open-ended and flexible depiction of the discipline. And while it's true a method of reading slowly could be taken as an approach that any careful reader—not only the philologist—might do, the definition's plasticity was, I suspect, calculatingly designed. Flexibility does not invalidate the discipline or render it insubstantial or easy. The three types of meaning derived from the study and use of texts adumbrated above draw our attention to approaches within philology that require an epistemological mindset that allows one to treat texts as ever-developing knowledge bases meant for technical applications that will necessarily change (for example, with each new patient and illness). This type of philology is not aimed at making critical editions and forming stemmatics. It instead asks how Ayurveda's past literary cultures contribute to current conversations about self-care, well-being, and the patient experience of disease. The Malayali vaidya-gurus I have observed and write about in this book consciously chose to read the Sanskrit medical classics slowly and to teach their students how to read slowly for the purpose of making sense of Vāgbhaṭa's *Aṣṭāṅghṛdaya* and its past and present functional contexts. This is not a conscious choice all literate people make when they read. It is a mindful decision about method and objective that involves translation, in the service of interpretation, and ultimately the application of textual knowledge. This philology is also *medical* in that healing concerns motivate the vaidya-guru's teaching and interpersonal activities within the clinical space of the gurukula. But whereas the vaidya-gurus I know in Kerala are able to cite manuscript disparities in a stemmatic genealogy of a text like the *Aṣṭāṅghṛdaya*—that is, to contribute to scholarly conversations of the Classical Indological sort—their readings with students and conversations with patients are intended to develop humanistic inquiry and understanding in direct ways that textual derivations and conjectural emendations typically do not invite. In doing so, they ensure the idea and practice of medicine in the gurukula reflects the expansive latitude and interests of the classical Indian life science they teach and practice.

The philological toils of teaching, learning, and healing in Kerala's gurukulas have been honed by Malayali vaidya-gurus over many decades, and the process continues to evolve today. It is a fairly straightforward task to identify how these physician-teachers practice texts by making meaning according to the things that texts say and by understanding the contexts in which these texts were made



and continue to be useful. To unearth the extent to which Kerala's vaidya-gurus engage in self-critical reflection about how, when, and why they bring aspects of their own cultural views, socioeconomic backgrounds, and aspirations to their interpretations of the texts they teach to students and practice with patients is less obvious. This information has emerged over the years in small talk at the end of a day's work, when I got the chance to speak with the teachers and students in unstructured conversations about casual matters that on the surface might appear ancillary to Ayurveda. It is no less important than the first two types of meaning-making, and to an extent this register enters into the discussion in chapter 3 on knowledge exchange between physicians and patients and the values that motivate vaidyas to treat sick people at all. Nevertheless, this introspective type of meaning is the least developed of the three registers of philological meaning-making in the book.

#### GURUKULAS AND COLLEGES: "PURE" AND "MIXED" AYURVEDA

In his sweeping study of ancient Indian education, Radha K. Mookerji classified the gurukula as part of an oral system of education known on the Indian subcontinent as *gurupāramparya* ("teacher lineage") or *sampradāya* ("tradition"). This didactic institution was primarily established for teaching the Vedas and to ensure "the uninterrupted ideal succession of pupils and teachers, by which knowledge is conserved and transmitted."<sup>36</sup> Mookerji marshaled ample data about the teacher's residence as a site of intensive learning that juxtaposed well with British-style colleges that spread across India from the late nineteenth through the mid-twentieth century. Gurukulas, he mused wistfully, were inspirational and conducive to knowledge transmission, while the European colleges were "mechanical, soulless, and oppressive" institutions of education that inherently "crush out the very taste for learning in the students after they leave them."<sup>37</sup> Even in large premodern South Asian universities in places like Kashi, Taxila, and Nalanda, where multiple teachers and large student bodies were the norm, M.K. Raina argues that "education was guru-oriented" in the same spirit, even if not the form, of the more intimate residential settings of Mookkamangalam and Shantimana. Integral to the transmission of scientific knowledge throughout Indian history, Raina continues, the guru is "an indispensable link in the process of communication, irrespective of the content of the message involved" or the setting.<sup>38</sup>

An institution similar to the gurukula, the *ācāryakula*, is attested in Sanskrit literature, suggesting a potentially different kind of teacher and scholastic center in Indian history: the residence of the *ācārya*. But Sanskrit authors often used "guru" and "*ācārya*" interchangeably to mean, at bottom, a teacher or preceptor, whose expertise might have been involved with spiritual or religious matters, as gurus are characteristically portrayed nowadays in popular media. In the south Indian

historical world we come to know through classical Sanskrit and Tamil literature, a key difference between gurus and *ācāryas* appears to have been their proximity to the people for whom they deployed their knowledge and skills.<sup>39</sup> Hartmut Scharfe describes the guru as an extended family member who historically taught the Vedas to a family's children over long periods of time, whereas the *ācārya* was something of a freelancer, an outsider hired to conduct initiation ceremonies on semi-regular contractual bases.<sup>40</sup> The south Indian vaidya-gurus discussed here viewed and described the knowledge they communicate to students and patients as areligious. They impart technical and therapeutic knowledge that's steeped in an old yet ongoing tradition of oral and written transmission, the integrity and longevity of which rests on the gurukula model of instruction.

The prevalence of gurukulas in India as institutions to study Ayurveda noticeably declined in the 1890s, when developments in ARM redirected the education of vaidyas away from the intimate *guruśiṣyasambandham* ("teacher-student connection") of gurukulas towards British-style collegiate institutions with large student bodies and multipart faculties of professors. In these colleges, most professors did not teach courses across Ayurveda's eight fields (*aṣṭāṅga*) of healing, but typically specialized in one (or maybe two). As I explain in the next chapter, the college model has been the norm for ayurvedic education in India ever since ARM's earliest advancements at the end of the nineteenth century, and the idea of a gurukula education in Ayurveda today is widely seen as impractical, since it takes considerable time to complete and no credentials are conferred when it's done. For some observers, the choice to take an education in classical Sanskrit literature as professional development, when the education that accredits that profession has been refined and streamlined according to international medical standards over several decades, might be assumed to be guided by identity politics bred by Hindu Nationalism, rather than a strictly professional desire to connect to the "roots" of Ayurveda. Among the gurukula teachers and students I spoke with in south India, these two motivations might be ineluctably connected, especially in the polarized political climate of contemporary India. But on the whole, most of these people kept their political views close to their chests whenever I brought up religion, Hindu Nationalism, and identity politics. I address the potential complications of taking recourse in a Sanskrit-based medium in modern India in the last section of this chapter.

In the central Kerala districts of Palakkad and Thrissur, the practice of training at a guru's residence managed to continue through the twentieth and into twenty-first century, in spite of the college's predominance in ayurvedic education. Bhasakaran and Priyankara worked, and Biju continues to work, out of their houses or in buildings adjoining their family dwellings. Their teaching and clinical work accord with a *śāstric* model of a teacher of classical Indian science. That is, they are products and purveyors of specific lineages (*paramparās*) in which elder gurus educate junior students, who usually come from the immediate or extended family of the

guru, although the closed family-based convention has not been upheld in recent decades. When I first met Bhaskaran, for example, he was simultaneously teaching a young woman from outside his family as well as his grandson, Biju. Priyankara and Biju routinely admitted non-kin as students, and neither Priyankara nor Biju has had a student from their family since I began visiting Mookkamangalam. In general, men have dominated the gurukula as both teachers and students for much of Kerala's history. But this trend has changed in the last half-century; Priyankara has been a pioneer in bringing women to the ayurvedic gurukula, and thanks to her efforts women are regularly students at Mookkamangalam nowadays. Irrespective of kinship, affinity, gender, or sex, vaidya-gurus in central Kerala are usually known in the community as "gurus" rather than one of the many Malayalam words for teacher (or related terms like instructor or tutor)—such as, *ācāryan*, *adhyāpakan*, *aṅṅāvi*, *āśān*, *eḷuttuchan*, and *upādhyāyan*. As a traditional site for learning Ayurveda, the word gurukula has thus endured among many of the Malayalis I met in Kerala, whereas the alternative classical term *ācāryakula* has not.

Gurukula philology presents a unique and little-known segment of Indian textual studies and, apropos of medical education and practice in general, it ironically shares the basic aims of the biomedical frameworks adopted in the nineteenth and twentieth centuries that were institutionalized by the CCIM in the ayurvedic college. This is ironic because the educational model of the gurukula was widely and eventually rejected during ARM. It was held up as the thing against which prevailing voices in ARM proposed the new, forward-looking collegiate system. The move from the gurukula to the college was imagined as creating distance between the old familiar environs of a Sanskrit past and a modern and magisterial system of English biomedicine. Hard-won developments during ARM and systematic re-classifications of the Sanskrit classics in the ayurvedic college curriculum displaced the "old" or "traditional" methods of teaching and studying medical texts for "new" and "modern" ones. The discrediting of gurukula philology in favor of biomedical specializations and testing advanced on an undercurrent of anti-nostalgia among ARM's chief spokesmen and organizations, who promoted the translation and shoehorning of classical Sanskrit-based *āyurveda* into English-based biomedical categories and institutions. The move, ultimately, went from one type of bookish study (slow reading) and routine memorization of texts by physicians-in-training for the explicit purpose of healing patients to another: from the mukhāmukhaṃ pedagogy-qua-residential healing of the gurukula to the lecture hall-qua-hospital of the college. Both models require students to learn how to identify layers of meaning in texts about the human body and to internalize that knowledge so that it can be carried as effortlessly as possible into a doctor-patient meeting and implemented for healing. But the shift was imagined by many in ARM as an essential step to shed the sentimental envisioning and elicitation of an ayurvedic past that did not seem viable or helpful in a twentieth century defined and adjudicated by European biomedical standards.

The incorporation of biomedical disciplines and ways of envisioning bodily structure and performance in ayurvedic education could not have proceeded without rejecting the institutional design of the gurukula and its curriculum. Repudiation of the gurukula was not pointedly aimed at the methods of education that vaidya-gurus employed in the past, however. The gurukula was an obvious point of departure and change for a realpolitik movement wrought by late-nineteenth and early-twentieth-century colonialism on the subcontinent that at once sought the preservation of Ayurveda and the re-presentation of this classical tradition in step with modern biomedicine, both globally and as it was already accepted across most of India. The placement and shifting roles of Sanskrit language learning and literature in ayurvedic education underlined this simultaneous backward- and forward-looking endeavor. In the end, the gurukula was characterized as too backward-facing and not capacious enough structurally or ideologically to embody the overhauled tradition of the Ayurveda of the future.<sup>41</sup>

A belief in an ostensible “real Ayurveda,” like Prathik and Ganesh expressed to me at Mookkamangalam in 2011, is not new in India. It has been around for decades, emerging during ARM in discussions about whether or not to integrate biomedicine and Ayurveda. What Prathik imagined as the real or authentic form of Ayurveda is traditionally known as “pure,” or *śuddha* Ayurveda. Pure Ayurveda is associated with medical knowledge crystallized in the Sanskrit classics of Caraka, Suśruta, and Vāgbhaṭa, and its counterpoint is “mixed,” or *miśra* Ayurveda, which refers to the blend of Ayurveda and biomedicine that ayurvedic colleges teach. Both types preserve the name of India’s classical life science. Both types are also affiliated with a specific educational institution in the imaginations of many ayurvedic practitioners: pure Ayurveda is propounded in the gurukula, whereas mixed Ayurveda flourishes in the college. Throughout this book I probe and wrestle with the links between these kinds of ayurvedic knowledge and their sites of production and transmission. In the next chapter, for example, I explore historical events and popular discourses that cultivated the pedagogical bases and cultural demarcations of pure and mixed Ayurvedas. The chapters that follow illustrate how notions of pure and mixed knowledges still inform modern practitioners about the openness of classical *āyurveda* to medical ideas and practices that are not (obviously) articulated in the Sanskrit literature.

In the remaining pages of this introductory chapter, I would like to address a particular outlook about the production of knowledge in the history of Ayurveda that I encountered repeatedly among practitioners in south Indian gurukulas and colleges, an attitude that has been informed by a century or more of scholarship: namely, that ayurvedic gurukulas are upholders of a local or regional memory, where students and gurus tend to hold the view that mastery and transmission of the Sanskrit classics are the most vital tasks to protect and maintain a definable “tradition” of Ayurveda. I work through some of the implications this outlook has in shaping people’s considerations of ayurvedic knowledge as genuine

medical or scientific knowledge. But the discussion does not end with the closure of this introduction. I take up the question of Ayurveda and scholarship again and again in this book. In doing so, I try to problematize what I see as a drift in academic writing on India's medical history that has tended, and at times still tends, to overlook the gurukula as an integral and lasting institution in the production of ayurvedic knowledge and, thereby, to misread (even stereotype) practices of gurukula practitioners and their adherence to Sanskrit-based medicine as nationalistic and anti-cosmopolitan.

#### CONTEMPORARY CLASSICISM: COSMOPOLITANISM AND THE INVENTION OF TRADITIONS

Despite its central position in the long history of Indian medical education, little research has been done on the gurukula. Apart from minor studies of hospitals and asylums in British India, precious little research has been done on medical institutions in India's past, especially those explicitly utilized for educating physicians of indigenous medicines.<sup>42</sup> When scholars have considered the gurukula, most have written it off as one of the many traditional elements of Indian culture erased by colonialism. The turn from local or regional styles and institutions of education to European ones deeply influenced the subsequent history of Indian education, and discernibly reduced interest in gurukula learning. The far-reaching changeover across the region did not completely expunge gurukulas as places of learning and healing from the south Indian medical landscape, however.

Vaidya-gurus and students in Kerala's working gurukulas today consider their roles in the production and transmission of ayurvedic knowledge to be part of a lineage originating in an ideology of healing and curative techniques described in the oldest extant Sanskrit medical classic, the *Carakasamhitā*. The scope of healing concerns in Caraka's collection is vast, reaching across predictable areas like pathology, therapeutics, and dietetics, adumbrating matters of ethical or religious import such as *dharma* and *karma*, and expounding on the human condition vis-à-vis grander cosmological inquiries and expositions. The work also describes the mukhāmukhaṃ pedagogy deployed at Mookkamangalam and Shantimana. Because of the text's antiquity, it is common for Biju and his students to describe what they do as "traditional," and by keeping education and doctor-patient visits as close as possible to the letter of the *Carakasamhitā*, students like Ganesh and Prathik see the gurukula's activities as a counter to biomedical influence that is unmistakable in the ayurvedic college system. "What we're doing at Mookkamangalam with Biju," Ganesh told me in 2011, "is *śuddha* Ayurveda. The college syllabus is—" He stopped and looked at Prathik. "It's *miśra* Ayurveda," Prathik quickly added. "It is modern. It combines ideas and techniques of Ayurveda and allopathy. But still, we call it Ayurveda!"<sup>43</sup>

There are historical reasons for the development of such polar understandings of Ayurveda, and I examine them in detail in chapter 1. It suffices to say now that when views express notions of a tradition that is either/or, such as pure Ayurveda or mixed Ayurveda, those views are frequently informed by politics and historical rivalries. Purveyors of this type of black and white thinking might not be fully cognizant that their views advance certain political histories and/or present idealized visions of the past. In south India, I met students and professors who expressed unwavering support of the ayurvedic college syllabus. Yet, their support for the college did not necessarily translate into disdain for the gurukula. Indeed most supporters of the college model I met recognized the historical significance of the gurukula to Ayurveda's history, and most practicing physicians I know who were educated in ayurvedic colleges before the present century know someone (or someone's relative) who has had some gurukula training. But among those who are content with the college curriculum, the gurukula is also regularly seen as a bygone institution. Conversely, over the years I also met firm opponents of the infusion of biomedical knowledge and methods in Ayurveda. For them, the gurukula might be an antidote to the supposed mixing of medicines. But it is also usually clear to these people that the future of Ayurveda is not going to be shaped in gurukulas, even if the gurukula represents something that is, in their minds, uniquely Indian, long celebrated, and worthy of preservation. To what extent are these differing views based on questions and concerns of politics, cosmopolitanism, and nationalism? The answer is not always obvious, and students like Prathik and Ganesh, and the others I introduce in this book, embody and express a perspectival pluralism that simultaneously gestures towards both extremes on the *śuddha-miśra* continuum. They complicate dichotomous thinking along the lines of tradition and modernity in the college and gurukula and in Ayurveda in general in the twenty-first century.

Tradition in Asian medicines, Waltraud Ernst and Vivienne Lo observed, was never univocal nor uniform, but rather “intrinsically ‘plural’—both in terms of the variety of ways in which any one tradition has been interpreted and codified by different learned authorities, and in terms of the variety of their practical applications.”<sup>44</sup> Scholars sometimes speak of hybridities in the history of Indian medicine, casting about binaries of colonizer/colonized, biomedicine/indigenous medicine, west/east, and modernity/tradition. Naturally, the full history and complexity of Ayurveda since the time of Caraka's collection is not captured with such neat dyads. Yet the last pair—modernity/tradition—and its adjectival associate—modern/traditional—nevertheless underlies many ideas about the state of Ayurveda today among many people actively practicing the medicine in south India. Students and practitioners in colleges and gurukulas alike often use these English terms to make sense of this medicine's history. Consideration of the nature and construction of tradition can thus be helpful to study the ayurvedic gurukula and college.

Traditions of all sorts are constructed, communicated, enforced, and revised through education. Schools and other centers of learning, Eric Hobsbawm remarked, deploy rule-governed practices meant “to inculcate certain values and norms of behaviour” in such a way that makes those practices, norms, and values appear continuous with “a suitable historic past.”<sup>45</sup> Reflecting on the history and long-established practices of Ayurveda in India, and running that past through belief systems of modern-day practitioners, it is tempting to apply the labels that Hobsbawm and Terence Ranger called “genuine” and “invented” traditions to the gurukula and the ayurvedic college, respectively. If a tradition is invented to manage or come to terms with sociopolitical change, as many of the essays contend in *The Invention of Tradition*, then ARM and the construction of the modern ayurvedic college curriculum neatly fit the bill of a neo-tradition that was “invented” by physicians and supported by government officials to compete with the spread and popular acceptance of biomedicine in India at the turn of the twentieth century. Likewise, if, as Hobsbawm suggested, “the strength and adaptability of genuine traditions is . . . where the old ways are alive,” neither in need of renewal nor reinvention, then the gurukula might appear to be a place for learning classical life science, sans biomedical influence, and giving safe harbor to the “genuine” tradition of Sanskrit healing in India.<sup>46</sup>

The historical record and my fieldwork suggest the situation is not so tidy. If a central element of so-called genuine traditions is adaptability (à la Hobsbawm) or flexibility (à la Ranger) and strength to persist over time, then one could just as convincingly argue that both traditions transmitted via the curricula of the gurukula and the college are genuine. Moreover, we would do well to ask, along with Peter Burke: “given that all traditions change, is it possible or useful to attempt to discriminate the ‘genuine’ antiques from the fakes?”<sup>47</sup> In this study, I opt not to further this line of inquiry, which unhelpfully misdirects our attention to questions of origins and authenticity. Instead, the key point I return to in the following chapters is that all acknowledged traditions—genuine, invented, or otherwise—are human creations.<sup>48</sup> While people and groups peddle different opinions about historical beginnings and development in pursuit of different aims, it is usually the case that “official” points of investiture are actually unknown or misunderstood, thus historical fabrications, and circulate couched in myth.

I approach the matter of tradition in Ayurveda by taking recourse in the plural—ayurvedic traditions—and by probing important discourses and social events in Indian history that have called for continuity and change. I am interested in how these forces have concretized and/or dismantled competing notions of Ayurveda’s past, attempting to hold in tension the presence and interplay of multiple modernities and cosmopolitanisms on the Indian subcontinent among ayurvedic educators and practitioners alongside, since the mid-nineteenth century, a growing concern for acceptance in a global sphere of medical science. The problem of how to interpret medical history and its practice in the present day lies



at the heart of this tension. My interpretation of the history and the opinions of vaidya-gurus and students in south India suggests that the ideological frameworks organizing the multitude of views about medical history at gurukulas and colleges have never been straightforward or indisputable, nor are they today. These views are not merely slavish extensions of intellectual commitments to enshrine—for the historical record, posterity, or recognition in the marketplace of global science—either immemorial or new ideas about medicine in South Asia. The next chapter demonstrates this point: the construction of an ayurvedic tradition in modern India has been anything but singular. The process has unfolded across several coterminous modernities inhabited by many people, and these people have addressed and negotiated multiple cosmopolitanisms. These realities are not satisfactorily understood according to globalization discourses that posit an unambiguous synthesis (or hybridization) of indigenous medicine within a superstructure of colonial or global medicine. To understand the complexities and multidimensional agencies motivating all people who have established their positions in, and perspectives about, the pasts and presents of Ayurveda, we need to move beyond notions of hybridity and syncretism.

What can cosmopolitanism theory add to our understanding of Ayurveda and the impact of biomedicine on it? This concept has gone through numerous changes and been subject to both approval and stern critique, to be sure. When I use the term, I do not intend to invoke Kwame Anthony Appiah's moral-philosophical cosmopolitanism, denoting a society where people in different life stations and situations (national, economic, political, religious, etc.) peacefully enter into social agreements despite their differing belief systems.<sup>49</sup> I am not interested in moralizing the interplay of peoples and ideas. For me, at its etymological level of *cosmo polis*, "world state," cosmopolitanism in Ayurveda helps us acknowledge and visualize that sources of classical healing knowledge and therapies comprise a far-reaching life science that has always been composite, never fully formed or complete, with many regional byproducts created by many hands, untethered to borders, nationalities, or singular cultures. This view is most apparent in chapter 1, where I discuss ARM and set up the historical context for the contemporary narratives from the field that follow. Episodes from Shantimana and Mookkamangalam, each in their own way, show us how students and teachers in south Indian gurukulas have carried forward Ayurveda's multifaceted cultural and scientific history. They convey details about their clinical and educational practices that have never been described before. These particular case studies on pedagogy, knowledge, and ritual illustrate how the men and women teaching and studying in a so-called traditional setting negotiate sometimes contesting ideas about their profession's past and present practice and how they create their own views about these matters. In the end, the ethnographic illustrations show that the several cohorts of students I have met and observed in Kerala, who have come from across south India and as far away as Haryana and Himachal Pradesh, exemplify a contemporary



commitment to the classicism of Ayurveda, advocating the principles of ayurvedic healing put forth in the classics and the learning of these principles through what's described by vaidya-gurus as classical ayurvedic scholarship. The diversity of people and ideas implicit in cosmopolitan theory is present every step of the way, from the events of ARM to the anecdotes drawn from the field.

Twenty years ago, Sheldon Pollock, Homi Bhabha, Carol Breckenridge, and Dipesh Chakrabarty suggested that cosmopolitanism “is infinite ways of being.”<sup>50</sup> It is not only an analytic or speculative idea. It elucidates a process by which the local exists and cultivates space for itself in a global community. We can speak about *cosmopolitan practices* and *discourses* to explain this, for instance, by exploring multilayered and multidimensional power relations. As we shall see, ARM had many disparate voices. While some called for the mixing of biomedicine and Ayurveda during revitalization of the 1890s and through Independence, others rejected integration out of hand. Still others sought to bridge the two positions. This conversation continues today, though the stakes have changed. The ayurvedic college is not going away and the gurukula will not likely again become the gold standard for training vaidyas. Much like late-colonial deliberations about pure and mixed forms of Ayurveda, nowadays proponents of integration are generally seen as the power brokers, in step historically with colonial physicians and today with suppliers of an education and medical treatment that Indian society demands. As a counterpoint, the didactic model of the south Indian gurukula presents an instance of creative local agency, of “the slow and shrewd” practice of medicine in what has become “global space and time.”<sup>51</sup> Although they represent a space that gave voice to a position that was hesitant to embrace European medicine, gurukulas are locations of changing ayurvedic practice and dialogue. Mookkamangalam is testament to this. It is changing slowly and shrewdly, reversing the notion of incorporation so that the local emerges as a productive agent of cultural delineation. Vaidya-gurus at Mookkamangalam exercise a surprising amount of autonomy and subtle tact in their healing practice, for example, given the heated politics of indigenous medical education over the past two centuries to move away from—in content, not in name—the *āyurveda* propounded in texts. Sanskrit literature remains the primary subject of education in Kerala's ayurvedic gurukulas, and yet today vaidya-gurus are adjusting their training methods and imbibing a body of knowledge that had not been present in gurukulas of earlier generations. If the gurukula stands as the final location in which to learn so-called pure Ayurveda according to the ways the Sanskrit medical classics say it should be learned, and the college BAMS degree is thoroughly mixed Ayurveda, then a modern ayurvedic site like Mookkamangalam ushers in an entirely new shade of Ayurveda on the pure-mixed spectrum.

## 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.<sup>1</sup> 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 Vāgbhāta 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.<sup>2</sup> 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.”<sup>3</sup> 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.<sup>4</sup> 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.<sup>5</sup> 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.”<sup>6</sup>

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.<sup>7</sup> “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).<sup>8</sup>

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.<sup>9</sup> 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.<sup>10</sup> 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.<sup>11</sup> 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.<sup>12</sup> 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.<sup>13</sup>

Close readings of Vāgbhāṭa'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.<sup>14</sup> 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.<sup>15</sup> 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.<sup>16</sup> 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.<sup>17</sup> 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."<sup>18</sup> 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.<sup>19</sup> 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.<sup>20</sup>



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.<sup>21</sup> 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.<sup>22</sup> 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.<sup>23</sup> 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.<sup>24</sup> 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.<sup>25</sup> 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 *Aṣṭāṅgahṛdaya*. 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 *Aṣṭāṅgahṛdaya* 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 mukhāmukhaṃ 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.”<sup>26</sup> 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.<sup>27</sup>

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.<sup>28</sup> 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.”<sup>29</sup> 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.<sup>30</sup>

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.<sup>31</sup>

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 *brhatrayi* 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."<sup>32</sup> 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.<sup>33</sup>

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.<sup>34</sup>

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."<sup>35</sup> 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.<sup>36</sup>

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.<sup>37</sup> 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.<sup>38</sup> 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.<sup>39</sup> 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.<sup>40</sup>

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."<sup>41</sup> 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.<sup>42</sup>

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 re-deployed 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.<sup>43</sup> 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.<sup>44</sup> Colonial doctors called for strict regulations, and in some cases total bans, on the practice of Ayurveda and Unani.<sup>45</sup> 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.<sup>46</sup> 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.<sup>47</sup> 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.”<sup>48</sup> 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.”<sup>49</sup>

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.<sup>50</sup>

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."<sup>51</sup>

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]."<sup>52</sup> 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."<sup>53</sup> 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.<sup>54</sup>

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.<sup>55</sup> 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.<sup>56</sup> 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.”<sup>57</sup>

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.”<sup>58</sup> 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 kaviraj 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.<sup>59</sup> 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.”<sup>60</sup> 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.<sup>61</sup>

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.”<sup>62</sup> 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.”<sup>63</sup> 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.<sup>64</sup>

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.”<sup>65</sup> 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.<sup>66</sup> 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.<sup>67</sup>

Much of the *Vyas Report's* position on the ayurvedic college syllabus, as Dominik Wujastyk explains, was written entirely in Sanskrit.<sup>68</sup> 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.”<sup>69</sup>

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.”<sup>70</sup> 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.”<sup>71</sup> 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.<sup>72</sup> 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). . . .”<sup>73</sup>



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.<sup>74</sup> 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.<sup>75</sup> Thus the CCIM syllabus in the twenty-first century has courses on *racanā śārīra vijñān* (anatomy), *kriyā śārīra vijñān* (physiology), and *dravyaguna* (pharmacology).<sup>76</sup> 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 Sanskrit 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.<sup>77</sup>

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."<sup>78</sup> 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.'"<sup>79</sup> *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.<sup>80</sup> 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.<sup>81</sup> 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.<sup>82</sup>

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.<sup>83</sup> The book also shows Singhji's practical awareness of his cultural surroundings and the spirit of ARM. He knew Indians were growing comfortable with bio-medical 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.<sup>84</sup>

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."<sup>85</sup> *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.”<sup>86</sup> 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.<sup>87</sup> 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.<sup>88</sup> The Travancore Āyurveda Pāṭhaśāla initially offered a four-year degree known as the “Vaidya Test” that was open to upper-caste students exclusively.<sup>89</sup> 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.<sup>90</sup>

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.<sup>91</sup> 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 Vellanisheru Vassunni Mooss in Chalappuram. In 1913, the Samājam was renamed Keraliṃya 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.<sup>92</sup>

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,<sup>93</sup> 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.<sup>94</sup>

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.”<sup>95</sup> 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.<sup>96</sup>

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 ghr̥tam*—which saved countless people from dying during the plague that ravaged Bangalore in 1898–1899.<sup>97</sup> 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.<sup>98</sup> 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."<sup>99</sup> 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.<sup>100</sup>

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."<sup>101</sup> 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.<sup>102</sup>

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.<sup>103</sup>

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."<sup>104</sup> 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."<sup>105</sup> 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, "Āryavaidyaparīṣkāraṃ" ("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 pariṣkarikāṇaṃ*, 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.<sup>106</sup>

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.<sup>107</sup> 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.<sup>108</sup>

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 Vāgbhata'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."<sup>109</sup>

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.<sup>110</sup> 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 *Bṛhaccārīram* (*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, *Pratyakṣaśārīram* (*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.<sup>111</sup> *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).<sup>112</sup> 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.<sup>113</sup> 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.<sup>114</sup> 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.<sup>115</sup> 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.<sup>116</sup> 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."<sup>117</sup> 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.<sup>118</sup> 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."<sup>119</sup> 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."<sup>120</sup> 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.<sup>121</sup> 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.<sup>122</sup>

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.

## Practicing Texts

In the last decades of the Raj, Bhaskaran studied many subjects with different teachers in different residential settings. He learned Sanskrit, the *Aṣṭāṅgahr̥daya*, regional poison therapies, English literature, and the *Yajur Veda*. He trained intensively in the regional pharmaco-based poison healing of Kerala known as *viṣavaidyam* until 1940, when, at the age of twenty-three, he began treating patients on his own.<sup>1</sup> By the time he started sitting mukhāmukhaṃ with his teachers of Ayurveda, two and half decades into the twentieth century, ayurvedic physicians had been training in colleges in Kerala for over thirty years. Yet, even while ayurvedic education was institutionalizing across south India and most of the country, from the Malabar Coast to southern Travancore lineages of Namboodiri Brahmin vaidya-gurus, known in Malayalam as *aṣṭavaidyans*, were also preserving the mukhāmukhaṃ teaching style and a Sanskrit- and Malayalam-centered curriculum. Bhaskaran and Priyankara advanced this tradition in the last half of the preceding century and the early years of the present one, and Bijū continues to preserve it today.

The Malayalam word mukhāmukhaṃ (“face-to-face”) is an adjective and occasional adverb indicating the traditional physical position and proximity between teachers and students in Kerala’s gurukulas: sitting cross-legged on the floor, relaxed but steady, teacher and student straightforwardly occupy each other’s attention. In the initial years of training, there might be a physical book ready at hand between them. But the need for tangible books with pages to turn, revisit, mark-up, and bookmark decreases as students memorize more and more of the material. Even then, after the meaning of a written book is adequately known, memorized through particular techniques, so that this knowledge transforms into a way of knowing and feasible practice in the clinical setting, the text is always there. K.P. Girija has recently reflected that practitioners are drawn to the mukhāmukhaṃ method of learning because it “envisages a practical application of knowledge in a productive way” that is not as evident in a modern classroom.

This kind of training is “an action in itself,” she continues, that transforms texts into discursive and improvisational resources that can be reconfigured and put in conversation with other texts to re-create new arrangements of knowledge to suit the therapeutic needs of patients.<sup>2</sup> Because illnesses and healing concerns change from person to person, on-the-spot improvisation with healing knowledge in classical Sanskrit and regional vernacular texts is crucial to a vaidya-guru’s repertoire. The practice of texts is a systematic way of knowing the data of texts as well as their arguments, intertextual references, and modes of explication, always and already, as valid expressions of therapeutic practice.

### AYURVEDIC GURUS AND THEIR METHODS

When vaidya-gurus and students sit mukhāmukhaṃ, they participate in a three-part pedagogy explained in the *Carakasamhitā*. Malayalis use the term “mukhāmukhaṃ” to capture the intimacy underlining this type of learning and the intellectual directness and connections it is meant to establish between teachers and students. Like *tête-à-tête* in French, the term suggests a semi-private, close, and unmediated discussion. I explain the textual origins and practical details of mukhāmukhaṃ below. For the moment, I would like to introduce the three parts of this Keralan teaching and learning in the ayurvedic gurukula. In the first part, articulation (*vākya*), a vaidya-guru leads a student through an entire medical collection—in Kerala, the *Aṣṭāṅgahr̥daya* is and has been for centuries the gold standard. The student learns how to pronounce every word and line of the text, from beginning to end. Depending on the student’s familiarity and proficiency with Sanskrit, this stage can proceed at a swift clip or quite slowly. The *vākya* stage traditionally requires students to memorize an entire work, and the *Aṣṭāṅgahr̥daya*’s versification lends itself to mnemonic devices. Describing the articulation stage, K.P. Girija notes that the “reiteration technique” students master at this level is called “*kambodu kambu* learning or memorizing thoroughly.”<sup>3</sup> In the second part, sentence meaning (*vākyārtha*), the vaidya-guru and student together go back through every line of the text they articulated in the *vākya* stage to establish each word’s meaning in every sentence, connecting the particular usages with the theories and principles of *āyurveda* in the collection. Because the writing of Vāgbhaṭa’s collection is efficient and succinct, when the text’s elaboration of medical theory is deficient, the other classics and their commentaries are consulted. The third part of mukhāmukhaṃ learning involves the clarification of the meanings of the sentences (*arthāvayava*). Here a vaidya-guru revisits the most complicated passages of a text with students, ensuring their understanding of the work as a functional guide for interacting with and healing patients. Students trained according to the three-part mukhāmukhaṃ pedagogy thus learn how to practice the texts they study. The realization and implementation of this practice is gurukula philology.

The labels “philologist” to describe the vaidya-guru and “philology” to describe his or her practice are my descriptions. They correspond to what I observed at

Shantimana and Mookkamangalam, and they differ from terms the vaidya-gurus I write about in this book typically use for themselves. They prefer “vaidya” most often, occasionally “guru,” and every now and then “scholar.” (The achievement of publishing scholarly articles or translations sometimes prompts the self-recognition of this English term or, less often, *paṇḍitan* in Malayalam.) The descriptor “philologist” is hence an analytic device. When vaidya-gurus impart the Sanskrit classics mukhāmukhaṃ-style with students and practice texts for their patients, they are doing what I understand to be philology. Taken together, teaching and healing comprise their philological discipline, which produces text-based meaning via rhetorical rules and is expressed for therapeutic ends. It is a discipline that depends on the primary task of making sense of texts, as I explained in the introduction, so that, subsequently, understanding produced in textual study will have transformative remedial applications in the lives of sick and ailing people.

Most students of Bhaskaran, Priyankara, and Biju were already-credentialed practitioners of Ayurveda or students at ayurvedic colleges when they began to study at Shantimana and Mookkamangalam. The students I met at these gurukulas sought training from these particular ayurvedic experts because they wanted to learn in a mukhāmukhaṃ style and wanted the skills this pedagogy cultivated to connect the classical literature with the ideas of health and illness they learned at college. There are of course basic theories and methods in modern Ayurveda that derive from the Sanskrit big trio, such as humoral theory (*tridoṣavidyā*), patient inspection (*rogīparikṣa*), valid means of knowing (*pramāṇas*), and many others. These are subjects covered at ayurvedic colleges, and ayurvedic physicians worth their salt, whether trained at colleges or gurukulas, need to know them. In a gurukula, students learn how to apply medical theory and general “bedside etiquette” primarily by observing their guru’s clinical work and interactions with patients. But most of Biju’s students, for example, were drawn to the epistemological shaping they received under his direction. “Medicine here,” an advanced Malayali student of Biju’s named Ajeeth said in 2005, “is not explained in lectures, or lists to memorize, as it often is at college.”<sup>4</sup> Ajeeth had taken a year after receiving his BAMS degree to study with Biju, and occasionally with Bhaskaran and Priyankara, before he went on to private practice in ayurvedic ophthalmology (*netra cikitsā*).

Over eight weeks at Mookkamangalam, I observed Ajeeth’s lessons and spoke with him about his decision to postpone his career to study with Biju. He was articulate and so soft-spoken that the omnipresent whirring fans overhead or at eye level sometimes made it hard for me to understand what he said on the first try. But he was patient with me, thankfully, and he seemed eager to talk about his own motivations for being at Mookkamangalam. He was also intrigued about my reasons for being there, and when Biju was out of the house or otherwise unavailable, Ajeeth often helped me with some of the difficult Sanskrit texts I happened to be working on. I told him I was keen to know more than just the content of these texts, that I wanted to know what kind of roles the medical classics had in current ayurvedic practice in south India. This interest had led me from colleges and

research centers in Tamil Nadu and southern Kerala to Shantimana and Mookkamangalam, and thus to Ajeeth. He told me that he disliked the fragmented nature of medicine in the ayurvedic college, that it was based on specializations and specialties. “How can healing be separated into parts, even if they are related parts, instead of a way of thinking? A way of understanding?” he asked me one afternoon while we sat in the tiny room he rented from a neighbor and friend of Priyankara. He was making lunch for me on his day off from lessons with Biju and assisting Priyankara with patients. As he boiled rice and warmed up vegetables, he explained that after he finished studying with Biju he had a job lined up that would start him on a career as an eye doctor. “That’s terrific,” I said, “are you looking forward to it? Where will it be?” He told me the job was between Thrissur City and Kozhikode, in the Malappuram District. He would have a nice office, make a good living, and see a diverse clientele because his clinic would be connected to a chic hospital-spa facility. Like many of the young twentysomething men and women I met at Mookkamangalam over the years, Ajeeth also told me that his parents were enthusiastic about him getting married and starting a family. “It will be a good job, and I am happy to know it is waiting for me. But I’m not ready to leave here, even though I’m the only student right now and it can be lonely. There’s not a lot to do around here other than learn from Biju and Priyankara.”<sup>5</sup> Being at Mookkamangalam seemed to help Ajeeth think about medicine differently than he had at college. Reading texts and seeing patients there was an antidote to the dissection of medicine he learned at college which, ironically, encouraged the kind of specialization that awaited him in ayurvedic ophthalmology.

Ajeeth had gotten high marks as a college student, and it was clear that beyond his intellectual gifts, his kind demeanor would lend itself well to interacting with his own patients when the time came to make that transition. As we talked sitting on the floor of his room eating lunch, plates in one hand and handling food with the other, I saw that Ajeeth was captivated by how he learned to understand the very nature of “medicine” and “healing” at Mookkamangalam. Disease identifications, pathologies, and treatments were naturally critical to what Priyankara and Biju taught him. But that afternoon he spoke about landscapes of healing and interpersonal connection, addressing questions about wellbeing and the human condition that extended medicine and healing beyond the individual diseased body. He was compelled by how Biju and Priyankara helped a patient view, as P.U. Leela puts it, “the state of disease’ (*rogam*) in continuity with the very familiar ways of his own/her own living,” so that sickness and disease are not “conceived as a ‘break’ within the normal or ‘healthy’ ways of living.”<sup>6</sup> So, we talked about what it means to be a patient, for example, someone who’s “diseased,” a *rogin* in Sanskrit, and lacks wellbeing, and how his college education did not give him a chance to explore this kind of question in depth or across the human sciences. He told me he feared a focused career in ophthalmology might not foster this kind of inquiry, and so he was determined to make the most of his time at Mookkamangalam. “Biju teaches a

general way to heal, not only subjects about healing,” he said. “We don’t talk about diseases as things patients reveal or carry with them, exactly. They have symptoms, of course, and we know what is wrong with them; and we often name the problem. But the approach [to healing] here requires conversation as much as definition. It’s an approach to see illness as part of a process and to adjust to shifting variables in patients’ lives.”<sup>77</sup> Ajeeth’s training with Biju pushed him to think about the aims of medicine in general, access to and use of classical *āyurveda* today, and the parameters of healing in ways the college he attended did not, or perhaps could not because of its size and the less personalized training that large institutions are able to offer.

Biju’s less seasoned students might not have articulated the nuances of what they learned at Mookkamangalam as lucidly as Ajeeth did. Eating the last bits of my lunch, I realized that Biju had expanded Ajeeth’s outlook about the nature and practice of medicine. Diseased and distressed bodies were only part of the clinical equation in the gurukula, and awareness of wellbeing and illness is always mutable—necessarily created, analyzed, and dismantled patient after patient. Medicine is also social and indeterminate, a procedural field. The physician is a part of and shapes it, and the onus to make sense of its various configurations rests on her shoulders. The field is never static. With each new patient, the physician’s method of texts informing practice changes, drawing on new texts and assessing new relationships. These ideas are in-built and built up by mukhāmukhaṃ pedagogy. It is collaborative and generative education that’s hard to achieve in large lecture courses with preset exams and a fixed curricular plan neatly planned out according to subject and time-to-degree. Higher education is like this in many places around the world, and while there is certainly knowledge production and meaning-making in this kind of education, too, students tend to be recipients rather than creators of knowledge and meaning. Like a lecturer of anatomy or pharmacology, a mukhāmukhaṃ teacher explains somatic and therapeutic subjects. But unlike lecturers, and because of the intimacy of the gurukula and its constant integration of classroom and clinic, the vaidya-guru also lays bare the indivisibility and complementarity of the realms of text and practice in the healer’s effort to understand and treat the capricious and complex processes (bio-social-moral-economic-legal) of disease.

Teachers and students at Shantimana and Mookkamangalam consciously study and use a multitude of texts every day. Their practice of texts is extensive and obvious. Yet as a typology, the practice of texts (or gurukula philology) that’s cultivated via mukhāmukhaṃ is mine at the end of the day. It is a helpful framework to structure the studies in rest of the book, which illustrate the many ways that texts in the south Indian ayurvedic gurukulas I visited are studied because of their utility as tools for healing. The idea that medical texts give physicians information to use with patients is not novel to Ayurveda, of course, and I return to some comparative questions about classical literature in biomedical schools in the United States

in the last chapter. The classical *āyurveda* of Vāgbhata's *Aṣṭāṅgahṛdaya* and other texts naturally bolster an ayurvedic vocabulary in students and teachers, as any medical training would, and that language shapes discussions in the classroom and when designing prescriptions. But a mukhāmukhaṃ education engenders more than an ayurvedic patois. Gurukula philology itself is novel, and the way it leads to an ayurvedic way of knowing the human body and its ability for being well and/or ill is both unique and instructive. Even though mukhāmukhaṃ study has changed and become somewhat less rigorous in recent decades, customarily textual mastery occasions healing when a vaidya practices texts by destabilizing them, improvising, rearranging, and colloquializing them in social encounters with patients. The technical jargon of *āyurveda* in the big trio frequently telescopes into somatic minutiae, and I observed many study sessions where Biju and his students did not discuss the lived experiences of people saddled with conditions like irritable bowel syndrome, alopecia, and various types of dermatitis. Outside of the study hall and in the clinical space, however, the human condition of patienthood is explored together with patients and the people who accompany them. Texts and conversation inform a perspective about disease and healing that sees bio-physiological conditions within the orbit of the societies and cultural institutions that shape patients' lives.

Observations and interviews from Shantimana and Mookkamangalam present a parallel account to the narrative of the entrenchment of biomedicine in India that has not been explored before: broadly, the tradition-making impacts of gurukulas and colleges in modern Ayurveda through education. Connecting India's educational history to current practices of vaidya-gurus in south India is not merely useful to fill gaps in existing scholarship, however. The point is also to open the social and cultural history of ayurvedic medicine in modern India (chapter 1) to angles of analysis that ponder how knowledge in one of India's classical scientific literatures is transmitted and learned (this chapter) and employed (chapters 3 and 4). By understanding the mechanisms that drive the south Indian ayurvedic gurukula, as well as the people who operate and orchestrate those complex arrangements, we can at once complicate and correct studies that have diminished or overlooked the perseverance and contributions of India's practitioners of Ayurveda in the face of the awesome resources and power of the biomedical superstructure in colonial and postcolonial India.

#### PHILOLOGY, INDIA, AND THE GURUKULA

Phonological, interpretive, and performative text-based acts in the ayurvedic gurukulas of central Kerala illustrate the discipline of philology and philological meaning-making. In the introduction I advanced a view that begins with Sheldon Pollock's elastic vision of philology as "the discipline of making sense of texts."<sup>8</sup> A Malayali vaidya-guru's ability to heal rests on his or her aptitude to apply textual

models to clinical contexts. Gurukula philology thus starts with detailed studies of established texts—primary sources, commentaries, and related vernacular sources—and progresses toward the application or performative use of the knowledge formed during textual study.

These two features, textual interpretation and textual performance, are integral to gurukula philology. In an illuminating study of philology in medieval south India, Whitney Cox observes a similar case. Arguing that “the texts with which a potential philologist concerns herself are both *prior* and *plural*,” he reckons that philology in medieval south India was also both practical and public.<sup>9</sup> The pedagogical utility of philology, in other words, made it communicative and communal. Cox arrives at these ideas by mining several texts for potential Sanskrit equivalents of “philology.” While permitting the lack of an agreed-upon term for the discipline in modern scholarship, he ventured two possibilities of his own. The first suggestion, *vyākhyāna* (explanation), resembles the text-based language analysis and clarification of the ayurvedic vaidya-guru, who teaches students how to read texts according to rhetorical criteria established by tradition, as I explain in a moment. I refer to this hermeneutical component of a vaidya-guru’s skillset as a type of commentarial philology (as explanations do, the term *vyākhyāna* also entails observation, interpretation, and commentary).

Cox’s second submission—*vyutpatti* (development or cultivation)—underscores the comprehensive nature of philological scholarship in premodern India. This term also points to a performative aspect of philology and suggests that philology is a discipline capable of shaping numerous features of human life. Though none of the teachers or students I met in Kerala use this term to explain the style or aims of mukhāmukhaṃ training, as an analytic category *vyutpatti* does capture aspects of the work they do. Concerned with refining perceptions and modes of social engagement, Cox describes philology qua *vyutpatti* as “an ethical art or a way of life.”<sup>10</sup> In the gurukula, this could refer to a means for cultivating professional comportment according to tradition, and in fact we find *vyutpatti* on the ayurvedic college syllabus, though meaning “etymology,” in the first-year course on ayurvedic history (*āyurved itihās* in Hindi).<sup>11</sup> We do not have ethnographic or sociological studies that shed light on how disciplinary practices like *vyākhyāna* and *vyutpatti* might have looked in the past. With only descriptions of the terms in the texts themselves, it is therefore hard to know what a medieval Indian philology as ethical art or way of life might have looked like in practice.

Classical *āyurveda* itself has an intricate interpretive system that includes one of Cox’s proposals for an Indian philology: *vyākhyāna*. The Sanskrit classics reflect at length on a hermeneutic doctrine called *tantrayukti*, “text-method”—methods (*yuktis*) used in texts (*tantras*)—that expresses theoretical criteria required to produce reliable readings and explanations of texts. The *Carakasamhitā* lists thirty-six *tantrayuktis*, as does Vāgbhaṭa’s *Aṣṭāṅgahṛdaya*, while the *Suśrutasaṃhitā* has thirty-two. Among these *yukti* lists is *vyākhyāna* (explanation) and text-methods



vital to mukhāmukhaṃ instruction, including subject (*adhikaraṇa*), content (*vidhāna*), concise statement (*uddeśa*), word-meaning (*padārtha*), arrangement [of words, sentences, and sections] (*yoga*), purpose (*prayojana*), illustration (*nirdarśana*), etymology (*nirvacana*), doubt (*samśaya*), and others.<sup>12</sup> These text-methods are indispensable for making sense of texts in Ayurveda, the achievement of which empowers a vaidya to put into practice textual knowledge for the tradition's cardinal goal: to use knowledge (*veda*) for the advancement of long life (*āyus*).

Does the application of the *yuktis* in textual study necessarily lead to practice? How do we know? Or is it merely the teaching of the *tantrayuktis* as interpretive strategies that captures a vaidya-guru's philological performance? Cox acknowledges the inadequacy of casting *vyākhyāna* as a one-for-one analogue of philology because, at present, we lack a "second-order reflection" in Sanskrit literature about workable applications of this rhetorical method. He tantalizingly surmises in a footnote that the system of *tantrayukti* in the *Arthaśāstra* and Ayurveda might point to a "partial exception" to this lacuna.<sup>13</sup> But he does not elaborate, nor does he note that *vyākhyāna* is a *yukti* in ayurvedic hermeneutics. Yet even in Ayurveda, the *vyākhyāna* method is only part of gurukula philology, a detailed exposition (by an expert) of something that is generally unknown (by novices and patients). When Biju reads the *Aṣṭāṅgahrdaya* with his students, he usually presents the *tantrayuktis* as interpretive devices to help them connect text and meaning (*vākya* and *artha*) to master ayurvedic theory. When executed well, *vyākhyāna* and the other *yuktis* support and permeate the performative practice of texts during patient visitations. That interpersonal and transformative work—the effective execution of texts to assess and heal sick people—is the purpose (*prayojana*) of each *yukti* and the anticipated outcome of Biju's pedagogy.

The *Tantrayuktivicāra* of Nilameghabhiṣajā, a ninth-century author from Kerala, was among the very first texts that Biju encouraged me to read after I told him about my interest in learning about the teaching and healing practices he and his mother performed at Mookkamangalam. Nilameghabhiṣajā's interpretative method is the backbone of the ayurvedic way of knowing that mukhāmukhaṃ pedagogy cultivates. But as crucial as the text-methods are to ayurvedic education, they are only a part of gurukula philology, and the extent to which they factor into daily lessons depends largely on the vaidya-guru in charge. They might enter the flow of a lesson quite overtly, like a *pūrvapakṣa*, when Biju pauses a close reading of the *Aṣṭāṅgahrdaya* with students to introduce a conceivable objection to claims made in Vāgbhaṭa's text. More often, he teaches the *yuktis* through tacit modeling by pointing out (*apadeśa*) reasons for a certain action, for example, or by acquainting his students with varying opinions (*anekānta* or *naikānta*) about a pharmacological or nosological topic. The *tantrayuktis* are philological tools, to be sure, and they contribute perforce to the performative space of healing in the ayurvedic gurukula. Nevertheless, to appreciate how the *yuktis* are taught and the particular

ways each vaidya-guru infuses his or her readings, interpretations, and clinical work with them, reliance on accounts in the literature alone is insufficient.

Explanations of philology like Cox's and my own will inevitably differ regarding the extent to which and ways that knowledge created via text-based language analysis and interpretation can be used. An understanding that philology is concerned with language use, texts, and interpretation and that some form of practice is also important to the discipline undergirds both of our characterizations. But our analytic vantage points differ, ultimately occasioning dissimilar views. Whereas Cox reads a selection of texts and explains the descriptions of philological practices presented in those texts themselves, my reckoning arises from ethnographic observations of how a particular way of reading texts informs present practices and interactions. There is no such thing as a once and for all definition or form of philology; the discipline has changed over time, and articulations of it differ from place to place, since interpretive and practical requirements aligned with each language and literature require philologists to command particular skills and sensibilities. Cox was searching for "modes of philology" in Sanskrit and Tamil texts from south India in the twelfth through the fourteenth centuries. I too am observing modes of philology in south India, and my study is also occupied with texts, mostly Sanskrit and Malayalam sources spanning a more expansive period of time, circa first century BCE to the fifteenth century CE. But the forms of knowledge production, textual interpretation, and text-based practices that have pervaded ayurvedic education in south India for centuries, as explained in ayurvedic texts, are still observable today, and therefore analyzable, in ways that a literature-based study alone is hard-pressed to capture. Projects concerned with recovering the "habits of reading, thinking, and writing" in premodern literatures have supplied the grist for the mill of Classical Indology since it took shape as an academic field in the nineteenth century.<sup>14</sup> Scholarly endeavors of this sort tend to pursue questions about Indian philology in the past, and they often involve the production of critical editions of classical language texts in Sanskrit, Pali, Prakrit, and Tamil and, to that end, involve the collection (digitally in many cases), reproduction (again, digitally), and conservation of various editions of a singular text. With these objectives, philological studies in Classical Indology have by and large left unstudied, if not overlooked altogether, the performative use of texts.

