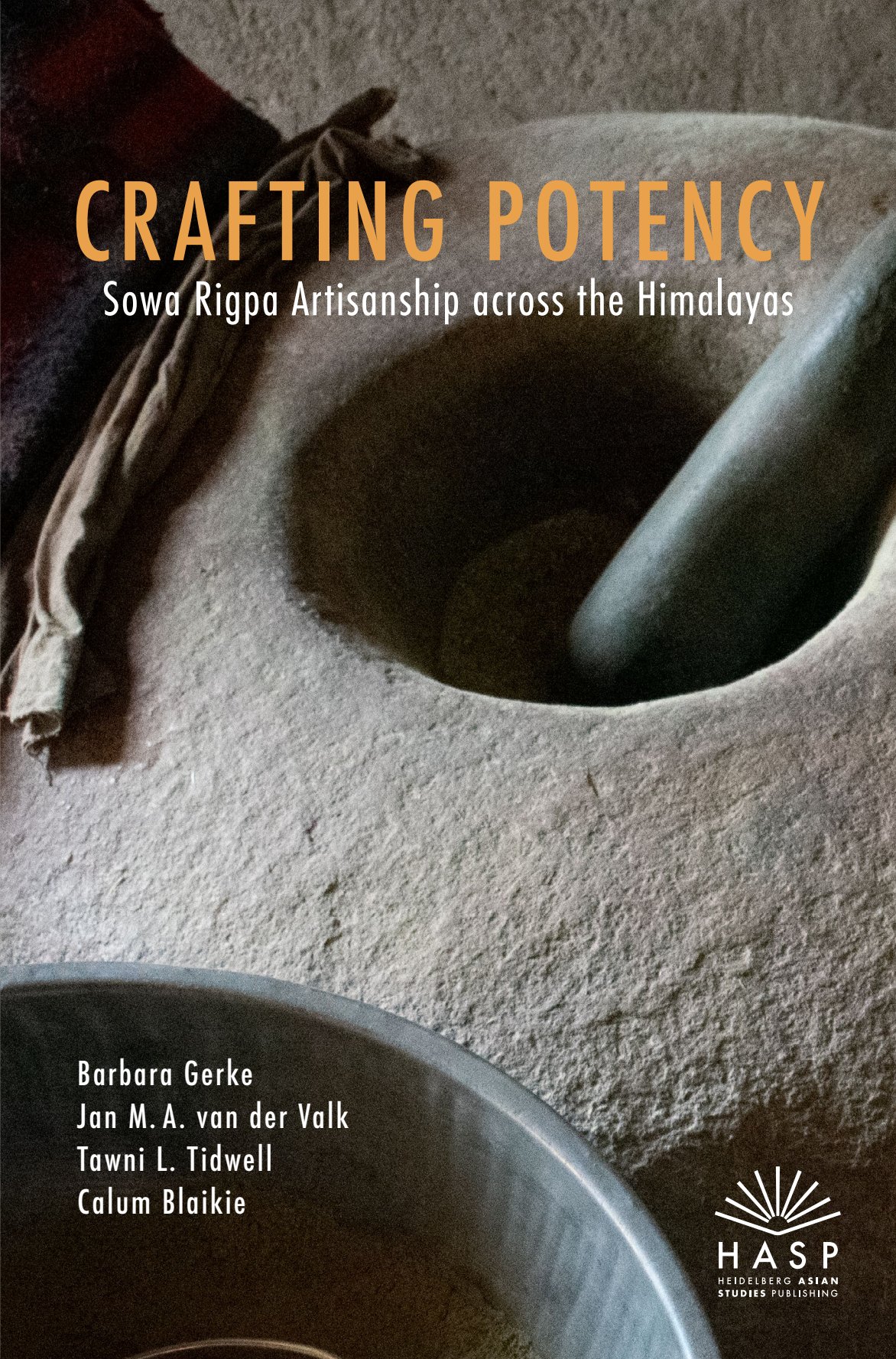

CRAFTING POTENCY

Sowa Rigpa Artisanship across the Himalayas

Barbara Gerke
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Front cover image: Grinding stone of the Nee Amchi Association (Ogyan Sorig Tsogspa) pharmacy operated by Amchi Nawang Tsering. Nee, Ladakh, September 2018. Photo J. van der Valk (CC-BY-SA 4.0).
Back cover image: Amchi Nawang Tsering's hands working with a piece of limestone. Nee, Ladakh, September 2018. Photo courtesy of T. K. Shor (all rights reserved).

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This book is dedicated to all of the Sowa Rigpa medicine makers and physicians we met during our years of study and fieldwork, in recognition of the skill and value of their craft.