Mastery of the Sanskrit medical classics demands creativity and, especially for the student who has already graduated from an ayurvedic college, a thorough rethinking about what a text is. By the end of a mukhāmukhaṃ education, the *Aṣṭāṅgahr̥daya* is treated as an unfixed body of knowledge whose uses today might differ from uses envisaged by medieval commentators or compilers of the root text. The vaidya-guru as philologist, unlike the Classical Indologist, is less concerned with identifying variant manuscripts in a text's transmission than she is with coming to terms with the fact, to echo Bernard Cerquiglini, that premodern "writing does not produce variants; it is variance."<sup>15</sup> Once that determination is made, she

then contributes to this variance, which of necessity is unending as long as people continue to engage prior collections of texts in their present endeavors. Malayali vaidya-gurus do not traditionally spend their time producing critical translations and postulating lines of manuscript descent. The commentarial aspect of their philological practice resembles what Peter Richardson considered the main contribution of New Philology in the 1990s. Namely, textual studies of New Philology illuminate “how narrators help audiences arrive at readings in the first place.” By reading the Sanskrit classics and regional sources with their students with the intent to use their textual investigations for therapeutics, vaidya-gurus like Bhaskaran, Priyankara, and Biju bring “new evidence—and new ways of understanding old evidence—to a broad range of ongoing discussions in textual and literary criticism.”<sup>16</sup> They profess new evidence about old data in the classics by drawing from years of clinical experience. The continuing discussions they add to are historically layered commentaries that explain, expand, and enhance classical and vernacular healing sources. In this way, a seasoned vaidya-guru like Bhaskaran is a modern commentator in these lines of criticism, contributing Malayalam and Sanskrit interpretations of earlier literatures and analyses produced by previous interpreters.<sup>17</sup>

But philology in the gurukula is also much more than commentarial explication (*vyākhyāna*). It is textual investigation meant for use and interpretation designed for the production of physical transformation. In this sense, gurukula philology is always oriented to shared usage, a kind of “reading *in public*,” as Cox puts it, if not, even more so, a kind of reading *for the public*. The mukhāmukhaṃ method serves as the hub that, on one hand, ensures texts are understood by means of “a form of *virtuoso* reading, reading as a methodical, self-aware and self-reflexive practice” and, on the other hand, makes that reading practicable.<sup>18</sup> By ensuring students can master—fully articulate, memorize, and explain—an ayurvedic work like the *Aṣṭāṅghṛdaya*, vaidya-gurus guide them from reading texts as material objects grasped sequentially from first page to last, to practicing texts in conversation, synchronically and inter-textually, as storehouses of clinical counsel that can be used piecemeal, out of order, and reorganized if necessary. And while they also teach textbook-type material about the body, pathology, botanical remedies, and the like that students get at college, training in a gurukula is unique for most aspiring vaidyas. Because vaidya-gurus cultivate sensibilities that reveal textual knowledge and medical theory as usable and shareable knowledge, gurukulas are quite unlike colleges, where, as M.P. Sridharan observed in the 1970s, clinical practice has always been prioritized over deep understanding of the tradition’s philosophical and theoretical principles.<sup>19</sup> Mukhāmukhaṃ education builds up an epistemological framework that dovetails text and practice. Students cultivate a “philological instinct” that, J.R.R. Tolkien famously declared, is “as universal as is the use of language.”<sup>20</sup> Mukhāmukhaṃ training rouses the creative, improvised

use of texts. This use does not thrive on scholarly reconstructions of different manuscript transmissions but flourishes in social interactions and conversations between physicians and patients, ideally resulting in physical rejuvenation of a sick person's mind and body.

Is it possible, at least in part, that academic discussions about philology as instinct, epistemological framework, and sensibility—elusive or contested aspects of human nature and cognition—undergird the absence of an equivalent for philology in an Indian language? Cox helpfully entertains this possibility, wondering if philology was “so integral to the life-world of those elite literates to whom we owe India's textual archive that to name it as such may have simply been superfluous.”<sup>21</sup> Perhaps philology was too natural and basic to Indian scholasticism and knowledge production to warrant sustained dissertations on the topic. But perhaps not. Why must there be an equivalent term? It is appealing to identify Sanskrit words like *vyākhyāna*, *vyutpatti*, and *tantrayukti* that point to certain philological methods and traditions in Indian history and literature. If philology and all that it entails is what we call the work we do when we read and interpret Indian texts, naturally it would be satisfying to learn that the composers of the texts we read wanted us to read them with this disciplined approach and set of intentions. But are *vyākhyāna*, *vyutpatti* and *tantrayuki* terms Indian textual scholars devised to explain the work they do? Can we ever know? Hermeneutics is part of philology and so *vyākhyāna* and *tantrayukti* as interpretive exercises are entirely germane to this discussion. They are, as I have suggested, also not quite the whole of philology in the south Indian ayurvedic gurukula.

When a Sanskrit or other vernacular language term matches an understanding of philology in some ways but not in others, moving forward it is best to let those identifications speak for themselves, as such, and acknowledge that philology is the analyst's category. It is not a category most of the people I observed and interviewed in Kerala, Tamil Nadu, and Karnataka used. But some did. Those who agreed that the work Biju, Priyankara, and Bhaskaran have done and continue to do is philological were either graduate students like George or young physicians like Gopal and another former student of Priyankara, Unnikrishnan, both of whom I introduce below and both of whom have collaborated with scholars from North America and Europe and learned Classical Indological jargon, interests, and methods. For these gurukula alumni, to say that *mukhāmukhaṃ* is philological education accords with their own views that the practice of texts typology occupies part of what they continue to do in their post-gurukula professional lives.

For the historian of education, and equally for the researcher studying the history of philology, it is important to be clear about who defines the terms by which a group or practice(s) are studied and comprehended. Otherwise, as Bruce Lincoln cautions, “when one permits those whom one studies to define the terms in which they will be understood . . . one has ceased to function as historian or

scholar.<sup>22</sup> To use philology as an analytic category to probe and explain how traditionally-trained physicians, teachers, and students teach and learn classical and local literatures for the purpose of treating patients helps us to see and appreciate the enduring impact of premodern texts in ayurvedic education and practice in south India today. To describe contemporary ayurvedic education and practice in Kerala's gurukulas as *philological* is a choice not to rely on a single person's, community's, or tradition's self-identification. It is a decision not to write a disciplinary history from within. To that end, Lorraine Daston and Glenn Most, like Lincoln, counsel historians of science and philology not to confuse their analytical or disciplinary positions with the positions and analyses of the people who compiled the texts and traditions being studied.

Disciplinary history written from within that discipline tends to be not only teleological but also parochial and hagiographical. Most importantly, disciplinary history written from within that discipline tends to be unprofessional, in the sense that it is written by scholars who have been trained in the discipline that they are studying but not in the discipline of history or the history of science.<sup>23</sup>

That said, it is also important to know how a tradition understands and describes itself and, wherever possible, to identify people by the terms they choose for themselves. At the same time, in the production of academic research it is just as crucial to be equipped with one's own terminology to describe people, practices, and institutions, if for the fundamental reason that sometimes what people say and write about what they do differs from how they actually act.

Vaidya-gurus at Shantimana and Mookkamangalam have not objected (in my presence) to my suggestion that they do the work of philologists, and the textual precedents of the *Carakasamhitā* they point to as the basis of their work is, in many ways, emblematic of philology. The primary components of the discipline are present in their work, and I have not met a gurukula student or teacher who was not acutely aware that Ayurveda in the gurukula is grounded on the application of knowledge in texts, memorized and exhaustively studied, to the problems that patients bring to them every day. This is *the discipline* of the ayurvedic gurukula and, whenever I pressed a student or vaidya-guru to help me define it, the conversation nearly always returned to mukhāmukhaṃ learning. Admittedly, any attempts at getting gurukula students to untangle the components of mukhāmukhaṃ training—to analyze the stages of articulation, sentence meaning, and clarification in order to understand the correlation between textual study and clinical work that's baked into the process—led to forced and awkward conversations. Mukhāmukhaṃ is not taught as two separable sides of a singular disciplinary training. Students are not told that a hermeneutic lesson in the afternoon will naturally morph into a workable treatment in the evening. They learn this twin-function gradually and organically over days, weeks, months, and sometimes years. For Bhaskaran, Priyankara, and Biju this two-sided enterprise is somewhat

like Tolkien's observation: the practice of texts in the gurukula should become as instinctual as language use itself. What I am describing as philological practice, then, is a way of reading and understanding the world in view of what's been read and commented on across generations. The vaidya-guru's practice with students is based on a pedagogical process in a two-thousand-year-old text that Malayali vaidya-gurus named "face-to-face" (mukhāmukhaṃ), and it's been modified over many generations to help students understand and produce information about health and wellness, the body, and patienthood that is usable.

### HISTORICAL PRECEDENTS AND ARRANGEMENTS

Local history places the start of mukhāmukhaṃ training of vaidyas in central Kerala in the mid- to late-eighteenth century, when the state was home to eighteen celebrated Mooss and Nambi families of *aṣṭavaidyans*, which is a Malayalam term derived from Sanskrit *aṣṭāṅgavaidya*, meaning a "physician of the eight parts [of *āyurveda*]."<sup>24</sup> When Haider Ali and Tipu Sultan led the Mysorean invasions of Malabar in northern Kerala from 1766–1792, many Malayalis were forced into the central and southern parts of the state, seeking protection from the Maharaja of Travancore, Kartika Tirunal Ramavarmma (often known simply as Dharmmaraja). Among the migrants were a number of distinguished families with ayurvedic experts, *aṣṭavaidyans*, including Parameshwaran Mooss and his son, Ravi Mooss (born 1789).<sup>25</sup> Some of the displaced families eventually returned to Malabar after the invasions ended, since the 1792 Treaty of Seringapatam ceded Malabar to the EIC and reduced Mysore's influence in the region. Many Malayalis stayed in south and central Kerala nevertheless, and as their families grew a number of legendary vaidyas eventually inhabited the regions. Ravi Mooss, for example, married into the Malappuram-district family of Pulamanthol Shankaran Mooss, an eminent *aṣṭavaidyan* and scholar, whose two-part *Cikitsāmañjari* continues to be a widely used pharmacopeia in Kerala today.<sup>26</sup> In the popular imagination of Kerala, perhaps the most prominent among those who fled the Mysorean invasions were members of Panniyinpalli Raghava Varier's family, which produced several ayurvedic physicians, among whom Panniyinpalli Sankunni (P.S.) Varier, discussed in chapter 1, was the most prolific and well-known both inside and outside of Kerala.<sup>27</sup>

In the eighteenth century, Kerala's gurukulas were not restricted to ayurvedic education. Though the *āyurveda* of Vāgbhaṭa's *Aṣṭāṅgahrdaya* is often the primary subject in the working gurukulas of Kerala today, as I noted of Bhaskaran's early education, in the previous century it was common for parents to find gurus for their children to train in multiple subjects, including philosophy, literature, the sciences of astronomy and medicine, and the Vedas. The vaidya-gurus at Shantimana and Mookkamangalam are known for their poison therapies, especially the treatment of snakebites. The particular kind of poison treatment they practice is based

on a collection of Sanskrit, Malayalam, and Manipravalam texts on *viṣacikitsā*, broadly construed as toxicology.<sup>28</sup>

In Kerala, *viṣacikitsā* historically had two divisions—*viṣavidyā* (mantra-based poison treatment) and *viṣavaidyam* (pharmaco-based poison treatment). Over time the two divisions merged, and a new discipline of poison therapeutics evolved in the fourteenth or fifteenth century that offered treatments for numerous types of poison. Biju described this time to me as the golden age of *viṣacikitsā*, and the *Jyōtsnikā*, a Manipravalam text with some Sanskrit mantras, was the first literary work of the new discipline to emerge from it. The text has two parts, a *mantra khaṇḍa* and an *auśadha khaṇḍa*, corresponding to the tradition's mantra-based and pharmaco-based treatments. Although both *khaṇḍas* have been preserved in palm-leaf manuscripts, most printed versions of the *Jyōtsnikā* nowadays contain only selections of the Sanskrit mantras or none of them at all.

The title *Jyōtsnikā* derives from Sanskrit  *jyotsnā*, “moonlight,” symbolizing cool healing nectar and communicating the idea that the work's knowledge is an antidote to fiery and venomous poisons.<sup>29</sup> It was composed by someone named Nārāyaṇa, whom tradition usually holds to be a Namboodiri descendent of the Karattu family. In the text's final chapter on physician lineage (*vaidyapāramparyyaḥ*), Nārāyaṇa compares the moonlight of the title to the compassion of his two teachers, father and son Brahmins both named Vāsudēva, who taught him the tradition of poison healing in the Kāśyapa lineage (*kāśyapagōtrattīl*), and to his ascetic maternal uncle, who commissioned him (*viśēṣānmātulēnāpi niyuktōhaṃsayoginā*).<sup>30</sup> The work is still taught and used by Namboodiri Brahmin physicians in central Kerala, including Biju and his mother, and Bhaskaran used it when he was alive. Additionally, Kochunni Thampuram's *Prayogasamuccayaṃ* and V.M. Kuttikrishna Menon's *Kriyākaumudī* are two Malayalam works on poison therapy that continue to be taught and practiced in the ayurvedic gurukulas in Kerala I visited.

The traditional residential setting (*kula*) of a vaidya-guru's instruction is not unique to Kerala. Every region in India has produced its own centers of education, distinctive pedagogies, and subject specialties, some of which look like Kerala's gurukulas and some that look quite different. In the northeast, for example, from the medieval period until the 1820s, the *ṭol* (“school” in Bengali) specialized in educating students in Sanskrit grammar and literature.<sup>31</sup> Often explicitly religious in their missions, *ṭols* were located at important Hindu sites, such as Navadvip, Krishnanagar, and Varanasi, and their teachers were commonly honored at Hindu festivals. In his *Reports on Vernacular Education in Bengal, Calcutta 1835–1838*, William Adam classified elementary-level education sites for children ages five to seventeen by the Sanskrit name *pāṭhaśālā*, “recitation hall,” occasionally also known as a village school.<sup>32</sup> Aparna Basu ascribed a west Indian provenance to the *pāṭhaśālā*, though the term, she noted, has been applied to educational centers throughout the whole of India in various ways. For example, the *pāṭhaśālā* was not always limited to elementary education, and sometimes the name was clearly



applied to centers of higher education corresponding to the Bengali *tol*.<sup>33</sup> What is more, as we saw in the previous chapter, in Kerala the earliest ayurvedic colleges were known as Āyurveda Pāṭhaśālas before the English term “college” was adopted nationwide.

An old south Indian educational arrangement comparable to the Kerala gurukula is the Tamil *paḷḷikkūṭam*, “settlement room.” Over time the *paḷḷikkūṭam* came to mean a kind of home school where, Hartmut Scharfe explains, Brahmins “taught their students on the raised porch at the front of their home (*tiṇṇai*).” These were later called “*tiṇṇai-ppaḷḷi-kkūṭam*, ‘porch schools’ or still later (i.e., after the arrival of the Portuguese in India) *pyal/pial* schools, named with another word for this porch.”<sup>34</sup> The gurukulas I observed in Kerala are typically managed by one Namboodiri vaidya-guru (sometimes two), and their students come from different classes, castes, and religious backgrounds.<sup>35</sup> Daily lessons and patient treatments are traditionally located on the veranda or in an easily accessible anteroom of the vaidya-guru’s *illam*, “house” in Malayalam, though *mana* is sometimes also used. Although there is some variation among Malayalis from the northern part of the state and those south of Kozhikode, whichever word is used can indicate the social and religious background of the speaker. In general, most Malayalis use the term *illam* to denote a person’s house, whereas in some central Kerala communities non-Namboodiri Malayalis use the term *mana* pointedly to denote the house of a Namboodiri Brahmin family.<sup>36</sup> Thus, depending on the person with whom I happened to be speaking, Mookkamangalam and Shantimana were either the *illams* or *manas* of Biju, Priyankara, and Bhaskaran.

Historian A. Shreedhara Menon’s socio-cultural history of Kerala places the traditional gurukula arrangement in the broad category of *eḷuttuppaḷḷi* (Mal.), a “village [writing] school” meant for the education of young non-Brahmin boys and girls. Larger institutions like the ninth–twelfth century *śālai* and early-medieval *sabhā maṭhas* (religious, temple-based centers of learning) were reserved for Brahmin youth with the highest scholastic propensities. Under the guidance and typically at the house of a teacher (*eḷuttucchan*, Mal.), *eḷuttuppaḷḷi* students received instruction in reading, writing, and arithmetic as well as instruction in advanced humanistic and technical subjects, including poetry (*kāvya*), dramatic literature (*nāṭaka*), logic (*nyāya*), grammar (*vyākāraṇa*), and life science (*āyurveda*). The creation of western-style institutions like the British college in the nineteenth century, Menon’s work suggests, sounded the death knell of *eḷuttuppaḷḷi* and gurukula models of learning in Kerala.<sup>37</sup>

#### COURSE OF STUDY

Known as the heart (*hṛdaya*) of medicine (*aṣṭāṅga*, “eight parts [of *āyurveda*]”), Vāgbhaṭa’s *Aṣṭāṅgahr̥daya* is widely regarded, as Dominik Wujastyk puts it, as “the greatest synthesis of Indian medicine ever produced.”<sup>38</sup> A profusion of manuscript



replications of the text in both north and south India points to its importance and ample use across the subcontinent, while translations in Chinese, Tibetan, Arabic, and other languages suggest it has held some sway outside of South Asia as well. More than the other two classics, which are written mostly in long prose passages, the *Aṣṭāṅgahṛdaya* is concise and its verses are lyrical. It is amenable to memorization, and its distillation of the sometimes unsystematic and conflicting data in the collections attributed to Caraka and Suśruta has made it the go-to source in Kerala for clinical work and education since the medieval period. Also, because the text draws on central principles from the other two classics, the *Carakasamhitā* and *Suśrutasamhitā* are drawn into the course of study in a gurukula that focuses on Vāgbhaṭa's treatise.

Generations of vaidyas in central Kerala have committed the entire *Aṣṭāṅgahṛdaya* to memory. The collective thirty chapters of its first section, the Sūtrasthāna, is widely recognized as a masterpiece unto itself because it presents a clear and to-the-point rendering of *āyurveda*. Most of the Malayali vaidya-gurus over fifty years old I have met, and a few under fifty, know the *Aṣṭāṅgahṛdaya* by heart, while their students generally do not. Nowadays the typical gurukula student cannot study with a vaidya-guru for the amount of time normally needed to master the text by rote. Instead, most come for weeks or months at a time, or only during holidays and long breaks in the course of an academic college year; some do this over many years. If they can piece together a long enough stay to memorize a sizeable portion of the text, the Sūtrasthāna is usually what they focus on. For students of earlier generations, studying the *Aṣṭāṅgahṛdaya* from beginning to end, memorizing every verse, was thought to reveal associations between body, mind, and society that contribute to disease and sustain health. The Sanskrit, Malayalam, and Manipravalam sources that form a gurukula's curriculum should be introduced by a bona fide master, who him or herself has had a gurukula education and been treating patients for years. Since putting textual knowledge into clinical practice is crucial to the mission of the gurukulas I visited, students get hands-on, apprentice-like instruction about how to yoke *śāstra* and *karma*, textual knowledge and clinical practice.<sup>39</sup> An education deprived of on-the-job training about the practice of the tradition's texts is considered incomplete.

Bhaskaran would often underscore the danger of misconstruing *āyurveda* as bookish or academic medicine, as if it were fixed in oral or written texts and ideas from the past that we discuss today as history. "It is not enough to simply read and study these works," he said in an interview in 2001, two years before I met him. "What is imperative is that these works be brought into the realm of experience. 'Theoretical knowledge' (Skt. *śāstrajñāna*) must be brought into the realm of 'practical experience' (Skt. *karmaparicaya*)."<sup>40</sup> For him, for his teachers before him, and now for the students he has trained, practical experience is sine qua non to being a successful vaidya. Texts must be mastered. But to amass practical experience, those texts must eventually be embodied, so that neither the vaidya-guru nor the

physical version of the text are needed. The texts become fields of knowing on which vaidya-gurus coordinate their interactions with patients (and their attending students). A comprehensive and prompt understanding of issues that patients present and the mettle to make quick decisions come from experience, Bhaskaran used to tell his students. These qualities are imperative to manage not only the assortment of illness that patients present day to day but also the occasional life and death situation that can arise in central Kerala, where deadly snakebites are not uncommon.

Critics during ARM who thought the gurukula system allowed too much variability to remain central to ayurvedic training saw the nationwide standardization of the ayurvedic curriculum as a fix. Consistency of subjects, testing, and modes of delivery would create a coherent vision of Ayurveda among students and practitioners, improve its public perception, and thereby ensure its place as a viable indigenous medicine in twentieth-century India. Without these sweeping reforms, there were linguistic gulfs and regional incongruities, for example, between Kannada curricula in Karnataka and curricula in Malayalam or Tamil in Kerala and Tamil Nadu. In theory, vaidyas trained in gurukulas in all three south Indian states would be equally well-trained in the Sanskrit classics. But the heavy reliance on the modelling of their teachers for fundamental things like patient examination and the administration of drugs and treatment meant that in each location (even within states) student learning was an idiosyncratic enterprise. As elucidated in *Bhore Report* in the previous chapter, there was no way for a national organising body to monitor and advise gurus from one place to the next regarding how they taught their students to practice the texts they studied in their clinical interactions with patients. Even if the classics—or just the *Aṣṭāṅgahṛdaya*—formed the basis of gurukula education across south India in the nineteenth century, those texts were taught and practiced, augmented with regional specialties and case studies, in radically different ways by individual gurus, leading to radically different student and patient outcomes.

#### PEDAGOGICAL PARTICULARITIES

Until recently, Priyankara and Biju maintained basically the same instructional procedure with their pupils at Mookkamangalam that Bhaskaran used when he taught them at Shantimana, in the same style that Bhaskaran's gurus had in turn taught him in their gurukulas many years earlier. Things were noticeably different in Biju's approach with his students when I visited Mookkamangalam for two months in 2008, as I explain below, than when I first observed his lessons with this grandfather at Shantimana. Between 2003 and 2008, the mukhāmukhaṃ arrangement at Mookkamangalam had grown lax and informal with each new cohort of students. The intense face-to-face learning I saw Bhaskaran impress upon Biju on my first visit to Kerala in 2003 is designed to introduce sequentially more complex

lessons on an entire text over several years. Lessons begin at a basic level, building up slowly based on previous lessons, while the teacher helps the student work through progressively more challenging material with the ultimate aim of merging textual knowledge (*śāstra*) and practice (*karma*).<sup>41</sup> Any Malayali vaidya-guru who says they teach mukhāmukhaṃ signals this twofold nature of their work. Biju told me in 2017 that he gives his students “obvious examples and, by watching me interact with patients, also unspoken information about past practices. My students learn to consider new possibilities for treatment when they see me apply Vāgbhaṭa’s ideas to problems today.”<sup>42</sup>

Whenever I observed an ayurvedic gurukula in central Kerala, irrespective of the formality of the mukhāmukhaṃ arrangement, Vāgbhaṭa’s text was always present in some way. Oftentimes it was a physical book, like the diminutive, purple-bound copy I always carried in my shoulder bag. I needed it to follow along with Priyankara’s and Biju’s lessons, as did most of their short-term and novice students. My copy has the Sanskrit text in Devanagari script, and so did the editions that Biju and Priyankara keep on hand. Many of their Malayali students had Malayalam transliterations, however, because they were more comfortable with the Malayalam *lipi* than Devanagari (although all knew Hindi), and it made it easier for them to stay on point.

For an advanced gurukula student, the nature of a text—like the *Aṣṭāṅgahr̥daya*—changes from a physical object that displays “things”—ideas conveyed via language—that need to be memorized and recited and slowly unfolds into a body of knowledge that is conversational; that prompts questions and supplies answers; that creates in the student a particular way of thinking about the human body and how it works; and that weaves medical principles within an ever-expanding tapestry of case studies charting therapeutic successes and failures. A thorough gurukula training places teacher and student together on a path of discerning the meanings of texts, parsing what’s written in them, and learning how to reiterate the language of the texts accurately. Together they also put the texts they study in context: historically in view of their production; inter-textually in relation to coeval Sanskrit and vernacular literatures; and practicably in light of the viability of applying the texts’ knowledge about the body and wellbeing to patient cases.

The *Carakasamhitā* is the source of the multilayered and progressive structure of mukhāmukhaṃ learning. Near the end of its Sūtrasthāna, a three-part approach to teaching an entire text (*tantra*) is described. It involves methodical recitation (and by extension, memorization); line-by-line analysis; and clarification of the text’s thorniest passages.

Those who relate, one after another, articulation, sentence meaning, and clarification of the sections, chapters, and disputed parts of scientific works are called knowers of life science (*āyurveda*). How, then, are the aforementioned articulation, sentence meaning, and clarification of scientific works performed? ‘Articulation’ is

the recitation of a sacred text in full, according to tradition. ‘Sentence meaning’ is deliberately and correctly getting to the heart of a matter with speech that is elaborate, concise, and consistent with the principles of proposition, reasoning, example, application, and conclusion in a way that is intelligible and accessible to the three kinds of students [i.e., superior, average, and poor]. Using critical observation, ‘clarification’ is the restating of inevitable passages in a text whose meanings are difficult to access.<sup>43</sup>

Priyankara said with a chuckle in 2005 while she, Biju, and I talked late into the evening in their front sitting room at Mookkamangalam that this passage is “the *mukhāmukhaṃ-mūlam*,” the root of mukhāmukhaṃ instruction. I was midway through a yearlong stretch of fieldwork in Kerala, and the more time I spent at Mookkamangalam the more I realized that this short passage in Caraka’s collection was a deep-seated *mūlam* for Priyankara and Biju, an invisible inspiration (below ground as it were), that supported and shaped what they did every day. What Bhaskaran taught them to do with Caraka’s framework is a unique Kerala innovation that has developed and adapted to changing social and political landscapes and assemblies of people over generations. It’s an education that leads to a particular way of knowing that distinguishes this extended Namboodiri family from other practitioners in contemporary Kerala, as well as the nearby border areas in southern Karnataka and western Tamil Nadu, where I also met and talked with ayurvedic physicians and students.

Darting his left middle, ring, and pinky fingers into the air to indicate the number three, Biju inquired, “Did you know that my grandfather taught me and my mother that there are three tiers of Ayurveda?” I shook my head, and as he broke down the three tiers, it was clear that he sees these differentiations in ayurvedic education in the early years of the twenty-first century occurring in Kerala and across India.

The first tier is *vyavahāra*. This is basic practice at a superficial level, even the commercial level for many people nowadays. Most ayurvedic colleges teach Ayurveda like this. The second is *śāstra*. This is scientific practice like we find in Sanskrit [literature]. Some colleges today try to teach this level, or claim to teach this level. But most do not go beyond reading short passages in English [translation]. The third tier is *tattva*. This is the philosophical background of the *śāstras*. This level is not taught or discussed at all in colleges today. But it is critical to the gurukula tradition.<sup>44</sup>

Biju’s remarks evoked the progressive stages of mukhāmukhaṃ instruction, though they do not map onto them perfectly. By calling an education *vyavahāra*, a Sanskrit term meaning “doing” or “action” in a mundane or everyday sense, he sharply summed up a common attitude in the south Indian gurukula community that the mixed “bio-Ayurveda syllabus” of the college is disconnected from the history and literary culture of the tradition, the *śāstras*. Comprising the second level of Ayurveda, the *śāstras* are essential to ayurvedic education, and though the

colleges try to incorporate them here and there on the syllabus, they ultimately fail to teach them in a substantive way. The third level, *tattva*, meaning “truth” or “reality” in Sanskrit, reveals the extent to which Biju has been taught to see Kerala’s mukhāmukhaṃ-based gurukulas as key brokers of classical *āyurveda*, the so-called real Ayurveda that Biju’s students imagine they learn from him. Biju and his grandfather were engaged in *tattva*-level conversations when I initially met them both in 2003.

It was pretty late in the afternoon when I entered Bhaskaran’s traditional Namboodiri *mana* that day, and I was beat. I’d been jostled around for most of the day in the backseat of a small red Maruti-Suzuki hatchback. One of Priyankara’s top students, Gopal, drove the tiny car as I tried to steady a supply of camera and film equipment while we and another colleague, Dr. Matsuzaka, travelled throughout the Palakkad District, past seemingly endless and identical rubber tree plantations. We stopped only a handful of times, whenever we arrived at houses Dr. Matsuzaka believed had manuscripts he wanted to photograph. I had met Dr. Matsuzaka only the day before in Tamil Nadu, as my studies with Prof. Shastri (mentioned in the introduction) were ending. Prof. Shastri and Dr. Matsuzaka were old friends and frequent collaborators, and Prof. Shastri had apparently encouraged Dr. Matsuzaka to invite me to join him and Gopal for two or three days on their research trip to document traditional ayurvedic manuscripts and practitioners in Kerala. The timing was perfect. I had some free time, and I was keen to see Kerala. So, I went along for the ride.

Before we left Tamil Nadu, Dr. Matsuzaka told me that the highlight of this trip would not be the manuscript collections he hoped to discover, most of which, he insouciantly whispered, “we’d probably never get to see anyway.” He was excited most of all “to go to Shantimana, to film a master vaidya and ayurvedic guru, Bhaskaran, while he instructed his grandson,” Biju, who was then in his early twenties and deep into the clarification stage of mukhāmukhaṃ training.<sup>45</sup> A few of the stops that day turned up some paper and palm-leaf manuscript caches, and Dr. Matsuzaka was allowed to photograph a few of them. A little after two o’clock in the afternoon, Gopal asked me to help him get the camera equipment ready and assemble the video tripod. We were going to Shantimana. He drove for about fifteen minutes before pulling over to the shoulder of the road, alongside a wall with a wrought iron gate, flanked by yards of concrete wall that curved along the windy road. Bhaskaran’s residence was on the other side of the gate, beyond a wooded area visible through the gate’s iron bars. As we stretched our legs outside of the car, waiting for someone to let us in, I could see bits and pieces of a pale blue structure through the trees. About ten minutes had passed when a man emerged from the narrow dirt driveway that snaked through the woods. Gopal greeted him, and when he opened the gate, we got back into the car and entered the property, slowly coasting downhill to Bhaskaran’s house. The pale blue structure I had seen through the entry gate was an impressively large house. Gopal told me it was about

four hundred years old, designed in traditional Namboodiri architecture, and it appeared to be in tip-top shape, as far as I could see, perhaps just recently painted. I would see a similar, though smaller and tannish-orange colored, Namboodiri house when I got to visit Mookkamangalam days later. The three of us grabbed our equipment and made our way to a door on the side of the house about fifty feet from where we parked. As we approached, Bhaskaran emerged in the doorway, thin and grey-pated, clad in a white mundu folded up to his knees, sacred thread of the twice-born (*yajñopavīta*) strung across his hairy chest. He greeted us with a smile and a *namaskaram*, and we repaid the salutation. Gopal took an extra moment to bow deeply before Bhaskaran, genuflecting, and touching his forehead to Bhaskaran's feet, acknowledging that Gopal, who had studied with him at times the previous two years, revered Bhaskaran as a special teacher and elder in his life.

After Bhaskaran let us into the house, he took us to the veranda, where Biju was seated on the floor waiting. We set up the film equipment far enough away that we wouldn't disturb the lesson, but close enough to hear what the two were saying. Before Bhaskaran resumed his seat across from Biju, Gopal explained to him that I was from the United States, a friend of Prof. Shastri, and an assistant to Dr. Matsuzaka. Bhaskaran did not seem disturbed by my unexpected attendance. Gopal emphasized my association with Prof. Shastri a couple of times, which might have eased Bhaskaran's curiosity about me; sitting patiently but expectantly listening to Gopal and looking at me, Biju, too, appeared less diverted by my presence once it appeared Prof. Shastri had encouraged my participation in Dr. Matsuzaka's research. So, when I asked Bhaskaran if he would mind if I also took notes, he readily approved, and I took a seat on the floor and opened my notebook in my lap. By the time their *mukhāmukhaṃ* session resumed, it was about three-thirty in the afternoon. They had started around ten o'clock that morning, and after a half-hour delay because of our arrival, the session lasted about two more hours for a total of about seven. During the two hours I observed, the two men sat on the floor face-to-face. Biju was in a half-lotus position, while Bhaskaran shifted between a half-lotus and cross-legged. Other than sporadic twists and twirls of their hands in the air, accentuated by flicks of an index finger to emphasize an idea or counterpoint, the energy level of the lesson was relatively subdued and had a smooth conversational flow.

The apparent half-century or so that separated the two men in age was a clue about who was the student and who was the guru. Though both men were dressed the same—white mundus pulled above the knees, with bare chests apart from the sacred threads looping over their left shoulders—everything else about their comportments differed. An ever ready and superb student, Biju displayed exacting self-care and discipline as he sat. His back was straight and stable. His shoulders were evenly poised, and his hair was neatly coiffed. His mundu was ironed and deftly wrapped and tucked into his waistband. Facing Biju about three feet away, Bhaskaran was more relaxed and less stiff. His mundu was baggily collected

around his pointy knees. He had thinning scruffy grey hair atop his head and a stubbly grey chin. His angular and wizened face bespoke experience and seniority. And though Bhaskaran always had all the answers, during this lesson Biju was visibly an advanced student, not Bhaskaran's equal by any stretch, but an inquirer and conversationalist as much as he was a student performing for his guru. Although he had basically committed the entire *Aṣṭāṅgahr̥daya* to memory by this time, Biju kept a pocket-sized edition of the text on a small table within arm's length in case he needed it for reference.

Across two decades of fieldwork in south India, I observed students at each stage of mukhāmukhaṃ training. The ones I saw in the initial articulative stage and second analytic stage were not taught by Bhaskaran, but by Biju and his mother. Biju and Priyankara also had advanced students at various times, even, with Biju, as recently as 2017 on my last research visit there. But I would not place any of the most gifted students at Mookkamangalam at the same level as Biju was when I saw him train with his grandfather. As teachers, Bhaskaran, Priyankara, and Biju each have distinctive pedagogical styles, and whenever I asked them about why they teach the way they do, all three downplayed their differences, preferring to acknowledge their gurus as the respective models for their didactic practices (thus making Bhaskaran's teaching style the touchstone for both Biju and Priyankara). After recognizing the influence of their teachers, each then usually drew my attention to the textual precedent that outlines the style of teaching they refer to as mukhāmukhaṃ, reciting the verses from Caraka's collection cited above and then unpacking them for me in the following way.

The preliminary phase of mukhāmukhaṃ training that I call articulation is conveyed in Caraka's collection by the Sanskrit term *vākya*. At bottom, this word means "speech" or "assertion," though it also designates a "sentence" or "mode of expression." The articulation stage involves going over an entire compendium like the *Aṣṭāṅgahr̥daya* from beginning to end, with special attention given to a student's ability to recite every word of the work with exacting pronunciation. Students often do not fully understand the full meaning of each passage they learn at this stage, and that's okay. Their ability to intone every word properly is key here. The idea is that the phonemic structure of each Sanskrit word and its syntactic relationship to the other words in a given sentence, chapter, section, and the overall text, accurately produced through speech, provides an indispensable foundation without which the full understanding of the text's meaning is destined to fail. This stage of instruction resembles the traditional practice of teaching the Vedas in Kerala, which Robert Gardner and Frits Staal's documentary, *Altar of Fire*, showed depends both on a teacher's effective oral articulation and a student's rote memorization and vocal precision.<sup>46</sup>

I call the second phase of mukhāmukhaṃ sentence meaning. Caraka's collection designates it with the Sanskrit compound *vākyaṛtha*. The term carries the



oral-aural transmission of meaning (*artha*) through spoken words (*vākya*) that construct arguments, technical rules, and (medical) theories. This involves a rather plodding and detailed examination of every sentence in a text. Students should have a firm handle on the components of the text they are studying. In the past, such as when Priyankara learned the *Aṣṭāṅgahṛdaya*, students did not advance to the sentence meaning stage until they had memorized the entire work. That isn't the case today. Most of Biju's students do not sit with him long enough to learn the entire *Aṣṭāṅgahṛdaya*, or any other text, and as a result Biju routinely condenses all three phases of mukhāmukhaṃ to focus on one small text-selection (usually the Sūtrasthāna of Vāgbhaṭa's classic). Once a text is fully internalized, and a student can recite it using correct pronunciation and grammar, the vaidya-guru leads her through a line-by-line analysis of the text's meanings and the ayurvedic principles that undergird those meanings. While the *Aṣṭāṅgahṛdaya*'s versified structure makes it easier to memorize than prose texts, gains in memorization come at the expense of having fewer in-text clarifications, which a more prolix collection like the *Carakasamhitā* has. Hence the theoretical foundations are often not evident to a new reader of the *Aṣṭāṅgahṛdaya*, and inter-textual allusions to the collections of Caraka and Suśruta embedded in it are easily missed by a neophyte. Reliance on an experienced teacher to make these connections clear is therefore crucial.

The third phase of mukhāmukhaṃ is called *arthāvayava*. This is the clarification stage of training when students cultivate a sensibility about how texts can be practicable. The teacher shows students how to do things with texts by revisiting complicated passages, fundamental concepts, and challenging scenarios to understand how a text that's loaded with theoretical and speculative information can make a tangible impact in the clinical context. A vaidya-guru's experiences with patients are indispensable here. Circumstances of former and current patients are related to parts of a text under study. Because most gurukulas also double as active clinics and educational centers, at places like Shantimana and Mookkamangalam students routinely shadow their teachers as new patients arrive throughout the day. In the course of doctor-patient interactions, vaidya-gurus explain how they mentally handle the texts they have memorized and how they intend to use those texts to structure their assessments and treatments of the bodies, illnesses, and people they encounter. Conversations between teachers and students during clarification are less structured than the first two phases. Having gone through *vākya* and *vākyaārtha*, students appear more assertive in this third part of mukhāmukhaṃ. It's not simply that advanced students are encouraged to speak up and raise questions when they encounter portions of a text they do not understand, which they are, and which there is less time for during the first two phases. Because they have more experience with ayurvedic medicine by this time, sometimes (especially nowadays) partly drawn from a college education, they also tend to be armed with particular interests and queries they bring with them to the



gurukula. This stage is thus conversational, even chatty at times, and can appear like an ever-unfolding quiz for students, as the vaidya-guru asks them to connect chapters and sections of a text to reinforce their ability to recite by heart what they have been studying.

To reinforce certain lessons in the third phase, the vaidya-gurus I know introduce their own regional traditions of poison therapy along with the *Aṣṭāṅgahr̥daya*'s data about diagnoses, prognoses, and treatments. The cumulative result is ayurvedic, certainly, but it is also something more. Patients receive an assessment and therapy that non-Malayalis sometimes call "Kerala Ayurveda" (the same umbrella term is applied to other specialties common to Kerala, such as *pañcakarma*). A vaidya-guru's particular education and clinical experiences enter her instructions in this way. Malayalam sources she teaches function as new vernacular commentaries on the Sanskrit classics, at once augmenting and expanding students' conceptions and capacities to practice the root text of their gurukula education. By orally demonstrating how and why the local tradition employs Vāgbhaṭa's classic, for example, the vaidya-guru familiarizes her students with an array of ways to rehearse this collection's framework for thinking about disease and the body that can be adjusted and rethought to meet diverse patient needs.

At the first mukhāmukhaṃ lesson I observed, Bhaskaran presented the case of one of his recent patients to Biju. He asked his grandson to call to mind a passage from the *Aṣṭāṅgahr̥daya* that could explain what he had observed and heard from the patient's testimony about her ailments. Biju cited verses from the Sūtrasthāna of Vāgbhaṭa's text, suggesting that the patient appeared to have ingested contaminated water (*duṣṭajala*). Without much hesitation, he explained that depending on the type of contamination she experienced (water mixed with algae or mud? water unexposed to sunlight? water that had been crisscrossed by spiders and soiled by their webs? and so on), the woman most likely had intestinal worms (*kr̥mi*). As Biju recited verses from Vāgbhaṭa's collection, Bhaskaran aided and corrected his articulations of the Sanskrit.<sup>47</sup> This type of pedagogy was not exactly new for me. I had heard Sanskrit recited many times before that afternoon at Shantimana. I had also seen traditional ways of learning Vedic Sanskrit in Kerala performed in the abovementioned documentary, *Altar of Fire*. But I remember thinking while I sat on Bhaskaran's veranda that before this encounter, for me the learning of Sanskrit had been a fairly solitary endeavor. Until then, in the United States, where my Sanskrit studies had taken place, Sanskrit was a language fixed in books that I read and translated alone, many hours each week, in preparation for short twice or thrice weekly lessons with a teacher and a chalkboard. I usually had a few classmates, though not always. Each class, we (the students) would take turns reading several verses of a text, trying to translate what we read, while our teacher pointed out the grammar of what we read and helped us produce reliable translations. Proficiency in the Sanskrit language opened up sources of Indian history for me that were unmediated by others' translations, and hence interpretations, and it helped

me cultivate a sensibility about premodern Indian aesthetics, epistemologies, politics, devotional practices, and many other types of knowledge. At the end of the day, however, we were trained as translators of Sanskrit texts. The language was not conversational in the classrooms I knew, as it appeared to be in Bhaskaran's gurukula.

So-called spoken Sanskrit is well-known and expressed today by many people in India and elsewhere. But that's not the type of Sanskrit I observed in 2003. Bhaskaran and Biju were not composing Sanskrit sentences off the cuff. They (re)-presented passages of the *Aṣṭāṅgahr̥daya* to each other, treating the text like a deck of cards from which they picked and traded *ślokas* ("stanzas") freely, without obvious effort, and always with single-minded purpose. I came to learn later that they actually dissected Vāgbhaṭa's classic, and together they laced together verses from different sections of the text. Bhaskaran referenced passages from the collections of Caraka and Suśruta that Vāgbhaṭa cited or alluded to, and he nudged Biju to connect the three classics to Kerala's poison therapies. The assembly of texts formed a phonologic field that teacher and student shaped, discussed, and debated face-to-face. They created this field with specific texts for the practical aim of treating Bhaskaran's former patient (their case study for that day's lesson). The study of this patient's situation had run its course, Bhaskaran determined, after he and Biju adequately diagnosed the patient's condition and agreed on a treatment. In my subsequent visits to Shantimana and Mookkamangalam, case studies like this were also crucial to mukhāmukhaṃ training. But more often than not, teachers and students create these phonological textual fields while speaking with and inspecting real patients arriving throughout the day, in real time. After a patient has left the gurukula clinic, or when a case study has been put to rest, the field collapses. Although the particular patient and illness might be recalled in a subsequent lesson, traditionally it would not be logged in a notebook or captured on a tape recorder. In theory, it's no longer needed, for no two patients are alike. A new collection of texts will be knitted together when prompted by the ailments of a new patient or case study.

#### MUKHĀMUKHAṀ INSTRUCTION THEN AND NOW

For the students and physicians I observed in central Kerala, mukhāmukhaṃ training was practiced by the book up to and including the education of Biju, who began studying face-to-face off and on with Bhaskaran as early as four or five years old. Although no one I spoke with in central Kerala was certain about the exact length of time Bhaskaran trained Biju, everyone reckons he amassed a total of perhaps two years through his childhood until he reached his late teens, when lessons intensified. By Biju's own account, he sat mukhāmukhaṃ with his grandfather at Shantimana routinely for at least eight years into his early twenties, totaling around a decade of training in gurukula philology and clinical work. All the while,

up to around the time I met him, Biju also studied at Mookkamangalam with Priyankara. Like Biju, she began sitting with her father around five years old. She married at twenty-five, and collective family memory suggests that for the twenty years in between she regularly studied the *Aṣṭāṅgahr̥daya* and local *viśavaidyam* mukhāmukhaṃ with her father and assisted him during patient consultations.

The practice has changed considerably since Biju's training, however, as he and his mother began welcoming cohorts of students with a wide array of abilities, interests, and commitments into their home for lessons. In the years between 2004 and 2008, I met many students at Mookkamangalam, and I got to know three especially well: Gopal, Unnikrishnan, and Ajeeth. All three worked intensively over long stretches of time. They were Malayalis from different districts in the state, and they were deeply dedicated to learning Ayurveda face-to-face and improving their knowledge of the Sanskrit medical classics. Each told me in so many words that they felt the ayurvedic college they attended did not prepare them to make sense of their work with patients using the Ayurveda's "original" literature, which they regretted having to learn in a piecemeal, brief, and incomplete way at college.

"I learned 'Ayurveda Sanskrit' at college, with lots in English translation, and only at the beginning of my studies," Gopal told me during a relaxing weekend in the Kottayam District near India's longest lake, Lake Vembanad, and the region's famous Śiva temple, Thekkan Kashi.<sup>48</sup> He had learned Sanskrit before going to college, which enabled him to move through the *Aṣṭāṅgahr̥daya* with Priyankara rather quickly. He told me that one of his college professors impressed upon him the import of learning more about the collections of Caraka, Suśruta, and Vāgbhaṭa than the CCIM syllabus required. That professor directed Gopal to Mookkamangalam as an ideal place to do that, and after he met Priyankara he became her student. Whenever possible he also studied with Bhaskaran, and he excelled with both teachers. Unnikrishnan and Ajeeth were junior to Gopal at the same ayurvedic college in Karnataka, and they eventually found their way to Mookkamangalam by following in Gopal's footsteps. Like Gopal, and like numerous students I met every year until 2017, they rented rooms in houses nearby Mookkamangalam *mana*. They usually sat with Priyankara, and later with Biju, six days a week studying the *Aṣṭāṅgahr̥daya* and regional poison therapies. All the while they observed and essentially interned for their two gurus, as Priyankara and Biju treated patients arriving at their home for consultations and treatment every day. Bhaskaran visited his daughter's home regularly during this time, and he also made his own house available to his daughter's and grandson's students. All three of these students thus, by extension, consider Bhaskaran one of their gurus.

By the end of the first decade of the twenty-first century, Biju had taken over most of the educational demands and many of the clinical responsibilities at Mookkamangalam. Increasing numbers of students in Kerala, Karnataka, and

Tamil Nadu had been learning about the lessons Priyankara and Biju offered, and between 2008 and 2010 Mookkamangalam saw a steady uptick in requests for training. The work had become too burdensome for Priyankara, who also performed the daily domestic chores at the family's multi-building property. Biju had become an expert vaidya-guru in his own right by this time, and with more energy and time than his mother to devote to Ayurveda and *viṣavaidyam*, he was better suited to teach and manage the gurukula's clinic. His students since 2010 have come from various social and academic backgrounds. Often they were young men and women who had recently graduated from ayurvedic colleges, were nearing graduation or, like George, were pursuing a three-year post-graduate degree, the Ayurveda Vachaspati (MD[Ayu]). Whatever their credentials, most saw themselves as students of Ayurveda, and at Mookkamangalam they were recommitting themselves to "traditional training." I also met some teenagers studying with Biju who were simply contemplating Ayurveda as a potential profession, or who had heard about him and his family and, out of curiosity, approached him to be their guru for a short spell. That said, it is important to note that while Biju attracts students to study with him, gurukula students of Ayurveda in contemporary south India are the exception rather than the rule. Most ayurvedic college graduates do not complement their degrees with gurukula training, but move on to careers in Ayurveda or even, increasingly, take up opportunities to practice hybrid forms of "bio-Ayurveda" (that is, mixing biomedical and ayurvedic therapies).

The gurukula culture that Bhaskaran oversaw at Shantimana at the end of the twentieth century and that Priyankara and Biju created at Mookkamangalam in the 2000s began to change considerably in early 2009, when Biju started accepting students who were not from Kerala. His Malayali students of course knew Malayalam and had no trouble conversing with Biju and Priyankara when their studies of the *Aṣṭāṅgahr̥daya* drifted into discussions of Malayalam texts about snakebites or when they assisted their gurus with patient evaluations. By the early 2010s, I saw people arrive at Mookkamangalam from Tamil Nadu, Maharashtra, Haryana, and Himachal Pradesh. Biju naturally had to adapt his lessons and clinical work to suit the abilities of his students, mixing in Hindi at times to accommodate the north Indians who did not know Malayalam and occasionally using English as the lingua franca to communicate with a group of students from across the country and whose first languages were different. Whether from the north or the south, students go to Mookkamangalam primarily to learn the *Aṣṭāṅgahr̥daya* in the Sanskrit language. While this can be done in some graduate programs in the national and private college system in India, an intimate mukhāmukhaṃ-type experience must be sought elsewhere. Since Biju sees patients while he teaches, and his students observe him while he assesses and treats each case, anyone who studies with him, even if only for a short while, also learns how someone with a mukhāmukhaṃ education puts into practice the foundational texts of the profession.

Unlike Biju's own training, when he sat face-to-face with Bhaskaran at Shanti-mana, and his grandfather's veranda morphed from study room back to domestic space as soon as each lesson ended, since shouldering the teaching duties at Mookkamangalam Biju has had as many as seven students at one time attending his lessons. To accommodate the growing number of students, he had to stop sitting with students on the veranda of Mookkamangalam's main house, and he had a study hall built on the second floor of an adjacent building. It is a spartan room with white-washed walls, cement floor, low ceiling, and spacious windows that allow decent air movement. The space is accessible only by a very steep wooden staircase, which feels almost like a ladder going up and requires that one belay down with the assistance of a cabled rope. There is a ceiling fan and a stand-up fan with a rotating head, standard apparatuses for a non-AC space in Kerala wherever business is conducted during the day. Two uncovered incandescent lightbulbs illuminate the room when the sun has shifted to the west side of the building. Even with the fans and always-open windows, the study hall was often very warm. But the fans and dim lights made the space as conducive to studying as possible. Students from the north tend to be accustomed to the drier heat of the plains and foothills of the Himalayas, and it seemed to me that Virendra and Raju suffered through the humid Kerala afternoons more than Biju's Malayali students did.

Biju has also altered the physical layout of mukhāmukhaṃ in his study hall. Like his grandfather did, he dons only a white mundu and sacred thread, often with *tilakas* smeared on his forehead, arms, and chest from the morning *pūjā*. As he's gotten older, he grows his facial hair from time to time into a dark black bushy beard at his chin, which thins out as it climbs up his cheeks to meet his shock of jet-black hair. Nowadays, when Biju teaches he sits on a plastic chair situated behind a small wooden desk, which is nearly always strewn with books, bottles of decoctions, salves and other medicaments, and his and his students' cell phones. His students sit in chairs as well, across from him on the other side of the desk or off to his left on a wooden bench positioned beneath one of the room's windows. I was always instructed to sit to Biju's right when I was there, against the wall where the rotating fan was usually located. There is a little more leg room in that spot than in other areas, accommodating my 6'1" frame, and it's also next to one of Mookkamangalam's drug cabinets. This is an old metal shelving unit with windows on the doors, behind which sundry dried herbs, decoctions, oils, pills, books, mortars and pestles, and more sit. Biju likes to place me in this spot, he told me the first time he showed me the space, to get the most cooling from the two fans and to have clear sight lines of both of the room's windows. These things are all true of this position, and I always appreciated his thoughtfulness during long days reading texts and seeing patients. But a downside is that as the sun moves westward across Kerala toward the Arabian Sea, by about three o'clock in the afternoon Biju starts to look like a silhouette from this spot because the sunlight pours through the window and drenches his left side.

Biju and his students stop their readings and discussions and leave the study room whenever patients arrive on the porch beneath the second-floor study space. They usually announce their arrival with a soft yelp up the steep staircase or a loud knock on one of the porch's wooden beams. A whistle from one of the workers milling about the *mana* property sometimes also signals a patient's arrival. When a patient arrives by auto rickshaw, everyone in the study room usually hears the sputtering engine of the three-wheeler bounding toward the compound along the long dirt road that leads up to the main house. Patients are seen under the overhang on the porch, although, on occasion, if they are agile enough and if medicine from the small medicine cabinet is required immediately, they might climb the steep steps up to the study hall for a consultation.

Most of Biju's students rely on an ample supply of books when they study with him, and not only copies of the *Aṣṭāṅgahr̥daya*, which was the only physical book Priyankara and Biju used when they studied with Bhaskaran. They arrive at Mookkamangalam between eight and nine o'clock in the morning hauling backpacks stuffed with Sanskrit dictionaries, Malayalam-Hindi dictionaries, and English translations of *viśacikitsā* texts. They move back and forth between conversations with Biju, reading silently to themselves, and reciting aloud from the *Aṣṭāṅgahr̥daya* at Biju's direction. The profusion of physical books reflects the schooling that most of Biju's students have had by the time they study with him. They are products of an educational system based around textbook training and the compartmentalization of medical fields and subfields. In such an arrangement, ayurvedic college students learn to link textbooks on physiology, pharmacology, anatomy, botany, and so on to their respective classes, and as students advance in their studies and prepare for their careers, further specializations often follow. Biju does not ask his students to abandon their textbooks, however, if they get confused or need help tracking down an answer to one of his questions. Stacks of books are therefore commonplace in the study hall. Dual language dictionaries are a necessity now that the languages of instruction have changed from the standard two of Bhaskaran's and Priyankara's day—Sanskrit and Malayalam—to four—Sanskrit, Malayalam, Hindi, and English—to accommodate everyone.

Biju does not usually turn away students based on their background or depth of ayurvedic knowledge. If someone is interested in learning the *Aṣṭāṅgahr̥daya* and practical applications of that text, he teaches them. This open classroom policy has meant that he has had to modify his instruction so that a BAMS student and a licensed vaidya, not to mention the occasional curious teenager, can be equally engaged. It has also meant that he has had to sharpen his fluency in Hindi and English. Though he often downplays his linguistic abilities, Biju's Hindi is excellent, and his English is also very good. His nimbleness across multiple languages has affected him as a physician and teacher as much as it has opened up Mookkamangalam to a diversified student body. Work across four languages has forced him to

explore new ways of understanding *āyurveda* in the Sanskrit classics, in different idioms, so that he can relate it to others. Sometimes he does this in a single lesson, in rapid fire, shifting from explanations of disease causation or the treatment of a patient suffering from a spider bite using Sanskrit, then Malayalam, then Hindi, then English. Biju's mother and grandfather did not need to ponder the prospect of acquiring, much less mastering, a linguistic skillset like Biju's when they were teaching. For Biju this has been vital. His ability to communicate Vāgbhaṭa's classic as a dynamic, functional resource for healing has garnered him a reputation as a gifted and versatile teacher, which in turn has ensured a steady inflow of new (and returning) students with diverse educational and cultural backgrounds year after year.

The length of time most students can commit to mukhāmukhaṃ training at Mookkamangalam is perhaps the most challenging transformation for Biju since his student days. Although he had a student in 2017 during my last visit to Kerala who had been with him without interruption for nearly three years, and another who had been present off and on for three years, most of his students tend to drop in for a month or two at a time; some might do this periodically over a number of years. The lack of continuity means that Biju does not instruct in the same sustained way over months and years that his grandfather and mother did. If a student plans to stay for only six weeks over the summer, for example, even for intensive training, the foundational stage of articulation (*vākya*) will never amount to the memorization of an entire text, and depending on a student's ability in Sanskrit when he or she arrives, even mastering the *Aṣṭāṅgahṛdaya*'s Sūtrasthāna in six or seven weeks is a tall order. Still, young physicians and physicians-in-training are drawn to what they perceive as the literary sources of their medical tradition, which prior to meeting Biju they only got to know at college in a cursory way, and mostly used the language of allopathy to understand. That is why they continue to come to Mookkamangalam, and Biju has resigned himself to carry out mukhāmukhaṃ lessons that might center on a just a fraction of the *Aṣṭāṅgahṛdaya* or another text according to the needs and wants of the students. While a commitment to the practice of texts is clearly present among each cohort of students I met over the past two decades, an expectation to learn any of the texts in toto was usually lacking. So, Biju works with smaller, partial sections, trying to ensure they memorize some of the passages they want to know and maybe even progress through a detailed analysis or *vākyārtha* of those passages. The clarification stage typically receives short shrift. Inter- and intra-textual references in the final stage require a depth of knowledge and proficiency with a corpus of texts that most college-educated students do not have.

The turnover and diversity of students at Mookkamangalam has created a much more informal atmosphere at this gurukula than I observed at Shantimana. The intimacy of the guru-student relationship described in Sanskrit literature, which



Biju and Priyankara experienced with Bhaskaran, is now mediated by a host of social and professional constraints, tensions, and expectations brought by the college-educated students. The ones who already hold BAMS degrees are seeking a “continuing” or “further” education in a field they are already certified to practice, while their teacher, Biju, has neither that same education nor government authorization to practice Ayurveda. From time to time, I saw Biju’s students show some entitlement while speaking with him, challenging him or citing their college professors about an illness and symptoms that a patient presented if they thought it somehow ran up against something Biju said or the *Aṣṭāṅgahr̥daya* asserts. But on the whole his students showed deep respect and loyalty to him, and most admired him as an endless and generous font of healing expertise. Nevertheless, I noticed less outward deference to the authority of the *vaidya*-guru today than when I first started visiting Kerala and Biju was his grandfather’s pupil and, later, when Gopal, Unnikrishnan, and Ajeeth studied with Priyankara.

Biju told me many times that his students are much more gregarious and apt to object to his lessons than he was as a student. Although it would not have crossed his mind to question Bhaskaran’s judgment (aloud, at least), he has had to learn how to respect his students’ academic accomplishments while at the same time showing them there are aspects of *āyurveda* that are missing from their college studies. Most of his students are receptive to this. Yet, he still works very hard to make apparent the differences between what he teaches and practices at Mookkamangalam and what they study at college. At every one of Biju’s lessons that I observed, he showed genuine interest in the experiences of his students and their professors’ explanations about disease theory, pathology, and other medical topics. He also studied up on aspects of biomedicine taught at ayurvedic colleges, which invariably arise in discussions with his students. Biju and his students teach each other, in effect, using the expertise they have gained from their respective educations. Their associations and exchange of ideas therefore yield a new type of life science (*āyurveda*) and ayurvedic physician (*vaidya*) that is uncommon in ayurvedic clinics and colleges in India today.

#### TEXT-KNOWLEDGE-PRACTICE

Since serious philological engagement with the big trio of Sanskrit classics was progressively edged out of the ayurvedic college syllabus in the twentieth century, it is perhaps predictable that an ayurvedic gurukula would attract students and practitioners of Ayurveda in the twenty-first century. The ayurvedic gurukulas in central Kerala that I observed enable students to discover why and, fundamentally, how the collections of Caraka, Suśruta, and Vāgbhaṭa have remained consequential to healing across the many centuries the literature has existed. For those gurukula students at Mookkamangalam who return to a text like the *Aṣṭāṅgahr̥daya*



after having studied selections of it in college, the experience of sitting face-to-face with a slow and shrewd reader-cum-healer like Biju is a fresh, intensely philological enterprise that cultivates and connects textual mastery with patient awareness and responsivity.

Roland Barthes saw the mutual exchange of information that occurs among people every day as a constant re-production of texts.<sup>49</sup> Ideas are built up and revised in this intercommunication, mythologies are created and sustained, and political messages are delivered and consumed. Courses of memorizing and understanding the *Aṣṭāṅgahr̥daya* and parts of the *Carakasam̥hitā* and *Suśrutasaṃhitā* in a gurukula involve the constant re-producing of classical Sanskrit medical knowledge in the flow of discourse among teachers, students, and patients, and when there is learning for the student and healing for the patient, the texts effectively “work” for all three groups. Yet, texts that are shared and re-presented among them are not reducible to observable results in the way that, in a medial context, the work of drugs on sick bodies is usually apparent. Texts “work,” Barthes teaches us, because certain people are especially equipped to fashion and disseminate the kind of work that healing drugs can do.

The gurukula teachers I write about in this book re-produce texts so that they will be useful to students and patients. Students are able draw on this knowledge to bolster, in many cases, an already accredited education they see as distant from classical *āyurveda*, in the hopes that connecting the classical and contemporary domains of their profession will enliven their daily work and enrich their careers. The desire patients express for ayurvedic knowledge has presumably not changed much since the time of Vāgbhaṭa. They want this therapeutic information not for its literary sophistication, but to be able, in concrete ways, to know how to feel better. For patients, the knowledge of the big trio heals, and at Mookkamangalam Biju and Priyankara give this information to patients liberally, at no cost, with the aim of preparing them to be their own healers in the future.

## Knowledge that Heals, Freely

I arrived at Biju's house promptly at nine o'clock in the morning, per his request the night before. It was an hour earlier than our usual starting time. I had only a few more days left in a month of fieldwork at Mookkamangalam, and that day the humidity was already so intense that I had sweated through my well-worn poplin shirt just sitting in the back of the auto-rickshaw on the twenty-minute commute from my hotel. The fifty-rupee note I fished out of my jeans to pay the driver was damp, too, and when I handed it to him and said thanks, he gingerly pinched it by a corner and wincingly asked, "Any others?" "I'm very sorry," I said, "they're all damp," and stepped away to find Biju standing atop the stairs of his front entrance waiting for me. The driver turned from me to Biju, who, with a slight jerk of his head, sent the man away. As the auto's engine kicked back on, Biju commented on the heat. "It's going to be very hot today, so we need to start early." I couldn't help but think it was already very hot and humid, and I tried to waft some air through my shirt by tugging on it a few times.

I kicked off my flip-flops at the bottom of the stairs, and made my way up the steps to join Biju on the veranda, where we talked about the lessons I had observed the day before and some of the recent patients who visited Mookkamangalam. "Do you remember the *lūtāviṣa* [spider venom] patient from Thrissur City two weeks ago, a young girl, eleven years old? The skin on the lower part of her leg was irritated. She came here with her mother and father." I said I did. But I checked my notes anyway, and this brought back a visual of the girl's shin, which my notes said was very red and swollen. At the site where a spider bit her, the skin was slightly depressed, and around it the skin appeared bubbly, brownish-red, and like it could easily slough away when touched. The girl was visibly in some pain, though not a lot, and reported itchiness at the site of the bite. She had a fever, which alarmed her parents, and all three of them were worried that the leg seemed to be getting worse with each passing day.

Biju's students had already left for the day when this family arrived at Mookkamangalam. With no one to question about the young girl's symptoms and treatments for *lūtāviṣa* in the *Aṣṭāṅgahrdaya*, he spoke with the girl's parents, explaining that this was a spider bite, and it would get better. He asked the mother and father about their daughter's overall health, and when he learned it was generally good, he instructed them to purchase several things from the market, and to prepare the ingredients into a medicated oil (*taila*) to apply to the leg. The father said he couldn't remember all of this, and he asked his wife if she had a pen and paper to write it down. One of Biju's students usually writes down these instructions for patients and the people who accompany them. It would have taken me far too long to get this down in Malayalam, and Biju knew that, so he didn't ask for my help. The girl's mother rummaged through her purse and pulled out a pen and what looked like an advertisement on a piece of 8x10 paper. As Biju restated the ingredients to make the oil and how to prepare it, she wrote down everything in the blank spaces and margins of the ad.

The parents were relieved to learn what had happened to their daughter's leg. The girl also seemed comforted to know that the medicine Biju prescribed would make her skin normal again. When Biju finished explaining his treatment plan, the girl's father and mother turned their shoulders away, forming a huddle, and began whispering to each other. The mother pulled something from her purse and surreptitiously handed it to the father. He then reached out his hand to Biju, clutching something in his fist and said, "Thank you. Please take this." I couldn't see what he held. But I presumed it was money. Biju raised his hand to his chest, palm facing out, and shook his head, "No, no, this isn't necessary. There is no charge." Discomfort gripped the parents, and the father again politely asked Biju to take the money. All the while, their daughter sat silently, wounded leg stretched out in front of her, skirt pulled above her knee; she didn't seem to notice the awkward interaction her parents were having with Biju, as she tilted her head side to side to get a thorough look at the blistering skin on her leg.

For most of this interaction I was seated behind Biju on a wooden chair. I'd seen this kind of back and forth many times before with people who visited Mookkamangalam for the first time. When I compared my own experiences with doctors in the United States, as a patient and a parental escort for my son, I understood these parents' wish to give Biju something in this situation. He had taught them what was wrong with their daughter's leg, how to treat it and, equally crucial, he had given them peace of mind. He had allayed their worries about what was happening to the young girl's leg and assured them it was curable, provided they follow his plan. Receiving a concrete therapeutic plan and, oftentimes, comfort from knowing that things aren't as bad as they might seem, especially when my child is involved, are things I have come to expect from my interactions with doctors. I don't expect to get these things for free, however. So, it never surprised me when I observed patients or their relatives and friends try to pay Biju and Priyankara for

their attention, time, and healthcare. But when I initially started visiting Mookkamangalam, I was surprised that they always refused every kind of payment. This time, just like every other time, once Biju insisted this was how it had to be, the patient and her family expressed their gratitude several times, descended the steps of the veranda to rejoin the driver of the auto-rickshaw that had brought them there, and left the compound.<sup>1</sup>

Apart from a treatment plan written on a piece of paper that is sometimes provided at the end of a consultation, nonemergency healthcare at Mookkamangalam seldom involves an exchange of anything material. Patients do not usually receive medicines for their disorders, and Biju and Priyankara never accept money for their services. To the onlooker, the only thing that appears to move between the physician and patient is information, and their confab and re-presentation of facts and perceptions move in relaxed yet semi-formulaic ways similar to clinical communications I have had myself as a patient of biomedicine in the United States. That is, as a patient, my perception of my symptoms and experience of disease intermingle with the physician's assessment of my point of view and medical history, which informs her expert evaluation of my condition, leading to an explanation about how to proceed: by monitoring the situation, with treatment, or perhaps with a combination of approaches. At Mookkamangalam, Biju and Priyankara evaluate patient illness narratives and the conditions they present with direct reference to the *Aṣṭāṅgahr̥daya* and, often, sources on *viśavaidyam* they have taught and used in their gurukula many times before.

Discussions that vaidyas and rogins have about the experience of disease, somatic data, and healing knowledge comprise the critical part of gurukula philology that reveals the ongoing lives of old texts in contemporary south India. It's here that a vaidya-guru and students assess and treat patients, colloquializing Vāgbhaṭa's classic along the lines of what, at the end of the nineteenth century, E.S. Sheldon and Henry Sweet called "practical philology."<sup>2</sup> Specifically, Sheldon and Sweet thought that philological techniques applied to Latin and Greek texts had practicable uses for instructors and students of modern European languages. And while I am describing the use of texts in a medical context, the twofold philological process in both cases is parallel. The vaidya-guru as philologist connects techniques derived from a systematic textual discipline to new and present situations, with actors who can apply (physicians/ language instructors) and who want to receive (patients/language learners) the effects of that discipline to gain a sound grasp of something in the present moment (illness/language) in order to effectively address it. The transmission of knowledge learned and mastered in the philological study of classical texts during gurukula education leads to the application of that knowledge for the express purpose of healing the "diseased [person]," the rogin. In this chapter, I explore this second register of the practice of texts, the necessary and subsequent complement to the preliminary register we saw in the preceding chapter that begins with intense, oftentimes multilanguage textual studies.

Exchanges between vaidya-gurus and patients clarify why some ayurvedic practitioners continue to read their tradition's classical literature. Daily encounters with patients at Mookkamangalam offer distinct examples of how vaidyas like Biju and Priyankara take recourse in classical Sanskrit literature to explain and rationalize aspects of their contemporary healing work. These examples furthermore shed light on bigger questions about exchange relations in Indian history and society and complicate earlier studies and scholars' long-held assumptions about the nature of giving and taking in India generally.

#### MAUSS AND MOOKKAMANGALAM

A patient consultation at Mookkamangalam calls to mind the classic study of exchange and gift-giving in Marcel Mauss's "Essai sur le don: forme et raison de l'échange dan les sociétés archaïques" (hereafter *The Gift*).<sup>3</sup> Which is to say, a contractual *do ut des* appears to be in play between patients and physicians in the south Indian ayurvedic gurukula: the former gives information to the latter so that the latter might give back healing information and treatment plans to the former. After that, the patient does not, indeed is not allowed, to give anything back to the physician, apart from a kind gesture and word of thanks. As a patient of biomedicine in the United States, after I present an illness and relevant medical history that might help a doctor assess my health concerns, I normally expect the doctor to respond by giving me something in the form of a diagnosis and prognosis. If the physician then gives me medicine or a prescription, this act prompts yet another offering from me to the doctor: commonly a monetary payment (which I would give to a pharmacist when picking up the prescription). In my experience, doctor-patient exchanges usually end in this way, and the doctor and I part having fulfilled our obligations in this particular social relationship. The interaction of vaidyas and rogins at Mookkamangalam, however, is fundamentally different.

Although this gurukula stands outside of the network of government-certified medical caregivers in Kerala, it is still for many people no less part of the Indian healthcare system as a clinic I might visit in the midwestern United States is part of the American medical marketplace. Yet, the clinical space of Mookkamangalam *mana* operates almost exclusively in the exchange of data and knowledge and nothing more. Acts of exchange there are not measured and made in kind but, instead, are designed to be unequal and nonreciprocal. These behaviors complicate Mauss's influential theory about exchange and gift-giving, which I use in this chapter as a prompt to reflect on the motivations, rationalizations, and rewards of giving and receiving knowledge and data about the body in the clinical dealings I observed between Priyankara and Biju and their patients.

Growing up, my parents subtly informed me that the nature of gift-giving was supposed to be a one-sided affair. Some of my earliest memories of this lesson are from attending friends' birthday parties. Naturally I had to bring presents to their

parties. I enjoyed the festivities and birthday cake, and Mauss might have argued that this enjoyment was tantamount to recompense for the gifts I gave my friends. But like most kids, I learned not to expect to go home with a gift in hand that matched the gift I gave. Children in the United States and around the world learn this lesson from an early age: a gift-giver presents another person with something that's seen neither as repayment for an earlier exchange nor as an offering meant to elicit a future return from the recipient. In *The Gift*, Mauss argued that actors in gift exchanges might *perceive* themselves to be either givers or receivers of so-called free gifts—offerings unmotivated by self-interest or an expectation of future compensation. But the fact is, there are almost always counter-gifts, even at children's birthday parties. Lapses of time between initial- and counter-gifts tend to make people forget or perhaps be more prone to overlook the actual *quid pro quo* of which their "gifts" were a part. Or, as Pierre Bourdieu noticed, the profit interests of givers are often veiled in euphemism, causing receivers of so-called free gifts not to realize that such gifts are in fact imaginary.<sup>4</sup> Gifts are never really free, Mauss taught us. Free gifts are not and have not been part of exchange economies in most human societies throughout recorded history, and this applies, Mauss said, to all cultural domains, including medicine. So, after a doctor tenders a prescription or medication to a patient, a counter-offering is ordinarily given from patient to doctor, making good on the social convention of their relationship with symmetrical prestations.

But interactions between physicians and patients at Mookkamangalam destabilize the universality of Mauss's observations about gift-giving. These relationships are based on a tenaciously asymmetrical system of exchange in which a vaidya gratuitously gifts knowledge of classical life science to a rogin, who pays nothing for it. If we follow the mandate laid out in the Sanskrit medical classics, to which I return later, an exchange of equal gifts in an ayurvedic context runs the risk of invalidating the intent, use, and healing capacity of the knowledge the vaidya conveys.

In the exchange of health data and healing knowledge at Mookkamangalam, the Maussian understanding of the gift is at once corroborated and complicated. Mauss argued that an obligation to reciprocate an offering, immediately or at a later time, was a regular facet of archaic societies. He intended this general observation and the sociological theorization he applied to the forms and reasons for exchange to serve as a prehistory of economic and legal contracts that were also found in most modern societies.<sup>5</sup> Despite the overall validity and applicability of his theory in both premodern and modern societies, ideas about exchange in India—in classical literary explanations and contemporary observation—diverge from Mauss's hypotheses about why and how people give and take. The Sanskrit conception of *dānadharma*—the "duty" (*dharma*) of "giving" (*dāna*)—has influenced the nature of exchange in Indian societies for centuries, especially impacting religious communities of Hindus, Jains, and Buddhists, and it does not permit

the kind of reciprocity that Mauss thought undergirded the giving of gifts in most societies. The back and forth movement characteristic of exchange economies in his analyses is instead anathema in classical Indian articulations of *dāna*, which is an expiatory gift offered to someone who is specially authorized to receive it. What is more, an act of *dāna* establishes neither an obligatory bond of reciprocity nor an equal relationship between givers and receivers. Axel Michaels suggested that “wherever reciprocity is practised, it is not a case, in India, of religious *dānāni* but of profane exchange or trade.”<sup>6</sup> Profane exchange or trade is not *dāna*, although it agrees with Mauss’s model of gift-giving. Conversely, *dāna* is nonreciprocal exchange that is inimical to Mauss’s model.

Mauss knew that the history and practice of *dāna* in India did not align with his ideas about exchange. In W.D. Halls’s translation of *The Gift*, Mauss’s most telling reflection on what has come to be known in scholarship as the “Indian gift” (*dāna*) appears in the famous footnote 61 of his classic study. In this lengthy footnote, he refers to passages in the *Mahābhārata* and treatises on *dharma* (*dharmaśāstra*) that forbid the reciprocation of certain gifts, especially gifts to Brahmins, pondering the outlier status of the Indian gift to his general theory of gift-giving.

Concerning the main subject of our analysis, the obligation to reciprocate, we must acknowledge that we have found few facts in Hindu law, except perhaps *Manu*, VIII, 213. Even so, the most apparent fact is the rule that forbids reciprocity. Clearly, it seems that originally the funeral *çraddha* [sic], the feast of the dead that the Brahmins expanded so much, was an opportunity to invite oneself and to repay invitations. But it is formally forbidden to act in this way, for example [in the *Anuśasanaparvan* of the *Mahābhārata*] lines 4311, 4315=XIII, reading 90, lines 43 ff.: ‘He who invites only friends to the *çraddha* [sic] does not go to heaven. One must not invite friends or enemies, but neutral persons, etc. The remuneration of the priests offered to priests who are friends is called demoniacal (*picaca*) [sic]. . . .’ The cunning Brahmins in fact entrusted the gods and the shades with the task of returning gifts that had been made to themselves. Undoubtedly, the common mortal continued to invite his friends to the funeral meal. Moreover, this continues in India in the present day. For his part, the Brahmin did not return gifts, did not invite, and did not even, all said and done, accept invitations. However, Brahmin codes have been preserved in sufficient documents to illustrate our case.<sup>7</sup>

Mauss acknowledged that the prohibition against the repayment of gifts “continues in India in the present day,” underscoring the persistent social authority of classical texts and practices designed to uphold *dharma*, like *The Laws of Manu*, and the custom of *dāna* in modern India. Yet, as examples from Mookkamangalam show, Sanskritic behavioral guidelines are at once vital to contemporary medical practice but rarely reified wholesale. If the spirit of a dharmic-like “medical law” about gift-giving persists in the present day, the letter of that law in central Keralan gurukula culture is also intentionally supple to accommodate varying features and needs of each patient scenario, reference to multiple and perhaps



conflicting texts, and treatment plans that draw from the past clinical experiences of the vaidya-guru.

To explore the idea that knowledge for long life, *āyurveda*, can be a gift, it's instructive to note, with Miriam Benteler, that gift exchange in any context often consists of far more than material things.<sup>8</sup> Gifts can also be ideas, advice, stories, and participation. The point of all these things, Benteler suggests, is to support social roles and relationships. By exchanging knowledge about health and the body, vaidyas and rogins at Mookkamangalam are situated on the threshold of an exchange economy that has features of Michael's so-called profane trade, involving a classic *do ut des*, as well as features of an asymmetrical social relationship typical of the so-called Indian gift. Although it exhibits aspects of asymmetrical gift-giving, aspects not addressed in footnote 61 of *The Gift*, thus both challenging Mauss's theory and affirming the uniqueness of the Indian gift, the Mookkamangalam example also adds conceptual nuance to, and encourages further analytical elaboration of, the ways that scholars have imagined gift-giving as atypical in India. In the rest of this chapter, I suggest that the gifting of *āyurveda* in the work of Biju, Priyankara, and Bhaskaran is a further example of how the practice of texts shapes their healing practice and, beyond its relevance in the gurukula clinic, how it challenges and problematizes articulations of gift theory in South Asian studies and Classical Indological studies since Mauss's seminal analysis, which tend to treat *dāna* as an inflexible principle in the practical lives of Hindus, Jains, and Buddhists.

#### VAIDYAS AND ROGINS

Bhaskaran, Priyankara, and Biju were trained mukhāmukhaṃ-style. They did not receive degrees from ayurvedic colleges, and the Government of India never officially licensed them to practice Ayurveda. Nevertheless, each garnered a favorable and quite celebrated reputation as an ayurvedic healer and teacher in central Kerala. Patients found them and sought their advice, and continue to visit Priyankara and Biju at Mookkamangalam, based on these reputations and word-of-mouth referrals. Between 2003 and 2017, the patients I encountered at Mookkamangalam were demographically diverse. I met many parents who brought their sons and daughters for consultations and treatment, like those in this chapter's opening vignette. But the majority of patients were middle-aged men and women. Seniors were seldom there when I was present; if they were, their adult children typically accompanied them. I met Hindu, Muslim, and Christian patients over these years. The vast majority of adults were educated through the senior secondary level (equivalent to high school in the United States), some were college-educated, and most were working professionals from middle- and lower-middle-class backgrounds. Auto-rickshaws and family motorcycles were the most common modes of transport to the Mookkamangalam clinic; occasionally a patient arrived by private car with a driver. I don't recall hearing patients say that they were visiting

Mookkamangalam because the healthcare is free or a religious commitment or duty (*dharma*) led them to Ayurveda because it is “Hindu medicine,” as opposed to the “Muslim medicine” of Unani, for example. These are distinctions colonial administrators made in the eighteenth and nineteenth centuries, European and North American Orientalists carried forward into the twentieth century, and people in India and around the globe continue to make today. For patients and physicians alike at this gurukula, Ayurveda was fundamentally humoral and corporeal. It is medicine for unwell bodies, and health and disease were understood and expressed according to physiological and pathological processes involving diet, the movement and mixing of substances in bodily fluids, and environment. Problems like contact dermatitis, allergic rashes, and inflammatory reactions to insect and spider bites made up the majority of cases Biju and Priyankara had when I was there. More severe and potentially fatal cases, as I discuss in the next chapter, usually involved sickness and trauma due to snakebite.

Most of the patient clientele at Mookkamangalam is from the Thrissur District. Some are from the immediate neighborhood itself and have been going there for years, although I also met several patients who traveled from over an hour’s distance by auto-rickshaw. In the last decade of my visits, 2007–2017, in a normal week Biju would see anywhere from five to ten patients a day. Rarely would a day pass that no patients at all would show up, and those who did come usually just appeared, rarely calling ahead to make an appointment. As I explained in chapter 2, students who are studying with Biju accompany him when he meets patients. After learning the reasons for a rogin’s visit, Biju often puts questions to his students, pressing one after another to connect their knowledge of the *Aṣṭāṅgahṛdaya* and other texts with the patient’s testimony and visible ailments. The Mookkamangalam “team” then briefly confers, and Biju usually asks a series of questions before inspecting the disorder(s). Depending on factors like the patient’s age, level of anxiety, and severity of sickness, his inquiries are sometimes put directly to the sick or injured person, and at other times he addresses their attendants. He tries to establish basic but vital information, such as a patient’s place of residence, profession, diet, elimination consistency, and family health history. Once his questions have been answered, he inspects the actual problem, if it’s a visible wound, and replies with an improvised commentary on what he has learned, drawing on and putting into layman’s language citations from the *Aṣṭāṅgahṛdaya* and *viśavaidyam* sources. When students shadow him, he might ask one of them about the problem first, correcting and adding nuance to their diagnosis, before recommending a treatment plan. This “prescription” is a brief memo or command called a *kurippaṭi* in Malayalam. It may be conveyed orally, but often it is written down so a patient can consult it again later. A typical *kurippaṭi* will include things such as herbs, plants, and powders to purchase and instructions for cooking the ingredients into a decoction (*kaṣāya*) for ingestion or an oil (*taila*) for topical application, as well as recommended dosages. With that, a meeting between the vaidya

and rogin ends. Sometimes small talk ensues, especially if the visitors have been to Mookkamangalam before or mutual friends referred them to the clinic, before the patient and his or her entourage depart.

In some cases, follow-up appointments are set for days, weeks, or even months later. More often than not, a return check-up is not planned unless the patient's problem gets worse after the start of treatment or persists beyond a certain time. Because patients and their attendants have been equipped with information needed to correct a particular condition, after leaving the gurukula they can reprocess the knowledge Biju gave them if the same disorder resurfaces. Just as the parents of the young girl from Thrissur City did, in my experience at Mookkamangalam new patients and/or their attendants invariably ask about the fee for Biju's or Priyankara's time and assistance. Every time these vaidya-gurus reply, with a gentle wave of the hand and some variation of the phrase, "Nothing, it's free" (*onnumilla, it saujanyamāṇ*). All medical services at Mookkamangalam are provided *saujanyamāyi*, "for free." Most patients nonetheless try to give Biju and Priyankara some kind of payment, or diplomatically ask one of their students (and even me, on occasion) to take their money. Regardless of their patients' persistence, they insist on accepting nothing—no money or material gifts—for the healing work they do. Even in cases where certain remedies are dispensed on-site to a patient, the same policy about remuneration holds true.

When medicines are administered during a consultation, the give-and-take between the vaidya and rogin is often fraught. The fact that drugs are needed then and there means the patient is seriously ill, maybe even close to death. In central Kerala, such incidents routinely involve snakebites. Someone bitten by a venomous snake might arrive at the gurukula clinic fairly alert, with only a bit of localized swelling at the site of the bite. But sometimes they arrive in semiconscious states and are lethargic or even nonresponsive; conversely, the poison can also have the effect of making the rogin frantic and abnormally agitated. I explore this kind of emergency scenario in the next chapter, where the on-site delivery of drugs initiates a much more elaborate pattern of social interaction than a routine clinical visit. Biju, for example, reacts to a snakebite victim's arrival by promptly retrieving medicinal plants from his yard or gathering prepared drugs from one of the house dispensaries, whereas most of his patients are instructed to prepare and administer drugs to themselves. If his patient's life is on the line, however, he is much more involved, and he vigilantly ensures a rogin takes the drugs he assigns straightaway. Looking back through my years of fieldnotes, pictures, and videos at Mookkamangalam, in both emergency and regular visits I have no record of either Priyankara or Biju applying oils, pastes, or other topical medicines themselves to a patient or in any way making sustained contact with an ailing person. There might be a gentle pat on the shoulder here and there, or a very cautious touch of the skin, especially when the patient is a small child who's uneasy about being ill and uncomfortable being observed. But that is usually all there is, if any contact is

made. Typically, while speaking with a patient or inspecting a skin disorder, Biju has his arms draped behind his back or folded across his bare chest. Priyankara is more prone to gesticulate than Biju, and because she was having problems with her eyesight for many of the years I did fieldwork at their *mana*, she often had to get closer to patients than Biju did just to make sure she was adequately accessing their conditions. Both vaidyas are always respectful, often smiling and pleasant hosts during their patients' short visits, and Priyankara has a special knack for allaying worry in the children at their clinic.

People familiar with the history of Hinduism and the Brahminical concern with purity and pollution described in *dharmasāstra* literature might wonder if such concerns lie behind Biju's avoidance of contact with his patients. There is no simple answer to this. But it is possible, at least in part. The idea that contact with open wounds and bodily fluids, as well as interactions with people from lower classes and castes, is polluting agrees with the customary classic view among scholars that Brahmin physicians of Ayurveda have historically faced: specifically, their social and religious obligations, or *dharmas*, do not match up with their professional pursuits, and vice versa. This incongruity might explain why the practice of surgery and obstetrics in Ayurveda dropped out of the profession around the seventeenth century.<sup>9</sup> A perceived incompatibility of certain ayurvedic practices with the protection of Brahminical purity has certainly persisted in modern Kerala, most notably among the well-known Vaidyamadham family of *aṣṭavaidyans* from the Palakkad District. P.U. Leela observes that the family patriarch, Vaidyamadham Valiya Narayanan Namboodiri I (1882–1959); his son, Vaidyamadham Valiya Narayanan Namboodiri II (1910–1988); and his grandson Vaidyamadham Cheriya Narayanan Namboodiri (1913–2013) all outspokenly disparaged any type of hands-on or surgical practice in their ayurvedic work because of the probability of ritual contamination.<sup>10</sup> Their prohibition is attributed to the fact that the Vaidyamadham family belongs to the highest Brahmin subcaste in Kerala, the Bharadvaja *gotra*, which is a socio-religious distinction that also sets them apart from the Mooss and Nambi families of *aṣṭavaidyans*, who belong to the Dhanvantari Brahmin *gotra*.<sup>11</sup>

For his part, Biju does not hide the fact that he is a religious person or that he lives his life as a devout Namboodiri Hindu Brahmin. Most days his attire attests as much: his upper body is often uncovered, apart from the *yajñopavīta* thread; his lower body is usually wrapped in a plain white mundu; and his arms, neck, and forehead are frequently smeared with ash from daily *pūjā* offerings. And yet, this doesn't preclude him from consulting "people from all classes and castes irrespective of the normative understandings on comparative purity and pollution of human bodies."<sup>12</sup> By avoiding most physical contact or by asking a patient's attendants to administer drugs to their sick friend or family member, Biju generally maintains his ritual purity throughout the day. He learned early in his studies from Bhaskaran and Priyankara that the *vedādhikāraṃ* and *yagādhikāraṃ* (authority to teach the Vedas and perform religious sacrifices) of Namboodiri vaidyas were

historically denigrated by orthodox Malayali Hindus because they had regular associations with the sick and impaired. So, for him it's been vital to keep his religious practice and healing work in separate spheres. "My worship and *āyurveda* are unconnected. I separate them," he told me, "at certain times and in certain spaces every day. But if I make contact with a patient or if I reassure an anxious child [by touching his shoulder], that's okay. That's nothing to be afraid of."<sup>13</sup> He understands the social and historical perceptions of the ayurvedic physician in Kerala, and he tries his best to keep religious-ritual and professional-medical duties distinct and sorted in his mind, with neither one interfering with the other. The absence of physical contact with his patients complements his religious practice. This "distance" also happens to be compatible with, and perhaps supports, the gifting system at play most often at Mookkamangalam, where the polestar of a clinical visit is the flow of data from patient to physician and healing commands from physician to patient.

Jacob Copeman's study of blood donation (*rakt dān* in Hindi) in north India offers instructive insights about the gurukula vaidya's potential reasoning for upholding a knowledge-based gift economy. A physician's orchestration of medical services for patients, especially in crisis situations, makes explicit "those always-present and yet at the same time frequently latent fears concerning the flows of bio-moral qualities between persons," Copeman suggests, since medical contexts bring people "fully face-to-face with the dangers of social contact."<sup>14</sup> This naturally calls to mind the dharmic typology of purity and pollution that has fascinated anthropologists and scholars of Indian religions for decades. In his classic, though contested, expression of Indian ideas about purity and pollution, McKim Marriott argued that in the Indian worldview all people are believed to be exposed to a constant barrage of "substance-codes" that flow throughout the environment and from person to person in the course of daily activities and interactions. In the medical context, avoidance of contact with an ailing patient could be seen as a mindful effort by Mookkamangalam vaidyas to exchange only the most intangible elements that Marriott supposed make people open and porous organisms, rather than self-contained entities. That is, they deal in knowledge exchanged through words, ideas, and appearances folded into the constant transfer and entanglement of particles and matter that move among people. These exchanges, Marriott reasoned, are what make people individual: "always composites of the substance-codes that they take in" day-to-day.<sup>15</sup> Gifting knowledge as a remedy might not result in overt contamination for the Brahmin physician. If we follow the somatic worldview Marriott imagined to its end, however, it would appear that this exchange does contribute to the continual reconstitution of both gift-giver and gift-receiver.

To further situate the gift and gifting, Sanskrit *dāna*, in the medical context of central Kerala's gurukulas, a practice known in Hindi as *auśadh dān*, "medicine gift," which usually denotes charitable giving to the indigent, speaks to the impact that gift-giving has on both givers and receivers.<sup>16</sup> The medicine gift is a

social-medical-religious practice that alleviates people's physical and financial healthcare problems, while also having the added impact of absolving sins of the gift recipients. Ron Barrett's study of the Kusht Seva Ashram (KSA) in Varanasi is a unique case study of *auśadh dān*.<sup>17</sup> Aghori doctors at KSA give their socially ostracized patients with leprosy, leukoderma, and vitiligo—diseases seen by many in north India as the result of grave improprieties, or so-called bad *karma*—a potent mix of what's known in Hindi as *davā aur duā* (“medicines and blessings”). By welcoming and physically embracing these patients, Aghori doctors challenge the perceived pollution associated with these misunderstood dermatological afflictions. They offer psychological and spiritual relief to their patients, who in many cases have been shunned for years because of their appearance and the religious sins associated with their disorders.

KSA patients are not the only ones who benefit from *auśadh dān*. The Aghori doctors also gain something for the healthcare they provide, though it is not a return gift per se. They assuage the social and emotional experience of illness in their patients by embracing and in the process absorbing, symbolically, their diseases. They also take upon themselves the social and religious traumas of rejection and humiliation their patients have endured because of their skin disorders. The Aghori doctors' immunity to disease, and the obvious “polluting contact” they make with patients, is paraded as a medal of these healers' fearlessness and moral integrity. The contact empowers them. By purifying the sick, they uphold what has been long seen as an antinomian agenda to disavow the restrictions of orthodox Hindu purity and pollution laws. An idea like the one Marriott professed in the 1970s about substance-code transference appears unimportant or nonexistent in the lives, work, and religious practice of KSA's doctors.

At Mookkamangalam, the gift of *āyurveda* leads to bodily restoration and general wellbeing. The re-establishment of wellbeing in Biju's and Priyankara's patients also brings a degree of social and emotional restoration among their patients' families and the communities to which they belong. The achievements of physical wellbeing in the patient and the social-emotional renewal are often quite clear. In my experience, however, rarely, if ever, have Biju's or Priyankara's consultations with rogins spilled over into areas of moral renewal or spiritual cleansing for either the healer or the healed. As I noted of Biju, and the same goes for Priyankara, these *vaidya*-gurus go to great lengths to separate their medical work from their religious practice, each of which, they insist, requires a unique frame of mind to perform and offers its own distinctive rewards.

#### GIVERS, GIFTS, RECIPIENTS

How do we make sense of a gurukula *vaidya*'s behavior in the gifting of *āyurveda* at Mookkamangalam? Is it a charitable act? What motivates Biju (whom I have observed more than Priyankara) to do the work he does without recompense and

in a framework that is, for this observant Hindu Brahmin, potentially polluting? To explore these questions, it is helpful to look at Mookkamangalam through the lens of Mauss's theory of the gift. On the one hand, vaidyas and rogins in the clinical setting of Mookkamangalam engage in a classic Maussian gift exchange. There is a mutual nature to the gifting that serves a basic social function that, Diana L. Eck observes of gift-giving generally, "is more than a gesture of generosity." It is an exchange that establishes connections and patterns of behavior between people and communities, creating "the very sinews of the body of society."<sup>18</sup> A conversational exchange of information about an unwell body starts the interactions: first, in the patient's prestation of knowledge about her illness to the physician, followed by the physician's offering of a diagnosis, prognosis, and prescription to the patient.

On a typical visit to the doctor in the United States, this exchange would not be the end of it. The presentation of a diagnosis and treatment plan marks the first component of a *quid pro quo* of the kind that Mauss identified as gift-giving based on re-compensation. It typically follows that physicians should be paid for their work, and countless Mookkamangalam patients have seemed to believe as much, illustrated by their attempts to give money to Biju or Priyankara and their students. As we will see in the *dharmaśāstra* literature and classical ayurvedic sources, however, if a physician were to take any form of payment, he would reveal himself to be a fraud, uncommitted to classical life science as such, which requires physicians to gift knowledge for long life (*āyurveda*) at no cost to patients or their attendants. If the *āyurveda* an ayurvedic physician gives is matched with a payment of any sort, that healing knowledge is not given as a free, voluntary, or disinterested gift. According to the Maussian model, this kind of giving is constrained by social rules and obligations that are common in medical encounters in the United States, where the things that are given (medicine and money) are based on a long-established system of reciprocity.<sup>19</sup> If that's the system we are used to, we might expect Biju's or Priyankara's gift of healing knowledge to be met with a counter-gift, *viz.* a payment. But at Mookkamangalam they neither receive nor request this—indeed, they firmly oppose it.

Before considering the question about payment for services rendered, the absence of which calls to mind the so-called Indian gift, it is important to underscore the difference and disproportionate nature of the information physicians and patients share. People who are sick and suffering offer individual, intimate, and experiential knowledge of their illnesses. This information is loaded with personal and social anxieties that affect the way and the extent to which patients convey their problems to the physician. At Mookkamangalam, Biju and Priyankara impart information supported by years of textual study and professional activity. The knowledge they ultimately share is based on the collection of current and historical data that patients provide; it is etiological, prognostic, and therapeutic. Such a clear difference explains why a mere tit for tat is often not adequate for many people who visit Mookkamangalam for healthcare, and why I have



seen many patients try to compensate the physician's tat (therapeutic knowhow) with some form of tit (money). Not only is the nature of the knowledge offered different, but the stakes for both parties are also unlike. Patients stand to gain a great deal—health, reincorporation into their communities, peace of mind—by overcoming their illnesses. But what do the vaidyas stand to gain or lose? This question is best understood in view of the decision not to accept counter-gifts for the medical services they administer. This decision is grounded in classical texts, and it is a clear example of the extent to which philologically informed knowledge impacts clinical practice and the vaidya-guru's commitment to promote wellbeing.

At Mookkamangalam the gift of *āyurveda* is tantamount to a gift of knowledge, *vidyādāna*, sometimes called the “gift of learning” according to Indian *dāna* theory.<sup>20</sup> The well-known *dharmaśāstra* text, *The Laws of Manu*, held *vidyādāna* to be the highest possible gift one could give, standing “above other gifts of water, food, cows, clothes, sesame, gold and clarified butter.”<sup>21</sup> The second ruler of the Sena Dynasty of Bengal, Ballālasena, praised the virtue of various types of gift-giving in his twelfth century masterwork, *Ocean of Giving (Dānasāgara)*. Among other gifts, he extolled the giving of land grants to Brahmins for the advancement of Vedic learning and, of note, the gifting of knowledge from teachers to students.<sup>22</sup> Unsurprisingly, the idea of *vidyādāna* has been used as a descriptive in contemporary India to express the charitable nature of the teaching profession and virtue of education generally.<sup>23</sup>

I asked Priyankara and Biju many times what “medicine”—sometimes indicated broadly as a science (or practice) to identify, treat, and prevent disease and other times pointedly meaning an effective remedy (or cure), e.g., *vaidyam*, *vaidyaśāstram*, *auśadham*, *marunnu*, *bheṣajam*, Mal.—is and how they imagine it to function in the routine encounter with a rogin. The first time I inquired about this I got a quick reply from Biju: “It's *auśadham*.”<sup>24</sup> While *auśadham* can mean “medicine” or “medicaments” in Malayalam, it is derived from Sanskrit *auśadha*, which is a collective noun designating the herbs, plants, and occasional minerals that make up healing remedies in Ayurveda. Biju and Priyankara usually use *auśadham* to refer to the contents of a *kuṛippaṭi*. We will see in chapter 5 that the herbal substances constituting ayurvedic remedies constitute one of the four pillars of classical *āyurveda*, alongside the human trio of physicians, patients, and attendants. To say medicine is *auśadham* is thus a reasonable, if a bit textbookish, answer. But over the years, as opportunities increased to talk with Priyankara and Biju in depth and with the ease and comfort that comes with familiarity, I learned that they imagine their use of Vāgbhaṭa's classical knowledge as a kind of *vidyādāna*.

After the young girl with the spider bite left Mookkamangalam in 2014, Biju and I sat on his veranda for a while and talked about medicine and knowledge exchange at Mookkamangalam. I told him that I was struck by how much the mood of the girl and her parents changed from the time they arrived to when they left. When they arrived, they were genuinely worried about the girl's leg: would it actually heal? By the time they left, they were noticeably calm and relieved of their

stress. “They hadn’t even seen the medicine yet,” I said, a little surprised. “They do not need to *see* the medicine,” Biju replied. “Of course, they must apply the *tailam*. But that’s not my job. My grandfather, my mother, and I, we give knowledge. That is *āyurveda* for me. That is what I teach students and, patients also, they are students in a way.”<sup>25</sup> When Biju says he transmits “knowledge,” he prefers to use the term *vijñāna* rather than *vidyā*. Both mean “knowledge” and “learning” in Malayalam and Sanskrit. But when he uses *vijñāna* in the gurukula setting, he intends to express a functional overtone to his work and the *āyurveda* propounded in Vāgbhaṭa’s collection, suggesting that what he shares with patients and students in his capacity as a *vaidya-guru* leads to concrete applications and results. He regards *vijñāna* as a type of knowledge that has the capacity to improve the lives of sick people, not only by making them feel better, but also by empowering them. Once they leave the clinic, *kurippaṭi* in hand, patients are outfitted to treat themselves. At Mookkamangalam, the giving of *vijñāna* appears to be a genuine gift, not a *do ut des*, that is designed for selected worthy recipients (*supātras*)—the sick and diseased (*rogins*) and the people who escort them. These people receive this information and depart Biju’s clinic without any obligation to return something to their healer.

Biju and Priyankara know that most people expect to pay for medical care. They also know that many of their patients have been seen by other doctors, often from other medical traditions, such as biomedicine, Unani, homeopathy, as well as Ayurveda, before they visit Mookkamangalam, and in those prior medical visits they normally had to pay for the services they received. From the patient’s perspective, why should the matter of a physician’s fee be any different if one visits a modern medical establishment or a *mana* surrounded by mango trees and rice paddy? It is in this perspectival gulf separating the physician’s and the patient’s views about the nature of exchange and reciprocity that crucial questions emerge concerning the gift in theory and practice in India. Why are payments not accepted or expected for ayurvedic services offered at this gurukula clinic? Are there simply no types of payment that could equal the offering of the *vaidya-guru*’s knowledge, so that a counter-gift like money might taint the gift of *āyurveda*? Do Priyankara and Biju consider the *vijñāna* they give to patients unrequitable? In answering these questions in the medical context of the central Kerala gurukula, features of *dāna* theory directly run up against Mauss’s theory of the gift and shed light on his remarks in footnote 61 of *The Gift*.

A number of scholars have argued that Indian ideas and practices of *dāna* depart from and even resist Mauss’s design of exchange, most notably on the matter of a gift recipient’s obligation to reciprocate.<sup>26</sup> Working from the observation of Thomas Trautmann that the *dharmasāstra* theory of the gift “is a soteriology, not a sociology of reciprocity,”<sup>27</sup> as it was for Mauss, Reika Ohnuma wrote that *dāna* in Hinduism, Buddhism and Jainism “agrees with Mauss that all ordinary gifts are reciprocal in nature, only to reject such gifts in favor of an asymmetrical, unreciprocated gift that bears fruit in the transcendent future, beyond the present realm

of give-and-take.”<sup>28</sup> At its core, classical *dāna* theory says the true gift is neither a part of the social web of reciprocity nor an act that provokes a return. There is no redistribution of resources with *dāna*. It instead concerns issues of moral value. Because the relationship between giver and receiver is always asymmetrical, *dāna* creates what Maria Heim describes as an “ethics of esteem,” fostering interpersonal respect and admiration toward the person on the receiving end of an exchange.<sup>29</sup>

According to the classical *dharmasāstra* model, in Hinduism *dāna* must go to worthy recipients: traditionally Brahmins, renunciators (*saṃnyāsis*), and holy men and women (*sādhus* and *sādhvīs*). Worthy recipients in Jainism are known as strivers (*śramaṇas*), while in Buddhism the classical portrayal of “beggars,” *bhikṣus* and *bhikṣuṇīs* (monks and nuns), typified the characteristic of worthiness in a gift-receiver. Ballālasena’s *Dānasāgara* classifies worthy recipients according to the moral qualities they possess: they should be known by others, and according to socioreligious conventions and in their speech they should display good behavior, purity, and wisdom.<sup>30</sup> In current social practice, recipients of gifts in Indian societies who need not give anything in return usually live ascetic lives and are often people who own nothing, or very little, and have removed themselves from the ebb and flow of commercial society.<sup>31</sup> The daily offerings of food that lay Jains give to monks and nuns, for example, or householder Hindus give (along with money) to the sea of *sādhus* at the Kumbh Mela readily come to mind in this regard. The monk and the *sādhu*, as Eck puts it, are renunciators who “bear witness to a set of values they place over and against the markets and materialism of the culture at large.”<sup>32</sup> The worthiness of a recipient signals the most critical element of *dāna* in both theory and practice in Indian society and religion.

The gift of *āyurveda* that vaidya-gurus give to patients (as well as to students, who are learning to give *āyurveda* to patients) at Mookkamangalam, in contrast, emphasizes something different about worthiness vis-à-vis gift reception: the worthy recipient, the rogin, is someone *in need* of a cure, healing, and restoration. In the ayurvedic context, there’s a concern for neediness rather than worthiness. This aligns with Copeman’s research on blood donation, which shows that contemporary forms of Indian *dāna* like *rakt dān* and philanthropy focus on neediness far more than worthiness as the most essential attribute of a gift recipient. Although worthiness and neediness are not mutually exclusive categories, Copeman’s research helps us extend the classical view of *dāna*, in effect to reformulate the notional value of worth to include need. A powerful result of this extension is that “accountability is built into *dan*,” Copeman suggests, and “efficacy is assured prior rather than subsequent to the gift,” since the criterion of neediness ensures that gifts are offered to people for whom they are likely to provide some kind of benefit.<sup>33</sup>

The Sanskrit medical classics address the question of need by delimiting the types of patients who should and should not be treated by physicians. The central concern in the literature boils down to whether or not a patient is treatable.

Which treatments are apt to fail or work for patients? Are patients generally well-informed, and will they be able to follow instructions? Do they have the resources to purchase the *auśadham* to cure their ailments? Are they likely to follow through with the prescription and recommended doses a physician gives them? And so on, the list of concerns in the classics goes, presenting qualities of “the needy patient” who is and who is not suitable to treat. Reading through the considerations a physician is advised to weigh, it appears that a patient’s so-called need might actually also reflect the needs and obligations of the physician. This intersecting relationship, Dagmar Wujastyk comments, derives “from the perspective of the physician’s needs. Most of the patient’s good characteristics—wealth, curability, obedience to the physician, and fearlessness—pertain to the physician’s convenience: A good patient is one who makes the physician’s job easy and worthwhile.”<sup>34</sup> As a result, the classics are ambiguous, and hardly uniform from text to text, about who or what the “patient” is. This could be due to the absence of case studies in the classical sources; I have addressed this curious absence in an earlier project on Sanskrit illness narratives and I take it up again briefly in this book in chapter 5.<sup>35</sup>

The gifting relationship between vaidyas and rogins at Mookkamangalam is unidirectional, and thus it accords with classical *dānaśāstra*, or rules of giving. Knowledge moves from the gift-giver to the appropriate gift-receiver, and the latter is not obliged—indeed not allowed—to make recompense for the gift(s) received. But it might seem odd that the gift of *āyurveda* moves from physician to patient, since the exchange relationship in the south Indian ayurvedic gurukula stands the classical connection of giver and receiver on its head by making neediness the primary criterion for receiving knowledge for long life. How, then, can we make sense of the nature and role of the gift-giver in this exchange, the Namboodiri Brahmin healer, whose gift, freely given, might on first glance seem out of place in the professional practice of medicine? Epic Hindu literature offers us one of the most basic and well-known directives concerning the “ethic of the donor,” when Krishna explains to Arjuna in the *Bhagavadgītā* that one must, above all else, comprehend one’s role on earth.<sup>36</sup> That is a person’s essential duty (*dharma*). Having learned that, Krishna explains that people should renounce all desires for the fruits of their actions in pursuit of upholding *dharma*, acting selflessly and making their actions sacrificial offerings of devotion to their chosen deities, while forsaking the potential positive outcomes of what they have done. The Malayalam verb *upekṣikkuka* expresses a person’s intention to give up or forsake something, such as payback after giving a gift. It signals disownment or the renouncing of something from one’s possession. At Mookkamangalam, *upekṣikkuka* exemplifies an act of professional austerity: vaidyas take nothing, neither goods nor money, in return for their gifting of healing knowledge to rogins. Yet it’s also more than austerity. It is a veritable “relinquishment of . . . proprietary rights in the property” of ayurvedic knowledge itself, insofar as they educate, equip, and empower

sick people with an awareness of their bodies and a therapeutic competency that enables them to treat themselves.<sup>37</sup>

The knowledge patients present at the start of a gurukula consultation with Biju is obviously not given unselfishly. They expect and need something in return. The physician's *dāna*, however, is an ostensibly altruistic offering, an act of generosity that falls within the ambit of Hindu, Buddhist, and Jain articulations of the giver of *dāna*, whose gift-giving, Peter Harvey observes, "forms a basis for further moral and spiritual development."<sup>38</sup> Mookkamangalam patients are worthy recipients by virtue of their somatic and mental needs, while gurukula vaidyas are sacrificers, seekers, and strivers for moral development by virtue of their gratis gifts of ayurvedic knowledge to properly designated recipients.

#### GIFTING KNOWLEDGE FREELY, OR THE AYURVEDIC GIFT

The proposal that any gift is genuinely nonreciprocal is bound to raise suspicions. What is the point of engaging in ayurvedic practice if there isn't compensation for seeing and treating patients? Biju and Priyankara also do not (and Bhaskaran did not when he was alive) accept money for the Sanskrit and textual training they give students. More than once Biju made it clear to me that, as Bhaskaran used to tell him, the Sanskrit classics say that Ayurveda should be practiced charitably, without taking any money from sick and impaired people. The classics do say this. But they say it in more ways than one, and not every source agrees about the "*dāna* rule" of offering medical services freely. Even still, this was the understanding of the big trio regularly summoned by Priyankara and Biju whenever I asked or a patient insisted on paying for their help; their students have learned to promulgate this rule as well, at gurukula clinics if not in their professional careers, wherever it has been feasible.

The *Carakasamhitā* identifies a medical imposter as anyone who, firstly, attempts to heal without much knowledge and, secondly, who does so primarily for financial gain. The text's compilers differentiate so-called quacks from bona fide healers (e.g., *vaidyas*, *bhiṣajs*, and *cikitsakas*), and Dagmar Wujastyk identifies two particular types of quacks in the literature: "One is a deluded person who wrongly, though perhaps innocently, believes himself to be a physician. The other is someone who knows full well that he lacks knowledge and skill yet viciously persists in practicing medicine."<sup>39</sup> In either case, patients suffer. Meanwhile quacks still take payment for their failures; they incongruously brag about their abilities despite their failure to heal; and they take no responsibility for poor remedial results, but instead blame their patients. The *Carakasamhitā* distinguishes a fraudulent ayurvedic healer as one who, after his therapies fail, points out that it wasn't his fault but "the patient himself who lacked equipment, helpers, and the right attitude."<sup>40</sup> Fault and failure always rest with patients wherever quacks are involved.

There is some ambiguity and contradiction in the literature about livelihood and the acquisition of money for the work ayurvedic physicians do. The *Carakasamhitā* has statements that could be given to support arguments both for and against the acceptance of money for healthcare. The compilers of this collection were perhaps ambivalent about ayurvedic practice and income, and/or quite possibly their views about whether or not physicians should accept money changed over the course of the time during which they assembled the text.<sup>41</sup> They were unequivocal, however, in their assessment that money should not be the physician's primary motivation for offering treatment. Bhāvamiśra addressed the matter with a bit more conviction in his medieval text, the *Bhāvaprakāśa*. For example, Dagmar Wujastyk interprets his statement "one who does not recompense for bodily treatment is a fool" to mean that ayurvedic physicians should expect payment for the good work they do and also, possibly, even recognition for doing it.<sup>42</sup> Earlier sources occasionally discuss criteria for who should and should not receive payment for their medical work, quacks or honest vaidyas.

The answer to these questions about payment for ayurvedic services sometimes boils down to the social class (*varṇa*) of the healer. In the *Sūtrasthāna* of the *Carakasamhitā*, we learn that only physicians of the Vaiśya class should practice *āyurveda* for money, whereas Brahmins and Kṣatriyas should practice for free.<sup>43</sup> Yet, Kenneth Zysk describes a fifth-century-CE Chinese traveler in India, Faxian, who witnessed Vaiśya families in Pāṭaliputra dispensing "charity and medicine" to the poor, diseased, and handicapped.<sup>44</sup> Scholars of India's Sanskrit literature have known for a long time that the big three classics (*bṛhatrayī*) we have today are products of numerous revisions, interpolations, and emendations, and that these accretions and changes occurred over centuries. Consequently, they present some inconsistencies and contradictions about things that we might classify under the umbrella of professional etiquette. It is not clear, for instance, even in the case of Brahmin physicians, as Dagmar Wujastyk argues, if the compilers of the *Carakasamhitā* imagined there was supposed to be "a direct transaction between patient and physician, that is, [whether] . . . the physician received payment directly from the patient for each treatment" or if payment might have been made and accepted by another means.<sup>45</sup>

If the *Carakasamhitā* presents too many positions concerning the association of ayurvedic practice and monetary gain to draw definitive conclusions about whether or not the gift of *āyurveda* should be complimentary or a source of income, then the compilers of this collection were relatively consistent and clear in the *Cikitsāsthāna* about why a person would want to pursue ayurvedic medicine as a profession in the first place. "The physician striving for the highest *dharma* should save from pain all patients like they were his own sons," the text explains.

Single-mindedly fixed on *dharma* and eager for everlasting life, the great sages revealed knowledge for long life for the sake of religious merit and for the sake of wealth and pleasure. He who practices medicine neither for wealth nor pleasure, but

rather with compassion for all creatures, surpasses everyone. But the one who deals in the business of medicine for livelihood, he abandons the heap of gold and obtains a pile of manure.<sup>46</sup>

The phrase “for the sake of wealth and pleasure,” *cārthakāmārtham*, in this passage is noteworthy. My translation is based on Jadavji Trikamji Acharya’s edition of the *Carakasamhitā*. It is a widely used and generally dependable edition of the Sanskrit text. Yet the best-known English translation of Caraka’s collection by P.V. Sharma relies on a variant reading here, *nārthakāmārtham*, which changes the translation to “not for the sake of wealth and pleasure.” It is not uncommon to encounter alternate Sanskrit editions across genres of premodern Indian literatures, and ayurvedic sources are no exception in this regard. The example of the variants of this passage alone, setting aside, for example, the possibility of scribal errors in the transmission of this early part of Caraka’s *Cikitsāsthāna*, displays the philological challenges involved in defining a particular work-related component of the medical profession in classical India. But we have to work with what’s available and, so, we may interpret the two Sanskrit options as suggesting, à la Sharma, that *dharma*—the multifaceted Hindu principle defining a person’s social-legal-religious duties—is the primary aim of the ayurvedic physician (*bhīṣaj*), while wealth (*artha*) and pleasure (*kāma*) are dissociated from the practice of the unrivaled physician. Trikamji’s version instead brings the original intention of the ayurvedic physician’s practice within the ambit of the fundamental Hindu doctrine of *puruṣārtha*, the four valid “aims of human life”—*kāma*, *artha*, *dharma*, and *mokṣa*.<sup>47</sup> The choice to follow either version reveals a conviction about where one positions the dissemination of knowledge for long life along a spectrum that holds medicine-as-vocation at one pole and medicine-as-livelihood at the other.

The norm of *dharma* lies at the heart of the notion of medicine-as-vocation. The physician who strives for the “highest *dharma*” (*dharmamanuttamam*) is marked by “compassion for all beings” (*bhūtadayāṃ*). That the compilers of the *Carakasamhitā* appeal to compassion as the physician’s duty, rather than a financial motivation, is suggestive of the long-held hypothesis in secondary literature on Ayurveda that the Sanskrit medical classics display a distinct Buddhist influence.<sup>48</sup> To this end, the Four Noble Truths (*catvāri āryasatyāni*), which encapsulate the Buddha’s teaching on compassion—namely, the wish that all beings be free from suffering—are often cited. Hendrik Kern argued over a century ago in the *Manual of Indian Buddhism* that the Four Noble Truths were known among the compilers of the *Carakasamhitā*, evidenced by their resemblance to a fourfold division of healing knowledge.<sup>49</sup> Compare, for instance:

Four Noble Truths: (1) all existence is *duḥkha* (dissatisfaction or suffering); (2) the cause of *duḥkha* is thirst; (3) putting an end to thirst stops *duḥkha*; (4) the way to eliminate *duḥkha* is by following the Eightfold Path.

The best physician possesses the fourfold knowledge of cause, symptomatology, healing, and prevention of diseases; he is fit for [healing] the king.<sup>50</sup>



Kenneth Zysk investigated Kern's claim, noting several flaws in his argument. Following the pioneering research of Albrecht Wezler, Zysk provides a good sense of the enormity of influence that Kern's scholarship has had on Buddhologists who "blindly followed" his claims.<sup>51</sup> A different passage in the *Carakasamhitā*, however, could be read as indirectly drawing on the Buddhist concepts of suffering (*duḥkha*), impermanence (*anitya*), and non-self (*anātman*), and arguably expressing an early philosophical position in Ayurveda on the nature of human existence:

Everything that has a cause is suffering. It is not one's own. It is temporary. It is not created by the self. Yet it arises as one's own possession. Once the true knowledge that I am not this and this is not mine arises, with that [knowledge] the wise man overcomes all suffering.<sup>52</sup>

The Buddhist ideal of offering compassion to all living beings—whose lives are indelibly marked by suffering—lends itself well to the present discussion about gratuitous gifting of healing knowledge. The absence of any recompense, indeed the insistence that there be no repayment, could suggest that Biju and Priyankara view their work as vocational. The gifting of *āyurveda* is done for the simple, if generous, purpose of helping people overcome their suffering.

Given their unwavering responses to my inquiries year after year about not accepting payment for what they give to and do for rogins, it should come as no surprise that Biju and Priyankara tend to see their work in line with the P.V. Sharma rendering of the Sanskrit text. They are motivated to practice Ayurveda as a dharmic obligation in a socio-ethical sense. Their work is a form of compassion, meant to ease the suffering of the ailing and infirm. That they take no money might also speak to their self-awareness as bona fide vaidyas in the august vision of the Sanskrit classics. But at the risk of being overly cynical, it is also noteworthy that Biju and Priyankara have other sources of revenue, both agricultural and religious, available to them through Mookkamangalam *mana*.<sup>53</sup> The security of their economic situation provides an explanation for their ability to refuse all payments for their medical work. It does not speak in full, however, to why they resist the generally inherent, if socially unstated, expectation that people have to receive gifts after giving them and to give gifts after receiving them. This is the social circumstance of *do ut des* or, in Mauss's terms, the "total services" of human societies, archaic and modern, that characterize gift exchange.<sup>54</sup> In Malayalam, this kind of exchange is known as *sammānam*, a gift that's offered between equals in the sense of trade or mundane exchange. Because Sanskritic *dāna* is thought to contain the "spirit" of the person who gives it, this unique Indian gift becomes a form of self-sacrifice. Just as a Vedic sacrificial victim stands in for the sacrificer, likewise in the act of *dāna* "the gift is a surrogate for the donor," Jonathan Parry argues, for which "no return of any earthly kind is countenanced and even an increment to the prestige of the donor weakens the gift."<sup>55</sup>

There are therefore clear reasons to view the work of the central Keralan vaidyaguru as dharmically motivated, even a kind of charitable offering to those who truly need it. But to what extent is it appropriate to see the gifting of knowledge

for long life in the ayurvedic gurukula—*āyurvedadāna*, as it were—as a kind of traditional *dānadharma*? There are two overarching markers of *dānadharma*. Biju and Priyankara follow one and contravene the other.<sup>56</sup> Their gifting of *āyurveda* is nonreciprocal like classical *dāna*, on the one hand. It must be unidirectional for the reasons noted above, not the least of which is the belief that treatment administered primarily for compensation is usually the work of dishonest charlatans and little more than flimflam. On the other hand, Jonathan Parry writes that a donor in the Indian context “should seek out the reluctant recipient and give freely” because “the genuine gift is never solicited.”<sup>57</sup> Biju’s or Priyankara’s gift of *āyurveda* differs from this point. The movement of benefits in their interactions with rogins runs counter to examples in the literature on *dāna*, where sanctified or learned persons reluctantly receive gifts they are not expected to reciprocate. At Mookkamangalam, rogins receive without reciprocating. Biju and Priyankara do not lobby for patients, and their patients naturally are not averse to receiving their healing knowledge. These exchanges nevertheless still evoke the so-called Indian gift, since *āyurveda* is given gratuitously, without expectation of recompense among people united in an asymmetrical relationship. Neediness rather than worthiness is the fundamental criterion of the gift receiver (although it’s notable that in the clinical setting, neediness for healthcare is precisely what makes patients worthy of a physician’s healing work). And yet, because the receiver self-interestedly pursues the gift-giver’s *āyurveda*, the Mookkamangalam case also complicates, if not flouts, this aspect of the Indian gift. The ayurvedic case of giving and receiving is far from straightforward in either the Maussian sense or in the paradigm scholars have long held about the Indian context.

Moving from the practice of gifting healing knowledge to the theoretical presentation of the physician-patient exchange in the classical literature, the *Carakasamhitā* asserts the following: “There is no gift to compare with the gift of life. The practitioner of medicine who believes that his highest calling is the care of others achieves the highest happiness. He fulfils himself.”<sup>58</sup> This passage submits that by virtue of the ability to heal freely, in giving the gift of *āyurveda*—to patients and students—the vaidya-guru is actually compensated in a way. It is reasonable to ask whether fulfillment and happiness qualify as return gifts for the gift of *āyurveda*. This question in turn rouses other questions and points to other avenues for further study concerning benefits and the gift in ayurvedic theory and practice. What, for example, is the relationship between the emotional and moral outcomes experienced, perhaps even pursued, by the vaidya-guru who gifts *āyurveda* free of charge to ailing patients and aspiring vaidyas? Do the rewards of happiness and fulfillment in some way lessen the force of the free gifting of knowledge for long life? Do these rewards undermine the component of classical *dāna* ideology in the ayurvedic exchange of knowledge between physicians and patients? Moreover, who or what gives these potential gifts of fulfillment and happiness to

vaidya-gurus in exchange for their gifts of healing knowledge? Are they not self-generating, according to the above quote from the *Carakasamhitā*?

While physicians at Mookkamangalam acknowledge and abide by certain millennia-old notions of exchange that bring together socioreligious views about *dharma* and professional standards concerning remuneration and ayurvedic practice, when textual theory merges with clinical necessity, they rarely reify textual injunctions in Sanskrit texts across the board in their daily work. Here, we see that in spite of attempts to interpret the gift according to “processes of systematization and instrumentalization” based on models and scenarios proposed in texts, each instance of gift exchange is not “reducible to or definable in terms of these processes solely.”<sup>59</sup> Out of this observation that Jacob Copeman made about *rak dān* in north India, a methodological truism surfaces: ethnographic considerations enrich philological inquiry. The union of fieldwork and philology encourages analytical equipoise and eschews the liability of assigning undue or rigid influence to classical texts in people’s everyday lives. When context-sensitive social categories underline an exploratory theory like the gift and analytical categories such as worthiness, recipients, reciprocity, and so on, it is essential to have a polythetic study that examines how people think about and say they use classical texts, as well as how they actually use them (or don’t use them), in their day-to-day activities.

Biju routinely appeals to the classics to explain and justify his work. But he invokes these sources primarily as fountainheads to be extended and adapted via impromptu interpretation and practice, using vernacular ideas and idioms, according to the particular needs of his patients and students. If the texts’ influence is foundational, their implementation is changeable. Hence, although students at Mookkamangalam learn many of the topics covered in Ayurveda’s Sanskrit corpus, from botany to disease causation, doctorly etiquette to the impact of the environment on human welfare, and much more, their most important lessons pertain to the epistemological frameworks the texts provide to see problems and situations clearly and to work through each one anew, according to the particular facets and challenges before them. Textbook theory and on-the-ground experience are complementary, and they have been yoked for generations in central Kerala gurukulas, including at Shantimana and Mookkamangalam. The texts postulate ways to organize knowledge and think through medical problems that are both methodical and supple and serve gurukula students well when they leave and attend to patients in different settings.

Scholars have known for a long time that texts are important in Indian history and society. Contemporary ethnographic studies help us unearth essential points on which the significance of texts depends. Observing Biju’s practice of texts, for example, we find the question of *dāna* cannot be reducible to a case of *śāstric* literalism, a position arrived at all too often when textual studies alone are used to determine the nature of practice. He follows the models of his mother and

grandfather. He gives healing knowledge freely, at once indicating *dāna* and evoking Mauss's concessional footnote 61 about Indian exceptionalism vis-à-vis a universal theory of the gift. Though buttressed amply by sometimes conflicting textual precedents, gifting *āyurveda* at Mookkamangalam implies that the so-called Indian gift too, as a theory of human interaction, is frequently prone to over-generalization. The gift of *āyurveda* is an Indian gift, to be sure, and in this way it is an exception to Mauss's general theory. But it is additionally unique among classical archetypes of *dāna*. Adding nuance to Mauss's theory as well as the Indian ideal, in the ayurvedic context the gift takes us away from the largely religious domain of *dānadharma* in Hinduism, Buddhism, and Jainism, which posits a unidirectional movement of gifts from laity to mendicants, and opens up the Indian gift to social and professional relationships and ordinary aspects of human existence like affliction, neediness, compassion, and an unending awareness of social contracts. Here we continue to see that Ayurveda can be good to think with, to theorize not only questions of education and philology but also the bases motivating human interactions and engagements. In the next chapter I explore another case study, looking at the space of Mookkamangalam gurukula to discover how the practice of texts sometimes materializes in emergency situations and to ask if medical practice in the south Indian gurukula can inform our understanding of ritual and what constitutes ritual activity.

## From Healing Texts to Ritualized Practice

I had grown accustomed to taking lunch in Mookkamangalam's front sitting room between 2003–2017 when I did fieldwork in central Kerala. I always sat on a short wooden chair, my knees jutting high above my waist, in front of a round table with a vinyl tablecloth that was positioned underneath the ceiling fan for maximum breeze-effect. I'd wash my hands over the edge of the veranda using a bucket of water and a bar of soap, and take my seat while Biju or Priyankara stood next to me, waiting to set the table. A large freshly cut banana leaf lay on the table as my plate, still wet from washing. It dried quickly under the fan, and as soon as it did Biju would heap two or three scoops of hearty *kerala matta* rice onto the leaf and dollop some mango pickle on the side. He would go to the kitchen, and Priyankara would place some vegetables on the leaf and garnish it with a crispy poppadum atop everything. Normally, they would leave me alone for twenty minutes to eat, while they ate together in the kitchen with other family members. I don't know how many lunches I had like this over the years. Nearly every one was the same, with a small rotation of veggies depending on the season, and they were always delicious. If I happened to be feeling any gastrocolic disquiet, as I often did in my early visits to Kerala, Biju would insist that I drink buttermilk after the meal to calm the rumble, and that usually did the trick.

On a particular day in March 2015, lunch at Mookkamangalam was a bit different. Instead of eating with his mother and the other family members at the *mana* that day, Biju joined me in the sitting room. As I hunched over the table ready to eat, he sat down on the wooden bed frame to my left, slowly leaning back onto the rolled-up cotton mattress wedged along the wall. "You're not eating lunch today?" I asked. "We had a late breakfast, and I am not hungry. I'll eat later. Don't worry," he said. Normally whenever I was alone at this time, I would revisit events of the morning as I ate, making mental notes about gaps in my notetaking that I should

address later in the day when transferring my handwritten notes to my computer. Biju sat silently as I ate, occasionally glancing at his mobile phone. I must have felt a little uncomfortable with the silence, and because I was eating alone but wasn't alone, I felt compelled to voice my thoughts. "I'd like to write something about the clinical work you and your mother do here," I said, "about the interactions you have with your patients."

"What do you think we are doing here? We are vaidyas. We study *āyurveda* and practice it. What more is there to say?" Biju smiled as he said this, placing his phone on the bed frame and crossing his arms across his bare chest. I stopped eating, dangling my right hand over the banana leaf, and answered: "There are things you and your mother do when you treat patients that seem to follow patterns. I've been coming here for many years, and I see a routine that I think will interest people who study medicine, healing, and ritual." "Ritual," he replied with a puzzled look. "What do you mean?" "Well, that's actually the feature that I'd like to write about. This is an important type of practice anthropologists and scholars of religion have been wrestling with for more than a century. The work you do with rogins reminds me of some of these studies and makes me think about the nature of ritual in new ways." Biju chortled, and shook his head. Then he asked if I wanted more food.

I did not find his non-reply dismissive or trivializing. He and I had had this type of conversation many times before. He rarely shared my interest in theorizing what happened at Mookkamangalam. "That's okay," he eventually said. "I don't know if what we do is ritual or not. You can tell me, and we'll see. I'd rather talk about what the texts say and how that looks when we treat patients." "Yes, that's great," I eagerly offered, "that's important to me and also important to how I understand ritual. Some techniques you do are especially instructive . . . the attention you give certain patients, like snakebite patients, they require special assistance. Do you remember when I was here five or six years ago and you had to use blowing treatment on a couple patients who were bitten by snakes?" "Yes, that is *ūtu*," he said. The treatment these people received, *ūtu*, offers a good example of my thinking about ritual, and I told Biju that I wanted to write about how his grandfather talked about *ūtu* and how *ūtu* is practiced as a way to clarify scholarly attempts to define "ritual" and use the term to explain human behavior. "Okay, let us see," Biju laconically put an end to the conversation, and he invited me to wash up and take a rest on the swinging bed before mukhāmukhaṃ lessons resumed in the adjoining building where his students waited.<sup>1</sup>

It is uncommon to see acts of the ritualist and acts of the physician described in similar terms. There tends to be a perceived difference of purpose and performance in institutions of religion, where we find the ritualist, and institutions of science, where we generally find the physician. This division lies at the heart of this chapter. I examine a procedure for treating serious cases of snakebite called *ūtu*, "blowing [away disease]" or "blowing [therapy]" (from the Malayalam verb *ūtuka*, "to blow"). I suggest that religious and medical ideas about ritual can

actually unite on the matter of healing, and the language used to show this union need not take recourse in any one domain of culture or academic field of inquiry. To set up the example of *ūtu*, I first explore ritual theory in religion and medicine, asking why analyses of so-called medical or healing rituals habitually draw on theory and language from religious studies to describe an act as ritualistic. Is this borrowing conducive to describing the physician's range and manner of practice? Does the use of religious-studies terminology help to resolve differences between the activities of the ritualist and the physician? Or does this borrowing propagate another enduring assumption that pervades the academic study of religion, too often without critical attention, and its allied subfields, including the anthropology of religion, history of religion, psychology of religion, and sociology of religion: namely, that the identification of ritual implies a religious context?

Andrew Strathern and Pamela Stewart contend that "it is in the sphere of ritual that most questions arise regarding traditional medicine." The attributive "traditional" is key to their observation. They use it as a blanket reference to many, if not most, healing traditions that are not biomedicine. Thus, in South Asia, Ayurveda would be a traditional medicine. Unani would be another, and so would Siddha. Strathern and Stewart's statement rests an old and now almost natural association of ritual with religion in academia and popular media, the perception of which has made it difficult for biomedical practitioners to perceive rituals in their practice, or for others to acknowledge ritual in biomedicine, because rituals are seen as "superstitious nonsense" instead of "valuable therapeutic functions."<sup>2</sup> In part, in this chapter I would like to nudge the discussion of ritual away from the academic study of religion. The presumption that religion naturally undergirds ritual activity has had the unhelpful consequence of preserving a view in medical institutions that ritual acts are irrational, hence unscientific, insofar as they are thought to be linked to transcendent entities for their efficacy. In the medical context, this association is anathema to physicians and scientists, who generally insist that their work is grounded on verifiable laws of cause and effect, laboratory experiments, and randomized controlled trials (RCTs).

After considering examples of ritual in religious studies and the social scientific study of medicine, I reflect on the practice of texts at Mookkamangalam to propose a practice-oriented understanding of ritual that is flexible and amenable to the task of making sense of activities and interpersonal interactions across multiple spheres of human culture. Religion is of course a part of human culture, and the components of ritual I put forth and describe can be helpful to comprehend elements of religious practice and performance. That said, I analyze a healing practice to upset the presumption of a natural or expected attribution of ritual to religion. I do not deny that there are rituals in religion, but at the same time, I also want to present a clear distinction between ritual and religion. This distinction, some might observe, is not entirely new to the discipline of anthropology, as will soon be clear from my review of the literature. But in the field of religious studies the distinction is far too rarely made. There are historical reasons for this, and I



trace some of the foundational theorists in the current and past centuries who helped form and fix the connection of ritual and religion that persists in a lot of writing about religion today.

By utilizing an example of ritual from a medical context, I show that rituals per se convey power and meaning that are not necessarily tied to religion. The ayurvedic case study serves as a foil, therefore, to clarify the relevance of ritual as an analytic category beyond the cultural institution of religion and the academic field of religious studies. Medical anthropological research can enlighten the study of ritual in religious studies, and perhaps even encourage a more mindful approach to the use of ritual in the study of religion. Anthropological scrutiny of a “traditional medicine”—to use Strathern and Stewart’s label, which often conveys intangible notions of spirituality and holism versus the empirical science of modern biomedicine—that is grounded in practice and performance theory can illuminate human interaction and activity in multiple cultural domains. To show this, I scrutinize and ultimately avoid language pervasive in religious studies, language historically linked to dichotomous universals like sacred-profane, otherworldliness-thisworldliness, and good-evil. To that end, Kaja Finkler’s study of similarities and differences between spiritualist healers and biomedical doctors in Mexico is helpful to accentuate the utility of practice theory to explain ritual irrespective of the segment of society in which we find it.<sup>3</sup> Especially important to my depiction of ritual is Finkler’s observation that, at bottom, rituals function to identify and possibly resolve conflicts and problems.

Rather than looking across multiple healing techniques that I watched Biju, his mother, and grandfather perform over the years, to keep the discussion on point I focus on the blowing therapy of *ūtu*. Parsing the performance and various activities of *ūtu* occasions the opportunity to articulate a practice-oriented account of ritual, the three components of which (sociality, reformation, and cynosure) I present in detail at the end of the chapter. The technique of *ūtu* arises at Mookkamangalam exclusively in emergency situations, differentiating it from the routine give-and-take of gifting healing knowledge (*āyurveda*) that I discussed in the previous chapter. While snakebites are fairly common in parts of south India, blowing therapy has occurred only twice while I was in the field in south India, and I missed them both. Both occurred in the evening, one time after I had left Mookkamangalam for the day and returned to my room for the night and once when I was in Thiruvananthapuram visiting the Government Ayurveda College there. I discuss these two cases, how they were described to me in the days following the procedures, and how I have continued to learn about the technique from Bhaskaran and Biju since then.<sup>4</sup> Quotidian events at Mookkamangalam could also illustrate the three elements of ritual I develop in the following pages. But they do so less obviously than *ūtu*, which demands a lengthier and more pronounced set of performed acts than the day-to-day activities at the gurukula.

## WHY THEORIZE RITUAL IN MEDICINE?

The impulse to problematize ritual and the association of ritual in medicine emerged early in my observations of ayurvedic gurukulas and colleges. One incident in 2004 at the Government Ayurveda College in Thiruvananthapuram rooted the idea. I lived near the college in 2004–2005, and I had recently been authorized to use the its library and speak with faculty members and graduate students. I was there regularly when I was not spending time with Biju and Priyankara that year, working on a project examining the role of narrative in the Sanskrit medical classics, which evolved into my dissertation and eventually a book, *Somatic Lessons*. After two months at the college, I befriended Ojaayit, an advanced grad student at the college. He had received his BAMS degree two years earlier, and he was doing post-graduate work on the *Carakasamhitā*. I frequently ran into him in the library stacks, since we were often consulting the same books. He also introduced me to the college's head instructor of Sanskrit, Prof. Karambha. Ojaayit told me about a workshop at the college in 2003 in which several scholars of Ayurveda in south India, including Prof. Karambha, met to discuss the state of Sanskrit studies at ayurvedic colleges. The event fascinated me, and I asked Ojaayit if the three of us could talk about the conference.

He arranged for us to meet at Prof. Karambha's office. After brief introductions, I explained to Prof. Karambha that I was splitting my time between Thiruvananthapuram and gurukulas in Palakkad and Thrissur. Despite his interest in the Sanskrit language and medical literature, Prof. Karambha was pretty dismissive about the kind of ayurvedic training I was observing at Shantimana and Mookkamangalam. He called it impracticable and antiquated and, belying his own professional commitment to the Sanskrit literature of Ayurveda, he thought the dependence on Vāgbhata's *Aṣṭāṅgahrdaya* in gurukulas like the ones I'd been visiting neglected a whole century of reforms in ayurvedic education, to their own detriment. When I asked him about his students, he voiced disappointment about their lack of interest. "Students in my classes are eager to complete the first-year Sanskrit coursework and to get on with the 'modern' aspects of Ayurveda," he said. When I asked him about what he meant by "modern," he clarified. "Modern Ayurveda means the allopathy that has been on the BAMS syllabus since the 1970s. The *samhitās* [of Caraka, Suśruta, and Vāgbhata] gave us the theories that still guide Ayurveda [e.g., *doṣa*, *rasa*, *dhātu*, *mala*, etc.]. But exclusive dependence on them is obsolete. The subjects in the oldest *samhitās* are different than the BAMS syllabus, which is like the modern medical schools."<sup>5</sup> Matthew Wolfgram describes attitudes like Prof. Karambha's as "the labor of school-educated Ayurveda practitioners," which "involves the mediation between Indian classical and cosmopolitan theories of the corporeal body and its pathology and treatments."<sup>6</sup> Given the pervasiveness of English language pedagogy alongside an increasing de-emphasis of Sanskrit studies at ayurvedic colleges in the twentieth and twenty-first centuries, and the systematized integration of biomedical

science in ayurvedic education, attitudes about the ayurvedic gurukula like Prof. Karambha's are not unusual today.

Prof. Karambha also said he felt that gurukula training has held on to religious ceremony and ideas, including Dhanvantari *pūjā* and concerns with concepts like *karma* and *dharma*, to explain why some people become ill or why treatments succeed or fail, when ayurvedic colleges have basically abandoned these. He conceded that the history of gurukula education is important to understand the state of modern Ayurveda, and he stopped short of criticizing the work of the vaidya-gurus I had been observing at Shantimana and Mookkamangalam. But he regarded them as an outlying archaism in Ayurveda's evolution. I continued to meet with Prof. Karambha after Ojaayit introduced us, and nearly every time we talked, he unfailingly described a bleak outlook for Sanskrit studies in the ayurvedic college. It was an odd message to get from a professor of ayurvedic Sanskrit in one of India's storied ayurvedic colleges and a man whose livelihood rested on that expertise and his ability to teach a language that he thought students routinely viewed as a nuisance to get out of the way en route to more interesting and practical subjects. But his was not a solitary voice on the matter of teaching Sanskrit in the crowd of college faculty and students. I heard similar ideas and attitudes about the nature of education in Ayurveda echoed by others in Thiruvananthapuram in the south of Kerala, in central Kerala in Thrissur, and further north in Kottakkal and Kozhikode.

In my research on narrative and storytelling as a means to relate bio-physiological issues in Sanskrit literature, including the Sanskrit medical classics, I identified a recurrent handling of bodily disease and health by taking recourse in ethics, divine entities, and religious warrant.<sup>7</sup> I also examined areas in the history of Indian religions where discourses about healing offered creative articulations of important, primarily Hindu, religious doctrine, such as grounding the principle of *dharma* on bodily wellbeing and theorizing *karma* in the current moment rather than in future iterations of a life cycle as a means to preserve health and prevent disease. The collections of Caraka, Suśruta, and Vāgbhaṭa combine an array of explanatory models for health and illness. Many of the professors and students at ayurvedic colleges in south India I interviewed were, on the one hand, reluctant to reconcile apparently unscientific elements of ayurvedic literature with their college educations and, on the other, eager to commend the Sanskrit sources for their wide-ranging ideas about not only the body, but also the entire human condition. Even if the interdisciplinarity of the classics is proof of the vital and enduring place of *āyurveda* in Indian culture and history, in the end, for many people I met working and studying in Ayurveda's collegiate system in south India, particularly those with no personal gurukula experience, the Sanskrit classics complement biomedicine more than amount to a corpus capable of supporting a standalone and self-regulating medicine in the modern era.

My reception of the remarks of Prof. Karambha and others in Thiruvananthapuram connected to the Ayurveda College and my observations at ayurvedic gurukulas in south India more broadly, have been informed by my training and research on religion generally and in South Asia in particular. The categories of ritual and religion are habitually joined at the hip in religious studies research. The studies I am thinking about, which I explore momentarily, are products of scholars working in various disciplines, and many display an old and continuing tendency to use “ritual” as if the very term has self-evident explanatory power, as if its every use inherently carries a meaning so accepted and understood that it requires neither reflection nor explanation. But what does ritual mean? What does the term do when it is used to explain human behavior? I explore the evolution of this association here, drawing on fieldwork at Mookkamangalam to problematize the ritual-religion link and make the case that resorting to the cultural institution of religion and religious (studies) language is not the only, nor is it the most fruitful, option to bring clarity and analytical breadth to ritual theory.

At the outset, I would like to put forth a basic idea about ritual that reappears throughout this chapter. Adam Seligman, Robert Weller, Michael Puett, and Bennett Simon propose a concise yet capacious definition that says ritual is “a unique way of accommodating the broken and often ambivalent nature of our world.”<sup>8</sup> I nuance and expand their insight by suggesting that Catherine Bell’s notion of ritualization and J.Z. Smith’s view of emplacement advance our understanding of the morphology of ritual and its features. Seligman *et al.*’s broad reading gestures toward these advances, and even presages the areas of ritual sociality, reformation, and cynosure I propose below, but does not fully capture them.

The broken and ambivalent nature of being human, at its base, rests on the fragility and degenerative physicality of the human body. Health and wellbeing are aspirations that medicines in general can never attain for their patients completely, and Ayurveda is no exception with its aim of *āyus* (“long life”). The body is in a constant state of disintegration, however slowly and imperceptibly, and the meeting of patient and physician may be seen as a collection of complex sensory experiences that represent, as J.Z. Smith said of ritual in general, “the creation of a controlled environment where the variables (i.e., the accidents) of ordinary life have been displaced *precisely* because they are felt to be so overwhelmingly present and powerful.”<sup>9</sup> It is in the course of everyday life, after all, that people confront the infections, afflictions, fractures, and so on they bring to doctors. As Kaja Finkler’s social analysis of healing acts demonstrates, rituals help people and communities adjust to—with the aim of correcting—ruptured and uncertain states of being.<sup>10</sup> The clinical encounter illustrates this well and provides useful examples for theorizing ritual as an analytic category apart from the constraints of a single disciplinary source or academic field.

## RITUAL AND RELIGION

In a lot of European and North American scholarship, rituals are treated as religious acts, linked to religions, or in some way evocative of religious things, ideas, and conditions. It is thus useful to consider ritual as a classifying tool in the field of religious studies. It's true, as an academic field, religious studies is highly multidisciplinary and filled with scholars trained in historically resolute disciplines like anthropology, history, psychology, and sociology. Pioneering research in these disciplines, in fact, has supplied many of the most tried and tested theories and methods in religious studies over the last century and a half, exploring rituals in "religious contexts" of purification, matrimony, festivals, funerals, and the like. Scholarly trends like these might lead us to ask whether the study of ritual is inexorably linked to the context of religion and religious actors. And if it is, how and why did this association arise?

When Sally Moore and Barbara Myerhoff edited *Secular Ritual* in 1977, the volume ushered in an important and novel explanation of the link between ritual and religion. The book's contributors refused to reduce ritual activity to religious activity, and many of them convincingly argued that ritual is not at all exclusive to the cultural institution of religion. Nevertheless, by making the secular the primary marker of ritual, Moore and Myerhoff also ensured (perhaps inadvertently) that most of the essays in the book retained a vital place for religion in ritual theory. In calling ritual secular, contributors were bound to discuss ritual inside and outside of religion and religious studies. When all's said and done, the book is helpful insofar as it argues that ritual acts can be sacred or secular, religious or nonreligious. But the reader is still left with the sense that secular rituals can only be identified by using language that does not speak of rituals in and of themselves—ritual in its own right, regardless of environment and cultural domain, as a powerful theoretical and analytical construct—but only inasmuch as they display the mirror opposite of acts presented in religions and religious settings.

Some elasticity is always crucial for an analytic category to work meaningfully across the human sciences. By closely examining the idea of ritual as such, as well as vis-à-vis religion and medicine, we can disaggregate longstanding dichotomies like secular-sacred and even medicine-religion, which tend to obscure, if not outright deny, the analytic flexibility and usefulness of ritual across studies of culture. It will be helpful to take note of the foundational theoretical and methodological history that has contributed to the connection between ritual and religion in scholarship and, where possible, correct misidentifications in ritual theory with new case studies. The secular-sacred distinction is a particular ethnocentric division that scholars in Europe and North America have used, and at times continue to use, to explain religion and religious phenomena. A half-century ago, for example, Clifford Geertz famously defined religion as a cultural "system of symbols," while in the early twenty-first century Bruce Lincoln envisions religion as a composite

of four cultural domains: discourse, practice, community, and institution.<sup>11</sup> The list of theories of religion is much older than Geertz's famous definition, and it extends well after it, up to and beyond Lincoln's contribution.<sup>12</sup> But my aim here is not to enter the debate about what constitutes religion per se. It is about when and why ritual was absorbed within the study of religion.

The link between ritual and religion crystalized in the development of the secular-sacred dichotomy decades before Moore and Myerhoff addressed the opposition. It is impossible to understate sociologist Émile Durkheim's influence in drawing our attention to ritual in the social and cultural sphere of religion. In *The Elementary Forms of the Religious Life*, Durkheim argued that religion is "a unified system of beliefs and practices relative to sacred things, that is to say, things set apart and forbidden—beliefs and practices which unite into one single moral community called a Church, all those who adhere to them."<sup>13</sup> Within a religion he understood rituals as practices that help people identify with, reaffirm their participation in, and orient themselves toward a community of people with shared beliefs. He thought "primitive societies"—that is, non-European communities—were governed by belief systems grounded on Manichaeian worldviews framed by the sacred and the profane, which influenced people's perceptions, shaped behaviors, and determined relationships. The sacred is the ideal, divine principle. It transcends the monotony of the everyday and reflects the needs and welfare of the greater collective, or "the social." In contrast, the profane is mundane and bodily. It corresponds to basic, biological needs like nourishment that reflect the welfare of the individual. Durkheim assigned the performance of ritual activity (or "rites") to the sphere of the sacred, and whether we accept or reject his assessment of societies in *The Elementary Forms*, his book has been and continues to be influential on the study of religion. Scholars have drawn on *The Elementary Forms* and his other studies as points of departure, theories for expansion, and positions to critique, challenging and championing his conclusions about religion, ritual, and society almost in equal measure. In their contribution to the Bloomsbury series "Key Concepts in Religion," Stewart and Strathern's *Ritual* chronicles the critique of Durkheim by a ritual theorist I return to in this chapter many times, Catherine Bell. She dismisses Durkheim's religion-society equivalence as a gross overstatement, for example and famously, like anthropologist Roy Rappaport, she rejects his insistence that categories of thought derive from social forms only, rather than from within all domains of human action.<sup>14</sup>

Rituals are acts oriented towards the sacred, Durkheim believed, and this belief led him to see ritual and ritual acts in religious contexts. Yet, if we can set aside the reductionism and western cultural myopia occasioned by the sacred-profane distinction Durkheim used to frame and describe ritual, and we take his description of ritual in itself (which, importantly, was based on analyses of photographs of Australian aborigines, not his own fieldwork), we can see that the explanation of

ritual in *The Elementary Forms* anticipates what later becomes “practice theory.”<sup>15</sup> Durkheim thought ritual acts exist within the actor’s frame of reference, and these acts are meaningful to the people who perform them. This view was later refined by Talcott Parsons, who understood the Durkheimian view about the perception of ritual behavior to be consistent with the Weberian notion of *Verstehen* (interpretive understanding). Parsons proposed that ritual situations “must be subjectively defined, and the goals and values to which action is oriented must be congruent with these definitions, must, that is, have ‘meaning.’”<sup>16</sup> With this interpretation of ritual perception and circumstances we run into an interpretive problem, however. Is it possible to adduce objective criteria to say for whom meaning exists—for the actor, for the observer, for both—not to mention the content of Parsons’s so-called meaning? If the meaning has a religious or sacred nature, then we furthermore need to address questions concerning the constitutive nature of the sacred as well as religion, so that we can know what is and what is not sacred and religious.

Sticking with the Durkheimian position that classifies rituals as actions necessarily oriented towards the sacred, and presuming for the moment that scientific activity would not fit this basic criterion, it might seem that we are left with no option but to relegate the work of physicians to the realm of the profane. Seemingly unoriented to the sacred, and instead fixed to somatic inquisitiveness and a commitment to healthcare, medical and religious acts are like proverbial apples and oranges, incommensurable. A sacred-profane dichotomy assigns meaning to actors according to whether they position their actions either toward or away from the sacred, and thus it inevitably describes an incomplete worldview. Roger Caillois observed this in *Man and the Sacred*, when he wrote that “the profane, in relationship to the sacred, simply endows it with negative properties. The profane, in comparison, seems as poor and bereft of existence as nothingness is to being.”<sup>17</sup> Caillois was dubious about the possibility of identifying objective criteria as either sacred or profane, and he rejected the utility of these categories for comparative social-scientific use. Others after Durkheim nevertheless promoted and extended the dichotomy, including influential scholars like Mircea Eliade, who even made it the centerpiece of his most popular work on the historical and comparative study of religion.<sup>18</sup>

“Adequate as this [sacred-profane dichotomy] may be for theological purposes,” the English social anthropologist Jack Goody surmises, “it is hardly sufficient as an analytic tool of comparative sociology.”<sup>19</sup> Despite the uncertainties and objections raised to theories of ritual that invoke polysemous notions like the sacred and contested categories like religion, ritual theory is an expansive field of inquiry, and a number of ritual theorists provide actionable insights about the motivations and consequences of people’s behaviors. We need not rush, in other words, to abandon all theorization of ritual as an analytic category because of the social-scientific inadequacy of the sacred-profane dichotomy or the disputed nature of religion. Given the historical use of the term, the task of theorizing ritual from and



for a specific disciplinary outlook demands that we press on and take a critical view of academic understandings of religion and the religious, which notably since Durkheim's sociological paradigm have included ritual activity.

Although the incidence of ritual activity is commonly folded into the cultural institution of religion, in the Durkheimian system the mean-ends relationship of ritual is symbolic rather than intrinsic to the activity of ritual itself.<sup>20</sup> When a means-end relationship is intrinsic to an action, the means bring about the end, consistent with progressions that are valid according to scientific causation. Arguably more influential than Durkheim's theorization of ritual in this regard was the work of his nephew, Marcel Mauss, whose synthesis of "technique"—articulated with his uncle in *De quelques formes primitives de classification* (1901–02) and in his own studies, "Les techniques du corps" (1934) and *Manuel d'Ethnographie* (1947)—swayed anthropological and sociological deliberations on ritual in the first half of the twentieth century. Mauss pioneered the idea that "magic, sacrifice, sorcery, shamanistic practice and technical arts could be put together into a single category of 'techniques,'" Jean-Pierre Warnier argues, "because all of them have *tangible effects* that can be assessed and described."<sup>21</sup> In his own words, Mauss wrote: "I call technique a *traditional efficacious* act (and you can see that it is not different from the magical, religious or symbolic act). It has to be traditional and effective."<sup>22</sup> He insisted on this dual effect of techniques, and hence the dual effect of so-called religious acts: the latter are transmittable by tradition and they have substantial real-world effects.<sup>23</sup>

Mauss's painstaking and complex work on techniques and cultural technologies was eventually outstripped in the second half of the twentieth century by scholars working on the anthropology of technology like Robert Cresswell and François Sigaut, who raised materialistic questions and concerns about Mauss's views, and Durkheim's before him. Deploying Marxist readings of social forces on the technical work of tradesmen, agriculturalists, and artisans, the analyses of cultural technologies by Cresswell and Sigaut moved the consideration of ritual away from associations with religion.<sup>24</sup> They also repositioned their thinking about means-end relationships in ritual to reflect on targets of technologies, such as human subjects and lifeless matter. Annemarie Mol has advanced this work in the twenty-first century in subtle and fruitful ways. Her approach to explaining human behavior focuses neither on people's motivations nor the first person accounts they give about what they do. She prefers to study interventions, spaces and places where people and objects meet. Mol encourages us to stop trying to follow and know "a gaze that tries to see objects" and instead attempt to understand "objects while they are being enacted in practice. So, the emphasis shifts. Instead of the observer's eyes, the practitioner's hands become the focus of theorizing."<sup>25</sup>

It would be wrong to think that Mauss was completely unconcerned with ritual targets. But his way to approach that matter rested largely in the ways that people confirm efficacy in ritual, magic, sorcery, etc. For example, with Henri Hubert he

argued that the ends of ritual activity belong to a “world of ideas which imbues ritual movements and gestures with a special kind of effectiveness, quite different from their mechanical effectiveness.” They then classified ritual acts and gestures as “*traditional actions whose effectiveness is sui generis*.”<sup>26</sup> This delineation still leaves us with crucial and unanswered questions about adjudication. Who measures efficacy and by which criteria? Do the means of ritual (or magic or sorcery) produce this peculiar end consistent with progressions that are valid according to scientific causation? When the answer is no, the ritual practice is oftentimes taken to be irrational and/or ineffective.

Talcott Parsons nuanced the Durkheimian and Maussian descriptions of ritual when he argued that ritual acts are not symbolic of means-end relationships and that means-end relationships are not intrinsic to ritual practice. After refusing to link ritual activity to both of these things, he did not go on to say that ritual practices are irrational, as we might expect. Instead, Jack Goody explains, Parsons advanced the idea that ritual is a type of action that is “neither rational nor irrational . . . but non-rational, or ‘transcendental’; that is, it has no pragmatic end other than the very performance of the acts themselves, and cannot therefore be said either to have achieved, or not to have achieved, such an end.”<sup>27</sup> Parsons’s suggestion that ritual acts are ends in themselves anticipated something Frits Staal argued two decades later regarding the Indian context, when he tried to debunk the view that rituals communicate symbolic meaning. “The only cultural value that rituals transmit are rituals,” Staal provocatively asserted. Ritual, he continued, is “pure activity, without meaning or goal,” existing entirely “for its own sake.”<sup>28</sup> Staal’s position received a fair amount of criticism. In two different pieces in the *Journal of Ritual Studies*, George Thompson and Solomon Harris each contended, contra Staal, that ritual does have symbolic meaning, and it is often meaning that points to sociohistorical value systems tied to the particular group performing the rituals.<sup>29</sup> These two scholars thought rituals communicate knowledge to the members of the in-group, which through ritual performance becomes a ritualized body. And the “rules of the ritual are,” according to Harris,

self-contained within that ritual and have no bearing on things outside that ritual. But the ritual as an entity is related to its associated group and the historico-social evolution of that group. . . . Thus rituals are embedded in the value system of their respective groups and serve the purpose of internalizing and perpetuating that value system, or some aspect of it. Looked at in this way, the internal rules of ritual *per se*, may in the restricted sense of ‘meaning’ as used by Staal, be regarded as meaningless; but the ritual as an entity and as a component of the socio-cultural value system of the particular group, is meaningful.<sup>30</sup>

The work of Talcott Parsons and counter-positions to Staal’s postulation about the meaninglessness of ritual stress the social functions and value of ritual. Harris referred to this as the “we-ness” of ritual; below I call it ritual “sociality.” It points

to a fortified awareness of or attentiveness to the group's activity, which I refer to as the ritual element of "cynosure." These positions did not declare ritual to be irrational or ineffective as such. Instead, they operationalize ritual as a multivalent analytical term with which to query individual and group activities apart from (or outside of) the domain of religion, in spite of the fact that so many scholars of ritual since the late nineteenth century have argued that the irrationality of ritual acts is what makes them religious. Nevertheless, even if ritual practice is deemed valuable in itself, and thus non-rational in Parson's sense, his theory still relegates ritual to the actor's frame of reference, and this is problematic. For a ritual is non-rational, irrational, rational, or something else entirely depending on the perception of the observer, not the actor, whose analysis imputes a connection or gap between the means and the end of the activity.

By recognizing the value of the acts of rituals themselves, Parsons emphasized the practice and behavior of ritual activity and, though I am unsure about the degree to which he intended it, also the bodily basis of ritual. But he foregrounded belief and understanding in his analysis, calling to mind Evans-Pritchard's classic study of the Azande, and his useful warning that there has not been sufficient evidence to suggest people in non-western societies adhere to supposedly universal paradigms like the sacred and the profane. Evans-Pritchard distinguished between "ritual and empirical actions by reference to their objective results and the notions associated with them."<sup>31</sup> While I do not support Parson's proposition, or the similar argument of Staal, that ritual acts have no pragmatic ends beyond their performance, I do want to draw attention to the bodily, performative, and especially the processual activity of ritual that Parson's analysis highlights. But then I would press further. Ritual actions, as I conceive them, cultivate a kind of discipline in actors, creating "ritualized agents," as Catherine Bell puts it, whose bodies subtend an instinctive knowledge, certain ideals, and dispositions that enable the achievement of desired ends.<sup>32</sup>

In any theorization of ritual, it is vital to ask oneself how exactly the category is being used. Does ritual carry any implicit or explicit assumptions that such actions are causal social factors or organizing principles? Are rituals, in other words, existing processes for social actors or categories that exist primarily for researchers? My sense is that scholars working on ritual often fall prey to the former temptation—taking rituals as causal social factors, not organizing principles of the observer. This leads to the erroneous belief that rituals, because of an inherent symbolic or expressive force, illustrate major facets of social behavior rather than merely expressing or signifying social structures of the observer's view. This approach, to follow Goody, "simply involves the reification of an organizing abstraction into a causal factor."<sup>33</sup> William Sax christens this the "academic sin of reification," or mistaking an analytic category for a natural kind.<sup>34</sup> By taking ritual as a concrete or real expression of social behavior, many scholars, coasting in the wake of Radcliffe-Brown's theory, have defined ritual in opposition to rational and scientific acts.<sup>35</sup>

The symbolic force of ritual is assigned from outside, by the observer, ascribed to the actor, and imposingly declared to be integral to the actor's frame of reference in an attempt to make sense of what otherwise appears devoid of reason. Here again, as with questions of meaning, the matter of symbolic significance is fraught with ambiguity. For whom is it symbolic? For the actor, for the spectator, for both? If we proceed from the assumption that ritual is an analytic category of the observer, not an interior belief of the actor, we must then accept that the observer assigns meaning, expresses whatever aspects of ritual actions are symbolic of social structures, and so on, not the actor (who might or might not have knowledge of a symbol's reference, and very well could reject its interpretation when she learns it).

None of this is to say that social actors themselves never speak about ritual. In this chapter, and throughout this book, I am most interested to analyze scholars' intentions and conceptions when we deploy a category like ritual or exchange, or attempt to define a discipline like philology. All the same, it is important that we do not lose sight of the fact that social actors have their own ways to categorize ritual, knowledge, and exchange that might or might not accord with the categories we impose on them. The word ritual, in non-academic usage in the United States, for example, often immediately brings to mind associations with religion and psychology. People who claim to do ritual tasks (whether they are identified by scholars or not) might be aware that some of their actions are different than others and even have a different kind of, or an anticipated or hoped-for, efficacy. Fieldwork might even reveal to the researcher that so-called ritual actors are aware that their actions in certain instances are different than others, and indeed they might even use the term ritual to express this type of understanding or awareness. But from the researcher's point of view, the frame of reference through which the category of ritual is applied belongs to the researcher, and thus it exists apart from actors being observed. The researcher's perspective, including the reception of "ritual information" from actors in the field, is vital to acknowledge and explain. Otherwise, the presentation of ritual analysis will mean multiple things to multiple readers, and the scholar's handling of this analytic category runs the risk of appearing to be little more than a presentation of the actor's views, rather than his or her explanation and interpretation of observed events and behaviors.

Many of the activities at Shantimana and Mookkamangalam are remarkably similar to those described as rituals in religious studies literature. A major and unavoidable difference, however, is this: actors in the south Indian ayurvedic gurukula do not engage in activities that would appear to be oriented toward or linked to religion, divinities, or anything akin to the so-called sacred. Vaidyagurus and students at Mookkamangalam, for instance, see their clinical activity in no uncertain terms as medical science (*vaidyaśāstram*, Mal.). They work with and dispense medicine to promote health and wellbeing. If we acknowledge that their work is devoid of a religious component, is it then reasonable to discuss their practices as rituals? Must we use terminology that evokes ritual theory, directly or indirectly, that draws comparisons to religion and the religious to understand and

describe the medicine and healing practices of *vaidya-gurus* in central Kerala? Can we instead accurately say that the actions of these healers fall within a category of ritual that is neither religious nor magical, that does not necessarily admit the presence of divine entities, and for which a means-end relationship is intrinsic (such as, therapeutic practices leading to health)?

#### RITUAL AND MEDICINE

In scholarly literature on the intersection of medicine with other cultural institutions, such as economics, politics, and especially religion, it is not hard to find descriptions of a visit to a doctor's office portrayed with terms that resemble jargon in ritual theory. An example in this vein that I often read with my students is John Welch's "Ritual in Western Medicine and Its Role in Placebo Healing." In this piece, Welch suggests many points of similarity between the acts of a doctor-patient encounter in a biomedical context and the acts he calls "the shaman's blend of religion and medicine."<sup>36</sup> Over several pages, his comparison unfolds like this: a sick person travels (Welch uses the verb *pilgrimages*) to the doctor's office, and upon entering the waiting room, he crosses a threshold from the mundane (profane) world into the marked off and special (sacred) space of healing. In the process of moving from a mundane to a special space, the journey (the noun *pilgrimage*) itself becomes significant in a way that distinguishes it from routine travel. Whether set up in advance as an appointment or because his sickness becomes so aggravating or dire that sudden medical attention is required, this type of travel focuses his attention on a specific destination and a pointed goal (mission), transforming the person from an ordinary civilian into a patient-*qua*-pilgrim. Welch adumbrates this journey in a way that most adults in the United States can easily recognize, culminating with unease and anticipation at the journey's terminus, the "temple of healing."<sup>37</sup> The patient-*qua*-pilgrim is received by receptionists and nurses (temple superintendents). They query him and produce an initial judgment of his condition, recording the details of their inquiry in their "book of life."<sup>38</sup>

Sometimes the transformation into patienthood is further solidified if the doctor's visit requires denuding from street clothes to an austere hospital gown. Fully clothed or now somewhat exposed, the patient waits for the doctor (temple priest or priestess), the healer who speaks to the sick and infirm on behalf of the "gods of medicine." These healers are celebrated for their access to seemingly transcendent knowledge about the human body and how it works, knowledge that's been passed on, tested, and expanded for centuries and is the foundation of the medicine patients desire.<sup>39</sup> Dressed in white robes, the doctor receive the patient's report of complaints just as a priest hears a confession. There's a "laying on of hands," sometimes using special instruments for looking into dark spaces and hearing fine sounds inside the patient's body.<sup>40</sup> The doctor-*qua*-priest then conveys portions of the healing knowledge of the medicine gods, knowledge that

characterizes his professional life and, for so many patients, is simultaneously confusing and anxiety-inducing. This knowledge in effect brings the doctor and patient together, and once it is shared it defines and gives meaning to the patient's experience of illness.

Welch qualifies the doctor's tools, texts, and language with the adjective "sacred," and therapies are comprised of ointments and pharmaceuticals "of unknown substances" that appear mystical to patients and may include a set of actions to be performed at home.<sup>41</sup> Whatever the therapy entails, he writes, it will include "a reiteration of our common beliefs concerning health and illness, how we believe we maintain order and balance between the two, and a promise that the therapeutics will result in a restoration of that health and a balance between ourselves and the cosmic forces of wellness."<sup>42</sup> Welch presents a colorful correspondence, bordering on the parodic, between a biomedical doctor-patient encounter and the priest/priestess-pilgrim engagement. His comparison is based on a study of the use of placebos in biomedicine, suggestive of Ted Kaptchuk's contention that "placebo studies may be one avenue to connect biology of healing with a social science of ritual. Both placebo and ritual effects are examples of how environmental cues and learning processes activate psychobiological mechanisms of healing."<sup>43</sup>

Environmental cues and processes of learning do play a role in the healing of patients generally speaking, and this is also true in the gurukulas of central Kerala. Unlike Welch's study, I want to ask what happens when we read medical practice using ritual theory *without recourse to religious discourse or imagery*. But if we eschew this language, do we have to drop ritual theory? Ronald Grimes memorably reminds us that when we raise questions about ritual in medical contexts, there's bound to be pushback and dismissiveness from practitioners. "Generally, priests think they are engaged in ritual," he quips, while "generally, physicians deny that they are."<sup>44</sup> A decision by priests or physicians to use or reject ritual as a term for what they do tends to signify the degree to which they see their work as efficacious. Priests are effective at what they do because they have rituals in their earthly positions to aid their communications with and on behalf of the divine. Physicians—especially, but not only, in biomedicine—deny a place for rituals in their work because they view medicine as utterly thisworldly, entirely human, and for them the association of rituals with the divine and religion is too deep-rooted to imagine ritual activity otherwise. Activities depending on transcendent communication or influence are unnecessary in the medical setting, if not irrational. RCTs are a pillar of biomedical research, and even though the doctor-patient meeting described by Welch contains emotionally supportive and trust-building features that benefit patients, also known as a doctor's "bedside manner," the interpersonal aspect of biomedicine is also critical to inspire obedience and prepare patients for the "real" medicine that will be prescribed later on. The ideology of biomedicine thus marginalizes ritual, alongside the placebo effect, where it is often classified as art rather than science.<sup>45</sup>

Biju and his students refer to clinical acts like *ūtu* that require on-the-spot preparation and delivery of medicine as *prayogaṃs* (Mal., from Sanskrit *prayoga*). A *prayogaṃ* is a practice or application, a means to some end. It is juxtaposed to theorizing and the visualization of a plan, and it involves the coming together of a sequence of acts that collectively advance toward a goal. A clinical *prayogaṃ* occupies the latter half of gurukula philology that I described in chapter 2, and it requires adept technique and experience. Experience here includes deep knowledge of the Sanskrit and Malayalam literatures in which the actions to be performed are explained, as well as years of clinical appointments practicing those literatures with and for patients. Experience and good technique thus point to the repeated application, testing, and practice of texts. A seasoned vaidya-guru like Biju or Priyankara knows when and for whom to perform any given therapy established in the literature.

Daily activities in a gurukula clinic involve practices that can neatly fit within more than one scholarly definition of ritual. For instance, at times and to varying extents, elements of Stanley Tambiah's classic definition are evident, including ritual formality-conventionality, stereotypy-rigidity, and redundancy-repetition.<sup>46</sup> If we combine Bourdieusian practice theory with Tambiah's conceptual framework, it is also clear that the clinical care Biju routinely gives and the texts he trains his students to master include embodied practice undergirded by a logic that's irreducible to linguistic expression.<sup>47</sup> Special attention is also given to space, as Richard Schechner puts it, so that "the performance process and the ritual process . . . are strictly analogous."<sup>48</sup> From the participant-observer's standpoint, a somewhat problematic part of clinical meetings at Mookkamangalam and, earlier, at Shantimana involves what Thomas Csordas called the patient's internal states. It was often tricky to pin down the predisposition, empowerment, and transformation of Biju's patients, since most did not want to answer questions beyond the details of their immediate healthcare needs.<sup>49</sup> The information I was able to obtain about patient perspectives, feelings, and experiences of illness mostly came from Biju and his students, for whom this kind of information emerged organically in small talk and especially with patients and attendants whom they knew personally.

The features that scholars choose to emphasize in definitions of ritual point to the variety of ways that rituals may be framed to convey the "sense of 'This is a ritual,'" as Stewart and Strathern explain it.<sup>50</sup> The three ritual foci I present below—sociality, reformation, and cynosure—contribute to a working definition of ritual in the way that Jan Snoek suggests most definitions produce a "fuzzy set" or "polythetic class" of common characteristics.<sup>51</sup> We know a practice fits within the category when it resembles the definition's components, and practices will align more or less with the components, though probably not perfectly. In effect, when you see it, you know it, à la Wittgenstein's family resemblance (*Familienähnlichkeit*) approach to analytic categories: though we recognize that what we are calling rituals are not all the same, we also acknowledge that rituals share certain



characteristics and, to agree with William Sax about the fuzziness endemic to ritual theory, “when a particular activity has a sufficient number of them, it ‘counts’ as ritual, more or less.”<sup>52</sup>

Before probing the case of *ūtu*, I want to mention a small but important methodological point. My aim here is to explicate a basic theoretical model to analyze ethnographic data I have gathered among ayurvedic physicians in central Kerala over the first two decades of the twenty-first century. I hope to capture the *processual* components of ritual *formation* and *activity* through which behavior patterns are both modified and serve communicative functions apart from their primary or original functions. In short, my aim is to theorize, following Irenaus Eibl-Eibesfeldt’s classic expression, the process of *ritualization*.<sup>53</sup> Consequently, most phenomenological reflections on *ūtu* in the patient’s experience (Csordas’s so-called internal states) are bracketed. Patient experience is important, no doubt. The patient is always there, and without the patient, neither the ethnography nor the theorizing in this book could happen. Although I do consider the involvement and placement of patients in *ūtu*, I do not delve into their feelings. In the next chapter, the patient in Ayurveda and in medicine in general, apropos the idea of wellbeing and ayurvedic healing, occupies part of my closing reflections.

#### THE CONTEXT OF BLOWING THERAPY: *ŪTU*

*Ūtu*, blowing therapy, is not described in Ayurveda’s Sanskrit classics. The textual reference Bhaskaran, Priyankara, and Biju rely on for this therapy is the late medieval Manipravalam text, the *Jyōtsnikā*. Cherukulappurath Krishnan Namboodiri draws on this text and offers a very similar account of blowing therapy in his modern Sanskrit work, the *Viṣavaidyasārasamuccaya* (*Precious Compendium of Poison Treatment*). Both texts advise physicians to perform blowing therapy when presented with snakebite victims who exhibit symptoms like delayed responses to verbal and physical stimuli, drowsiness, numbness of the tongue, vertigo, body aches, and excessive salivation. The two descriptions of which plants to use during the procedure and how to perform it are not extensive in either text. C.K. Namboodiri’s Sanskrit text has the following two *ślokas*, where the key therapeutic act is marked by the onomatopoeic noun of agency, *phūtkāra* (“making a puffing sound” or “blowing”), connected to the verb *kr* (“to do” or “to make”):

After taking equal amounts of dry ginger, stinging nettle, black pepper, and Indian birthwort in the mouth [and then chewing], at the same time they should blow continuously and slowly 50 times [each] into the two ears and onto the top of the head of the person who is bitten. This should obstruct the poison from going beyond the body’s three constitutive elements [*rasa*, *rakta*, and *māṃsa*], the skin, etc.

The *Jyōtsnikā*’s statement is similar:

Add up equal parts of dry ginger, stinging nettle, black pepper, and Indian birthwort. Give [the plants] to the three of them to chew. [Have them] blow into the two ears and

onto the top of the head [of the snakebite victim] correspondingly, counting up to 150 [breaths]. The poison will disappear quickly from the three constitutive elements.<sup>54</sup>

As descriptive as these passages are, they do raise some questions, especially concerning the labor of *ūtu*. Who chews the plants and blows into the patient's ears and onto his head? The *Jyōtsnikāś* reference to "the three of them" is surely a clue, as is the use of the third person plural optative (*parasmaipada*), "they should blow," in the *Viṣavaidyasārasamuccaya*. I learned in 2009 that the vaidya-gurus at Mookkamangalam do not blow the medicine on the patient themselves, and as we will see in a moment, this crucial task falls to the attendants who bring the patient to the clinic. Biju and Priyankara are less hands-on during the procedure than these friends and family who, in this particular emergency situation, are essential to increase the snakebite victim's chances of survival. I will return to this perhaps counterintuitive aspect of *ūtu*—that medically untrained people rather than an experienced physician assume such an important role—and in the next chapter, I explore the nature of the "attendant" (*upasthātr*) in relation to the rogin in classical *āyurveda*. The accounts of *ūtu* in the *Viṣavaidyasārasamuccaya* and *Jyōtsnikā* also offer little obvious information about procedural rationale or *ūtu*'s basis in ayurvedic theory, though there are some clues about the ways this therapeutic breathing is connected to the classics by theories of the body's "constitutive elements" (*dhātus*), "vulnerable spots" (*marmans*), and "humors" (*doṣas*).

In their introduction to the *Viṣavaidyasārasamuccaya*, U.M.T. Brahmada-  
than Namboodiri and Madhu K.P. explain that despite not being mentioned in the collections of Caraka, Suśruta, and Vāgbhaṭa, *ūtu* has been practiced in south India for ages and to do it properly, one needs the guidance of an experienced guru and deep understanding of ayurvedic theory. Without this kind of training a physician wouldn't know that *ūtu* is only effective when indications of envenomation manifest in the first three of the body's seven *dhātus*, "constitutive elements"—*rasa* ("chyle"), *rakta* ("blood"), and *māṃsa* ("flesh"). "So, a proper study of Ayurveda is needed," they contend, to practice this specialized and regional therapeutic modality.<sup>55</sup> A physician properly trained in classical *āyurveda* would also have knowledge of the body's vulnerable spots, *marmans*, and the action of the "wind humor," *vāta doṣa*, in someone who has been bitten by a venomous animal (C.K. Namboodiri mentions snakes, spiders, rats, scorpions, and others) or interacted with a poisonous plant or mineral. The *marmans* are linked to the vascular system (e.g., heart, arteries, veins, and capillaries), tendons, channels of the nervous system (e.g., the spine), and particularly the head, the *mahāmarman* or "great vulnerable spot." When a *marman* is injured, *vāta doṣa* in its vicinity becomes agitated and moves to areas where its undue presence generates illness and potentially death.<sup>56</sup> The fundamental meaning of *doṣa* is "fault" or "taint."<sup>57</sup> Collectively, the three *doṣas* — *vāta* ("wind"), *pitta* ("bile"), and *kapha* ("phlegm") — are the body's pathogenic arbiters, and as venom matures in the body *vāta-doṣa* is especially likely to inflame. Its complex makeup and movements are thus crucial for the physician to assess and control.

Kenneth Zysk has written about *vāta doṣa* in Sanskrit literature, going back to the *Rgveda* and Upaniṣads and, important for us, in the big trio of Sanskrit medical classics. His research shows that *vāta* is subdivided into five vital breaths or winds, sometimes known in different textual traditions as the *pañca vāyus* or *pañca prāṇas*:

- fore-breath (*prāṇa*)
- up-breath (*udāna*)
- middle-breath (*samāna*)
- intra-breath (*vyāna*)
- down-breath (*apāna*)<sup>58</sup>

Each text has slight variations about the locations and functions of the the five vital winds in the body: *prāṇa* is unanimously located in the head or mouth, and from there the others are ascribed to places in the body below the neck, ending with *apāna* in the anal-rectal region. Properly calibrated *vāta* facilitates bodily movement, ensures mental acuity and proper breathing, and aids expulsion of waste from the body through spitting, sneezing, sweating, expectoration, urination, and excretion. When the five winds are impeded or irregular, physical debility, pain, and sometimes death can ensue.<sup>59</sup> A person might experience death, moreover, as a result of an occlusion of the five-part *vāta doṣa*'s natural movement in the body.<sup>60</sup> The two textual attestations of blowing therapy visibly involve the movement of winds from sources external to an ailing body into/onto an ailing body, the successful performance of which will pacify the five-part *vāta doṣa* in the patient suffering from poison toxicity.

Four verses after his statement on this unique Keralan *viṣa* treatment, C.K. Namboodiri describes another method for calming and regulating *vāta doṣa* aggravated by poison, though here the external source of manipulation doesn't involve blowing medicine but a *vaidya*'s physical suppression of the patient's breathing by tightly squeezing his nose and mouth and periodically encouraging him to inhale medicinal odors. In this procedure, a *vaidya* smears the ripened leaves of the *arka* (milkweed) and *hiṅgu* (asafoetida) plants on her hands, and presses them tightly over the nose and mouth of the patient, briefly interrupting the patient's breathing. The *vaidya* removes her hands after a moment, allowing the patient to catch his breath and inhale the medicinal scent of the leaves, and then repeats this procedure three times.<sup>61</sup> This practice, on its own or as a complement to blowing therapy, V.M.C.S. Namboodiri explains, temporarily shuts down the path of the patient's five winds (*vāyumārga*), causing them to move in new directions. This has the effect of opening up the "subtle and infinitesimal channels" (*sūkṣmātisūkṣma srotas*) in the envenomed patient's body, and when the *vaidya* removes her hands and the patient inhales deeply to catch his breath, the medicine of the *arka* and *hiṅgu* leaves is easily absorbed into the body.<sup>62</sup>

The case of *ūtu* therapy presents a good example of the application of ayurvedic theory in the clinical space of the south Indian gurukula. Its design targets the key

bodily component attacked by snake venom (and other animal and plant poisons), the head, which is the primary seat of *vāta* and a person's most vulnerable spot.<sup>63</sup> Botanical remedies a gurukula vaidya instructs a patient's attendants to chew and blow onto the patient have an acute antidotal effect (*viśahara*). As we saw, there are four herbs:

- dry ginger (*viśva*)
- stinging nettle (*dusparśa*)
- black pepper (*marica*)
- Indian birthwort (*viśavega*)

These plants have a "sharp" or "fiery" quality (*tikṣṇa*) that protects, soothes, and purifies the critical spots of the ears and highpoint of the head (*mūrdhan*). The deliveries of the plants' healing potency through breathing, Biju explained to me, is supposed to quickly vitiate the spread of the poison, while the measured blowing treatment is meant to recalibrate the patient's aggravated vital breaths.

#### RITUAL PRACTICE: COMPONENTS OF HEALING ACTIVITY

The connection between the theory and the practice of *ūtu* underscores the intrinsic means-end nature of the procedure, crucial to theories of ritual going back to Durkheim, and is a well-defined example of the practice of texts. The means of preparing four plants and administering them with controlled breathing are intended to bring about specific ends. The survival of the envenomed patient is the first and foremost goal, while mitigation of the poison in the patient's body is the second. Third, by ensuring survival, the patient gets a chance to cultivate a long and productive life, which ties *ūtu* to the overall aim of Ayurveda, practicing textual knowledge for the wellbeing of those who need it. The means-end relationship of *ūtu* is based on both the physician's experience and her mastery of textually attested theory. The success of her organization and management of *ūtu* rests on what Lévi-Strauss called "symbolic efficacy," insofar as she empowers the people gathered together with a sense of trust that she, the vaidya, can ably attend to this troubling situation with adroit execution.<sup>64</sup> What's more, J.Z. Smith's observation that ritual "gains its force where incongruency is perceived" applies to the vaidya's performance of *ūtu*, too.<sup>65</sup> The incongruence of a damaged human condition with the ideals of classical *āyurveda* powerfully illustrates the "broken and ambivalent nature of our world," recalling Seligman *et al*, and the attempt to cope with, if not to fix, that disagreement is at the center of the healing enterprise as much as it is a major function of ritual in general. Ritual practice, just as medical practice, Smith further explains, "is a means of performing the way things ought to be in conscious tension to the way things are."<sup>66</sup> Rituals are vital because, in reality, the ideal—the way things ought to be—cannot be realized perfectly or perpetually. In this way, medical acts are ritualistic when they work on the gap between ought

and is, when they attempt, Kaja Finkler posits, to resolve the physical and abstract “contradictions in which patients are enmeshed” by illness and impairment of all kinds.<sup>67</sup> These acts can be ritualized to varying degrees depending on the extent to which they work on the is-ought inconsistency. Where do we see this mitigatory function at work in medical and healing contexts? Using *ūtu* as the lens through which to see the clinic and bodily healing as fields of and for ritual action, I submit that the following three features are essential to arrive at an understanding of ritual as a actionable analytic across cultures and cultural institutions: sociality, reformation, and cynosure.

**Sociality:** A collection of people must come together to perform *ūtu*. In addition to physician and patient, the people who bring an envenomed patient for treatment are critical to the success of the procedure. Whether they know it or not in advance (most do not), these attendants directly impact the outcome of the patient’s treatment. Once they arrive at Mookkamangalam, they become ritual instruments of the physician. Biju explained the details of the practice to me in 2009 the morning after the first of the two *ūtu* performances that occurred during my research in central Kerala. I was in the state for just two months of fieldwork that year, and this case occurred while I was on a train back to Thrissur from Thiruvananthapuram, where I’d been for a few days visiting the Government Ayurveda College and Ojaayit, whom I had met at the college five years earlier and who was opening his own clinic in the city with his wife, who practiced ayurvedic OBGYN. Biju could see that I was disappointed to have missed this patient’s arrival at his clinic. I had heard about *ūtu* from him and his mother, as well as from Dr. Matsuzaka, who had been visiting Mookkamangalam for years before my project began. So, he tried to describe the event to me as carefully as possible, and even if it wasn’t the same as being there, his account and the textual precedents I considered above provide ample data to illustrate the social component of the procedure.

Biju said he typically requires three people to assist him when treating a patient with *ūtu*. “Usually, two people blow *auṣadham* into the ears of the patient and another blows it onto the top of the patient’s head.” But as it had happened the previous night, I learned that *ūtu* can be performed with two attendants. The helpers are sometimes members of a patient’s family, though that is not a requirement. Biju continued, “the helpers should not have consumed alcohol or eaten spicy food [in twenty-four hours] prior to treatment; these are *tīkṣṇa* and may blend with the *auṣadham*, rising the [already fiery] qualities of the herbs that are chewed and blown on the patient’s head. This can cause more harm and counteract healing.”<sup>68</sup>

As my luck would have it, three days after the first incident, and three or four hours after I had left the gurukula and returned to my room for the night, another collection of people arrived at Mookkamangalam, with another snakebite victim whom Biju and Priyankara determined required *ūtu* therapy. Though after learning about this second incident I felt very unlucky (again!) that I wasn’t on site to

see this south Indian therapy in action, Biju and Priyankara reminded me that these cases often occur late at night, when snakes are active and harder to see in one's path. I never slept at their *mana*, and so, at the very least, these two events (and certainly others) drove home the realization that sometimes (even oftentimes) participant-observation can be an unpredictable method of data collection. Once again, as I was there the day after, Biju and Priyankara graciously did their best to offer detailed information from the night before.

While in the first case the patient was an adult woman, the second patient was an adult man. The female patient's two attendants were a man, who blew into one of her ears, and a woman, who alternately blew onto the top of her head and into her other ear. The male patient had three attendants, all men, and each attended to a single location. In both cases, the patients arrived very soon after being bitten. Both also survived following *ūtu*. Neither group had been able to report the type of snake that bit their respective patients. I asked Biju and Priyankara if this lack of information impacts their choice of treatment. It does not, Priyankara told me, adding that "this is common." The vaidyas proceed apace when snakebite patients arrive at their *mana* by evaluating the symptoms. If a patient displays any symptoms of envenomation enumerated in the texts (e.g., lethargic response to verbal and physical stimuli, drowsiness, numbness, etc.), they begin therapy under the assumption that the case could be lethal. Given the different makeup of patients and attendants in the two groups, I asked Priyankara about the significance of gender during *ūtu*. "That does not matter. The main priority is quick treatment," she answered, "using available resources. Men-women interactions do not affect the *prayogam*."<sup>69</sup>

Visits to ayurvedic physicians in central Kerala—whether traditional vaidyagurus like Biju or state-licensed physicians at ayurvedic hospitals and clinics—are often collective events. To perform *ūtu*, a small group is necessary. The male patient was semi-conscious when he arrived at Mookkamangalam and could not have travelled on his own. But whether they are ambulatory or not, patients rarely go to Mookkamangalam unaccompanied, irrespective of their illnesses, and the patient's companions play key roles in Biju's and Priyankara's diagnoses. To collect information about a patient's condition and history, whenever I observed them, they often did not talk with patients until after they questioned the attendants. The people accompanying patients to Mookkamangalam clinic were rarely enlisted to participate in the application of medicine, as happened during *ūtu*, unless the patients were infants, small children, or unable to follow prescriptions on their own. The basic function of a patient's companion is to provide physical and emotional support and to contextualize and communicate health problems, commonly in addition to what patients offer themselves, and sometimes for patients who can't articulate these issues themselves because, for example, they are too young to express what they're experiencing, too sick to give a sober assessment of what they're feeling, or perhaps too anxious about meeting with physicians.

Priyankara and Biju usually gave patients a cursory glance during conversations with their escorts. But each new patient's background—including things like age, individual and family health history, domestic living environment, and so on—was gathered, as a matter of course, from the patient's escorts. These men and women offered their takes on the ailment that prompted their visit, whether it has improved or worsened, why it might have occurred, and any prior attempts to treat it. As we have seen, in the typical exchange at Mookkamangalam medicines are not dispensed, and Biju, Priyankara, or one of their students creates a *kurippaṭi* listing medicinal herbs for purchase and instructions about how to prepare the ingredients into a tonic, oil, or paste (*kaṣāya*, *taila*, or *cūrṇa*). It also outlines a daily, weekly, and/or monthly dosage protocol to follow.

In emergency situations requiring a procedure like *ūtu*, however, medicines must be dispensed immediately on-site. The body of the patient quickly becomes the focus of social orchestration under a physician's guided practice of texts. Plants are retrieved from the yard or from the premade drugs in the dispensary cabinet. Medicines are prepared for use, and the physician instructs the patient's attendants to chew the plants, following the instructions in the literature. I was told that if any of their students happened to be present, they might help position the attendants around the patient. Then Biju and Priyankara direct the helpers to blow the medicine onto the patient. Actors, objects, and actions come together because of an incongruence in their social nexus and interrelatedness, disrupting, as Victor Turner labeled it, their *communitas*. Ritual activity in this instance is "a matter of giving recognition to an essential and generic human bond, without which there could be *no* society," and trying to fix the broken social links.<sup>70</sup> The arrival of a snakebite victim at Mookkamangalam points to a divergence between the *socially real* situation of a person possibly dying from poisoning and the *socially ideal* state of somatic health expressed in theories of the body's *dhātus*, *doṣas*, *marmans*, and *vāyus*.<sup>71</sup> The patient's ailing status jumbles familiar assemblies of social order and hierarchy that are, Turner noted, "rooted in the past and [extend] into the future through language, law, and custom." Rituals are therefore initiated in the absence and disruption of assemblies.<sup>72</sup> The urgency of a situation might demand that socially corrective actions are taken, actions that have, further to Turner's vision, the "spontaneous, immediate, concrete nature of *communitas*, as opposed to the norm-governed, institutionalized, abstract nature of social structure." The sociality of ritual "is made evident or accessible, so to speak, only through its juxtaposition to, or hybridization with, aspects of social structure" that existed in the community with which the patient is associated.<sup>73</sup>

During *ūtu*, the *vaidya* acts like a concert conductor. His role is directive and heuristic. Biju explained to me that when he oversees blowing therapy, he always observes and mentally classifies the relationships existing in the social scheme of the clinic.<sup>74</sup> The healing he's ultimately able to do can have a socially re-integrative function in this context, since the attendants engage in a sympathetic meeting



with the suffering patient, underscoring the import of communal sharing and acceptance of the suffering their group member experiences. In the course of *ūtu*, as Howard Brody observes of rituals at large, “a healing ritual becomes a bodily enactment of reconnection with the community.”<sup>75</sup> Moreover, the medical ritual in this way can “gradually transform the [patient’s] existence,” Kaja Finkler argues, by “incorporating him or her, and sometimes the entire family, into . . . new interpersonal networks.”<sup>76</sup> Transformation of a patient’s social life has the capacity to restore *communitas* and in turn impact a patient’s individual health.

Reformation: The reformative characteristic of ritual follows and overlaps with sociality. In the late 1970s Moore and Myerhoff made the case that social rituals are by definition organized events, with beginnings and ends, that bring together people and engender social reorganization. That is ritual’s “dominant mode,” they argued, echoing Durkheim’s expression of the social. This coming together “is often quite exaggeratedly precise. Its order is often the very thing which sets it apart” from other, more mundane activities.<sup>77</sup> Among those involved in *ūtu*, the patient at once embodies and produces individual and social imbalance and disorder in the group. The eventual healing of patients remedies not only their particular health problems, therefore, but it also restores the units of family and friends who are actively interested in their wellbeing and shaken about the future abilities of the patients to participate emotionally and physically in their social networks.

Years later when Biju and I spoke about the nearly back-to-back *ūtu* cases in 2009, he told me that traditionally trained *vaidyas* like him usually only advise blowing therapy to pacify the symptoms of snakebite when it appears that venom is in the first three stages of maturation. He cited the *Suśrutasaṃhitā* to justify the approach, giving me what I later learned is a pat textbook method he teaches his students. The compilers of the text specify that in the first three stages venom usually has not yet settled in the victim’s abdomen, where poison severely disrupts the *kapha doṣa* and the digestive system, leading to a potentially incurable end. In the first stage, it infiltrates the blood, turning it black, after which, in the second stage, blackish skin begins to appear, and then, in the third stage, it penetrates a body’s fatty tissues.<sup>78</sup> While that is what the literature says, and Biju admits that it is much harder to counteract snake venom after it has suffused the body’s adipose tissue, in practice, he flatly put it, “we do *ūtu* on patients with almost all advanced symptoms, even on patients in semi-conscious states.”<sup>79</sup> He added that sometimes it is difficult to identify and determine the precise stage of venom maturation in someone’s body and it is in everyone’s best interest to proceed with the most effective and quickest-acting treatment available, which at Mookkamangalam is often blowing therapy.

Overseeing an assembly of people gathered at their clinic to perform *ūtu*, Biju and Priyankara pay special attention to the attendants’ blowing. They want to make sure they are blowing at a consistent speed, with an uninterrupted frequency of breaths, and that the blowing continues until the patient’s symptoms

noticeably diminish or abate. From preparation to delivery of the four herbs, the procedure can last from as little as thirty minutes to over an hour. In the two cases I mentioned above, blowing lasted approximately forty minutes for the woman and almost an hour for the man. The condition of the patient upon arrival and the degree of help that the attendants can offer are key factors in the duration of this procedure. Since the combined target of the medicinal ingredients and their precise delivery is the relief of symptoms and ultimately the reformation of a person's physiological state, the constitutive parts and actions of *ūtu* function as a restorative ritual, to borrow Howard Brody's phrase. The performance of blowing therapy attempts to move a person from discernable states of social discord and physiological disorder to reformed states of social accord and order.<sup>80</sup>

Cynosure: Ritual acts point to and impose special meaning on otherwise ordinary things. They impart significance to things, and then those things command attention. As an observer, when I apply the adjective ritual to objects, acts, and actors, I am signaling their significance. I am not attributing substance. To construct definitions of ritual, scholars often suggest that these special actions carry weight because of what they represent, such as models of the body, social constructions, inversions of authority, and so on. On account of such significance, rituals warrant attention and special interest. We typically would not, for example, look at the dry ginger used in *ūtu* as substantively different before and after it's been masticated and blown into the ears and onto the head of a snakebite patient. But when it is pulverized into a medicine with Indian birthwort, black pepper and stinging nettle, manipulated by a group of people under the supervision of a gurukula physician trained in poison therapy, then repeatedly blown on a patient, the herbs become part of a social process that commands a new attention to its various parts. Collectively, the herbs become a fierce brew that palliates the wind humor (*vāta doṣa*) in the head and throughout the subtle channels of the patient's body. The people, too—physician, patient, and attendants—assume special forms and functions: respectively, conductor of medicinal preparations and healing performance; cynosural topography for the healing implementation of textual knowledge and botanical remedies; and therapeutic applicators (literal respirators!). The act of breathing becomes a process of moving curative winds from healthy bodies into an envenomed and unhealthy body. *Ūtu* also commands a new attention to the environment in which the practice unfolds. For the extent of the blowing therapy, there is a flow of affiliation between physician, patient, and attendants, streaming in vocal commands and herbal winds from a collection of bodies into and onto one body in order to prevent the departure of the ailing body's five vital breaths, and hence preventing its death.

J.Z. Smith wrote that ritual is "a mode of paying attention" and "a process for marking interest."<sup>81</sup> For him, the characteristic of attention directly counters claims of Protestant reformers in the sixteenth through eighteenth centuries who asserted that rituals were empty and devoid of thoughtful intention, more

like habits marked by repeated performance and lack of forethought. It is common to find references to repetition in definitions of ritual. And though the textual accounts of *ūtu* advise attendants to blow medicine onto a patient up to 150 times, Biju claims the precise number is immaterial. What's important is that the symptoms of the poisoning subside or disappear; if either result occurs after 60 or 80 breaths, that is enough. The exact performance of *ūtu* is thus always different according to the needs of each patient. It is never done with 150 breaths as a strict yardstick, despite what the texts say. The precise number of breaths has little value, in fact: too few, just as with too many, can be deleterious to a patient's recovery, and the *vaidya* has to scrutinize the practice of the attendants and the recovery or loss of health in the patient, moving the procedure onward or calling it quits accordingly.<sup>82</sup>

The characteristic of marking interest also highlights the essential role of place in ritual. If for Moore and Myerhoff the re-forming that ritual activity generates sets it apart from other types of activity, place, J.Z. Smith said, "directs attention."<sup>83</sup> Ritual environments are specially marked-off areas where everything is positioned for explicit reasons, where everyone acts according to certain formulas, and all things (and some people) require undivided attention. If place directs attention, then things (and some people) within the confines of the marked-off places—ritual objects and actors—become special by virtue of simply being present. That which makes them special and more significant than if they were elsewhere is the attention directed at them, attention that is demanded on account of their emplacement. For Smith and others (all of whom are indebted to Durkheim), that which makes ritual objects and actors special is often referred to as "sacred." But for Smith, "the ritual is not an expression of or a response to 'the Sacred'; rather, something or someone is made sacred by ritual."<sup>84</sup> The sacredness of objects and people in the course of ritual activity derives from their emplacement, in other words. There is no inherent difference between these people and objects when they are busy in a ritual environment, such as a temple, mosque, or church, as opposed to when they are outside of those places. When they are inside a mosque or a temple, however, the attention they receive makes them special and extra-ordinary.

With these components in place, we can then ask: Do the people and the objects involved in *ūtu* become special or extra-ordinary by virtue of following the reasoning and directions of the *vaidya*'s orchestration and their emplacement at Mookkamangalam clinic? The answer is both yes and no. Their participation in the procedure makes them extra-ordinary in the sense that they become ritualized agents who, because of their performance, demand special attention. The collective actions of the group disrupt normal experience, and under the careful guidance of an expert, each person enacts what Richard Schechner called "hyper-experience." This experience is not abstract or merely a matter of academic conjecture, but "is made of definite sensuous items to do, smell, hear, see, and touch." *Ūtu* illustrates Schechner's perceptive observation that "more than any other kind of art or

entertainment, ritual is synaesthesia” and that “there is also a corresponding set of skills known to the ritualists for operating the performances.”<sup>85</sup> The so-called specialists at Mookkamangalam and Shantimana are the *vaidyas*. The attendants too become ritualists of a sort in the course of *ūtu*, acquiring certain skills in the therapy of blowing. They do not possess the knowledge to establish and direct the ritual setting, however, as Biju and his mother do, and they require the ritual specialists’ instruction to undergo this transformation.

In spite of the transformative capacity of *ūtu* for everyone involved, I would not follow Smith’s theorizing further than I have already, and suggest that *ūtu*, of necessity, makes the people and objects involved somehow sacred. Instead of getting caught in the secular-sacred dichotomy when the question of ritual activity is raised, and thus forever holding the work of physicians and priests at odds (recall Grimes’s quote earlier), what is needed is a narrower activity-based or practice-oriented lens to identify and analyze ritual. As an observer of medical practices, to pose the question—Is there, or can there be, ritual in medicine?—is not to inquire about the presence of, or reliance on, transcendent entities in a person’s or group’s performance. That might be present for the doctor just as we might expect it to be for the priest. The point is that both professionals may be said to perform rituals, given certain characteristics like the ones I just sketched vis-à-vis *ūtu*. So, yes, the short answer is that there can be rituals in medicine. We might extrapolate from the analysis of the qualities of sociality, reformation, and cynosure in *ūtu* to systems of medicine other than Ayurveda, such as Unani, traditional Chinese medicine, and even biomedicine, as well as to other cultural domains like education, politics, and religion. The flexibility of the components in the definition is critical. There will be different kinds of rituals and also different degrees of ritualization. With an analytic framework in place, ritual is potentially identifiable in many areas and institutions of human society and culture.

But we can still be more precise. Within the categories of sociality, reformation, and cynosure, there are also types of ritual action to further distinguish and analyze. In particular, a distinction of action types may be drawn between ritual rehearsal and ritual presentation. I deliberately draw these types of ritual activity from performance studies. They are meant to evoke the theatre in the sense that, for the observing ethnographer, the act of theorizing ritual in any context is necessarily an act of witnessing and commentating on the staging of a spectacle, in the fundamental sense of a specially prepared and arranged display.<sup>86</sup>

Ritual rehearsal is a practice marked by the process of returning to something again and again, not on one’s own, but at the prompt of directives that have been heard or read. Moore and Myerhoff called this ritual acting: “a basic quality of ritual being that it is not an essentially spontaneous activity, but rather most, if not all of it is self-consciously ‘acted’ like a part in a play. . . . [It] usually involves doing something, not only saying or thinking something.”<sup>87</sup> A ritual rehearsal is an action performed by people who do not have, think they have, or care to have

the requisite knowledge or capacities to achieve the goals of their practice without guidance. Success depends on someone or something external to the actor, like a director or a screenplay. An example of a ritual rehearsal could be prayer, since prayer usually depends on appeals to entities beyond the control of the actor (God, Allah, Viṣṇu, Ahura Mazdā, and the like) for a certain result. Caroline Humphrey and James Laidlaw discuss this in terms of “guided” action and “ritual commitment” on the part of the actor.<sup>88</sup> Similarly, the involvement of most medical patients in their treatments, whether in the preparation and/or taking of prescribed medications, falls within the category of ritual rehearsal. Patients play vital parts in their recoveries. But their capacity to be cured is contingent on the expertise and work of others well beyond their circle of influence, including the physicians who make diagnoses and prescribe medicines, as well as the manufacturers of the drugs they consume.

A ritual presentation, on the other hand, is marked by actors’ awareness that they possess the competence to accomplish what they set out to do. Ritual presenters know they have the requisite knowledge and capabilities to accomplish their desired goals. Ritual presentations are done by skilled people. They are trained to execute highly specialized actions, and their training guarantees effective outcomes, which are measured against defined standards established in things such as canons of literature. Facets of *ūtu* fit neatly within this category as well as ritual rehearsal. A vaidya’s recommendation and direction of blowing medicinal herbs is a ritual *presentation*. It is predicated on tested theories, observed data about human physiology, and years of clinical experience. His role as director of a group is evocative of a director’s staging in the theater. Crucial to *ūtu*’s success is his capacity to generate in the actors “at least an attentive state of mind, and often an even greater commitment of some kind . . . through manipulations of symbols and sensory stimuli . . . and through highly structured, rule-bounded activities, both of which produce concentration so extreme that there is a loss of self-consciousness, and a feeling of ‘flow.’”<sup>89</sup> The work of an *ūtu* patient’s attendants, in comparison, is an example of ritual *rehearsal*. Following Catherine Bell’s description of ritual agents, during blowing therapy these attendants “do not see how they have created the environment that is impressing itself on them but assume, simply in how things are done, that forces beyond the immediate situation are shaping the environment and its activities in fundamental ways.”<sup>90</sup> The so-called forces in this case are the healing properties of *auśadham*, the vaidya’s expertise in *āyurveda*, and the support derived from the group gathered together in search of reforming their *communitas*.

Another important way to discuss what’s happening during *ūtu* is to analyze it in view of *ritualization*. The central virtue of this concept is its accentuation of the ongoing process inherent to ritual and the movement of a person’s or a collective’s performance to communicate something that stands beyond individual actors. Using the theoretical lens of ritualization allows us to stress the dynamic

and generative nature of ritual agency and activity. Mary and Max Gluckman used ritualization to refer to the acting out of social relationships to express and alter a given situation, usually a conflict, for the purpose of achieving material ends.<sup>91</sup> Keeping with their line of thinking, we can see *ūtu* as a medical ritualization involving a group of people whose interactions express and attempt to correct the conflict of illness. Ritualization in this view clearly encompasses sociality and reformation. Bell's analysis of ritualization further adds the component of cynosure. "Intrinsic to ritualization," she observes, "are strategies for differentiating itself—from various degrees and in various ways—from other ways of acting within any particular culture. At a basic level, ritualization is the production of this differentiation."<sup>92</sup> According to a practice-oriented analysis, *ūtu* highlights the distinction between the envenomed physiology of a patient and an ideal physiology outlined in texts on *āyurveda*, which the attending cohort of the patient aims to reify by becoming instruments of the *vaidya*'s practice of those texts. By having the family and/or friends of patients both draw attention to, and attempt to counteract, the course of venom in the bodies of people who've been bitten by venomous snakes, *ūtu* compels social reciprocity and the correction of collective incongruence.

Seen as ritualization, *ūtu* is not a series of acts that renders sacred the whole therapeutic process. Yet the process is still made different through strategic means.<sup>93</sup> The decisive punctuation in ritualization is the condition that sets apart, begs attention, and gives special significance to the ritual process. This is the aspect of cynosure. The category of ritualization is interrelated across the three features of ritual I have presented in this chapter, and it conveys the understanding that ritual is always active and always entails development of some kind, positively or negatively. The social and reformative aspects help to generate the cynosural attention that ritual eventually demands.

By applying a practice-oriented approach to the study of ritual, we avoid reading into *ūtu* merely what we want to know and imposing conceptions and beliefs onto actors' frames of reference.<sup>94</sup> By looking to the "methods, traditions and strategies of 'ritualization'" we do not discuss ritual and ritualization in universal terms or along the lines of binaries like sacred-profane and religious-secular, or even religion-medicine, which often constrain analyses and skew conclusions.<sup>95</sup> Instead, a case-by-case analyses of practice—in *ūtu*, the *vaidya*'s practice of texts to coordinate healing plants, a patient's body, and human respirators—speaks to how certain experts and a community can come together to attend to situations of incongruity (emergencies, illnesses, poisoning of various kinds). The idiom of ritual theory can be helpful to explain the events of the south Indian healing practice of *ūtu*. The language used needn't carry an unstated or stated association with any particular domain of human culture. The features of sociality, reformation, and cynosure can apply to a medical context as well as a religious or economic context. We may use these categories in various places, too, and ask if ritual activity exists in the classrooms of higher education in the United States or in the halls of

European political institutions. The foregoing scrutiny of *ūtu* as a ritual activity suggests that the ritualist and the medical doctor do not have to see their work as incommensurate at the level of performance. The gulf separating the ritualist and the healer with which the chapter began can be dissolved, in no small measure by carefully identifying what the term ritual is meant to do when it is deployed and by purging the language used to describe ritual activity of assumptions that it naturally belongs to one segment of culture over another.

When Biju and Priyankara practice poison treatment texts to perform an emergency procedure like *ūtu*, we can see that at the level of performance their practices are, fundamentally, ritualistic in the same way that scholars of religion might be inclined to describe the agency and activities of priests or holy men and women. The people for whom their ritual activity is done, patients, have been present all along in this and the preceding chapters as well as, naturally, in the course of my fieldwork in south India. The ayurvedic patient is the primary beneficiary of the changes wrought by ARM and the philological acumen of traditionally trained physicians like those I met and observed in central Kerala. The (re)establishment of wellbeing in the ailing and diseased is the end goal that has always propelled healing in Ayurveda; it's what motivated the people who reformed via ARM; and it continues to inspire the people who practice it today. What does it mean to be a patient, to be a person in need of help to realize wellbeing in one's life? The answer to this question is integral to assess the nature of healing concerns in Ayurveda, and it might offer insights when posing the same question to other medicines. In a very real sense, medicines begin and end with patients. They embody illness and make disease "real" for physicians. Without them remedial theories cannot be applied, tested, and utilized to promote health and longevity. The patient is the indispensable explanatory target of the Sanskrit medical classics and, hence, of the practice of those texts. In the concluding chapter, I ask what the Sanskrit sources tell us about patienthood and probe the south Indian gurukula for ayurvedic articulations about patienthood, healing, and wellbeing.



## Texts in Practice and the Ayurvedic Patient

In the previous chapter's discussion of ritual in/and medicine we saw how consideration of a healing procedure in the south Indian ayurvedic gurukula, and of healing contexts generally, can be useful to challenge long-held assumptions about rituals and propose new ideas and applications for ritual theory. Blowing therapy (*ūtu*, Mal.) is on the surface a noteworthy healing procedure: it is effective, first and foremost, and its materia medica and their application are potentially beneficial to comparative medical research. But there's more to the study of *ūtu* in the previous chapter than its effectiveness. To parse the ways that Biju practices texts to save snakebite and other poisoning victims can also be a helpful analytic case study for the critical reevaluation of concepts we use to explain interpersonal activity. A combined ethnographic and philological study of *ūtu* is instructive and illuminating because the performance of this therapy, its actors, and aims spur us to rethink previous assertions in scholarship about ritual and religion, as well as the links between these analytic categories. If we press further and think along with Bhaskaran, Priyankara, and Biju as they do things with textual knowledge to heal, it appears that the effectiveness of gurukula philology and textual practice rests on an ayurvedic physician's ability to sway, from illness to wellness, the necessary yet often ambiguous figures the literature of classical *āyurveda* has as its focus: patients. In this final chapter, I reflect on the practice of texts as a formative process through which vaidya-gurus draw on established models of wellbeing and attempt to manufacture aspects of those designs for students and the patients who consult them as they try to make sense of the experience of illness.

Healing is real, and wellbeing is manifest not in abstractions or literary musings on the body. The healing knowledge of *āyurveda* that was compiled in the first half of the first millennium CE and established in the big trio is intended precisely for people who *need* it, recalling the discussion of *vidyādāna*, the gift of knowledge,

in chapter 3. These people lack wellbeing, or their health is compromised in some way. We know that the tradition calls these people *rogins*, and that they are “patients” in a general, cross-culturally familiar idiom. They are “sick,” “diseased,” and “impaired” according to the basic meaning of the Sanskrit adjective *rogin*. As I have done throughout this book, this adjective is frequently nominalized, so that a *rogin* is someone who is sick/diseased/impaired, or a sick/diseased/impaired person. The healing knowledge of *āyurveda* proposes ways to inspect and treat many of these people. Like patients of any medical tradition, ayurvedic *rogins* go to healing experts to share their experiences of illness with the hope of getting assistance to overcome, mitigate, or manage their afflictions. Healing experts in south India’s gurukulas, like Biju, his mother and grandfather, have been implementing knowledge contained in premodern Sanskrit and Manipravalam texts for generations of *rogins*. Biju continues to do this today, practicing these texts at Mookkamangalam with his students and the occasional assistance from Priyankara. His mastery of these sources, his reading and teaching of them, always points toward some kind of tangible healthcare. The ideas of healing and wellbeing adumbrated in the texts Biju practices cannot lead to treatment in the absence of patients, for whom these concepts reveal themselves as real-world states of being.

#### READING FOR HEALING

If the practice of texts in the ayurvedic gurukula has some things in common with textual-hermeneutic traditions of philology and medical practice in Europe and the United States, it differs in the ways that a rigorous study of classical texts is designed to set up immediate, sometimes urgent, applications of the meanings in those texts to contemporary problems. Put another way, gurukula philology entwines the study of classical healing knowledge with the treatment of contemporary medical problems. Neither side of this two-part practice is particularly unusual. Philology endures and even thrives in certain corners of academia, and procedures in biomedicine and other medicines continually advance through research and testing. Progress in biomedicine does not rest on philology, however, and the extent of the influence of the discipline of philology on medical research in either overt or direct ways is negligible. Practically speaking, the philological study of classical Greek, Latin, and Arabic thinkers recognized as the ancient and medieval composers (and compilers) of biomedicine’s foundational literatures, academicians like Hippocrates, Galen, Paul of Aegina, physicians at the Academy of Gondeshapur, Ibn Zakariyya al-Razi, Ibn Sina, Rogerius, Vesalius, and others, is generally the remit of the history of science and medicine, not medical schools that train physicians.

In the United States in the twenty-first century, whenever historical aspects of biomedicine enter medical school curricula, they tend to appear as electives and

seminars set apart from the actual work involved in the administration of medicine. Many medical schools nowadays make history of medicine, technology, and science units available to med students on their university campuses, and doctors-in-training who are interested can learn about developments in biology and anatomy, social approaches to epidemics, and ethical debates in medical experimentation as well as, fairly recently, literary depictions of healing and science in medical humanities programs. At the time of writing, as the Covid-19 pandemic and the various bio-psycho-social ailments it has instantiated among people the world over moved past the twenty-month mark, scholars in the United States have been urging medical schools to recognize the value of the humanities to both givers and receivers of healthcare and to implement (more) humanities classes in post-Covid medical school instruction. “Medicine is not a science but an art,” Molly Worthen writes, “that uses science as one of its many tools.” The humanities, she continues, “do more than shed light on the cultural context of disease. They can also help doctors connect with patients as multidimensional beings.”<sup>1</sup> There are also some medical schools in the United States where medical students do learn the discipline of philology in cursory ways that pertain to their work. Such programs tend to be housed in classics departments offering courses on Greek and Latin medical terminology aimed at familiarizing med students with Greek- and Latin-derived anatomical nomenclature.<sup>2</sup> Though noteworthy, these programs are rather different from the gurukula philology at Mookkamangalam and Shantimana and the lessons on Vāgbhata’s *Aṣṭāṅgahr̥daya* I have written about in this book. There are, perhaps, more similarities with the level and intensity of Sanskrit requirements on the BAMS syllabus in India’s ayurvedic colleges today.

For the most part, the operative literary bases for contemporary biomedical practice in university departments of biology, dermatology, toxicology, immunotherapy, etc. tend to be quite recent productions, circa the early-modern era. Biological sciences like botany, zoology, paleontology, and embryology were professionalized in the eighteenth and nineteenth centuries, alongside major developments in cell theory, which Darwin synthesized in his theories of evolution and natural selection. At the same time, physics and the natural sciences were exploring and understanding in new ways how the operation and flourishing of the human organism is tied to geography and environment. Germ theory matured at the end of the nineteenth century, and genetics rapidly developed only in the first decades of the twentieth century. Curricula at biomedical schools today need not, therefore, and many do not, include medieval and ancient historical developments that set up scientific progress in the modern era, prompting the “ologies” familiar to us today that are associated with particular areas of healing and specialization.

Apart from all-purpose considerations of medical etiquette handed down from Hippocrates, “the father” of modern biomedicine, much of the history taught in biomedical schools focuses on early-modern science and medicine, the effects of which are still noticeable today, and it routinely ignores the influence of Persia and

Islam. James Shedlock, Ronald Sims, and Ramune Kubilius studied the curricular placement of medical history at medical schools in the United States, giving special attention to the Feinberg School of Medicine at Northwestern University, their home institution. They discovered that history courses and the literatures of the medieval and ancient worlds that historians consider the bases of western medicine did not require students to spend time with actual writings like the *Hippocratic Corpus*; Galen's *Method of Healing*; Paul of Aegina's *Medical Compendium in Seven Books*; Ibn Sina's *Canon of Medicine*; al-Razi's *Fatal Diseases*; Rogerius's *Practice of Surgery*; and Vesalius's *On the Fabric of the Human Body*. Instead, they found that if students training to become biomedical doctors in the United States today get to know these works at all, they encounter them as history, display objects in museum galleries, or librarians reveal them as special editions on tours through rare book collections. They are not sources for obvious integration in med students' clinical work.

The Feinberg Medical School's curricular expectations for the history of biomedicine and biomedical literature is representative of medical schools across the United States, Shedlock and his colleagues argue, and their research intimates the same is true for places elsewhere around the world where biomedicine is the modern establishment medicine, as it is in India. Following a comprehensive two-year study of student evaluations written by Feinberg med students who took history and/or medical humanities courses, the three researchers deduced that

most students did not find the history of medicine seminar useful in a practical way. Student comments indicated that learning the history of medicine is important for what it teaches them about the medical profession and how it has developed over time via the science and art of medicine. As with other humanities seminars, this seminar *is not designed to be practical for learning or practicing current medicine*, but to help students understand the ethical, cultural, and social context of medicine.<sup>3</sup>

This finding is striking. The bracketing of *the practice of medicine* as somehow isolable from society, ethics, and culture is not unusual in biomedical discourse, and it has been increasingly common in BAMS-granting colleges in India. Recall, for example, the studies of Shailaja Chandra and Bode and Shankar, whose interviews with ayurvedic college graduates revealed considerable dissatisfaction with the BAMS degree for the ayurvedic college's failure to discuss Ayurveda's history and classical literature as pertinent to modern practice.<sup>4</sup> The development of the ayurvedic college system during ARM facilitated essentially the same situation that exists in the usual course of studies at biomedical schools in the United States. For aspiring physicians, there is a disconnect between the study of foundational medical texts and contemporary healing practices.

The practice of texts at Mookkamangalam hangs on the idea that reading should be workable. Bhaskaran taught his daughter and grandson how to make sense of texts for the purpose of healing sick people, people with physical (and

occasionally mental) problems who consult them because they need assistance, sometimes urgently. Modes of philology in Europe and the United States have been and still are mainly academic pursuits, in the sense that an “academic” enterprise involves processes of reading and thinking as opposed to practical and technical work. Which is to say that philology in Europe and the United States has been a form of critical scholarship, including how it has conventionally been applied to Indian sources (Classical Indology). It is largely divorced from the type of applied research that many scholars do in the social sciences and policy studies, research that impacts political decisions, actuarial calculations, advertising, and other areas of daily human life both familiar and tangible to many people. I neither mean to diminish the value of philological research in the humanities nor to say that our understanding of societies is not heightened by philological studies of classical texts. It certainly can be, and the conscientiousness and social awareness this research sometimes sparks can spur progress in the present day on issues of social justice, political and military reform, educational development, and more. But for all the good this kind of scholarship might do to edify and enlighten people about their social, political, and religious lives in the twenty-first century, maybe even motivating them to rethink their community and civic involvements, the reality is that work done by classical Indologists and scholars of arcane Latin and Greek texts simply is not readily available to everyone, at least not in the United States. It is not popular media.

That said, in South Asian studies, religious studies, and history many scholars have tried to make sense of old texts to level cultural critiques in the current moment and, in some measure, call for and possibly contribute to social, political, economic, and religious change. The kind of philological scholarship I have in mind here, even the most trenchant and award-winning, is commonly slow to influence the public sphere, however, if it leaves the halls of academia at all. Sometimes it does not leave, and merely circulates throughout scholarly subfields. But other times, when the connections between text and society are understandable, compelling, and apparent, the work finds its way to syllabi and students, and in this way textual research stands a chance to have social and cultural impact. Sheldon Pollock’s work on the *Rāmāyaṇa* in this regard was seminal in the study of India and South Asia.<sup>5</sup> He showed us clearly how this deeply seated Indian cultural text inspired the ascendancy of the BJP in the 1980s and illustrated why and how the BJP used the Rāma story (*rāmakathā*) and rhetoric of the Ramjanmabhoomi Movement to mobilize Hindus under the banner of Hindu Nationalism, igniting communalism and inter-religious violence not seen since Partition. In Pollock’s philological practice, we see that the ambitions of some Hindus to treat myth as history influenced how a powerful political group derived meaning from the *Rāmāyaṇa* and, in this particular case, how this worldview served the nefarious ends of state-sponsored intolerance and violence. In religious studies, a little over a decade after Pollock’s work on India’s epic literature, Bruce Lincoln published *Religion, Empire, and Torture: The Case of Achaemenian Persia, with a Postscript*

on *Abu Ghraib*, displaying how philological research as political critique could be done not only across vast expanses of time, but also across cultures of imperialism. Lincoln's reading of Achaemenian royal inscriptions (circa 553–330 BCE) illuminates the American military's sanction of torture in the wake of George W. Bush administration's response to 9/11.<sup>6</sup>

Naturally, it is difficult to gauge whether or not Pollock's or Lincoln's takes on the political affairs of the 1990s and early 2000s were noticed by people in power in India and the United States, or if their clarion calls to place checks on political leaders and their rhetoric in times of national emergencies influenced critical masses of citizens to demand change. At the very least, studies like these and, in countless comparable history books that overtly show or subtly suggest parallels between the Roman Empire and modern empires like the United States, model the methodological reach and incisiveness of philology, bringing the critical reader's positionality to bear on hermeneutical work.<sup>7</sup> By describing exploitations of political power and the overt use of religion to legitimate hostilities against Muslims in India and the use of torture both to quell dissent in ancient Persia and to extort confessions in modern-day Iraq, Pollock and Lincoln move through the initial two registers of philological meaning-making discussed in the introduction, text and context, to show that scholars' politics and relations to the texts they choose to study impact meaning-making in philology. Nevertheless, the stakes of the effort to "heal," broadly conceived, to expose injustice and oppression in these two philologies of the past in the service of the present, were aimed at broader, more socially incremental and progressive change than gurukula philology, where the stimulus to reify wellbeing for the sick is far more immediate.

As we have seen, applications of healing knowledge contained in Sanskrit texts do not simply transpire as vocal recitals, as one might expect in a mantra-based medicine or the glossolalia-inflected healing that happens in Pentecostal churches. Historically, the gurukula-trained student memorizes large portions of texts, sometimes in their entirety, to facilitate intertextual associations, across multiple languages in some cases, so that texts and ensuing reconfigurations of collections of texts may be used as instruments of healing. The healing part of this method is part and parcel to gurukula philology, to the practice of texts. It is not merely a beneficial aftereffect. Healing is the material occasion of the ideas (theory) about what constitutes wellbeing established by the compilers of the classics of Caraka, Suśruta, and Vāgbhaṭa and those who came after them, experts who worked out the expression of wellbeing by composing commentaries and spinoff texts. An example of wellbeing "made real" signals a moment in the practice of texts for the creation of new texts that will be taught, both for students and the people upon whom healing concerns begin and end: patients.

To appreciate the unyielding effort put forth to practice texts at Mookkaman-galam and Shantimana, it is not enough to recognize that the *Aṣṭāṅgahṛdaya* or the big trio informs the healing work of the vaidya-gurus at these locations. The ways that Biju, Priyankara, and Bhaskaran have and continue to implement texts

in their clinical work is an ever-changing and impromptu formative process that conceives, assesses, realizes, and manages wellbeing on a patient-by-patient basis. Each clinical procedure is thus transient, entailing reconstructed remedial information, and it requires a specifically curated rendering of wellbeing to suit new and different clientele and contexts. By choosing to transmit the ayurvedic tradition and treat patients on the basis of principles in the classical Sanskrit collections and associated regional sources, Priyankara and Biju today; Bhaskaran before them; and the students appearing in this book all actively mediate and organize an unfixed stream of medical realities that include notions of health and wellness and modalities to achieve these ideals.

In the course of much of the research and fieldwork for this book, I did not understand or “use” texts as the vaidya-gurus at Shantimana and Mookkamangalam did. Aware of this difference, and in an effort to articulate it, I would speak with Biju and Priyankara about their perception of texts whenever I visited them. In my earliest visits to Mookkamangalam, I typically showed up each day with a stack of Sanskrit and Malayalam sources that I hoped to read with them, or with any of their students who might have been interested. I wanted to understand what the texts said and how their compilers approached the matter of healing. But I was reaching for a wide-ranging knowledge of ayurvedic history, its technical language use, and what ayurvedic healing looked like *back then*, whenever the sources I happened to be working on were produced. I was attempting to locate a south Indian literary culture of healing, in effect, by identifying seminal texts that could be placed in a tidy chronology and taxonomy across medicinal fields, such as snakebite treatment, other poison treatments, astrological healing, and embryology.

Biju was always more comfortable about my preoccupation with “ordering” Indian medical knowledge (and knowledge production) than Priyankara was. My interests were not new to him. He had been enrolled as a student at an ayurvedic college briefly, though he never got his degree, and in the late 1990s and early 2000s many of his mother’s students were about the same age as him. He tended to connect with them socially, as members of the same generation with similar cultural references, and he developed friendships with many of them. He was also very familiar with the style and content of the education that BAMS students had when they came to study with Priyankara. The Sanskrit texts on the ayurvedic college syllabus were treated like history books, he used to tell me. Holding up a copy of a Devanagari edition of the *Aṣṭāṅgahṛdaya* slightly above his head, in 2015 he observed, “books like this tell BAMS students important ideas in Ayurveda. Naturally they do this. But most students never read all of them or appreciate them as tools [of healing].” When he said this we were sitting on the veranda along with three of his students, two men and one woman, who were studying with him during a short break from their respective colleges in Karnataka, Kerala, and Tamil Nadu. We had just finished six hours of mukhāmukhaṃ lessons and five patient



visits spread across the day. Everyone was tired, a little slap-happy, and everyone was just about ready to call it a day. I casually floated one last question to the group. “How do you think about the movement of ideas from texts like Vāgbhaṭa’s collection to patient care and how is this movement explained at the college and at Mookkamangalam?” The twenty-one-year-old woman who studied in Tamil Nadu, Thankam, responded with unexpected energy. She didn’t quite answer the question I had asked, but instead described a history of the modern college syllabus that she and all BAMS students had to follow. To her it seemed that long-gone administrators had re-positioned the Sanskrit she studied with Biju as a symbolic marker of a tradition from a time before classical Indian healing got mixed up with non-Indian medicines.

By this time, I’d been visiting central Kerala for over a decade, and I had heard variations of this history many times. Thankam’s parents were ayurvedic physicians. Her grandfather had been one as well, and she had studied in an ayurvedic gurukula in Tamil Nadu at a site she imagined was set up like Shantimana, which she had learned about from Biju and Priyankara. Her desire to connect with the history of the healing tradition she was about to enter as a professional became noticeably political, eliminating any residual lighthearted silliness among us on the veranda. “Ayurveda is self-sufficient,” she said. “It is effective, too. It is frustrating to spend so much time studying for a career in Ayurveda at college that looks like a modern medical school. I have friends at those schools [studying biomedicine], and we do many of the same things. In fact, some seniors who graduated from my school now work at ayurvedic clinics and actually dispense modern [biomedical] drugs. What is Ayurveda now? These people never wanted to study Ayurveda anyway. The [ayurvedic] college is making it possible to practice modern medicine even when you can’t get a seat in one of those schools. The college teaches modern medicine,” she concluded, which I understood to mean that it is not *āyurveda* and therefore, somehow, possibly less Indian.<sup>8</sup>

I arrived at the model of gurukula education as *the practice of texts* over the course of meeting many students at Shantimana and Mookkamangalam who bemoaned what they viewed as the near erasure of the Sanskrit classics from training in the ayurvedic college. What do the Sanskrit medical classics provide an ayurvedic physician that the standardized syllabus of the colleges does not or cannot offer? Both institutions convey knowledge about the human body, health, and disease and demand that their students master it. A major difference that I observed among students at central Kerala gurukulas is that they learned how to improvise ayurvedic theory in ways that they did not feel they were taught or encouraged to do at college. BAMS students and graduates who also seek gurukula training at places like Mookkamangalam are looking for exposure to an epistemological framework that facilitates the nimble application of healing theory that is, in their minds, ayurvedic rather than the hybrid bio-ayurvedic model taught at colleges.

For a BAMS student training with Biju, what sets the texts studied in the gurukula apart from modern medical texts studied at the college? The language of composition is one obvious aspect. For many of Biju's students, the fact that they do not learn about Ayurveda's materia medica, methods of diagnosis, and healing procedures *in Sanskrit*, apart from an introductory course in the first year, is disconcerting. For them translation signals a watering down of *āyurveda* and a reworking of the Indian tradition towards western models of diagnosis and treatment. This isn't the entire story, however, though it certainly drives some students' perceptions of what is real or pure Ayurveda (*śuddha*) and what became known as the mixed tradition of Ayurveda (*miśra*) during ARM. The mukhāmukhaṃ format teaches a workable approach to reading and that has the single biggest impact on gurukula students, especially on those who were able to spend more than a few months studying with Biju, Priyankara, and Bhaskaran. The practice of texts instills a practicable epistemology.

"How do you think about the *Aṣṭāṅgahr̥daya* versus other types of literature?" I probed Biju in 2017 during the last stretch of fieldwork I did for this book. "I understand that the content is often different. But you have also told me that Vāgbhaṭa's collection is different than other medical sources, that it teaches an orientation for thinking and perception as much as it teaches data and ideas about the body." "That is all there," he replied. "It has to be. But it is not primary. Anyone can learn these things. Many people do. But when I used to sit mukhāmukhaṃ with *muttacchan* [grandfather]," Biju expanded,

he did not want me to read Vāgbhaṭa like I read O.V. Vijayan and M.T. [Vasudevan Nair—two famous Malayalam authors]. He taught me to memorize the *Aṣṭāṅgahr̥daya*. When he taught me to recite it, he taught me how to think about the words, carefully, in relation to each other. We call this *saṃhitā* medical because treatments, drugs, disease, *doṣas*, and more are in there. But I had to see these things as devices to improve the sick person. Vāgbhaṭa gives an approach. So, when I memorize it, I can recall any part and apply it to correct a patient's problem. This is not how I read novels. Yes, ideas and images in good novels stay with me long after I've read them. But I did not read them in the first place to use later with others; not to comfort or relieve others. I did not read those books because they are technical or I thought they could be useful one day.<sup>9</sup>

Biju's reflections on what distinguishes ayurvedic from popular literature drew to mind something Priyankara explained to me in 2004. I had asked her why recent BAMS graduates wanted to study with her after they had already been licensed by the government to practice Ayurveda, and she told me: "because I teach them how to think."<sup>10</sup> There are concepts and there are procedures to be learned and remembered in an ayurvedic gurukula education, just as students are tested about the pharmaceutical properties of plants and human anatomy on exams at ayurvedic colleges. But Biju and Priyankara imagine the medical classics more like

a perspectival orientation for assessing and, when possible, pacifying and bringing order to changing and unstable patient scenarios. They do not consider their primary objective to be the transmission of data to rehash on exams for grades, of which only a handful turns out to be useful in a student's post-BAMS specialization. They teach the *Aṣṭāṅgahr̥daya* to promote and cultivate the ability to adapt and improvise across multiple branches of medicine no matter what the circumstances are or what patients bring to them (though they do not perform all types of medicine at Mookkamangalam, avoiding such procedures as bone setting and any kind of surgery).

"The ability to think about Vāgbhaṭa's words, in several ways, is important to my practice as a physician," Unnikrishnan told me in 2013 as we drove to northern Kerala, away from Mookkamangalam, after my visit with Biju was cut short by the unexpected death of his father. I stayed on at his *mana* for a while to offer my condolences and help Biju and Priyankara however I could. Ultimately my presence seemed more distracting than helpful, as their family obligations and assorted funerary rites grew more time-consuming. So, after Unnikrishnan paid his respects to his two gurus, he collected me and my things and took me on a tour across Kerala's winding backroads and interstates north of the Thrissur District. We went to his hometown, visited his small pharmaceutical manufacturing plant and the ayurvedic hospital where he worked, and toured the college where he was a newly hired professor.<sup>11</sup> His career was taking off, and he was eager to extend his deep understanding and appreciation of Ayurveda into diverse related projects. But despite the many things that I learned about Unnikrishnan's life since receiving his BAMS degree and training at Mookkamangalam, most of our conversation on that drive was not about Ayurveda, but about our mutual friend and his family.<sup>12</sup>

Unnikrishnan and I made almost this very same trip again in 2017. On the latter drive, knowing I was close to wrapping up my fieldwork for this book, I pointedly asked him to tell me about his early days studying with Priyankara, back when I first met him in 2004. I spent a lot of time at Mookkamangalam in 2004 and 2005, and on most days he picked me up in the mornings at my hostel, and took me on the back of his motorcycle to observe his lessons with Priyankara and Biju and their interactions with patients. Later in the evenings he took me home, usually after nightfall when patients were not likely to show up for consultations. From the first motorcycle ride, it was easy to talk with Unnikrishnan. He is kind and easy-going, with a nonchalant wit and intelligence that's magnetic. When I observed him during mukhāmukhaṃ lessons, it was obvious he was an excellent student. So, it is no surprise to me that he is a beloved professor and physician today. In 2004 and 2005, this tall, sturdily built Malayali man in his mid-twenties, clad in a t-shirt and a white mundu day after day, had Priyankara and Biju's constant trust, speaking on their behalf to patients and routinely issuing

their prescriptions. “What do you remember most about studying at Mookkamangalam and working with Priyankara and Biju?” I asked him in 2017 as we drove past the hustle and bustle of several Kerala towns.

I didn’t cram there, studying for a test the next day like I did at college. Priyankara tested what I knew by asking me to recite portions of the *Aṣṭāṅgahr̥daya* or to refer to a work in Malayalam that could address a patient’s needs. This was eye-opening. Vāgbhaṭa’s *saṃhitā* is more than a textbook with facts about the body, herbs, and theories. It’s broader than that, but of course still useful for specific problems. It’s about how to see and look at problems. It helped me think about the questions I should ask patients about their bodies, and ultimately how to treat them.

[I asked what he meant by saying that Vāgbhaṭa’s text is “broader” than a textbook.]

Priyankara used the *Aṣṭāṅgahr̥daya* to show that illness is a basic human experience. Universal, in fact. The body suffers for many reasons. But under the influence of drugs, that experience can change and improve. Priyankara and Biju understand *doṣa*, *rasa*, and *dravya* as well as anyone I know, and they taught me using technical language, language I use in the classroom now. Some of the terms they taught, I also heard at college; but some [of those terms] were put into allopathic terminology at college, and I learned their original meanings with Priyankara. But it’s what they do with these concepts when they meet patients that deepened my understanding of *āyurveda*. They can speak the knowledge of Vāgbhaṭa and give it to patients so they can understand their experience of illness and how to change it. This kind of conversation is hard to have today because the Sanskrit texts are complicated. Hardly any patients know them. But they [Priyankara and Biju] still find ways to do this every day, with people from all walks of life, in ways that appear direct and simple. They chat about a patient’s life and what it means to have and care for a body. That’s life, isn’t it? Everybody can relate to that.<sup>13</sup>

I asked nearly every student I met at Mookkamangalam why they went there to study. I knew what had initially brought Unnikrishnan there. But I wanted to hear him explain it again, while we were insulated from the distractions outside of his air-conditioned car. I thought maybe he would elaborate on his earlier answers to this question, which usually amounted to something about his seniors at the ayurvedic college he attended in Karnataka encouraging him to meet Bhaskaran and one of his professors there who also spoke about this remarkable vaidya-guru and his family of healers. In the break before his last year of college, Unnikrishnan drove his motorcycle from his college town in Karnataka to Mookkamangalam and asked Priyankara and Biju if they would let him take an apprenticeship. I had never fully understood the details of Mookkamangalam’s appeal for him personally, however, and I wanted to know if there was something more that motivated him than an answer that seemed to boil down to “everyone else was doing it.”

“Remind me what brought you to Mookkamangalam in the first place,” I nudged him. He told me that at the time he still had another year to complete his BAMS and that he was doing well at college, receiving high marks. When he

graduated, an excellent opportunity awaited him to move into private practice in his hometown in northern Kerala. He knew he liked Ayurveda not only to practice but as something to study, a perspective he had developed by working with a foreign scholar who employed him to work on some translation projects. This scholar's ardent interest in creating an archive of traditional Ayurveda in Kerala and in translating some of the writings of well-known Malayali vaidyas in the twilights of their lives also spurred Unnikrishnan's interest to meet Bhaskaran and study with Priyankara, over and above the precedents set by his college classmates. Years later, his academic curiosities led him to a dual career as a physician at a private hospital in his hometown and as a professor at a prestigious ayurvedic college.

The work Unnikrishnan did at Mookkamangalam, he told me on our road trip, exposed him to an approach to diagnosis and treatment that he did not share with many, if any, of his colleagues at the college where he worked. I asked if his colleagues knew about his gurukula training, and he told me that some did, though they rarely talked about it. He suspected this part of his ayurvedic education might have created some jealousy among his colleagues. He speculated that those who knew he had spent years studying with Priyankara and Biju privately envied the opportunity he had to engage their shared profession in a traditional and regionally unique manner (*mukhāmukham*), though he hastened to tell me that no one openly admitted to feeling this way. Personally, he felt he approached his job as a physician and professor differently than his colleagues who had been trained exclusively in the college system. Priyankara taught him to see the context in which patienthood formed, developed, and could be managed through a broader lens than his college training did. In the ayurvedic college classroom, first as a student and now as a professor, he felt a narrowing of the medicine that seemed open and impromptu at Mookkamangalam. Knowledge about sickness, the body, and healthcare that he shared and discussed with his students was absolutely vital, fundamental to the effectiveness of Ayurveda, and he was proud to teach it. His delight was also obvious when he talked about the academic progress and professional achievements of his students.

But Unnikrishnan understood that today's ayurvedic college education is scripted and tailored to the exam structure of the CCIM syllabus, and he reckoned this equipped his students with an understanding that equates the patient with the disease she presents, and to treat disease as a thing-in-itself. The patient's intensely personal experience of disease, what Lisa Diedrich calls "the patient's vernacular," is glossed over in this setting.<sup>14</sup> Instead, a less inclusive and undemocratic narrative predominates. It homogenizes patients in predictable categories and sees disease as a somatic verity isolable from the body and the person who bears it, shorn of cultural conditions that generate sickness and impact suffering, such as sex, gender, class, caste, and race. "The patient is individualized, and yet still objectified," Diedrich explains. "That is, she is individualized as a body, not as the subject of her own experience."<sup>15</sup>

The interaction of vaidyas and rogins at Mookkamangalam makes room for the inclusion of the patient's experience and her articulation of it in the evaluation of illness (*rogīparikṣa*) that determines treatment. This demands a level of spontaneity and willingness to create extempore illness narratives anew with each patient that, for Unnikrishnan and his gurukula teachers, are naturally informed by a deep understanding of Vāgbhata's classic. The *Aṣṭāṅgahr̥daya* serves as epistemological scaffolding for an assessment that must be shaped in the end by the information patients and their attendants disclose. A thoroughgoing understanding of disease alone is not sufficient, as Unnikrishnan explained to me.

We read large portions of texts together, not just one or two *śloka*s from *Caraka* or the *Aṣṭāṅgasamgraha* or *Aṣṭāṅgahr̥daya* that you might stumble through as a class in college. Priyankara showed me how to read a text like the *Aṣṭāṅgahr̥daya* in conversation with other texts and in relation to past practices with patients. She taught me by reading with me, and quizzing me about what we read, but most importantly by letting me help daily with patients. I am now a teacher of Ayurveda, teaching a specialized subject, and I cannot express the same kind of information to my students like she did for me. I tell them what they need to know. But showing them how to think with this knowledge, how to respond with this knowledge as a guide for each new patient and each new story that accompanies a disease or problem you can perhaps identify straightaway. . . . That can difficult in a lecture hall. The gurukula was more like an apprenticeship. It is not quite the same in the college or the hospital.<sup>16</sup>

#### WELLBEING IN THOUGHT AND PRACTICE

If the hallmark of the south Indian ayurvedic gurukula is its classical texts-to-treatment continuum, then mukhāmukhaṃ training communicates this field of healing and shapes its practice. The college curriculum repurposed the connection between instruction and healing—updating or “making it modern,” as Rachel Berger put it—by reinterpreting classical *āyurveda* and the classical corpus through the scope of biomedical categories and fields of inquiry. This has the effect of creating a new framework for teaching and practicing Ayurveda, far removed from the type of medicine Bhaskaran studied in his youth. This reminds us that the *āyurveda* of the Sanskrit classics has endured through the centuries, though in multiple interpretations and iterations. Changes during ARM mark a recent adaptation of the classical tradition to new and changing times, demands, and future prospects, and there will be others as long as Ayurveda perdures.

We can therefore speak about many and various Ayurvedas, past and present, as well as future Ayurvedas. With each milieu the framing and application of classical *āyurveda* displays unique conceptions and restatements of the tradition's central tenets and objectives. A decade ago, Gregory Fields reasoned that efficacy in healing traditions throughout history and around the globe has been judged by their ability to articulate two conceptual rubrics: on the one hand, there is a positive rubric of wellbeing that includes themes such as freedom from disease

and helplessness, adequate vitality to accomplish life goals, and feelings of welfare and comfort. On the other hand, there is a practical rubric of healthcare that delineates treatment and preventative modalities for bodies as well as socio-economic issues that implicate things like access to medical care, health education, and the means to pay for medical care.<sup>17</sup> Both rubrics are apparent in the earliest Sanskrit literature that subtends contemporary Ayurveda and the rehearsal of that literature at ayurvedic gurukulas, clinics, and hospitals today. Yet, wellbeing in classical *āyurveda* is an expansive and variously imagined concept. It is aligned with but also more than “freedom from disease,” the literal meaning of a key ayurvedic term, *ārogya* (a *taddhita* or “nominal affix” derivative of *aroga*, “free from disease”), which connotes the experience of health most people enjoy at times in their lives, although never perfectly nor, naturally, forever. Of course physical and mental disease and impairment do not obviate the chance to experience health. But the experience of health, individual as it is, is but one piece of an unrealizable ontological state, so-called wellbeing. Such an ideal sets the parameters for pragmatic inquiry and action in pursuit of that ideal, H. Tristram Engelhardt, Jr. observes of medicines in general, by delimiting modes of diagnosis, prognosis, and therapeutics.<sup>18</sup> In these considerations, wellbeing appears to be a category for physicians to envision, a target that is aspirational rather than achievable. If perfect wellbeing is not possible, at least the conception of it, Gregory Fields supposes, “calls us to question what health could be like ideally.”<sup>19</sup> Ayurveda offers practical methods and resources for people to care for their bodies and minds in pursuit of wellbeing, so that it might be more than an academic, professional aim.

Ayurveda’s therapeutic methods and curative resources are for people who need them, as we saw in chapter 3, people the literature calls *rogins*: the ailing, infirm, diseased people whom we know as patients. The way that a long-established medicine like Ayurveda promotes a culture of treatment among its practitioners to care for patients is an important measure of the medicine’s basic understanding of the human body and the nature of disease, and in many cases also its worldview about the human condition and its commitments to the cultivation of ethical standards like compassion. The reality of the patient—that *there is a patient at all*—grounds Ayurveda’s medical theory and practice, as it does for most medicines. If wellbeing is a medicine’s goal, then its practitioners must contend in some way with the nature of patienthood: the human experience of the evanescence of health over a lifetime and the ongoing awareness of the impossibility of endless health. Indeed, medicine reminds us that every one of us is a patient, at any moment and perhaps at all times. This is an ontological outlook of many established medicines, where pathology defines patienthood, and the existence of diseases as seemingly identifiable entities in bodies lends itself to the view that treating symptoms of disease in different bodies can be treated with similar remedies. This outlook tends to see patients broadly as a collective according to their classes of disease and somatic dysfunction. But patienthood is individual. The experience of changing health over time is personal and inimitable. Depictions of *rogins* in the Sanskrit classics do not include



the patient's vernacular, however. That voice lies outside the ambit of the texts. They are essentially professional workbooks, having been compiled and redacted over centuries so that physicians can attend to manifest symptoms of illness, misfiring organs, and broken bodies. With this understanding, we can read the Sanskrit medical classics as Michel de Certeau perceived "modern medicine." With few exceptions, these classics see, make legible, and make sense of bodies, not persons or lives lived with unfolding matrixes of consequences stemming from the engagements of social actors.<sup>20</sup> De Certeau's remarks on medicine in seventeenth and eighteenth century Europe apply also to the earliest literary cultures of Ayurveda in South Asia. "Thanks to the unfolding of the body before the doctor's eyes, what is seen and what is known of it can be superimposed or exchanged (be translated from one to the other)," he wrote. "The body is a cipher that awaits deciphering." When patients' bodies in ayurvedic literature are "exposed to erudite curiosity through a corpus of texts," as de Certeau observed of European medicine, the singularity and heterogeneity of patienthood fades in the process, and is reconstituted as a given

in the rift between a subject that is supposedly literate, and an object that is supposedly written in an unknown language. The latter always remains to be decoded. These two 'heterologies' (discourses on the other) are built upon a division between the body of knowledge that utters a discourse and the mute body that nourishes it.<sup>21</sup>

Patienthood is completely unexceptional. Because the objectified status of being a patient is so fundamental to human nature, the ayurvedic rogin is a generic marker that, apart from the identifiable diseases and malfunctions that parse out different groupings, expresses something we all share as humans: ongoing physical degeneration and the need for medical intervention at various times in our lives. We are all always patients.

If wellbeing for sick people is sought as a goal in Ayurveda, even if it's ultimately unachievable, the tradition's name brandishes the banner of long life, *āyus*, which would seem to be an unimaginable state without wellbeing. Or, put another way, *āyus* minus wellbeing would be a most unfortunate state of being. Yet, the idea of wellbeing is far from straightforward or uniform across classical ayurvedic literature. It is just as plastic of a concept in Sanskrit as it is in English. It can mean multiple things and, possibly, mean something different for every person. In English wellbeing can refer to a single person or a community. It can speak to states of health, happiness, and prosperity. It can be qualified by physical, psychological, emotional, and moral senses of welfare. It is in the latter two instances especially that interpretive space opens up for the reading and description of Ayurveda as a spiritual or religious medicine that attends to holistic concerns of the human condition, as it is has often been portrayed in the United States since at least the 1970–80s New Age Movement. With such an expanse of potential meanings, can we even begin to understand wellbeing amid the many Ayurvedas of the two millennia since Caraka's collection was codified?

A typical response to this kind of inquiry is to look at the texts, searching for ideas in the Sanskrit classics that might translate as wellbeing. Sanskrit is a synonym-rich language, and when it comes to a symbolic and philosophical concept like wellbeing, there are numerous ways to label it generally (or aspects of it) and to describe it by referencing contexts where it is likely to manifest. Lexicographers and scholars have often taken *svāsthya* and *susthiti*, both of which mean health, contentment, and a sound physical state, to signify wellbeing. Terms like *ārogya* and *nirāmaya* carry the more pointedly “medical” understanding that wellbeing implies freedom from disease and dysfunction. Similarly, *sātmya*, wholesomeness or somatic fitness, grounds the notion of wellbeing on the suitability of a person’s relationships with others and the environment. Occasionally, the sprawling states of happiness and enjoyment captured by the term *saukhya* are also linked to (or at least implied in) the idea of wellbeing. The views of illness, healing, and wellbeing that emerge in Caraka’s collection appear to reflect a theoretically grounded bailiwick more than a specialty per se, as we see in the works of Vāgbhaṭa and Suśruta, which are designed to inform remedial protocols and convey intricate anatomical mapping and manipulation. The *Carakasamhitā* describes the relationship between physical wellbeing and actions of people in the language of self-cultivation (*ātmahita*): “One wishing to make what’s good for oneself should always observe good behavior in line with tradition.”<sup>22</sup>

With a multifarious view of wellbeing in the literature, it is clear that none of these shades of meaning are realizable without an understanding of the context in which it is needed. We might therefore ask what constitutes a treatable person and how physicians tailor treatments to the specific people in whom they have identified disease. Even though we can adduce a litany of terms from the classics that say wellbeing is both this and that, it is achievable here and there, and so on, my observations of how Biju, Priyankara, and Bhaskaran handle the texts that support their healing practices suggest, first, that the usefulness of a text is contingent on the proficiency of the healers who use them and, second, that the notion of wellbeing ultimately rests in the somewhat inexact category of the patient. In the first case, chapters 2, 3, and 4 offered examples of Malayali vaidya-gurus demonstrating that they are skilled healers and rigorous teachers. The connection of wellbeing to the patient is where I turn now, as a way to draw to a close the larger discussion about how education and healing in the south Indian gurukula are yoked by the practice of texts.

#### PILLARS, TEXTS, AND HEALING

At Shantimana and Mookkamangalam, actors and their actions formulate and give real world shape to important ideas about “illness and other dimensions of medical reality,” in the same way that Byron Good observed of doctors and students at biomedical teaching hospitals.<sup>23</sup> Gurukula philology is generative and

creative, which is to say it is health-giving and, even more, it is formative. Biju's clinical and teaching work re-present and extend in the present day interpretive exercises that were fixed in classical texts of this two-thousand-year-old tradition. The practice of texts at Mookkamangalam is an ongoing process, to return to Good's appraisal, involving "interpretive activities through which fundamental dimensions of reality are confronted, experienced, and elaborated. *Healing activities shape the objects of therapy*—whether some aspect of the medicalized body, hungry spirits, or bad fate—and seek to transform those objects through therapeutic practices."<sup>24</sup> When Biju, Priyankara, and Bhaskaran work through the Sanskrit medical classics' articulations about how to use knowledge (*veda*) to promote long life (*āyus*) with their students, the ideas of life and wellbeing—and their opposites, death and illness—are symbolic objects of knowledge. The compilers of the classical sources constructed them, and vaidya-gurus at a place like Mookkamangalam teach them, as objects of life science that "presuppose forms of imagination, perception, and activity."<sup>25</sup> Aspiring physicians acquire knowledge and learn technical healing language that is "ayurvedic," but in the abstract. Daily clinical work with patients, then, exposes gurukula students to unique ways of seeing and treating individuals. Gurukula philology moves ideas about wellbeing into the domain of material practice, where the mastery of texts previously studied dictates the likelihood of an effective diagnosis and treatment leading to wellbeing for the patient.

Scholars generally identify the origin of the knowledge Kerala's vaidya-gurus teach and practice in the oldest text of the great trio, the *Carakasamhitā*. Historical connections exist between the Sanskrit medical classics and earlier literature of the Vedic era, however, which spans a lengthy, if contested, stretch from roughly 1400 BCE to 400 BCE. For example, a text from the late-Vedic period, the *Rgvidhāna*, presents everyday ritual uses for the hymns of the *Rgveda*, and links the use of amulets and recitation of mantras with the eradication of disease and protection of good health.<sup>26</sup> Another late-Vedic text, the *Kauśikasūtra*, is more deeply medical than the *Rgvidhāna*. It contains a section on healing remedies (*bhaiṣajyāni*) that includes instructions for using talismans and charms, botanical herbs, and mantras in the *Atharvaveda* for remedial aims, such as eradicating jaundice, leprosy, diarrhea, headache, urinary retention, fever, and other diseases.<sup>27</sup> This text has another section on rites designed specifically for women that discusses how to ensure the birth of sons, normalize menstruation, safeguard childbirth, and protect the health of young children.<sup>28</sup> The *Kauśikasūtra* devised household uses for the mantras and materia medica of the *Atharvaveda*, which scholars since the nineteenth century have viewed as the oldest available source of healing literature in South Asia.<sup>29</sup> Some remedies in the *Atharvaveda* appear to have informed aspects of curative thinking in classical *āyurveda*. But on the whole, Atharvavedic observations about the causes and nature of wellbeing and specific methods for preventing disease did not endure in the classical tradition. Pragmatism, prognostic reasoning, and clinical know-how distinguish the *bṛhatrayi*, for example, and

the sympathetic-based solutions of the healing tracts in the Vedas mostly do not carry over in Caraka's collection and later texts we classify as ayurvedic.<sup>30</sup>

The enumeration of the four keystones of life science in the Sanskrit medical classics in effect institutionalized a new healing tradition in South Asia. Thus, the *Carakasamhitā* explains that *āyurveda* is based on a trio of people—physician, attendant, and patient—and remedies. Each part of this quartet (*catuṣṭaya*) is “endowed with qualities that should be known as means to alleviate disease,” and collectively they are therefore indispensable to healing.<sup>31</sup>

Looking across the collections of Caraka, Suśruta, and Vāgbhaṭa, we learn a lot about this quartet, these four pillars (*pādas*) as they are often called, which support and ensure the integrity of ideas and practices that have developed into the institution we call Ayurveda. We discover that the physician (*bhīṣaj*) uses knowledge of the structure and inner workings of the body to heal sick and diseased people. The attendant (*upasthātr*) is an assistant to physicians and helper of patients, making sure that prescriptions are understood and followed. The patient (*rogin*) is the embodiment of illness, often appearing as the material incarnation of disease and the physical site for the healing graft of therapies. Of the trio of people, the physician receives the most attention in the literature and the attendant receives the least. Medicinal substances (*dravyāṇi*) are treated at length, although, unlike the physician, who is critical to every healing intervention, the types of medicines in each collection are prioritized according to the specialty of the particular text. The patient is always somewhat elusive, appearing at times as little more than an inert body displaying ailments and symptoms, while at other times emerging as a socially active person whose behavior illustrates the links between health, comportment, society, and environment.<sup>32</sup>

The development of the healer as a professional expert versed in classical life science marks a critical separation of classical medicine in India from earlier healing practices in the Vedic era.<sup>33</sup> With the advent of classical *āyurveda*, the Sanskrit classics discuss and celebrate vaidyas for their education, sensibleness, and applied knowledge (*vidyā*). The *Carakasamhitā* states that people merit the title of vaidya when they possess certain qualities, such as “knowledge, reasoning, discernment, memory, diligence, and accomplishment,” and they do “not turn away from anything that is curable.” What is more, when a healer has

knowledge, intellect, practical observation, discipline, success, and mindfulness—even just one of these is enough to merit using the title vaidya. But the person who possesses all these favorable qualities, beginning with knowledge, gives happiness to living beings and appropriately deserves the title of vaidya.<sup>34</sup>

The compilers of the *Carakasamhitā* explored the factors that someone might wrestle with in choosing to become a vaidya; they probed the decision to cultivate these qualities in oneself and propagate happiness in others. They asked what crafting a life for oneself defined by the general nature of a physician (*vaidyatva*)

might be like.<sup>35</sup> To appreciate such a decision, as we saw in the discussion of quacks and genuine healers in chapter 3, Caraka's collection invokes the drive people have to uphold *dharma*, the highest form of which is to shield from pain all patients like they are one's own sons.<sup>36</sup> After distinguishing the *vaidya* from the pseudo-physician (*vaidyamānin*), who merely pretends to heal, usually for monetary gain, the text's compilers characterize the *bhiṣaj*, a common title for healers in the Vedas, as inferior to the *vaidya*: "Those who get the title of *bhiṣaj* by observing a *vaidya*'s instruments and medicines, books, and strengths are known as charlatans."<sup>37</sup>

Healing activities in ayurvedic literature that constitute the south Indian gurukula curriculum, as Byron Good notes of biomedical schools, shape the objects of treatment. The practice of texts thus brings ideas of wellbeing to bear on the people who present themselves for care. Among the qualities of the patient in the classics, ubiquity and flexibility are common. Although aspects of the patient frequently change from section to section in each collection—occurring sometimes as male, sometimes female; occasionally elderly, occasionally adolescent; at times sturdy and robust, at other times delicate and infirm—descriptions of the patient as a *rogin* mostly tend to be plain "pathological facts," to borrow Michel Foucault's phrase, with an anatomico-clinical gaze that sees disease primarily in the observable body, and extracts or parenthesizes the experience and voice of the patient from typical medical procedures.<sup>38</sup> Correspondingly, in an earlier study of patienthood in Indian medical literature, I showed how some of the most common terms used to designate the patient, such as *rogin*, *ātura*, and *vyādhita*, adjectives meaning "diseased," "sick" and "afflicted" used nominally to indicate a diseased, sick, and/or afflicted person, express social and ethical views about the incidence of disease as well as, possibly, in some instances, the experience of illness.<sup>39</sup> A typical way the compilers of the literature formulated the objects of their study was by transforming the generic *rogin* into the embodiment of a specific condition. A patient suffering from a host of urinary disorders known as *prameha*, which some lexicographers have translated as diabetes, is *pramehin*, and thus a diabetic; a patient troubled with *atisāra*, diarrhea or dysentery, is *atisārin*, a diarrheic or dysenteric; a patient with a *gulma*, abdominal tumor, is *gulmin*, a tumored person; and so on.<sup>40</sup> Patients embody and express diseases in this way. They are identified by their afflictions.

Of Ayurveda's four pillars, the patient is consequently the pillar most intimately linked to poor health and illness. Disease befalls the patient, and in the changing representations of a patient's body pathologies develop, subside, and resurface. The patient is arguably the one absolutely necessary part in the *Carakasamhitā*'s articulation of the tradition's foundational four components, the thing without which ayurvedic knowledge could not formulate and identify diseases and ultimately apply therapies to treat them. Where would human diseases form, exist, develop, and be treated without them? Yet the classical compilers of the literature don't ask this question, in this self-reflexive way, about the crucial target of the tradition. That said, they do suggest some general agentive qualities that make

patients more than just personifications of disease. The *Carakasamhitā* offers a few additional notes about traits in patients that facilitate healing and treatment that shed a little light on this figure. The text states that physicians will have the most success treating patients who have good memories, are compliant, demonstrate fearlessness, and are informative.<sup>41</sup> Informative (*jñāpaka*) patients can express the nature and history of their ailments in detail, enabling the physician to make accurate diagnoses and administer suitable treatments. Compliant (*nirdeśakārin*) patients will observe the physician's diagnosis and adhere to prescribed medicines and healing protocols. The most authoritative and comprehensive commentator on the *Carakasamhitā*, Cakrapāṇidatta (eleventh century), explains that memory (*smṛti*) and fearlessness (*abhīrutva*) are important in patients because, in the former, the ability to recall states of health prior to the experience of disease is useful to calibrate the intensity of treatment and to assess recovery. He says that fearlessness is expedient when patients face the painful conditions that accompany acute disease and physical impairment, not to mention potentially uncomfortable treatments or therapies that might be necessary to overcome sickness.<sup>42</sup>

We do not know how the compilers of the Sanskrit classics arrived at the view that life science is built upon the pillars of physician, attendant, patient, and remedies. Surely their own investigations and observations impacted this conclusion. The development and practical teaching and applications of *āyurveda* in the present day are, correspondingly, also situated in particular contexts and histories that support and justify references to this healing tradition as *South Asian medicine*. Even so, the proposition that a tradition of healing, which does not overtly depend on possession or divine intervention, such as ritual or spiritual healing, rests on an equation of physicians armed with medicines for use on people who need it, because they are sick, may also be viewed as broad and basic to most notions and forms of somatic healing that we find around the world. If we strip away variations in professional titles and therapeutic substances that differ from location to location, historical eras, and research developments, perhaps this combination comprehensively captures the core of life science in general.

But what do we make of the attendant in the ayurvedic quartet, the *upasthātrī*, sometimes translated as “nurse”?<sup>43</sup> Even this pillar could be read less as a uniquely Indian contribution in the conception of medicine than as an important recognition of the complexities of diagnosis and execution of treatment that ensue in most, if not any, healing endeavor. The ayurvedic attendant provides additional healthcare over and above the physician's evaluation, prognosis, and distribution of healing knowledge to patients. In the history of medicine in the west, the occupation of the nurse (derived from Latin *nutrire*, “to nourish”) goes back to ancient Greece, where it associated with therapies internal to families and primarily fell under the purview of women (in ancient Greek, the term we translate as nurse is *aderfī*, “sister”).<sup>44</sup> Even when a patient presents a routine problem, a disease that is common and easily treated, the fact that the attendant is one of the foundational pillars of India's life science, a mainstay of support to both the patient

and the physician, suggests that the compilers of this tradition understood healing according to a broad view. It bespeaks an awareness of the combined physical, psychological, and emotional disturbance that causes patienthood and accompanies the human experience of illness. It also acknowledges the challenges that physicians confront apropos patienthood, when the technical healing knowledge and language of their training and professional experience must confront not abstracted maladies or anonymous afflicted bodies, but actual sick and ailing people, whose experiences of illness preexist clinical visits and whose agitated mental and physical states can muddle their efforts to understand fully and even respond to patienthood. To promote healing, the medical attendant works in the interstices that naturally form between people—physicians and patients—who come together to address a physical or mental problem, though their meeting is marked by two very different sets of perspectives, experiences, aims, and knowledge bases.

If delineations of *āyurveda* in the Sanskrit classics at the level of the four pillars of medicine lend themselves to broad-ranging or cross-cultural comparisons, we also have good reason to temper any drift toward universalizing with context-sensitive research that pushes us in the other direction, toward culturally and historically specific observations. Case studies from the field of gurukula pedagogy, knowledge exchange, and clinical practice in emergency situations in the preceding three chapters would suggest that even if the existence of people who deliberately strive to realize modes of education and healing from the classical period in their daily work today, people who practice texts of the past in the present moment, are common in many places and times, the particular means they use to achieve wellbeing are also bound to be quite different.

It is true that the attendant-qua-nurse has a long and comparable history in India and the west. But the ways in which the ayurvedic attendant in the classical sources can be seen in contemporary practice are also good reminders that inquiring practical, everyday rehearsals of textual knowledge almost always reveal difference. The attendant points to the social nature of illness and wellbeing in India. As I noted in chapters 3 and 4, it is commonplace in Kerala for partial or entire families to accompany patients on doctor visits. My field notes from Mookkaman-galam are filled with case studies of patients with spider bites, snake bites, dermatitis, muscle weakness, impaired vision, pregnancy complications, and numerous other issues. With few exceptions, the patients in these notes were accompanied by one or more people. Though not exclusively or even primarily women, as the ancient Greek *aderfi* was, all of them were implicated in the experience of the patients and invested in their recovery. Many were parents of youngsters, adult children of elderly parents, and spouses and partners. Some were family friends and neighbors. They served supportive roles, as the texts recommend, augmenting the testimony of the sick and adding perspectival depth to the patients' accounts of their illness experiences. Often, it appeared that Biju and Priyankara privileged the statements of the entourage over a patient's own account, and sometimes they had



to because patients were so injured or distressed that they could not communicate their problems on their own. What is more, after the work at the clinic is over, Biju and Priyankara rely on these attendants to supplement their expert care by lending their encouragement to patients to follow their prescriptions.

Context-dependent difference seen in the contemporary practice of classical texts in the gurukula points to distinctiveness at the level of texts and interpretation as well. Even when we observe parallels among the actors and their relationships in ancient Indian and Greek medical sources, for example, it would be an overstatement, as Jean Filliozat warned us in his classic study, to assign one-to-one correspondences at the level of medical theory in each culture.<sup>45</sup> The fundamental ayurvedic model of *tridoṣa*, the body's three "humors," has been one of the most commonly cited examples of Ayurveda's resemblance to the Greek proposition of the four humors, attributed to Hippocrates and developed by Galen—blood, phlegm, black bile, and yellow bile. Apart from the obvious differences in each culture's calculation—and it is worth noting that other less popular and enduring models of humoralism in the west were also put forth that recognized two, three, or five humors—in many ways the ancient theories were similar. The humors were envisioned as semi-fluid substances that explained disease when they were in excess and/or out of place, and health and wellbeing when they were stable and/or appositely located. The qualities of the humors in both traditions were thought to express temperaments and behaviors in people reflective of the kinds of diseases they caused. Although these temperaments and behaviors were understood to be corporeal, they also naturally lent themselves to communication (in nonmedical as well as medical literature) about emotional and psychological states resulting from feelings of physical malaise, agitation, and discomfort.

For all that they might have in common, historical developments in humoral theory in India and Greece (and the west more generally) deviate plenty over time, and differences in medical practice and research in both locations have impacted the ongoing use and acceptance of humoralism in the modern era. Humoral theory persisted in Europe, Asia Minor, Persia, and Arabia long after Galen as a means to explain what happens internally in sick and healthy bodies, pathology and physiology, moods and cognitive-emotional states. It underwent radical revision in the sixteenth century when the Flemish anatomist Andreas Vesalius critiqued followers of Galenic models of the body that were based on the humors. These people, he lamented, failed "to wield the knife themselves," that is, to practice dissection to understand the organization and functioning of the body.<sup>46</sup> Vesalius's commonsense call for a hands-on approach to know and explain the human body, supported by advanced techniques and precise structural depictions, challenged the Galenists' reliance on unverifiable humoral representations to describe how the body works and falls ill.

In India today the theory of the three humors continues to undergird ayurvedic theory and practice. The development of the ayurvedic college drove Ayurveda

somewhat away from the classical anatomy of *āyurveda* in the collection of Suśruta, chief anatomist among the *brhatṭrayī* texts, by positioning the classics within modern biomedical fields of biology, chemistry, and anatomy. The ayurvedic college curriculum did not take up formal courses of study in dissection or reinstitute surgery, although minimally invasive, “surgical-type” practices such as bloodletting via leech therapy (*jalaukāvacaṛaṇīya*), derived from Suśruta’s collection,<sup>47</sup> persist in Ayurveda in India today to treat things like inflammation, anemia, and certain infections.<sup>48</sup> A few architects of the modern curriculum of the ayurvedic college that I discussed in chapter 1 attempted to bring a number of biomedical ideas and designs, from ideas like those expressed in Vesalius’s *On the Fabric of the Human Body* and anatomical representations like those displayed in *Gray’s Anatomy*, within the ambit of Ayurveda as a way to complement the Sanskrit theories of about somatic functioning and structure that still prevail today.

Some people in gurukula communities of India in the twenty-first century pro-pound histories that connect the literature of Ayurveda to exalted moments in time, usually periods before the arrival of Muslims and Unani in South Asia and long before the British and French and biomedicine. Because the typical gurukula students I met between 2003–2017 in central Kerala were also products of the modern ayurvedic college system, they are also heirs to the political oratory and Sanskrit textual interpretation of people like Bhagvat Singhji, organizations like the Mumbai Vaidya Sabhā, and numerous governmental committees before and after 1947. Even for people who see great value in the knowledge of the Sanskrit classics to treat sick people in the present day, as do many of the people I have described in this book, the life science that we call Ayurveda is not reducible to the Sanskrit medical classics. These sources provide the symbolic structures and processes for how to understand wellbeing, disease, and healing. They describe *āyurveda*. But Ayurveda as an institutionalized tradition is also profoundly cultural and historical. When we talk about this healing tradition in terms of its texts only, we miss the crucial point that Ayurveda has been and continues to be conceived and constructed, historicized and embodied by actors from various cultures, who speak different languages to explain the Sanskrit classics and who have taught and practiced these texts. For generations of ayurvedic practitioners in south India, the Sanskrit medical classics have been, and for Biju and Priyankara and the students at Mookkamangalam in the first decades of the present century they still are, everyday and authoritative instruments that support teaching and exploration about ways to bring wellbeing to those who need it. Over the course of the twentieth century, contrastingly, these texts have been dyed with a great deal of symbolic weight and far less practical utility in the ayurvedic college education.

The gurukula has regularly been ignored in histories of education and medicine in India, despite the fact that it has, until fairly recently, had a central place in the history of Ayurveda and Indian medical education. As this institution endures in selected locations of south India today, the activities and people in them point us

to valuable ways for thinking about how medicine is practiced in modern India and in general. The method of instruction and techniques of clinical care at Shantimana and Mookkamangalam—the practice of texts imparted via mukhāmukham instruction—underscores the intertwined nature of education and healing in Ayurveda. Vaidya-gurus trained in this manner, and their students, understand their education and healing to be closely aligned with expressions of pedagogy and treatment expressed in the Sanskrit medical classics, and their views of healing and clinical work today offer an applied (and for the vaidya-gurus, typically unspoken) critique of the ayurvedic college curriculum that took shape in the nineteenth and twentieth centuries. This critique will persist and proliferate as long as Biju accepts and educates students, and these students continue to promote gurukula philology in their professional lives and implement the practice of texts in their professional pursuits, further changing Ayurveda as it advances and adapts to new eras and circumstances in south India and elsewhere.



## NOTES

### INTRODUCTION: GURUKULAS AND TRADITION-MAKING IN MODERN AYURVEDA

1. Field notes, December 2011, Thrissur District.
2. All personal names and names of the gurukulas where fieldwork for this book took place have been pseudonymized. Throughout the book I use the words *āyurveda*, Ayurveda, and ayurvedic to make distinctions about the South Asian healing tradition that was systematized in the early centuries of the Common Era in the Sanskrit medical classics—*Carakasamhitā*, *Suśrutasaṃhitā*, and *Aṣṭāṅgahṛdaya*—and the way that tradition developed and is discussed in the modern era. Thus, when I use the term *āyurveda* I am referring to a Sanskrit compound noun that means “life science” or, more clumsily but accurately, “knowledge (*veda*) for long life (*āyus*).” The term is therefore italicized and written with an initial lower-case long ‘ā.’ When I use the term Ayurveda I am referring to a proper noun that is part of the English lexicon: namely, the name of the Indian medicine that is based on and elaborates *āyurveda* and is established in the Sanskrit medical classics, medieval sources, and some modern vernacular literatures. It is therefore written with an initial upper-case ‘A’ with no macron, and it is not italicized. I use the term ayurvedic as an adjectival form of *āyurveda*. When it qualifies a noun, it implies that the noun in some way, even if remotely, relates to classical Indian life science (hence, “ayurvedic college,” “ayurvedic pharmacy,” “ayurvedic physician,” and so on). This is not a proper Sanskrit word, but a neologism, and so it is neither capitalized nor italicized, and a macron is not placed over the initial ‘a.’ Note that ayurvedic is more expansive than the Sanskrit word *āyurvedika*, which is an adjective meaning “acquainted or familiar with *āyurveda*” and sometimes functions as a synonym for a physician of *āyurveda*.
3. Most transliterations in this book are from Sanskrit. But some, like *nāṭṭuvaidyaṃ*, are transliterations from Malayalam, and this is indicated by the abbreviation “Mal.”

4. Field notes, December 2011, Thrissur District.
5. Looking across Indian languages and history, a good deal of nuance accompanies the translation of *vaidya* as “physician.” Patrick Olivelle’s study (2017) of the term shows that while the standard designation for a physician of Ayurveda is *vaidya*, the terms *bhīṣaj* and *cikitsaka* are also used in the Sanskrit classics to denote kinds of healers. He differentiates the terms like this: *bhīṣaj* = physician; *cikitsaka* = medic; *vaidya* = doctor. In Kerala, the Malayalam term *vaidyaṃ* generally means “medicine” but can also designate classical life science, *āyurveda*; the term *vaidyan* indicates a practitioner of this tradition. The Malayalam terms are derivatives of Sanskrit *vaidya*, whose basic meaning is “learned” or “versed in science” and frequently denotes “an expert in healing” (hence a “physician,” which is what the modern Hindi terms *vaidya* and *cikitsaka* mean). For the sake of continuity throughout this book, I use *vaidya* to refer to a practitioner of Ayurveda. In modern parlance, when speaking English it’s common for ayurvedic practitioners in India not to refer to themselves as *vaidyas*, but instead to use the words physicians or doctors. A practitioner’s choice to self-designate as either *vaidya* or physician (or doctor) is usually context-dependent and, in a sense, may be read as a modern instantiation of the effects of the Ayurvedic Revitalization Movement that I discuss in chapter 1.
6. Parpola 2019.
7. Amila Joseph de Saram (2003) provides a concise historical treatment of the gurukula in Buddhist communities.
8. Scharfe 2002, 120n33.
9. Copeman and Ikegame 2012, 4.
10. Nanda 2009, 92–99.
11. Nanda 2009, 92.
12. Copeman and Ikegame 2012, 2–3 (emphasis in original).
13. These markers of the modern Indian guru are taken from the chapter titles of Copeman and Ikegame’s edited volume *The Guru in South Asia: New Interdisciplinary Perspectives* (2012).
14. Field notes, December 2011, Thrissur District.
15. Cerulli 2012.
16. Field notes, September 2003, Palakkad District.
17. Field notes, August 2008, Coimbatore District.
18. Field notes, April 2017, Thrissur District.
19. Pollock 2015, 114 (emphasis in original).
20. Narayan 2007, 138.
21. Narayan 2007, 138, citing Barrington.
22. Speaking broadly across the discipline in different regional and historical contexts, Sheldon Pollock recently called edition and interpretation “philology’s two core components” (2018, 4).
23. Witzel 2013, 21. Michel Foucault’s discontent about the lack of recognition philology historically received as a mode of cultural analysis compared to other humanistic and scientific forms of analysis is worth rehearsing here, for the discipline’s socio-cultural-analytic utility today, over fifty years after his remarks, remains profound and yet undervalued: “A great deal of attention is willingly paid to the beginnings of political economy, to Ricardo’s analysis of ground rent and the cost of production. . . . The new forms taken by the sciences of nature have not been neglected either. . . . On the other hand . . . the whole body of

philological work accomplished by Grimm, Schlegel, Rask, and Bopp has remained on the fringes of our historical awareness, as though it had merely provided the basis for a somewhat lateral and esoteric discipline—as though, in fact, it was not the whole mode and being of our own language that had been modified through it. . . . The birth of philology has remained much more hidden from Western consciousness than that of biology and that of economics—even though it was part of the same archaeological upheaval; and even though its consequences have extended much further in our culture, at least in the subterranean strata that run through it and support it” (2002 [1970], 306–8).

24. Turner 2014, 128.
25. Turner 2014, 99.
26. Saussure 1959, 1.
27. See, for example, Bloomfield 1933, 512, and Meillet 1925, 11.
28. Benveniste 1964, 95. Translation from the French: “. . . certaines personnes ayant certaines origines, c’est ce côté presque ethnographique, qui conserve pour moi un intérêt.”
29. Pollock 2015, 118. I explain the details of these three areas in Caraka’s collection and how they have been practiced in the contemporary south Indian ayurvedic gurukula in chapter 2.
30. Pollock 2015, 115.
31. To preserve the anonymity of Bhaskaran and the scholars mentioned in this book who have edited and translated his commentarial output on key medical works in Kerala, I cannot cite their published works here.
32. Pollock explains the difference between the longstanding philological commentary as a secondary form of thought, common in first millennium CE India, and the rise of the commentary as a primary form of thought in the late-first millennium and second millennium thusly: “[A] transformation in Sanskrit culture occurred around the beginning of the second millennium that was epistemic, not simply technological. The rise of philological commentaries represented a new, or newly standardized, form of knowledge, and not simply a new desire to commit already existing oral knowledge to writing” (2015, 116). Gurukula philology combines both primary and secondary forms of philological commentary, while also complicating the oral-written conventions that Pollock works with in his many studies of Sanskrit philology.
33. Jakobson’s former student Calvert Watkins writes in the last line of his contribution to a special collection on the nature of philology: “Let me conclude with the definition of philology that my teacher Roman Jakobson gave (who got it from his teacher, who got it from his): ‘Philology is the art of reading slowly’” (1990, 25). Pollock suggests that Jakobson or one of his teachers likely adapted this definition from Nietzsche, who described himself as “a teacher of slow reading” (2009, 933).
34. Pollock 2009, 934.
35. Pollock 2009, 958.
36. Mookerji 1989 [1947], xxxi.
37. Mookerji 1989 [1947], 507.
38. Raina 2002, 173.
39. Gurus and *ācāryas* are not the only “teachers” common in Indian literature and history. Another title that appears and has not been mentioned so far, a kind of scholar or expert who in certain situations may also function as a teacher, is the *paṇḍita*. This Sanskrit



title is usually applied to someone who is learned in a particular subject and is a member of the Brahmin class, who has knowledge of Sanskrit, the Vedas, and possibly some proficiency in certain areas of Indian philosophy or religion. The way this term has evolved in English usage, as “pundit” (sometimes “pandit”), as we hear in the common American phrase “political pundit,” describes someone who is versed in a subject about which she or he can (and likes to) pontificate publicly, but perhaps is not qualified to extrapolate about in depth. Calling someone a pundit in colloquial American English nowadays thus amounts to calling that person a dilettante.

40. Scharfe 2002, 120n33.
41. Bode and Shankar (2018) conducted numerous interviews with recent ayurvedic college graduates in south India concerning the desire and abilities of vaidyas today to engage the literary bases of Ayurveda. Their interlocutors present strong views about the lasting effects of the integration of biomedical and ayurvedic subjects in the CCIM curriculum, which many see as an ongoing distancing of Ayurveda in the twenty-first century further and further from what they imagine it was in previous generations and as it appears in classical Sanskrit literature.
42. Mukharji 2007, 80.
43. Field notes, December 2011, Thrissur District.
44. Ernst and Lo 2005, 3. A little over decade later, Projit Mukharji made a similar argument, writing that medical historians would do well to conceptualize “learned traditions as always already internally pluralized” (2016, 24).
45. Hobsbawm and Ranger 2012 [1983], 1.
46. Hobsbawm and Ranger 2012 [1983], 8.
47. Burke 1986, 317.
48. On this point, see Richard Handler’s review of *The Invention of Tradition* (1984, 1026).
49. Appiah 1997.
50. Pollock, Bhabha, Breckenridge, and Chakrabarty 2002, 12.
51. Diouf 2002, 131.

#### 1. SITUATING SANSKRIT (TEXTS) IN AYURVEDIC EDUCATION

1. Leslie 1963, 1968, 1973, 1974, 1975, 1976, 1992.
2. Brass 1972, 344.
3. Nanda 2004, 88.
4. Fox 1992, 152.
5. Nanda 2004, 90.
6. Prakash 2007, 271.
7. Arnold 2020, 573.
8. Arnold 2020, 571.
9. Hardiman 2009, 264.
10. Langford 2002, 1–24.
11. Leslie 1963, 72.
12. Bode and Shankar 2018.
13. Bode and Shankar 2018, 164.
14. Nurullah and Naik 1943.

15. Basu 1982, 91.
16. Mukharji 2009, 76.
17. Mazumder 1916; Mookerji 1989 [1947]; Scharfe 2002.
18. Nurullah and Naik 1943, 739.
19. Nurullah and Naik 1943, 739–40.
20. www.ravdelhi.nic.in
21. Basu 1982, 92; 1974.
22. Leslie 1963, 1968; Langford 2002.
23. See, for example, Hardiman 2009, 274.
24. Take, for instance, Kavita Sivaramakrishnan's account of the ayurvedic gurukula in colonial Punjab, which she says was based not on a canon of texts or led by gurus who gain legitimacy and/or notoriety on their ability to handle and comment on the classical literature, but rather on the quality of their clientele (2006, 71). Punjabi history and culture are of course very different in innumerable ways than Kerala history and Malayali culture. Variation is expected. Even still, in direct contrast to her description my presentation of the south Indian history of the ayurvedic gurukula and my observations of contemporary gurukulas in Kerala suggest that vaidya-gurus amass clientele on the basis of their educational pedigrees and acquire protégés precisely for their abilities to comment on and extend the Sanskrit classics for clinical use. Indeed, between 2003–17, I never heard Bhaskaran, Priyankara, or Biju (or their students) speak about the eminence of their patients as a mark of their healing acumen.
25. Langford 2002, 97–116.
26. Mumbai Vaidya Sabhā 1990, 9; this English translation is from Langford 2002, 103.
27. Leslie 1975, 410–12.
28. Raghava Varier 2002, 476.
29. Langford 2002, 104.
30. Langford 2002, 106.
31. Leslie 1992, 179.
32. Udupa *et al.* (1959, 2) citing the earlier work of the Bhore Committee.
33. Udupa *et al.* (1959, 2, emphasis in original) citing the earlier work of the Chopra Committee.
34. Brass 1972, 371.
35. Udupa *et al.* 1959, 2.
36. Udupa *et al.* 1959, 145.
37. Crawford 1914, 434.
38. Panikkar 1995, 150–51; Alavi 2008, 95; Bala 2104, 12–13.
39. Sharp 1965 [1920], 107–17.
40. Basu 1974, 72.
41. Berger 2013, 43–44.
42. Alavi 2008, 95–98.
43. Crawford 1914, 101–9. Former NMI superintendent John Tytler was a well-known exception to this trend. He attempted to persuade the Court of Directors of the EIC that the indigenous physicians at his institution were highly competent healers and, following NMI's closure, that they should be hired at Calcutta Medical College. In the end, the EIC Court of Directors dismissed Tytler's request and rejected his own application for the superintendent position of Calcutta's new medical school.

44. Kumar 1997.
45. Arnold 1993, 59.
46. The Mont-Ford Reforms of 1919 derived from the *Montagu-Chelmsford Report* in 1918 and led to the Government of India Act in 1919, which was designed to expand the participation of Indians in the GoI.
47. Attewell 2014, 372–73; Hardiman 2009.
48. Crozier 1970, 283.
49. Hardiman 2009, 278.
50. Langford 2002, 1–24.
51. Chandra 2011, 74.
52. Field notes, December 2011, Thrissur District.
53. Field notes, December 2011, Thrissur District.
54. Field notes, December 2011, Thrissur District.
55. Bode and Shankar 2018, 165.
56. Ganesan 2010, 121.
57. Leslie 1968, 570.
58. Crozier 1970, 283.
59. Mukharji 2019, 955.
60. Shah 2017, 452. References to Sen's 1916 keynote address at BHU are taken from N.C. Shah's reprint of the speech in the *Indian Journal of History of Science* (2017).
61. Shah 2017, 459.
62. Shah 2017, 459.
63. Langford 2002, 86.
64. Shah 2017, 460.
65. Shah 2017, 447.
66. Mukharji 2016, 181; see also 39.
67. Cited in Dominik Wujastyk 2008, 68.
68. Dominik Wujastyk 2008, 68.
69. Sharma 1929, 174.
70. Sharma 1929, 206.
71. Shah 2017, 453.
72. Mukharji (2019) shows how Sen's integrationist position also made a technological argument encouraging the implementation of allopathic tools in ayurvedic practice, including the stethoscope and speculum.
73. Shah 2017, 453.
74. Mookerji 1989 [1947], 318–20.
75. Leslie 1963, 72; 1968, 569.
76. Central Council of Indian Medicine (CCIM), 2011–12, 17–31.
77. Thatte and Tiwari 1980.
78. Sinhjee 1896, 22. NB: my spelling of Bhagvat Singhji's name in the notes and bibliography follows the transliteration of his name in the publication of *Aryan Medical Science*.
79. Sinhjee 1896, 22–23.
80. Sinhjee 1896, 187–188.
81. Sinhjee 1896, 198. Gananath Sen took a less pessimistic view of the state of Ayurveda under the Mughals in the introduction to his Sanskrit anatomical textbook,

*Pratyakṣasārīram*. For example, following Mahmud Ghaznavi's plunderous incursions in Afghanistan, Pakistan, and northwestern India, Sen suggested that Ayurveda suffered mightily (following a common but likely ahistorical view of Mahmud as the founding father of the region's Islamic state, "legitimizing the Sultans in India"—see, e.g., Thapar 2000, 32) but then experienced a resurgence under the Mughal emperors Akbar, Jahangir, and Shah Jahan (Sen 1913, 7–8).

82. Business deals struck between the EIC and Mughal rulers allowed the Company to build shipping ports and warehouses in Indian coastal cities, initially in Surat in 1612, followed by others in Madras, Bombay, and Calcutta during the seventeenth century. These distribution centers brought the EIC tremendous economic influence, which they expanded across India's mainland, establishing an expansive Company Rule on the subcontinent in 1757. The Company's growth included sizable healthcare enterprises via the founding of bio-medical centers to attend to its soldiers, administrators, and workers. The extent to which the Mughals opened India's maritime doors to the British is revealed in a famous letter from the Mughal ruler Jahangir (r. 1605–27) to James I of England in 1612: "Upon which assurance of your royal love I have given my general command to all the kingdoms and ports of my dominions to receive all the merchants of the English nation as the subjects of my friend; that in what place soever they choose to live, they may have free liberty without any restraint; and at what port soever they shall arrive, that neither Portugal nor any other shall dare to molest their quiet; and in what city soever they shall have residence, I have commanded all my governors and captains to give them freedom answerable to their own desires; to sell, buy, and to transport into their country at their pleasure" (Robinson 1906, 334).

83. Sinhjee 1896, 204–205, 195–196.

84. Sinhjee 1896, 205.

85. Shah 2017, 459.

86. Arnold 2000, 179.

87. There is some disagreement about the founding year of the Āyurveda Pāṭhaśāla of Travancore. In a working paper for the Centre for Development Studies in Thiruvananthapuram, M.S. Harilal cites 1886 as the school's founding year in Thiruvananthapuram (2008, 16). The website of the Government Ayurvedic College of Trivandrum (<https://www.govtayurvedacollegietvm.nic.in>) and the blog of former secretary of India's Ministry of Health, Shailaja Chandra (<https://over2shailaja.wordpress.com/2016/03/10/indigenous-medicine-in-india>, March 10, 2016), both recognize 1889 as the founding year.

88. Mohanlal 2014, 12–13.

89. Mohanlal 2014, 9–10.

90. Vāriyar 2002 [1980], 504.

91. Vāriyar 2002 [1980], 505; Chattopadhyay 2002, 1500–1501.

92. A history of Kerala's early twentieth century ayurvedic *samājams* is provided at [www.samajam.org](http://www.samajam.org).

93. The Mumbai Vaidya Sabhā's quasiquicentennial anniversary volume, *Śatakottara Rajata Jayantī Samāroha Samitī*, lists the following eight physicians as taking part in the society's inauguration: Dr. Annāsāheb Moreśvar Kuṇṭe, MD; Dr. Bhālacandra Kṛṣṇa Bhāṭavaḍekar; Vaidyarāja Śrī Śaṅkaradāji Śāstrī Pade; Vaidyarāja Jaṭāśaṅkar Viṭṭhalji; Dr. Kher; Vaidyarāja Vāsudeva Śāstrī Enāpure; Vaidyarāja Kānaji Kevalarām; Vaidyarāja Mūlaśaṅkar Puruṣottama (Mumbai Vaidya Sabhā 2015, 12–14).

94. Krishnankutty 2001, ix–x.
95. Attewell 2014, 375.
96. Murthy 1968, 101, 136; Chattopadhyay 2002, 13. Murthy says that Anantacharyaru was given the Rajyotsava Prashasti Award in 1968. The State of Karnataka website puts his award a year earlier in 1967: <https://www.karnataka.gov.in/page/Awards/State%20Awards/Rajyotsava+Awards/en>
97. Chattopadhyay 2002, 482; Attewell 2014, 377–78.
98. Murthy 1968, 90–91.
99. Attewell 2014, 378.
100. Attewell 2014, 378–79; Murthy 1968, 91.
101. Sharma 2012, xi.
102. Langford 2002, 103.
103. Panikkar 1995, 149.
104. Panikkar 1995, 174–75.
105. Kumar 1997, 186.
106. Varier 1916, 108–11.
107. Usman *et al.* 1923, 5–10.
108. In 2013, BBC World: India Business Report aired a documentary, *Business Bizarre*, featuring the Ārya Vaidya Śāla, which delves into some of the history discussed here.
109. Field notes, January 2013, Thrissur District.
110. Field notes, January 2013, Thrissur District. Out of concern for their friends and colleagues, Biju and the students who told me this story requested that I do not publish the name of the institution where this occurred. They did say that recounting the story here is okay, since the fact that this happened at all will not come as a surprise to most people working in Ayurveda in south India today and, at the time it happened, as Biju told me, it was “big news” throughout the southern Indian states.
111. Berger 2013, 60–61.
112. Sen 1913, 16. That said, Sen takes great pains to explain that he arrived at an anatomical nomenclature in *Pratyakṣaśārīram* that is equally faithful to English, Latin, and Sanskrit, and thus not an outright translation or transliteration of any of these works. Yet, he is also quite open about his “indebtedness to the Western Medical Science for the materials which I have in this work culled from its vast literature on Anatomy” (1913, 13, catalogued by the transliterated title, *Pratyaksha-Shārīram*).
113. Chattopadhyay 2002, 1248.
114. Berger 2013, 62.
115. Sawhney 2009, ix.
116. When most of the fieldwork for this book occurred, Manmohan Singh was India’s Prime Minister (2004–2014) and the Congress Party, led by Sonia Gandhi (1999–2014) and then Rahul Gandhi (2014–present), successfully passed social reform bills with the support of the center-left United Progressive Alliance. This project emerged on the heels of the 2002 Godhra Train Burning in Gujarat, when fifty-seven Hindus were killed on the Sabarmati Express train, which, as Christophe Jaffrelot showed (2002; 2003), prompted the BJP-led Gujarat government of Chief Minister Narendra Modi (now Prime Minister) and the Rashtriya Swayamsevak Sangh (RSS) to massacre thousands Muslims across the state.
117. Sawhney 2009, 15.
118. Varma 2015, 142.

119. Diouf 2002, 127.
120. Sawhney 2009, 123–24.
121. Diouf 2002, 114, 132.
122. Pordié 2008, 9.

## 2. PRACTICING TEXTS

1. In Kerala Ayurveda, the term *viṣavaidyam* denotes pharmaco-based poison treatment, while *viṣavaidyān* refers to a poison healer. Details of Bhaskaran's education are drawn from the anonymized work of Yamashita and Manohar (2008a, 45–46).

2. Girija 2016, 52.
3. Girija 2016, 51.
4. Field notes, April 2005, Thrissur District.
5. Field notes, April 2005, Thrissur District.
6. Leela 2008, 128.
7. Field notes, April 2005, Thrissur District.
8. Pollock 2009, 934; 2016.
9. Cox 2016, 5 (emphasis in original).
10. Cox 2016, 8.
11. Central Council of Indian Medicine (CCIM) 2015–2016, 4.
12. See *Carakasamhitā*, Siddhasthāna 12.41–45; *Suśrutasaṃhitā* Uttarasthāna 65; and *Aṣṭāṅgahr̥daya* Uttarasthāna 50. There is considerable overlap between the *tantrayuktis* in these medical works and in the oldest Sanskrit tradition that presents them, Kauṭilya's *Arthaśāstra*, where thirty-two rhetorical techniques of interpretation are enumerated. An author from Kerala, Nilameghabhiṣajā, composed an authoritative work in Sanskrit on the *tantrayukti* doctrine in Ayurveda, the *Tantrayuktivicāra* (ca. ninth century), which names thirty-six *tantrayuktis*, basically following the *Carakasamhitā*. Apart from expositions of the *tantrayuktis* in Sanskrit literature, which also occur in the Purāṇas, they are also found in Tamil and Pali texts.
13. Cox 2016, 7n8.
14. Cox 2016, 3.
15. “Or l'écriture [prémoderne] ne produit pas de variants, elle est variance” (Cerquiglini 1989, 111).
16. Richardson 1994, 9.
17. In recent years, Bhaskaran's lessons have been collected and edited by a couple of his former students, though very few of them have appeared in print. Biju has produced scholarship on Ayurveda. But his gurukula lessons on the Sanskrit classics have not yet been put to writing in any formal way for publication.
18. Cox 2016, 5 (emphasis in original).
19. See M.P. Sridharan's preface to N.E. Muthuswami's edition of Nilameghabhiṣajā's *Tantrayuktivicāra* (1976).
20. Tolkien 1923, 36–37 (see also Momma 2013, 187). Pollock might have been riffing on Tolkien's sentiment when he asserted that philology “is and always has been a global knowledge practice, as global as textualized language itself” (Pollock 2009, 934).
21. Cox 2016, 11.

22. Lincoln 1996, 227.

23. Daston and Most 2015, 368.

24. Namboodiri 2010, 140–44; Leela 2008, 122–23; Vāriyar 2002, 488. The eight parts are: *kāyacikitsā* (internal medicine); *kaumārabhrtya* or *bālacikitsā* (pediatrics and OBGYN); *bhūtaavidyā* or *grahacikitsā* (treatment of mental diseases caused by demons and malevolent spirits); *śālākya* or *ūrdhvaṅga* (treatment of diseases of the head and neck regions); *śalya* (surgery); *agadatantra*, *viṣacikitsā* or *daṁṣṭrā* (detoxification and poison treatment); *rasāyana* or *jarācikitsā* (rejuvenation therapy); and *vājīkaraṇa* or *vṛṣacikitsā* (potency therapy).

25. Yamashita and Manohar 2008b, 143; Menon 2019, 191.

26. Vāriyar 2002, 491. Vāriyar furthermore attributes two commentaries to Pulamanthol Shankaran Mooss: the *Kairālī* on the *Aṣṭāṅgahrdaya* and the *Lalita Pāṭhyam* on the *Aṣṭāṅgasamgraha*. Indudharan Menon offers a different take. He agrees that these commentaries come from the Pulamanthol family, but not from the same person and that both commentaries are on *Aṣṭāṅgahrdaya*: “The family has also produced some outstanding scholars and authors of works on Ayurveda and commentaries on the *Ashtangahridayam*. Pulamanthol Shankaran Mooss, an Ashtavaidyān from the latter part of the 18th century, wrote a commentary called *Lalita* on the *Ashtangahridayam*. Another Ashtavaidyān of the Pulamanthol family wrote *Kairālī*, a commentary on a large part of the *Uttarasthanam*, the last section of the *Ashtangahridayam*” (2019, 201).

27. Raghava Varier 2002, 15–17.

28. Manipravalam is a macaronic south Indian language, mostly written in the Grantha script and combining Sanskrit lexicography and Tamil morphosyntax. The word *maṇipravāḷam* is a dual-language compound, literally meaning “pearls and coral,” from Tamil *maṇi*, meaning “pearl,” and Sanskrit *pravāla*, “coral.” Rich Freeman has shown that the fourteenth century Manipravalam *Lilātilakam* reverses the convention “where the more valued pearls were traditionally understood to be the Sanskrit and the coral to be the elements of some vernacular speech or other literary language interspersed with it,” in this case Tamil (1998, 58). The *Lilātilakam*’s author further re-signified the Sanskrit-vernacular relationship by claiming that *maṇi* here—general word for “gem” or “jewel”—in fact doesn’t refer to white pearls but rather to red rubies. The meaning then becomes “rubies and coral,” which Freeman reads as the *Lilātilakam*’s aesthetic metaphor of a linguistic necklace consisting of a “harmonious blend of the same red hues” instead of “red and white variegation” (1998, 58). Today, Malayalis often refer to Manipravalam as “Old Malayalam,” and some scholars have suggested that the language was an admixture of Sanskrit and Malayalam (or Keralabhasha) rather than Tamil (e.g., Menon 1990, 9). Freeman has explored two streams of premodern literary cultures in Kerala—Manipravalam and Pattu (*pāṭṭu*)—the latter of which is a mix of Sanskrit and Keralabhasha. In addition to explaining the differences between the two streams, he notes that for some Malayalis Pattu literature has been an important linguistic marker of Keralan identity apart from the larger Tamil cultural sphere that’s commonly seen as Kerala’s literary parent (2003, 448–50).

29. The *Jyōtsnikā* is not the oldest Indian work on poison treatment and the vitiation of snake venom. Several Sanskrit texts authored in Kerala and elsewhere are far older, including the early-medieval *Gāruḍa Tantras* that influenced much of the later *viṣacikitsā* literature (see Slouber 2016).



30. *Jyōtsnikā*, Vaidyapāraṃparyādhikārah 18.5–11.
31. Basu 1985, 140; Scharfe 2002, 128–29.
32. The *Adam Reports* are collected and edited in Di Bona 1983, 54–56; see also Basu 1985.
33. Basu 1982, 31.
34. Scharfe 2002, 77–78.
35. Brahmins have not been the only purveyors of ayurvedic care and education in Kerala's history. For example, the Ezhavas, an historically low caste community, are well-known healers throughout the state (Jeffrey 1994 [1976], 128, 188, 191), though little research on “Ezhava medicine” has been done. Of particular note for historians is the late-seventeenth century Ezhava, Itty Achudan, who's credited (though not without some contestation) with having contributed to the major botanical project of the Dutch Malabar governor, Hendrik van Rheede, the *Hortus Malabaricus* (written in Latin over thirty years and published in twelve volumes from 1678–1693).
36. In addition to indicating the house of Namboodiri Brahmins, a surname is typically placed before *mana* to show the ancestry through which the residence and associated property have been handed down. I have not provided these names of the families at Shantimana and Mookkamangalam, since it would be easy to identify them and their students. Moreover, today *mana* is also the standard designation appearing on postal addresses, and thus revealing the family names of these *manas* would make it rather easy to locate them with any online mapping system.
37. Menon 1979, 280–321.
38. Dominik Wujastyk 2003, 193.
39. Mookerji 1989 [1947], 347–48.
40. Yamashita and Manohar 2008a, 49; see also 51.
41. Raina 2002, 174.
42. Field notes, March 2017, Thrissur District.
43. *Carakasamhitā*, Sūtrasthāna, 30.16–19. (NB: Atridevajī Gupta's edition of the *Carakasamhitā* provides an alternate breakdown of the verses translated here, with all the information contained in two verses, 30.16–17): *tatrāyurvedavidastantrasthānādhyā yapraśnānām pṛthaktvena vākyaśo vākyaṛthaśo ṛthāvayavaśaśca pravaktāro mantavyāḥ / atrāha katham tantrādini vākyaśo vākyaṛthaśo ṛthāvayavaścoktāni bhavantiti //16// atrocitate tantramārṣam kārtsnyena yathāmnāyamucyamānam vākyaśo bhavatyuktam //17// buddhyā samyaganupraviśyārthattvaṃ vāgbhirvyāsasamāsapatijñāhetūdāharaṇopanaya nigamanayuktābhis trividhaśiṣyabuddhigamyābhirucyamānām vākyaṛthaśo bhavatyuktam //18// tantraniyatānāmarthadurgāṇām punar vibhāvanair uktam arthāvayavaśo bhavatyuktam //19//*
44. Field notes, February 2005, Thrissur District.
45. Field notes, August 2003, Coimbatore District.
46. Gardner and Staal 1976. The opening few minutes of the film especially capture this practice. See also Mookerji 1989 [1947], 197–98.
47. Field notes, September 2003, Palakkad District.
48. Field notes, March 2005, Kottayam District. The Malayalam name *theakkan kāsi* literally means “southern Kashi.”
49. Barthes 1986, 57–68.

## 3. KNOWLEDGE THAT HEALS, FREELY

1. Field notes, December 2014, Thrissur District.
2. Sheldon 1902; Sweet 1900.
3. Mauss 1923–24. All references to the abbreviated English title *The Gift* refer to W.D. Halls's 1990 translation.
4. Bourdieu 1998, 115.
5. Mauss 1990, 47–64.
6. Michaels 1997, 244.
7. Mauss 1990, 146–47.
8. Benteler 2014, 273.
9. Cerulli 2013 [2010], 275.
10. Leela 2008, 126.
11. Menon 2019, 198.
12. Leela 2008, 126.
13. Field notes, December 2014, Thrissur District.
14. Copeman 2011, 1059.
15. Marriott 1976, 111.
16. Agarwal 2010, 100.
17. Barrett 2008.
18. Eck 2013, 361.
19. I set aside here the complications that insurance companies bring to the scenario, although they, essentially, establish yet another set of relationships that further contribute to the overall gift economy that Mauss imagined (i.e., between insurance company and doctor and insurance company and patient).
20. Agarwal 2010, 146–47.
21. Acharya 1996, 104.
22. See Bhattacharya's edition of the *Dānasāgara of Ballalāsena* (1953–56). Heim (2007) offers an excellent overview of the major compendia on *dāna* in Hinduism, Buddhism, and Jainism.
23. Agarwal 2010, 101.
24. Field notes, September 2003, Thrissur District.
25. Field notes, December 2014, Thrissur District.
26. Among the most exhaustive secondary sources on *dāna*, many of which I engage in this book, are Trautmann 1995 [1981]; Parry 1986, 1994; Raheja 1988; Michaels 1997; Laidlaw 2000; Heim 2004, 2007; Ohnuma 2005; Copeman 2011; Eck 2013.
27. Trautmann 1995 [1981], 279.
28. Ohnuma 2005, 106.
29. See Heim 2004, 144–47, concerning the “ethics of esteem”; 74, regarding the interpersonal moral values encoded in *dāna*.
30. Heim 2007, 198.
31. Eck 2013, 365–68.
32. Eck 2013, 368.
33. Copeman 2011, 1064.
34. Dagmar Wujastyk 2012, 58.

35. Cerulli 2012, especially 147–60.
36. Eck 2013, 369.
37. Eck 2013, 370.
38. Harvey 2000, 61.
39. Dagmar Wujastyk 2012, 51.
40. Dominik Wujastyk 1993, 762.
41. For a thoroughgoing account of the Sanskrit medical classics and their commentarial traditions, see my forthcoming essay in *The Oxford Handbook of Hindu Literature*, “Early Indian Medical Literature.”
42. Dagmar Wujastyk 2012, 121.
43. *Carakasamhitā*, Sūtrasthāna 30.29.
44. Zysk 1991, 45.
45. Dagmar Wujastyk 2012, 119. She also cites examples from nonmedical texts like Kauṭilya’s *Arthaśāstra* and a Tamil inscription in the Viṣṇu temple of Venkateśa-Perumāl at Tirumukkūdal as evidence that payment to physicians in the form of land grants and royal patronage were additional ways for ayurvedic physicians to benefit from their work.
46. *Carakasamhitā*, Cikitsāsthāna 1.4.56–59: *bhiṣag apy āturān sarvān svasutān iva yatnavān / ābādhebhyo hi samrakṣedicchan dharmamanuttamam //56// dharmārthaṃ cārthakāmārthaṃ āyurveda maharṣibhiḥ / prakāśito dharmaparair icchadbhiḥ sthānam akṣaram //57// nārthārthaṃ nāpi kāmārthaṃ atha bhūtaḍayāṃ prati / vartate yaś cikitsāyāṃ sa sarvaṃ ativartate //58// kurvate ye tu vṛttyārthaṃ cikitsāpanyavikrayam / te hitvā kāñcanaṃ rāśiṃ pāṃśurāśimupāsate //59//*
47. The fourth aim on this list, *mokṣa*, “release” from the cycle of rebirth and redeath (*samsāra*), is rarely discussed in classical ayurvedic literature, whereas the first three aims (the *trivarga*, “three things” or “three conditions”) are discussed at length (see Cerulli 2012, 30, 136–40, 153, 161–65).
48. G. Jan Meulenbeld argued that in India many scholars have denied there is a noteworthy Buddhist influence on the basis of an assumption that the earliest medical source, the *Carakasamhitā*, might predate the life of the Buddha, and it is the *Carakasamhitā* that informs the other classical treatises (1999–2002, 1A: 110). That said, this is neither the prevailing attitude of one of India’s most prolific historians of medicine, P.V. Sharma, nor is it the general attitude among scholars outside of India.
49. Kern 1896.
50. *Carakasamhitā*, Sūtrasthāna 9.19: *hetau liṅge praśamane rogāṅāmapunarbhave / jñānaṃ caturvidhaṃ yasya sa rājārho bhiṣaktamaḥ //19//*
51. Zysk 1991, 38, 144–45; also see Engler 2003, 426n6.
52. *Carakasamhitā*, Śārīrasthāna 1.152–153: *sarvaṃ kāraṇavadduḥkhamasvaṃ cānityameva / na cātmaḥṛtakaṃ taddhi tatra cotpadyate svatā //152// yāvannotpadyate satyā buddhir-naitadaḥaṃ yayā / naitan mameti vijñāya jñāḥ sarvatativartate //153//*
53. To avoid compromising their anonymity I cannot name these sources of income. There are a few, one of which is well known in the Thrissur District, and would surely reveal their identity.
54. Mauss 1990, 13–14.
55. Parry 1986, 461.

56. Axel Michaels has further divided these two categories into seven categories, drawing on a collection of *dharmaśāstra* texts (1997, 249–51).
57. Parry 1986, 461.
58. *Carakasamhitā*, Cikitsāsthāna 1.60–62, cited in Dominik Wujastyk 1993, 762.
59. Copeman 2011, 1093.

#### 4. FROM HEALING TEXTS TO RITUALIZED PRACTICE

1. Field notes, March 2015, Thrissur District.
2. Strathern and Stewart 2010 [1998], 106.
3. Finkler 1994, 185–87, 188–89.
4. I am grateful to Unnikrishnan and Dr. Matsuzaka for providing me with additional video and photographs of the two cases explored in this chapter.
5. Field notes, November 2004, Thiruvananthapuram.
6. Wolfgram 2010, 163.
7. Cerulli 2012 and 2015a.
8. Seligman, Weller, Puett, and Simon 2008, xi.
9. Smith 1980, 124–25 (emphasis in original).
10. Finkler 1994, 188.
11. Geertz 1973, 90; Lincoln 2003, 5–8.
12. Now classic examples still taught in many universities in North America include Frazer's *Golden Bough*, Marx's "Theses on Feuerbach," Freud's *Future of an Illusion*, and more recent ones, such as Talal Asad's important oeuvre, especially his rejoinder to Geertz's definition in *Interpretation of Cultures* (1993; see also Asad, Brown, Butler, and Mahmood 2009), and the protracted discussion that Daniel Dubuisson's book, *The Western Construction of Religion* (2003), instigated among theorists of religion like Steven Engler, Russell McCutcheon, and Aaron Hughes (see Engler and Miller 2006).
13. Durkheim 1947 [1912], 47.
14. See Stewart and Strathern 2014, 29.
15. Kreinath 2012.
16. Parsons 1954, 209–10.
17. Caillois 1959, 21–22.
18. *The Sacred and the Profane: The Nature of Religion* (1957). Eliade made extensive use of this dyad in other studies, too, including *Patterns in Comparative Religion* (1958), *The Quest: History and Meaning in Religion* (1969), and *The Myth of the Eternal Return* (1971).
19. Goody 2010, 26.
20. Durkheim 1947, 137, 430–31.
21. Warnier 2009, 460 (emphasis in original).
22. Mauss 1934, 278. Emphasis in original: "J'appelle technique un acte *traditionnel efficace* (et vous voyez qu'en ceci il n'est pas différent de l'acte magique, religieux, symbolique). Il faut qu'il soit *traditionnel et efficace*."
23. Warnier 2009, 461–62.
24. See, for example, Cresswell 1969, 1993; Cresswell *et al.* 1975; Cresswell and Godelier 1976; Sigaut 1975, 1977, 1978, 1985, 1994.
25. Mol 2002, 152.

26. Mauss and Hubert 2001 [1902], 25 (emphasis in original).
27. Goody 1961, 154.
28. Staal 1979, 9.
29. Thompson 1995; Harris 1997.
30. Harris 1997, 43.
31. Evans-Pritchard 1937, 463.
32. Bell 1992, 221.
33. Goody 1961, 157.
34. Sax 2010, 3.
35. Radcliffe-Brown 1952, 136–39.
36. Welch 2003, 21–22.
37. Welch 2003, 24.
38. Welch 2003, 23.
39. Welch 2003, 23–24.
40. Welch 2003, 21.
41. Welch 2003, 21.
42. Welch 2003, 24.
43. Kaptchuk 2011, 1856.
44. Grimes 2000, 26.
45. Kaptchuk 2011, 1854.
46. Tambiah 1985, 128.
47. Sax 2010, 7–8.
48. Schechner 1985, 193; see also Rappaport 1999, 117–19.
49. Csordas 1983.
50. Stewart and Strathern 2014, 123.
51. Snoek 2008, 4–5.
52. Sax 2010, 7.
53. Eibl-Eibesfeldt 1970, 97.
54. *Viṣavaidyasārasamuccaya*, Uttarabhāga 122.27–28: *viśvadusparśamarica viṣavegān samāṃśakān / vaktre dhṛtvā daṣṭakasya karṇayormūrdhni cāsakṛt //27// phūtkāraṃ yugapat kuryussapañcāśataṃ śanaiḥ / tvagādi dhātutrayaḡaṃ viṣaṃ hanyādidam param //28//*  
*Jyōtsnikā*, Cikitsāraṃbhamaṃ 4.19–20: *viśvadusparśamarica viṣavēgaññaḡenniva / tulyaṃ kuṭṭicavacciṭṭu mūvvaroniccū koṇṭaṇ //19// ūtū nūṛṛampateṇṇīṭṭu śrōtrayōrmmūrdhani kramāl / ennāloḡiñṇpōmāśu mūnnudhātuvilē viṣaṃ //20//*
55. Introduction to *Viṣavaidyasārasamuccaya* 2006, 20.
56. *Suśrutasaṃhitā*, Śārīrasthāna 6.24–43. Incidentally, the extreme result of death from an injured/vulnerable spot is implied by the name *marman*, which derives from the Sanskrit verbal root *mṛ*, “to die.”
57. Francis Zimmermann explored the linguistic development of *doṣa* from its original meaning as “fault” or “taint” (1989, 144–45) into its meaning in ayurvedic theory. He suggests there is a clear application of a specialized (medical) meaning of *doṣa* based on the term’s primary evocative meaning of fault or taint, using the Sanskrit rhetorical rule *hetvārtha*, “the thing [implied] by its cause” (or “implication”). This is a metaphorical process by which the common use of a term picks up a technical or specialized use. Zimmermann describes this as a process of catachresis (146), the result of which is that ayurvedic

*doṣa* picks up three layers of meaning: the primary meaning of fault or taint, the technical meaning of “humor,” and the metaphorical meaning of pathogenic somatic entity (cf., peccant, à la Thomas Sydenham’s “peccant humour”).

58. Zysk (2007, 109–12) cites the following passages from the *br̥hatrayī* regarding the five subtypes of *vāta doṣa*: *Carakasamhitā* Cikitsāsthāna 28.3–12; *Suśrutasaṃhitā* Nidānasthāna 1.12–21; *Aṣṭāṅgahr̥daya* Nidānasthāna 16.19–27.

59. *Aṣṭāṅgahr̥daya*, Sūtrasthāna 12.4–5.

60. *Aṣṭāṅgahr̥daya*, Nidānasthāna 16.56–57.

61. *Viśavaidyasārasamuccaya*, Uttarabhāga 122.32.

62. V.M.C.S. Namboodiri’s commentary to *Viśavaidyasārasamuccaya*, Uttarabhāga 122.32 (2006, 124).

63. See, for example, the *Carakasamhitā*’s chapter on *viśacikitsā*, which includes the history and sources of poisons, the clinical features of poisons, twenty-four treatment modalities, characteristics of different snakebites, and much more (Cikitsāsthāna 23). See also *Jyōtsnikā* Cikitsākramādhikārah 8.53–56 and Sarvvamahācikitsādhikārah 15.36–42.

64. In *Structural Anthropology, Book I*, Lévi-Strauss wrote two essays developing the notion of symbolic efficacy: “The Sorcerer and His Magic” (1963, 167–85) and “The Effectiveness of Symbols” (1963, 186–205).

65. Smith 1980, 125.

66. Smith 1980, 125.

67. Finkler 1994, 188.

68. Field notes, July 2009, Thrissur District.

69. Field notes, July 2009, Thrissur District.

70. Turner 1969, 97 (emphasis in the original).

71. On the function of ritual to acknowledge the separation between the real and the ideal state of a social situation, see J.Z. Smith 1987, 41.

72. Turner 1969, 113.

73. Turner 1969, 127. See also Houseman and Severi 1998, which is a good example of theorizing ritual and exploration of the multiple characteristics within ritual activity through a sustained observation of family relations among the Iatmul of the Sepik River region in Papua New Guinea.

74. See Durkheim and Mauss 1963 [1901–02], 81.

75. Brody 2010, 162.

76. Finkler 1994, 188–89.

77. Moore and Myerhoff 1977, 7.

78. *Suśrutasaṃhitā*, Kalpasthāna 5.

79. Field notes, March 2015, Thrissur District.

80. Brody 2010, 153.

81. Smith 1987, 103.

82. On the privileging of the patient’s condition over maintaining a fixed procedure, Biju cites *Aṣṭāṅgahr̥daya*, Sūtrasthāna 12.55, 70–73.

83. Smith 1987, 103.

84. Smith 1987, 105.

85. Schechner 1985, 194.

86. My ideas about these distinctions were inspired by conversations with Erik W. Davis, as well as his analysis of the Cambodian *pamsukūla* (2012), and during the Q&A with

students and faculty following a presentation I gave to Bo Sax's graduate seminar in the South Asia Institute of Heidelberg University in 2013.

87. Moore and Myerhoff 1977, 7.
88. Humphrey and Laidlaw 1994, 5.
89. Moore and Myerhoff 1977, 7–8.
90. Bell 1997, 82.
91. Gluckman and Gluckman 1977, 233; also Max Gluckman 1962, 24.
92. Bell 1992, 90; 1997, 81.
93. Bell 1992, 90–93, 204ff.
94. Bell 1997, 265.
95. Bell 1997, 82.

## 5. TEXTS IN PRACTICE AND THE AYURVEDIC PATIENT

1. Worthen 2021.
2. I am grateful to Brian Collins for pointing this out to me, citing a course in his own Department of Classics and World Religions at Ohio University as an example.
3. Shedlock, Sims, and Kubilius 2012, 140 (emphasis added).
4. Chandra 2011; Bode and Shankar 2018.
5. Pollock 1993.
6. Lincoln 2007.
7. Studies of the fall of the Roman Empire that consider literature of the late antique world of the western hemisphere to illustrate obvious parallels or intimate similar trajectories to the United States in the last and current century have been plentiful in both trade and academic markets, though two recent standouts include Watts 2018 and Scheidel 2019.
8. Field notes, March 2015, Thrissur District.
9. Field notes, March 2017, Thrissur District.
10. Field notes, October 2004, Thrissur District.
11. Field notes, January 2013, Thrissur District and Kozhikode District.
12. This moment was unusual for me. On the whole, I did not experience many interruptions in the field between 2003–2017 that cut short my plans. I had setbacks, of course, like not getting access to archives, being stood up for interviews or work meetings, and missing trains, as many people do. But after spending time with the same family and community during many intense periods of research, the line separating my identity as a researcher and/or friend to Biju and his family (and a few of his students) became a little blurred by 2013. It was perhaps becoming more of a hyphenated relationship, and I sometimes felt like a researcher-friend to them at the same time. The death of Biju's father was sudden and unexpected. While it naturally affected my plans that trip to Kerala, the interruption was unimportant; there were other places I could work, and that's not what made the moment atypical and challenging. While I didn't know Biju's father exceedingly well—as you've seen, apart from this vignette, he does not appear in the book—I knew the man well enough. We saw each other age over ten years, and we both knew about personal things that transpired in each other's families. I knew Biju much better, and his mother quite well, by then. Their profoundly felt loss of a father and a husband struck me emotionally in ways I hadn't experienced in the field before, and I wasn't entirely prepared for it. Unnikrishnan and I talked a lot about what this death meant for Biju and his family, for him (as a student of both Biju



and Priyankara), and for me. Normally I would have visited Kerala and Mookkamangalam once or twice in the past twenty months. But the Covid-19 pandemic brought these trips to a halt, and in the process of revising this manuscript for production, and perhaps due to some nostalgia, I have reflected a lot on the times I spent at Mookkamangalam. This one event in 2013 stands out as a moment I might write about in the future, perhaps in a methodological paper I could call, “Ethnographic Interruptus: Long-form Fieldwork and Best Laid Plans.”

13. Field notes, April 2017, Kozhikode District.
14. Diedrich 2007, 64.
15. Diedrich 2007, 5.
16. Field notes, April 2017, Kozhikode District.
17. Fields 2001, 47.
18. Engelhardt 1981, 42–43.
19. Fields 2001, 48.
20. Exceptions to the general rule of reading and translating bodies in the classics may be seen in some of the storytelling in the *brhatrayi* and later medical literature in India, which propose causal links between social actions and disease. These stories give us a rough outline of the rogin in Indian medicine. But even there, these are usually just silhouettes or grainy portrayals more than defined lives which, in the end, represent idealized human types. I explored the roles of narrative, storytelling, and patienthood in (mostly) premodern Indian literature in Cerulli 2012.
21. de Certeau 1988, 3.
22. *Carakasamhitā*, Sūtrasthāna 8.17.
23. Good 1994, 69.
24. Good 1994, 69 (emphasis added).
25. Good 1994, 68.
26. Glucklich 2008, 135; Bhat 1998 [1987], 19.
27. *Kauśikasūtra* 25.1–32.27.
28. *Kauśikasūtra* 32.28–36.40. See also, Zysk 1996, 5; Glucklich 2008, 132–133; Modak 1993, 24.
29. Bloomfield 1899; Modak 1993; Zysk 1996.
30. For overviews of the Sanskrit classics, medieval sources, and more in Ayurveda, see Cerulli forthcoming; 2012, 13–48; 2010.
31. *Carakasamhitā*, Sūtrasthāna 9.3: *bhiṣagdravyāny upasthātā rogī pādacatuṣṭayam / guṇavat karaṇam jñeyam vikāravypaśāntaye //* See also *Aṣṭāṅgahrdaya* Sūtrasthāna 1.26–27: *dhīdhairyāt mādivijñānam manodoṣauśadham param //26// bhiṣagdravyāny upasthātā rogī pādacatuṣṭayam / cikitsitasya nirdiṣṭam pratyekam taccaturguṇam //27// dakṣastīrthātāsāstrārtho dṛṣṭakarmā śucirbhisak / bahukalpaṃ bahugūṇam sampannaṃ yogyamaūśadham //28//*
32. Many useful studies in English and Indian languages about the ayurvedic physician and materia medica are available. On the physician and the physician’s craft see Desai 1988, 2004; Jonsen 2000; Jaggi 2000; Sharma 2003; Athavale and Athavale 2003; Dagmar Wujastyk 2012; Bagde *et al* 2015; Olivelle 2017; Cerulli 2018a; Brooks 2018. On materia medica see Dash and Kashyap 1980; Dash 1991. Though very little has been published on the ayurvedic attendant, Leslie and Wujastyk 1991 is a useful short reference. Regarding the patient, Cerulli (2012) examines portrayals of the rogin in Sanskrit medical and

nonmedical literatures as a cadaver-like site of medical explanation and as a model of social agency that impacts wellbeing; Selby (2005) offers valuable insights into the nature of the female patient in Sanskrit medical texts that discuss pregnancy and childbirth.

33. Note that in the quote citing the four pillars of *āyurveda* the word used for “physician” is *bhiṣaj*, but more often, especially in modern times, this figure is known by the title of *vidya* (see n6 in the introduction).

34. *Carakasamhitā*, Sūtrasthāna 9.21–23: *vidyā vitarko vijñānaṃ smṛtistatoaratā kriyā / yasyaite ṣaḍguṇāstasya na sādhyamativartate //21// vidyā matiḥ karmadr̥ṣṭirabhyāsaḥ siddhirāśayaḥ / vaidyāśabdābhiniṣpattāvalamekaikamapyataḥ //22// yasya tvete guṇāḥ sarve santi vidyādayaḥ śubhāḥ / sa vaidyāśabdaṃ sabhūtarmanhan prāṇisukhapradaḥ //23//*

35. *Carakasamhitā*, Sūtrasthāna 11.53.

36. *Carakasamhitā*, Cikitsāsthāna 1.4.56.

37. *Carakasamhitā*, Sūtrasthāna 11.51: *vaidyabhāṇḍausadhahaiḥ pustaiḥ pallavairavalokanaiḥ / labhante ye bhiṣakśabdamañjāste pratirūpakāḥ //* Nevertheless, I hasten to note that the term *bhiṣaj* continued to be used in the big trio to designate a physician, even if by the classical era the significance of the *Atharvaveda* was nominal. The *Suśrutasaṃhitā* acknowledges its Vedic ancestor by calling *āyurveda* an auxiliary part (*upāṅga*) of the *Atharvaveda*, and the *Carakasamhitā* advises students to cite the *Atharvaveda* as a source of inspiration for their work, should they ever be pressed for such information (e.g., *Suśrutasaṃhitā*, Sūtrasthāna 1.6 and *Carakasamhitā*, Sūtrasthāna 30.20–21).

38. Foucault 1973 [1963], 8.

39. Cerulli 2012, 154–55.

40. E.g., *pramehin*—*Carakasamhitā*, Sūtrasthāna 1.13.91, 1.17.107; *atisarin*—*Suśrutasaṃhitā*, Sūtrasthāna 1.29.69, 1.46.253; *gulmin*—*Aṣṭāṅgahr̥daya*, Cikitsāsthāna 14.10, 78, 90.

41. *Carakasamhitā*, Sūtrasthāna 9.9: *smṛtirnirdeśakāritvamabhīrutvamathāpi ca / jñāpakatvaṃ ca rogāṇāmāturasya guṇāḥ smṛtāḥ //*

42. I discussed some of these qualities in *Somatic Lessons*, focusing on narrative explorations of the patient and patienthood (2012, 155–56). I noted, for example, that Cakrapānidatta says that in cases of madness (*unmāda*) and agitation that sometimes accompanies fever (*jvaravega*), a lack of memory (*asmṛti*) of past distresses can be beneficial to the overall health and possibly facilitate healing (commentary on *Carakasamhitā*, Sūtrasthāna 9.9). This calls to mind a kind of amnesia, or mental suppression of difficult memories, in the *Carakasamhitā*’s suggestion that the “repression of bad things in one’s mind” can be effective means to combat mental afflictions (Sūtrasthāna 11.54: *ahitebhyo ’rthebhyo manonigrahaḥ*). Additionally, along with Brahmadathan U.M.T., I wrote a short study of the nature of mental afflictions and distress in the *Carakasamhitā* and Cakrapānidatta’s elaboration of the topic (2009).

43. Leslie and Wujastyk 1991.

44. Theofanidis and Sapountzi-Krepia 2015, 793.

45. Filliozat 1949.

46. Arikha 2007, 149.

47. There are several examples of *jalaukāvacāraṇīya* in the *Suśrutasaṃhitā*, though a detailed account occurs at Sūtrasthāna 13: 1–23. Nearly everything I know about leeches and bloodletting in ayurvedic history and contemporary practice, I learned by speaking with Lisa Allette Brooks and reading her fascinating research (see Brooks 2020a and 2020b).

48. Vaibhav, Antiwal, Singh, and Singh 2016, 515.



## REFERENCES

### PRIMARY SOURCES

- The Aṣṭāṅgahr̥daya: A Compendium of the Ayurvedic System Composed by Vāgbhaṭa, with the Commentaries (Sarvāṅgasundarā) of Aruṇadatta and (Āyurvedarasāyana) Hemādri.* 6th edition, edited by Annā Moreśwar Kunte, K.R. Śāstrī Navre, and B.H. Parādkar Vaidya. Bombay: Nirṇaya-sāgar Press, 1939.
- Aṣṭāṅgasaṅgraha, with Indu's Śāṣilekhā commentary, notes, diagrams, and appendices.* Reprint edition, edited by Kiṅjavaḍekara, Rāmacandraśāstrī. Delhi: Sri Satguru Publications, 1990.
- Hymns of the Atharva-Veda, Together with Extracts from the Ritual Books and the Commentaries.* Edited by Maurice Bloomfield. Oxford: Oxford University Press, 1897.
- The Atharvaveda.* Edited by Maurice Bloomfield. Strassburg: Verlag von Karl J. Trübner, 1899.
- Carakasamhitā. Maharṣiṇā punarvasunopadiṣṭā, tacchiṣyeṇāgniveśena praṇitā, caraka-dhabalābhyāṃ pratisamśkr̥tā. Śricakrapāṇidattaviracitayā āyurvedadīpikāvyaḥyayā samvalitā.* 5th edition, edited by Jādavji Trikamji Āchārya. New Delhi: Munshiram Manoharlal, 1992 [1941].
- Caraka-Samhitā: Agniveśa's Treatise Refined and Annotated by Caraka and Redacted by Dṛḍhabala.* 4 vols., edited and translated by Priya Vrat Sharma. Delhi: Chaukhamba Orientalia, 2003.
- Caraka-samhitā. Maharṣi Agniveśa praṇita. Vol. 1: Caraka aur Dṛḍhabala se pratisamśkr̥ta (Hindi anuvād) sutra-nidāna-vimānātnaka. Vol. 2: Śarīra, indriya, cikitsāsthāna (1-15 adhyāya).* Hindi commentary by Kavirāj Śrī Atridevaji Gupta. Banāras: Bhārgava Pustakālay, Gāyagaḥ, 2005 [1947].
- Dānasāgara of Ballalāsena.* Biblioteca Indica, 1563, 1567, 1569, 1573, edited by Bhabatosh Bhattacharya. Calcutta: Asiatic Society, 1953-1956.

- Jyōtsnika (Viṣavaidyam)*. 2nd edition. Śrī Vañcisetulakṣmī Granthāvali, no. 9, edited by K. Mahādeva Śāstrī. Trivandrum: Government Press, 1940.
- Jyōtsnikā of Nārāyaṇa*. 2nd edition. Ernakulam: Azad Printers, 1948.
- The Kāuṣhika-Sūtra of the Atharva-Veda: With Extracts from the Commentaries of Dārila and Keçava*. Edited by Maurice Bloomfield. *Journal of the American Oriental Society* 14, 1890.
- Kauṣhika Sūtra of the Atharva Veda*. Reprint edition, edited by Maurice Bloomfield. Varanasi: Motilal Banarsidass, 1972 [1889].
- Kauṣhīliya Arthaśāstra*. 3 vols. 7th edition, edited by R.P. Kangle. Delhi: Motilal Banarsidass, 2000 [1960].
- Kriyākaumudī (Bhāṣāviṣavaidyam)* of V.M. Kuṭṭikṛṣṇa Mēnōn. Kottayam: Sāhitya Pravartaka Sahakaraṇasaṅgham, 1986.
- Mahābhārata*. 19 vols., edited by V.S. Sukthankar *et al.* Poona: Bhandarkar Oriental Research Institute, 1933–1959.
- Prayogasamuccayaṃ (Viṣavaidyam) of Koccuṇṇi Tampurān*. Tṛṣūr: Sulabha Books, 1999.
- Suśrutasaṃhitā of Suśruta*. With the *Nibandhasaṅgraha* Commentary of Śrī Dālhaṇāchārya and the *Nyāyacandrikā Pañjikā* of Gayadāsāchārya on Nidānasthāna. 7th edition. Jai-krishnadās Ayurveda Series, no. 34, edited by Jādavji Trikamji Āchārya and Nārāyaṇ Rām Āchārya. Varanasi: Chaukhambha Orientalia, 2002.
- Tantrayuktivicāra of Nilameghabhiṣajā*. 2nd edition, edited by N.E. Muthuswami. Keraḷa Prāśānāyurveda-granthāvaliḥ 1. Trivandrum: Government Ayurveda College, 1976.
- Vishavaidyasarasammuchaya*. With the commentary of V.M.C.S. Nambodiri, translated by Madhu K.P. Venkitangu: Ullanoor Mana Trust, 2006.
- Viṣṇusmṛti (The Institutes of Viṣṇu)*. With extracts from the *Vaijayanti* commentary of Nanda Paṇḍit, edited by Julius Jolly. Caukhambā-Saṃskṛta-granthamālā, 95. Varanasi: Caukhambha Sanskrit Series, 1962.
- Yājñavalkyasmṛti, with the commentaries of Mitra Miśra and Vijñāneśvara*. 11 vols., edited by Nārāyaṇa Śāstrī *et al.* Benares: Chowkhambha Sanskrit Series Office, 1924–1930.

## SECONDARY SOURCES

- Acharya, Poromesh. 1996. “Indigenous Education and Brahminical Hegemony in Bengal.” In *The Transmission of Knowledge in South Asia: Essays on Education, Religion, History, and Politics*, edited by Nigel Crook, 98–118. Delhi: Oxford University Press.
- Agarwal, Sanjay. 2010. *Daan and Other Giving Traditions in India: The Forgotten Pot of Gold*. New Delhi: AccountAid India.
- Alavi, Seema. 2008. *Islam and Healing: Loss and Recovery of an Indo-Muslim Medical Tradition, 1600–1900*. Basingstoke: Palgrave Macmillan.
- Appiah, Kwame Anthony. 1997. “Cosmopolitan Patriots.” *Critical Inquiry* 23, no. 3: 617–39.
- Arnold, David. 1993. *Colonizing the Body: State Medicine and Epidemic Disease in Nineteenth-Century India*. Berkeley: University of California Press.
- . 2000. *Science, Technology, and Medicine in Colonial India*. The New Cambridge History of India, III.5. Cambridge: Cambridge University Press.
- . 2020. “Pandemic India: Coronavirus and the Uses of History.” *Journal of Asian Studies* 79, no. 3: 569–77.
- Arikha, Noga. 2007. *Passions and Tempers: A History of the Humours*. New York: Harper Perennial.

- Asad, Talal. 1993. *Genealogies of Religion: Discipline and Reasons of Power in Christianity and Islam*. Baltimore: The Johns Hopkins University Press.
- Asad, Talal, Wendy Brown, Judith Butler, and Saba Mahmood. 2009. *Is Critique Secular?: Blasphemy, Injury, and Free Speech in the Humanities*. Berkeley: Doreen B. Townsend Center for the Humanities.
- Athavale, V.B., and K.V. Athavale. 2003. *The Ideal Physician*. Delhi: Chaukhamba Sanskrit Pratishtan.
- Attewell, Guy. 2014. "Compromised: Making Institutions and Indigenous Medicine in Mysore State, Circa 1908–1940." *Culture, Medicine, and Psychiatry* 38, no. 3: 369–86.
- Bagde, A.B., R.S. Sawant, J.J. Pawar, and V.P. Ukhalkar. 2015. "Chikitsa Chatushpad: Four Pillars of Treatment in Ayurveda." *International Journal of Ayurveda & Alternative Medicine* 2, no. 2: 7–12.
- Bala, Poonam. 2014. "Re-constructing' Indian Medicine: The Role of Caste in Late Nineteenth- and Twentieth- Century India." In *Medicine and Colonialism: Historical Perspectives in India and South Africa*, edited by Poonam Bala, 11–24. London: Pickering & Chatto Limited.
- Barrett, Ron. 2008. *Aghor Medicine: Pollution, Death, and Healing in Northern India*. Berkeley: University of California Press.
- Barthes, Roland. 1986. *The Rustle of Language*. New York: Hill and Wang.
- Basu, Aparna. 1974. *The Growth of Education and Political Development in India, 1898–1920*. Delhi: Oxford University Press.
- . 1982. *Essays in the History of Indian Education*. New Delhi: Concept Publishing Company.
- . 1985. "Review of *The Beautiful Tree and One Teacher, One School*." *Comparative Education Review* 29, no. 1: 137–40.
- BBC World: India Business Report. 2013. *Business Bizarre* (30 May).
- Bell, Catherine. 1992. *Ritual Theory, Ritual Practice*. New York: Oxford University Press.
- . 1997. *Ritual Perspectives and Dimensions*. New York: Oxford University Press.
- Benteler, Miriam. 2014. *Shared Values: Hierarchy and Affinity in a Latin Catholic Community of South India*. New Delhi: Manohar Publishers.
- Benveniste, Emile. 1964. "Lettres de Ferdinand de Saussure à Antoine Meillet." *Cahiers Ferdinand de Saussure* 21: 93–130.
- Berger, Rachel. 2013. *Ayurveda Made Modern: Political Histories of Indigenous Medicine in North India, 1900–1955*. Basingstoke: Palgrave Macmillan.
- Bhat, M.S. 1998 [1987]. *Vedic Tantrism: A Study of R̥gvidhāna of Śaunaka with Text and Translation*. Reprint, New Delhi: Motilal Banarsidass.
- Bloomfield, Leonard. 1933. *Language*. New York: Holt, Rinehart and Winston.
- Bloomfield, Maurice. 1899. "The Atharva-Veda and the Gopatha-Brāhmaṇa." In *Grundriss der Indo-Arischen Philologie und Altertumskunde*, 1–136. Strassburg: Verlag von Karl J. Trübner.
- Bode, Maarten, and Prasan Shankar. 2018. "Ayurvedic College Education, Reifying Biomedicine, and the Need for Reflexivity." *Anthropology & Medicine* 25, no. 2: 162–75.
- Bourdieu, Pierre. 1998. *Practical Reason: On the Theory of Action*. Translated by Randal Johnson. Palo Alto: Stanford University Press.
- Brass, Paul. 1972. "The Politics of Ayurvedic Education: A Case Study of Revivalism and Modernization in India." In *Education and Politics in India: Studies in Organization*,

- Society, and Policy*, edited by Susanne Hoeber Rudolph and Lloyd Rudolph, 342–71. Cambridge, MA: Harvard University Press.
- Brody, Howard. 2010. "Ritual, Medicine, and the Placebo Response." In *The Problem of Ritual Efficacy*, edited by W. Sax, J. Quack, and J. Weinholt, 151–68. New York: Oxford University Press.
- Brooks, Lisa Allette. 2018. "Epistemology and Embodiment: Diagnosis and the Senses in Classical Ayurvedic Medicine." *Asian Review of World Histories* 6, no. 1: 98–135.
- . 2020a. "The Vascularity of Ayurvedic Leech Therapy: Sensory Translations and Emergent Agencies in Interspecies Medicine." *Medical Anthropology Quarterly* 35, no. 1: 82–101.
- . 2020b. "A Surgeon's Hand." *Asian Medicine* 15, no. 1: 30–62.
- Burke, Peter. 1986. "Review of *The Invention of Tradition*." *The English Historical Review* 101, no. 398: 316–17.
- Caillois, Roger. 1959. *Man and the Sacred*. Translated by Meyer Barash. Glencoe, IL: The Free Press.
- Central Council of Indian Medicine (CCIM). 2011–2012. *Prescribed Syllabus for BAMS Degree Course (Ayurvedācārya), With a List of Approved Texts & Other Books*. Varanasi: Chowkhamba Sanskrit Series Office.
- . 2015–2016. *New Syllabus for B.A.M.S. Course, According to the Central Council of Indian Medicine, New Delhi (Along with the List of Text Books & Other Reference Books)*. Compiled by Dr. Parameswarappa S. Byadgi.
- . 2016. "Syllabus of Ayurvedacharya (BAMS) Course, UG 1st Year." New Delhi: Central Council of Indian Medicine.
- Cerquiglini, Bernard. 1989. *Eloge de la variante: Histoire critique de la philologie*. Paris: Le Seuil.
- Certeau, Michel de. 1988. *The Writing of History*. Translated by Tom Conley. New York: Columbia University Press.
- Cerulli, Anthony. 2013 [2010]. "Āyurveda." In *Brill's Encyclopedia of Hinduism, Volume II: Texts, Rituals, Arts, and Concepts*, edited by K.A. Jacobsen, H. Basu, A. Malinar, and V. Narayanan, 267–80. Revised online edition, Leiden: Brill.
- . 2012. *Somatic Lessons: Narrating Patienthood and Illness in Indian Medical Literature*. Albany: State University of New York Press.
- . 2015a. "Storytelling and Accountability for Illness in Sanskrit Medical Literature." In *Disease, Religion, and Healing in Asia: Collaborations & Collisions*, edited by I. Vargas-O'Bryan and Z. Xun, 86–101. London: Routledge.
- . 2015b. "Unpuzzling an Aporia: Theorizing Acts of Ritual and Medicine in South India." *Journal of Ritual Studies* 29, no. 2: 25–43.
- . 2018a. "Gifting Knowledge for Long Life." *International Journal of Hindu Studies*, 22, no. 2: 235–55.
- . 2018b. "Politicking Ayurvedic Education." *Asian Medicine* 13, no. 1–2: 298–334.
- . Forthcoming. "Early Indian Medical Literature." In *The Oxford Handbook of Hindu Literature*, edited by James Hegarty and Laxshmi Greaves. Oxford: Oxford University Press.
- Cerulli, Anthony, and Brahmadathan U.M.T. 2009. "Know Thy Body, Know Thyself: Decoding Knowledge of the Ātman in Sanskrit Medical Literature." *eJournal of India Medicine* 2: 101–7.



- Chandra, Shailaja. 2011. "Status of Indian Medicine and Folk Healing: With a Focus on Benefits That the Systems Have Given to the Public (Part I)." Department of Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homoeopathy (AYUSH). New Delhi: Ramko Press.
- Chattopadhyay, Anjana. 2002. *Biographical Dictionary of Indian Scientists: From Ancient to Contemporary*. New Delhi: Rupa & Co.
- Copeman, Jacob. 2011. "The Gift and Its Forms of Life in Contemporary India." *Modern Asian Studies* 45, no. 5: 1051–94.
- Copeman, Jacob, and Aya Ikegame. 2012. "The Multifarious Guru: An introduction." In *The Guru in South Asia: New Interdisciplinary Perspectives*, edited by Jacob Copeman and Aya Ikegame, 1–45. London: Routledge.
- , eds. 2012. *The Guru in South Asia: New Interdisciplinary Perspectives*. London: Routledge.
- Cox, Whitney. 2016. *Modes of Philology in Medieval South India*. Leiden: Brill.
- Crawford, D.G. 1914. *A History of the Indian Medical Service 1600–1913, Vol. II*. London: W. Thacker & Co.
- Cresswell, Robert. 1969. *Une communauté rurale de l'Irlande*. Travaux et Mémoires de l'Institut d'Ethnologie, 74. Paris: Institut d'Ethnologie (with cooperation of the Centre National de la Recherche Scientifique).
- . 1993. "Of Mills and Waterwheels: The Hidden Parameters of Technological Choice." In *Technological Choices: Transformation in Material Culture since the Neolithic*, edited by Pierre Lemmonnier, 181–213. London: Routledge.
- Cresswell, Robert, et al, eds. 1975. *Éléments d'ethnologie. 2 tomes: t. I: Huit terrains; t. II: Six approches*. Paris: Armand Colin.
- Cresswell, Robert, and Maurice Godelier, eds. 1976. *Outils d'enquête et d'analyse anthropologiques*. Paris: Maspéro.
- Crozier, Ralph. 1970. "Medicine, Modernization, and Cultural Crisis in China and India." *Comparative Studies in Society and History* 12, no. 3: 275–91.
- Csordas, Thomas. 1983. "The Rhetoric of Transformation in Ritual Healing." *Culture, Medicine and Psychiatry* 7, no. 4: 333–75.
- Dash, Bhagwan. 1991. *Materia Medica of Ayurveda: Based on Madanapāla's Nigaṇṭu*. New Delhi: B. Jain Publishers.
- Dash, Bhagwan, and Lalitesh Kashyap. 1980. *Materia Medica of Ayurveda: Based on Ayurveda Saukhyam of Toḍarānanda*. New Delhi: Concept Publishing Co.
- Daston, Lorraine, and Glenn Most. 2015. "History of Science and History of Philologies." *Isis* 106, no. 2: 378–90.
- Davis, Erik W. 2012. "Weaving Life Out of Death: The Craft of the Rag Robe in Cambodian Funerary Ritual." In *Buddhist Funeral Cultures of Southeast Asia and China*, edited by Paul Williams and Patrice Ladwig, 59–78. Cambridge, UK: Cambridge University Press.
- Desai, Prakash. 1988. "Medical Ethics in India." *Journal of Medicine and Philosophy* 13, no. 3: 231–55.
- . 2004. "Medical Ethics, History of South and Southeast Asia: India." In *Encyclopedia of Bioethics, Vol. 3*, edited by Stephen Post, 1681–87. New York: Macmillan Reference USA.
- Di Bona, Joseph, ed. 1983. *One Teacher, One School: The Adam Reports on Indigenous Education in 19th Century India*. New Delhi: Biblia Impex Private.

- Diedrich, Lisa. 2007. *Treatments: Language, Politics, and the Culture of Illness*. Minneapolis: University of Minnesota Press.
- Diouf, Mamadou. 2002. "The Senegalese Murid Trade Diaspora and the Making of a Vernacular Cosmopolitanism." Translated by Steven Rendall. In *Cosmopolitanism*, edited by C.A. Breckenridge, S. Pollock, H.K. Bhabha, and D. Chakrabarty, 111–37. Durham, NC: Duke University Press.
- Dubuisson, Daniel. 2003. *The Western Construction of Religion: Myths, Knowledge, and Ideology*. Translated by William Sayers. Baltimore: The Johns Hopkins University Press.
- Durkheim, Émile. 1947 [1912]. *The Elementary Forms of the Religious Life*. Translated by J.W. Swain. Glencoe, IL: The Free Press.
- Durkheim, Émile, and Marcel Mauss. 1963 [1901–02]. *Primitive Classification*. Translated by Rodney Needham. Chicago: University of Chicago Press.
- Eck, Diana. 2013. "The Religious Gift: Hindu, Buddhist, and Jain Perspectives on *Dana*." *Social Research: An International Quarterly* 80, no. 2: 359–79.
- Eibl-Eibesfeldt, Irenaus. 1970. *Ethology: The Biology of Behavior*. New York: Holt, Rinehart and Winston.
- Eliade, Mircea. 1957. *The Sacred and the Profane: The Nature of Religion*. Translated by Willard R. Trask. New York: Harcourt Brace Jovanovich, Publishers.
- . 1958. *Patterns in Comparative Religion*. Translated by Rosemary Sheed. New York: New American Library.
- . 1969. *The Quest: History and Meaning in Religion*. Chicago: University of Chicago Press.
- . 1971. *The Myth of the Eternal Return: Cosmos and History*. Princeton: Princeton University Press.
- Engelhardt, Jr., H. Tristram. 1981. "The Concepts of Health and Disease." In *Concepts of Health and Disease, Interdisciplinary Perspectives*, edited by Arthur L. Caplan, H. Tristram Engelhardt, Jr., and James J. McCartney, 30–45. Reading, MA: Addison-Wesley Publishing.
- Engler, Steven. 2003. "'Science' vs. 'Religion' in Classical Ayurveda." *Numen* 50: 416–63.
- Engler, Steven, and Dean Miller. 2006. "Review Symposium: Daniel Dubuisson, *The Western Construction of Religion*." *Religion* 36: 119–78.
- Ernst, Waltraud, and Vivienne Lo. 2005. "Asian Medicine: Tradition and Modernity." *Asian Medicine: Tradition and Modernity*, 1, no. 1: 1–9.
- Evans-Pritchard, E.E. 1937. *Witchcraft, Oracles and Magic Among the Azande*. London: Oxford University Press.
- Fields, Gregory P. 2001. *Religious Therapeutics: Body and Health in Yoga, Āyurveda, and Tantra*. Albany: State University of New York Press.
- Filliozat, Jean. 1949. *Le doctrine classique de la médecine indienne; ses origines et ses parallèles grecs*. Paris: Imprimerie nationale.
- Finkler, Kaja. 1994. "Sacred Healing and Biomedicine Compared." *Medical Anthropology Quarterly* 8, no. 2: 178–97.
- Foucault, Michel. 1973 [1963]. *The Birth of the Clinic: An Archaeology of Medical Perception*. New York: Pantheon Books.
- . 2002 [1970]. *The Order of Things: An Archaeology of the Human Sciences*. London: Routledge Classics.
- Fox, Richard G. 1992. "East of Said." In *Edward Said: A Critical Reader*, edited by Michael Sprinker, 144–56. Oxford: Blackwell.

- Frazer, James George. 2015 [1890]. *The Golden Bough: A Study of Magic and Religion*. Reprint, Scotts Valley, CA: CreateSpace Independent Publishing.
- Freeman, Rich. 1998. "Rubies and Coral: The Lapidary Crafting of Language in Kerala." *The Journal of Asian Studies* 57, no. 1: 38–65.
- . 2003. "Genre and Society: The Literary Culture of Premodern Kerala." In *Literary Cultures in History: Reconstructions from South Asia*, edited by Sheldon Pollock, 437–502. Berkeley: University of California Press.
- Freud, Sigmund. 1927. *The Future of an Illusion*. Translated by James Strachey. W.W. Norton & Co.
- Ganesan, Uma. 2010. "Medicine and Modernity: The Ayurvedic Revival Movement in India, 1885–1947." *Studies on Asia* 4: 108–31.
- Gardner, Robert, and Frits Staal, dirs. *Altar of Fire*. 1976. Harvard University Film Center. Watertown, MA: Documentary Educational Resources.
- Geertz, Clifford. 1973. *The Interpretation of Cultures: Selected Essays*. New York: Basic Books.
- Girija, K.P. 2016. "Refiguring of Ayurveda as Classical Tradition." *Pragmata: Journal of Human Sciences* 3, no. 1: 43–62.
- Glucklich, Ariel. 2008. *The Strides of Vishnu: Hindu Culture in Historical Perspective*. New York: Oxford University Press.
- Gluckman, Max. 1962. "Les Rites des Passages." In *Essays on the Ritual of Social Relations*, edited by Max Gluckman, 1–52. Manchester: Manchester University Press.
- Gluckman, Mary, and Max Gluckman. 1977. "On Drama, and Games and Athletic Contests." In *Secular Ritual*, edited by Sally F. Moore and Barbara G. Myerhoff, 227–43. Assen and Amsterdam: Van Gorcum & Comp.
- Good, Byron. 1994. *Medicine, Rationality, and Experience: An Anthropological Perspective*. Cambridge, UK: Cambridge University Press.
- Goody, Jack. 1961. "Religion and Ritual: The Definitional Problem." *The British Journal of Sociology* 12, no. 2: 142–64.
- . 2010. *Myth, Ritual, and the Oral*. Cambridge: Cambridge University Press.
- Grimes, Ronald L. 2000. *Deeply into the Bone: Re-inventing Rites of Passage*. Berkeley: University of California Press.
- Handler, Richard. 1984. "Review of *The Invention of Tradition*, edited by Eric Hobsbawm and Terence Ranger." *American Anthropologist* 86, no. 4: 1025–26.
- Hardiman, David. 2009. "Indian Medical Indigeneity: From Nationalist Assertion to the Global Market." *Social History* 34, no. 3: 263–83.
- Harilal, M.S. 2008. "Home to Market: Responses, Resurgence and Transformation of Ayurveda from 1830s to 1920." Working Paper 408, Centre for Development Studies, Thiruvananthapuram.
- Harris, Solomon N. 1997. "Ritual: Communication and Meaning." *Journal of Ritual Studies* 11, no. 1: 35–44.
- Harvey, Peter. 2000. *An Introduction to Buddhist Ethics: Foundations, Values and Issues*. Cambridge, UK: Cambridge University Press.
- Heim, Maria. 2004. *Theories of the Gift in South Asia: Hindu, Buddhist, and Jain*. London: Routledge.
- . 2007. "Dāna as a Moral Category." In *Indian Ethics: Classical Traditions and Contemporary Challenges, Vol. I.*, edited by P. Bilimoria, J. Prabhu, and R.M. Sharma, 191–209. Burlington, VT: Ashgate.

- Hobsbawm, Eric, and Terence Ranger, ed. 2012 [1983]. *The Invention of Tradition*. London: Cambridge University Press.
- Houseman, Michael, and Carlo Severi. 1998. *Naven or the Other Self: A Relational Approach to Ritual Action*. Leiden: Brill.
- Humphrey, Caroline, and James Laidlaw. 1994. *The Archetypal Actions of Ritual: Theory of Ritual Illustrated by the Jain Rite of Worship*. New York: Oxford University Press.
- Jaffrelot, Christophe. 2002. "Gujarat 2002: What Justice for the Victims?" *Economic and Political Weekly*, February 25.
- . 2003. "Communal Riots in Gujarat: The State at Risk?" *Heidelberg Papers in South Asian and Comparative Politics*.
- Jaggi, O.P. 2000. *Medicine in India: Modern Period*. New York: Oxford University Press.
- Jeffrey, Robin. 1994 [1976]. *The Decline of Nair Dominance: Society and Politics in Travancore 1847–1908*. New Delhi: Manohar Publishers.
- Jonsen, Albert R. 2000. *A Short History of Medical Ethics*. New York: Oxford University Press.
- Joseph de Saram, Amila. 2003. "Beginning the Process: The Great Masters and Selecting a Teacher: The Guru-Disciple Relationship." In *The Circle of Bliss: Buddhist Meditational Art*, edited by John Huntington and Diana Bangdel, 133–34. Chicago: Serindia Publications.
- Kaptschuk, Ted J. 2011. "Placebo Studies and Ritual Theory: A Comparative Analysis of Navajo, Acupuncture and Biomedical Healing." *Philosophical Transactions of the Royal Society* 366: 1849–58.
- Kern, Hendrik. 1896. *Manual of Indian Buddhism. Encyclopedia of Indo-Aryan Research*, vol. 3, no. 8. Strassburg: K.J. Trübner.
- Kreinath, Jens. 2012. "Discursive Formation—Ethnographic Encounter—Photographic Evidence: The Centenary of Durkheim's Basic Forms of Religious Life and the Anthropological Study of Australian Aboriginal Religion in his Time." *Visual Anthropology* 25, no. 5: 367–420.
- Krishnankutty, Gita. 2001. *A Life of Healing: A Biography of Vaidyaratnam P. S. Varier*. New Delhi: Viking.
- Kumar, Deepak. 1997. "Unequal Contenders, Uneven Ground: Medical Encounters in British India, 1820–1920." In *Western Medicine as Contested Knowledge*, edited by A. Cunningham and B. Andrews, 172–90. Manchester: Manchester University Press.
- Laidlaw, James. 2000. "A Free Gift Makes No Friends." *Journal of the Royal Anthropological Institute* 6: 617–34.
- Langford, Jean. 2002. *Fluent Bodies: Ayurvedic Remedies for Postcolonial Imbalance*. Durham, NC: Duke University Press.
- Leela, P.U. 2008. *Religious Beliefs and Medical Practices: A Sociological Study of Ashtavaidyas of Kerala*. Ph.D. diss., School of Social Sciences, Jawaharlal Nehru University, Delhi.
- Leslie, Charles. 1963. "The Rhetoric of the Ayurvedic Revival in Modern India." *Man* 63: 72–73.
- . 1968. "The Professionalization of Ayurvedic and Unani Medicine." *Transactions of the New York Academy of Sciences*, Series II (February): 559–72.
- . 1973. "The Professionalizing Ideology of Medical Revivalism." In *Modernization of Occupational Cultures in South Asia*, edited by Milton Singer, 16–42. Durham, NC: Duke University, Program on Comparative Studies on Southern Asia (monograph no. 12).

- . 1974. "The Modernization of Asian Medical Systems." In *Rethinking Modernization: Anthropological Perspectives*, edited by John Poggie and R. Lynch, 69–107. Westport, CT: Greenwood Press.
- . 1975. "Pluralism and Integration in the Indian and Chinese Medical Systems." In *Medicine in Chinese Cultures: Comparative Studies of Health Care in Chinese and Other Societies*, edited by Arthur Kleinman, Peter Kunstadter, E. Russell Alexander, and James L. Gale, 401–418. Washington DC: U.S. Department of Health, Education, and Welfare.
- . 1976. "The Ambiguities of Medical Revivalism in Modern India." In *Asian Medical Systems*, edited by Charles Leslie, 356–67. Berkeley: University of California Press.
- . 1992. "Interpretations of Illness: Syncretism in Modern *Āyurveda*." In *Paths to Asian Medical Knowledge*, edited by Charles Leslie and Allan Young, 177–208. Berkeley: University of California Press.
- Leslie, Julia, and Dominik Wujastyk. 1991. "The Doctor's Assistant: Nursing in Ancient Indian Medical Texts." In *Anthropology and Nursing*, edited by Pat Holden and Jeremy Littlewood, 25–30. London: Routledge.
- Lévi-Strauss, Claude. 1963. *Structural Anthropology, Book I*. New York: Basic Books.
- Lincoln, Bruce. 1996. "Theses on Method." *Method and Theory in the Study of Religion* 8, no. 3: 225–27.
- . 2003. *Holy Terrors: Thinking about Religion after September 11*. Chicago: University of Chicago Press.
- . 2007. *Religion, Empire, and Torture: The Case of Achaemenian Persia, with a Postscript on Abu Ghraib*. Chicago: University of Chicago Press.
- Marriott, McKim. 1976. "Hindu Transactions: Diversity without Dualism." In *Transaction and Meaning: Directions in the Anthropology of Exchange and Symbolic Behavior*, edited by Bruce Kapferer, 109–42. Philadelphia: Institute for the Study of Human Issues.
- Marx, Karl. 1998 [1845]. "Theses on Feuerbach." In *The German Ideology*. New York: Prometheus Books.
- Mauss, Marcel. 1923–24. "Essai sur le don: Forme et raison de l'échange dans les sociétés archaïques." *L'Année Sociologique*, seconde série, tome I. Paris: Presses Universitaires de France.
- . 1934. "Les techniques du corps." *Journal de psychologie* (address to the Société de psychologie, 17 May 1934, Sorbonne): 270–293.
- . 1947. *Manuel d'Ethnographie*. Paris: Payot.
- . 1990. *The Gift: The Form and Reason for Exchange in Archaic Societies*. Translated by W.D. Halls. New York: W.W. Norton & Company.
- Mauss, Marcel, and Henri Hubert. 2001 [1902]. *A General Theory of Magic*. Translated by Robert Brain. New York: Routledge Classics.
- Mazumder, N.N. 1916. *A History of Education in Ancient India*. New York: Macmillan & Co.
- Meillet, Antoine. 1925. *La Méthode comparative en linguistique historique*. Oslo: H. Aschehoug & Co.
- Menon, A. Sreedhara. 1979. *Social and Cultural History of Kerala*. Bangalore: Sterling Publishers, Pvt. Ltd.
- Menon, Indudharan. 2019. *Hereditary Physicians of Kerala: Traditional Medicine and Ayurveda in Modern India*. New York: Routledge.
- Menon, T.K. Krishna. 1990. *A Primer of Malayalam Literature*. New Delhi: Asian Educational Services.

- Meulenbeld, G. Jan. 1999–2002. *A History of Indian Medical Literature, 5 Volumes*. Groningen: E. Forsten.
- Michaels, Axel. 1997. “Gift and Return Gift, Greeting and Return Greeting in India. On a Consequential Footnote by Marcel Mauss.” *Numen* 44, no. 3: 242–69.
- Modak, B.R. 1993. *The Ancillary Literature of the Atharva-Veda: A Study with Special Reference to the Pariśiṣṭas*. New Delhi: Rashtriya Veda Vidya Pratishthan.
- Mol, Annemarie. 2002. *The Body Multiple: Ontology in Medical Practice*. Durham, NC: Duke University Press.
- Momma, Haruko. 2013. *From Philology to English Studies: Language and Culture in the Nineteenth Century*. Cambridge, UK: Cambridge University Press.
- Mohanlal, P.K. 2014. *Keraḷattile Āyurveda Vidyābhāsam: Pāṭhaśālayil Ninnūṁ Sarvāklāśālayilekk*. Trivandrum: State Institute of Languages.
- Mookerji, Radha Kumud. 1989 [1947]. *Ancient Indian Education: Brahmanical and Buddhist*. Reprint, Benares: Motilal Banarsidass.
- Moore, Sally F., and Barbara G. Myerhoff, ed. 1977. *Secular Ritual*. Amsterdam: Van Gorcum & Co.
- Mukharji, Projit Bihari. 2007. “Structuring Plurality: Locality, Caste, Class and Ethnicity in Nineteenth Century Bengali Dispensaries.” *Health & History* 9, no. 1: 80–105.
- . 2009. *Nationalizing the Body: The Medical Market, Print and Daktari Medicine*. London: Anthem Press.
- . 2016. *Doctoring Traditions: Ayurveda, Small Technologies, and Braided Sciences*. Chicago: University of Chicago Press.
- . 2019. “Akarnan: The Stethoscope and Making of Modern of Ayurveda, Bengal, c. 1894–1952.” *Technology and Culture* 60, no. 4: 953–78.
- Mumbai Vaidya Sabhā. 1990. *Mumbai Vaidya Sabhā Shatābdi Smaranika (1890–1990)*. Bombay: Mumbai Vaidya Sabhā.
- . 2015. *Śatakottara Rajata Jayanti Samāroha Samiti*. Mumbai: Mumbai Vaidya Sabhā.
- Murthy, K.R. Srikanta. 1968. *Luminaries of Indian Medicine*. Varanasi: Chaukhambha Orientalia.
- Namoodiri, Vaidyamadham Cheriya Narayanan. 2010. “Ashtavaidya Tradition and Ayurvedic Clinical Practice.” In *Ayurveda in Transition: Essays in Memory of Aryavaidyān P.S. Varier*, edited by T.S. Muraleedharan and M.R. Raghava Varier, 140–44. Kottakkal: Arya Vaidya Sala.
- Nanda, Meera. 2004. *Prophets Facing Backward: Postmodernism, Science, and Hindu Nationalism*. New Delhi: Permanent Black.
- . 2009. *The God Market: How Globalisation Is Making India More Hindu*. Delhi: Random House.
- Narayan, Kirin. 2007. “Tools to Shape Texts: What Creative Nonfiction Can Offer Ethnography.” *Anthropology and Humanism* 32, no. 2: 130–44.
- Nurullah, Syed, and J.P. Naik. 1943. *A History of Education in India (During the British Period)*. London: Macmillan & Co.
- Ohnuma, Reiko. 2005. “Gift.” In *Critical Terms for the Study of Buddhism*, edited by Donald S. Lopez, Jr., 103–23. Chicago: University of Chicago Press.
- Olivelle, Patrick. 2017. “The Medical Profession in Ancient India: Its Social, Religious, and Legal Status.” *eJournal of Indian Medicine* 9, no. 1: 1–21.



- Panikkar, K.N. 1995. *Culture, Ideology, and Hegemony: Intellectuals and Social Consciousness in Colonial India*. New Delhi: Tulika.
- Parpola, Asko. 2019. "The Mirror in Vedic India: Its Ancient Use and Its Present Relevance in Dating Texts." *Studia Orientalia Electronica* 7: 1–29.
- Parry, Jonathan. 1986. "The Gift, the Indian Gift and the 'Indian Gift.'" *Man* 21, no. 3: 453–73.
- . 1994. *Death in Banaras*. Cambridge, UK: Cambridge University Press.
- Parsons, Talcott. 1954. *Essays in Sociological Theory*. Glencoe, IL: The Free Press.
- Pollock, Sheldon. 1993. "Rāmāyaṇa and Political Imagination in India." *Journal of Asian Studies*. 52, no. 2: 261–97.
- . 2009. "Future Philology? The Fate of a Soft Science in a Hard World." *Critical Inquiry* 35, no. 4: 931–61.
- . 2015. "What Was Philology in Sanskrit?" In *World Philology*, edited by Sheldon Pollock, Benjamin A. Elman, and Ku-ming Kevin Chang, 114–36. Cambridge, MA: Harvard University Press.
- . 2018. "Indian Philology: Edition, Interpretation, and Difference." In *The Space of Meaning (L'espace du sens): Approaches to Indian Philology (Approches de la philologie indienne)*, edited by Silvia D'Intino and Sheldon Pollock, 3–45. Paris: Diffusion de Bocard.
- Pollock, Sheldon, Homi K. Bhabha, Carol A. Breckenridge, and Dipesh Chakrabarty. 2002. "Cosmopolitanisms." In *Cosmopolitanism*, edited by C.A. Breckenridge, S. Pollock, H.K. Bhabha, and D. Chakrabarty, 1–14. Durham, NC: Duke University Press.
- Pordié, Laurent. 2008. "Tibetan Medicine Today: Neo-Traditionalism as an Analytical Lens and a Political Tool." In *Tibetan Medicine in the Contemporary World: Global Politics of Medical Knowledge and Practice*, edited by Laurent Pordié, 3–32. New York: Routledge.
- Prakash, Gyan. 2007. "The Image of the Archaic." In *Social History of Science in Colonial India*, edited by S. Irfan Habib and Dhruv Raina, 252–90. New Delhi: Oxford University Press.
- Radcliffe-Brown, A.R. 1952. *Structure and Function in Primitive Society: Essays and Addresses*. Glencoe, IL: The Free Press.
- Raghava Varier, M.R. 2002. *The Rediscovery of Ayurveda: The Story of Arya Vaidya Sala, Kottakkal*. New Delhi: Viking.
- Raheja, Gloria. 1988. *The Poison in the Gift: Ritual, Prestation, and the Dominant Caste in a North Indian Village*. Chicago: University of Chicago Press.
- Raina, M.K. 2002. "Guru-Shishya Relationship in Indian Culture: The Possibility of a Creative Resilient Framework." *Psychology and Developing Societies* 14, no. 1: 167–98.
- Rappaport, Roy A. 1999. *Ritual and Religion in the Making of Humanity*. Cambridge, UK: Cambridge University Press.
- Richardson, Peter. 1994. "The Consolation of Philology." *Modern Philology* 92, no. 1: 1–13.
- Robinson, James Harvey. 1906. *Readings in European History: A Collection of Extracts from the Sources Chosen with the Purpose of Illustrating the Progress of Culture in Western Europe Since the German Invasions, Vol. 2*. Boston: Ginn & Co.
- Saussure, Ferdinand de. 1959 [1916]. *Course in General Linguistics*. Translated by Wade Baskin. New York: The Philosophical Library.
- Sawhney, Simona. 2009. *The Modernity of Sanskrit*. Minneapolis: University of Minnesota Press.



- Sax, William. 2010. "Ritual and the Problem of Efficacy." In *The Problem of Ritual Efficacy*, edited by William Sax, Johannes Quack, and Jan Weinhold, 3–16. New York: Oxford University Press.
- Scharfe, Hartmut. 2002. *Education in Ancient India*. Leiden: Brill.
- Schechner, Richard. 1985. "Victor Turner's Last Adventure." *Anthropologica* 27, no. 1.2: 190–206.
- Scheidel, Walter. 2019. *Escape from Rome: The Failure of Empire and the Road to Prosperity*. Princeton: Princeton University Press.
- Selby, Martha Ann. 2005. "Narratives of Conception, Gestation, and Labour in Sanskrit Āyurvedic Texts." *Asian Medicine: Tradition and Modernity* 1, no. 2: 254–75.
- Seligman, A., R.P. Weller, M.J. Puett, and B. Simon. 2008. *Ritual and Its Consequences: An Essay on the Limits of Sincerity*. New York: Oxford University Press.
- Sen, Mahamahopadhyaya Kaviraj Gananath. 1913. *Pratyaksha-Shārīram: A Text-Book of Human Anatomy in Sanskrit with an English and a Sanskrit Introduction Containing a Short History of Ayurvedic Literature, Part I*. Calcutta: K.R.S. Kavyatirtha.
- . 1941. *Pratyaksha-Shārīram: A Text-Book of Human Anatomy in Sanskrit Including History of Ayurveda, Classical Nomenclature and Elements of Physiology, Part II*. Calcutta: Kalpataru Press.
- Shah, N.C. 2017. "Some Thoughts on Hindu Medicine—An Address by Kavirāj Mahāmahopadhyāya Gananath Sen." *Indian Journal of History of Science* 52, no. 4: 446–63.
- Sharma, Madhuri. 2012. *Indigenous and Western Medicine in Colonial India*. New Delhi: Cambridge University Press.
- Sharma, Priya Vrat. 2003 [1982]. *Rogī-parikṣa-vidhi*, JaiAS 15. Reprint, Varanasi: Motilal Banarsidass.
- , ed. 1992. *History of Medicine in India: From Antiquity to 1000 A.D.* New Delhi: Indian National Science Academy.
- Sharma, Shiv. 1929. *The System of Ayurveda*. Bombay: Khemraj Shrikrishnadass, Shri Venkateshwar Steam Press.
- Sharp, Henry, ed. 1965 [1920]. *Selections from Educational Records, Part I (1781–1839)*. Reprint, Delhi: National Archives, Government of India.
- Shedlock, James, Ronald H. Sims, and Ramune K. Kubilius. 2012. "Promoting and Teaching the History of Medicine in a Medical School Curriculum." *Journal of the Medical Library Association* 100, no. 2: 138–41.
- Sheldon, E.S. 1902. "Practical Philology." *Publications of the Modern Language Association of America* 17, no. 1: 91–104.
- Sigaut, François. 1975. *L'Agriculture et le feu*. Paris/La Haye: Mouton.
- . 1977. "Quelques notions de base en matière de travail du sol dans les anciennes agricultures européennes." *Journal d'Agriculture traditionnelle et de Botanique appliquée* 24, no. 2–3: 139–69.
- . 1978. "Identification des techniques de récolte des grains alimentaires." *Journal d'Agriculture traditionnelle et de Botanique appliquée* 25, no. 3: 145–61.
- . 1985. "More (and enough) on technology!" *History and Technology* 2, no. 2: 115–32.
- . 1994. "Technology." In *Companion Encyclopedia of Anthropology*, edited by Tim Ingold, 420–59. Abingdon, Oxon: Routledge.

- Sinhjee, H.H. Bhagvat. 1896. *Aryan Medical Science: A Short History*. London: Macmillan and Co. Ltd.
- Sivaramakrishnan, Kavita. 2006. *Old Potions, New Bottles: Recasting Indigenous Medicine in Colonial Punjab*. New Delhi: Orient Longman.
- Slouber, Michael. 2016. *Early Tantric Medicine: Snakebite, Mantras, and Healing in the Gāruḍa Tantras*. New York: Oxford University Press.
- Smith, Jonathan Z. 1980. "The Bare Facts of Ritual." *History of Religions*, 20, no. 1–2: 112–27.
- . 1987. *To Take Place: Toward a Theory in Ritual*. Chicago: University of Chicago Press.
- Snoek, Jan A.M. 2008. "Defining 'Rituals.'" In *Theorizing Rituals: Issues, Topics, Approaches, Concepts*, edited by Jens Kreinath, J.A.M. Snoek, and Michael Stausberg, 1–14. Leiden: Brill.
- Staal, Frits. 1979. "The Meaninglessness of Ritual." *Numen* 26: 2–22.
- Stewart, Pamela J., and Andrew Strathern. 2014. *Ritual: Key Concepts in Religion*. London: Bloomsbury Academic.
- Strathern, Andrew, and Pamela J. Stewart. 2010 [1998]. *Curing and Healing: Medical Anthropology in Global Perspective*. Reprint, Durham, NC: Carolina Academic Press.
- Sweet, Henry. 1900. *The Practical Study of Languages: A Guide for Teachers and Learners*. New York: Henry Holt and Company.
- Tambiah, Stanley J. 1985. *Culture, Thought, and Social Action: An Anthropological Perspective*. Cambridge, MA: Harvard University Press.
- Thapar, Romila. 2000. *Narratives and the Making of History: Two Lectures*. New Delhi: Oxford University Press.
- Thatte, D.G., and G.P. Tiwari. 1980. *Current Trends in the Study of Śārīra*. Varanasi: Chaukhambha Orientalia.
- Theofanidis, Dimitrios, and Despina Sapountzi-Krepia. 2015. "Nursing and Care: An Historical Overview from Ancient Greek Tradition to Modern Times." *International Journal of Caring Sciences* 8, no. 3: 791–800.
- Thompson, George. 1995. "On Mantras and Frits Staal." *Journal of Ritual Studies* 9, no. 2: 23–44.
- Tolkien, J.R.R. 1923. "Philology: General Works." *The Year's Work of English Studies* 4, no. 1: 20–37.
- Trautmann, Thomas. 1995 [1981]. *Dravidian Kinship*. Reprint, New Delhi: Vistaar Publications.
- Turner, James. 2014. *Philology: The Forgotten Origins of the Modern Humanities*. Princeton: Princeton University Press.
- Turner, Victor. 1969. *The Ritual Process: Structure and Anti-Structure*. New York: Aldine Publishing Company.
- Udapa, K.N., et al. 1959. *Udapa Report of the Committee to Assess and Evaluate the Present Status of Ayurvedic System of Medicine*. Delhi: National Printing Works.
- Usman, K.B. Muhammad, et al. 1923. *The Report of the Committee on the Indigenous Systems of Medicine, 2 Volumes*. Madras.
- Vaibhav, Amit, Meera Antiwal, Jai Prakash Singh, and Om Prakash Singh. 2016. "Leech Therapy (Jalaukavacharana) in Ayurveda: A Scientific Review." *International Journal of Pharmacy and Pharmaceutical Research* 6, no. 4: 503–17.
- Vāriyar, N.V. Kṛṣṇankutti. 2002 [1980]. *Āyurvedacaritraṃ*. Revised, Kottakkal: Āryavaidyaśāla.

- Varier, P.S. 1916 (1092 Kollavarṣam, Malayalam calendar). "Āryavaidyaparīṣkaram." *Dhanvantari: Malayāḷattile Ēkavaidyamāsika* 14, no. 5 (December 16/Dhanu 1): 108–11.
- . 1942 and 1969. *Bṛhaccārīram: navīnamatānusāreṇa pracīnaśarīrasāstratātvanām vivaraṇam teṣu sandigdhatayā 'sāmpūrṇatayā vā sthītānām tatvānāmādhunikaśāstrā 'virodhī vistāraścāsmīn suṣṭhu kṛtaḥ*, 2 Volumes. Varanasi: Chaukhambha Sanskrit Series Office.
- Varier, P.S., and P.V.K. Varier, ed. 1903–1926 (1079–1101 Kollavarṣam, Malayalam calendar). *Dhanvantari: Malayāḷattile Ēkavaidyamāsika*. Kottakkal: Ārya Vaidya Śāla Press.
- Varma, Daya Ram. 2015. *Medicine, Healthcare, and the Raj: The Unacknowledged Legacy*. Gurgaon: Three Essays Collective.
- Warnier, Jean-Pierre. 2009. "Technology as Efficacious Actions on Objects . . . and Subjects." *Journal of Material Culture* 14, no. 4: 459–70.
- Watkins, Calvert. 1990. "What is Philology?" *Comparative Literature Studies* 27, no. 1: 21–25.
- Watts, Edward J. 2018. *Mortal Republic: How Rome Fell into Tyranny*. New York: Basic Books.
- Welch, John S. 2003. "Ritual in Western Medicine and Its Role in Placebo Healing." *Journal of Religion and Health* 42, no. 1: 21–33.
- Witzel, Michael. 2013. "How to Enter the Vedic Mind? Strategies in Translating a Brāhmaṇa Text." In *New Horizons of Indological Research: Felicitation Volume in Honor of Prof. P.C. Muraleemadhavan*, edited by Dharmaraj Adat, 21–33. Delhi: Kunjunni Raja Academy of Indological Research and New Bharatiya Book Corporation.
- Wolfgram, Matthew. 2010. "Truth Claims and Disputes in Ayurveda Medical Science." *Journal of Linguistic Anthropology* 20, no. 1: 149–65.
- Worthen, Molly. 2021. "A Dose of the Humanities." *New York Times*. April 11.
- Wujastyk, Dagmar. 2012. *Well-Mannered Medicine: Medical Ethics and Etiquette in Classical Ayurveda*. New York: Oxford University Press.
- Wujastyk, Dominik. 1993. "Indian Medicine." In *Companion Encyclopedia of the History of Medicine*, 2 Volumes, edited by W.F. Bynum and Roy Porter, 1:755–78. London: Routledge.
- . trans. 2003 [1998]. *The Roots of Ayurveda: Selections from Sanskrit Medical Writings*. Reprint, London: Penguin Books.
- . 2008. "The Evolution of Indian Government Policy on Ayurveda in the Twentieth Century." In *Modern and Global Ayurveda: Pluralism and Paradigms*, edited by Dagmar Wujastyk and Frederick M. Smith, 43–76. Albany: State University of New York Press.
- Yamashita, Tsutomu, and P. Ram Manohar. 2008a. "Memoirs of Vaidyas: The Lives and Practices of Doctors in Kerala, India (1)." *eJournal of Indian Medicine* 1, no. 2: 43–60.
- . 2008b. "Memoirs of Vaidyas: The Lives and Practices of Traditional Medical Doctors in Kerala, India (2)." *eJournal of Indian Medicine* 1, no. 3: 141–63.
- Zimmermann, Francis. 1989. "Terminological Problems in the Process of Editing and Translating Sanskrit Medical Texts." In *Approaches to Traditional Chinese Medical Literature*, edited by Paul U. Unschuld, 141–51. Dordrecht: Kluwer Academic.
- Zysk, Kenneth. 1991. *Asceticism and Healing in Ancient India: Medicine in the Buddhist Monastery*. New York: Oxford University Press.
- . 1996. *Medicine in the Veda: Religious Healing in the Veda*, Reprint edition. Delhi: Motilal Banarsidass.
- . 2007. "The Bodily Winds in Ancient India Revisited." *Journal of the Royal Anthropological Institute* 13: 105–15.

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Cover design: Glynnis Koike.  
Cover illustration: © Anthony Cerulli.

ISBN: 978-0-520-38354-8



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