Contents

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Abbreviations

AYUSH	Government of India Ministry of Ayurveda, Yoga and Naturopathy, Unani, Siddha, Sowa Rigpa, and Homoeopathy
CCTM	Central Council of Tibetan Medicine
CIBS	Central Institute for Buddhist Studies
CIHTS	Central Institute of Higher Tibetan Studies, previously CUTS (Central University of Tibetan Studies)
CTMI	Chagpori Tibetan Medical Institute
FWF	Austrian Science Fund, Wissenschaftsfonds (Fonds zur Förderung der wissenschaftlichen Forschung)
HAA	Himalayan Amchi Association
MTK	Men-Tsee-Khang (Tibetan Medical & Astro. Institute)
NISR	National Institute of Sowa Rigpa
PRC	People's Republic of China
RCT	randomized controlled trial
SBS	Sorig Bumzhi School
SRAN	Sowa Rigpa Association Nepal
SRIC	Sowa Rigpa International College
TBSI	Traditional Buddhist Sorig Institute
TME	Tibetan Medicine Education Center
NYI	New Yuthok Institute
SKIN	Sorig Khang International Nepal
NGO	non-governmental organization

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Author Contributions

This book is the result of a collaborative effort among four authors. We all contributed to the overall development and editing of the book, reviewed each other's work, co-authored the Introduction and the Conclusions, and contributed to the discussion sections of the chapters. Gerke took the lead in writing Chapter 1, the first section of Chapter 2, and co-authored Chapter 5. She also led on the development of the artisanal epistemology conceptual framework for the book, and oversaw the entire research project and publication process as the Principal Investigator. Van der Valk led on conceptualizing the Ingoldian frameworks tested in the book and is the main author of Chapters 2 and 4. He also contributed extensively to the overall structure of the book and the content of Chapters 1 and 5. Tidwell authored Chapter 3, contributed to the textual theoretical and mineralogical content in Chapter 1, and to the integration of Sowa Rigpa theory throughout the book. Blaikie co-authored Chapter 5 and contributed to analytical discussions across chapters.

Notes on Transliteration and Transcription

This is a book that moves through different parts of the Tibetan and Himalayan world. For reasons of legibility, when we use Tibetan terms rather than translations in the text, we provide consistent phonetic spellings that closely follow the "THL Simplified Phonetic Transcription of Standard Tibetan" (Germano and Tournadre 2010). However, we recognize that these spellings do not necessarily reflect how amchis pronounce these terms and that different Romanized spellings are used in Ladakh (e.g., *nuspa* rather than *nüpa*) and elsewhere. In specific cases, we make slight deviations from the THL system for legibility (e.g., using hyphens for *men-ngak*, *tup-pa*). At first appearance the transliteration is provided following the "THL Extended Wylie Transliteration Scheme" (Chandler et al. 2004). Explanations of recurring terms are provided in the glossary in Appendix 2. Where we use English translations of Tibetan terms or cite passages from Tibetan texts, we sometimes provide the transliteration of the original Tibetan in brackets or in a footnote for clarification, following Chandler et al. (2004). The phonetic transcription of proper nouns reflects the following order of priority: spellings that individuals or institutions themselves use; common local spellings; spellings commonly used in the secondary literature; and Germano and Tournadre (2010). For Tibetan proper nouns, if institutions or individuals use Romanized transcriptions of their names, we spell them accordingly (e.g., Men-Tsee-Khang, Teinlay Palsang Trogawa). Otherwise, we privilege common spellings in use in the secondary literature (e.g., Ngawang or Nawang not Ngakwang) and in particular regions (e.g., Chospel not Chöpel in Ladakh). The Wylie transliteration of the names of amchis and other figures who are mentioned in several places across the book is provided in Appendix 1. Well-known Tibetan terms like lama or amchi are not italicized and are anglicized with a plural -s. All Sanskrit terms are transliterated following the "International Alphabet of Sanskrit Transliteration" (IAST) scheme (Wikipedia 2019).

Note on Texts

Since this is a multi-author publication, we have sometimes used different versions of the same text. We list all versions that we have used in the bibliography and refer to the version used in each case in our in-text citations. For example, we use two versions of the *Four Tantras* (Yutok Yönten Gönpo 1982, 2006) and sometimes also refer to its more concise form used for memorization (Yutok Yönten Gönpo 1999). When we make more general reference to chapters in the *Four Tantras*, the tantra number and chapter number(s) are indicated (e.g., III, 90–91).

Introduction

Potency as Efficacy-in-Becoming

This book breaks new ground by exploring the intricate interweaving of knowledge, practice, and materials through which potency is crafted in Sowa Rigpa (*gso ba rig pa*). Based on fieldwork with practitioners known as *amchi* (*am chi*)[1] from the Himalayan regions of Ladakh and Dharamsala (India), as well as Kathmandu (Nepal), the four authors analyze how potency is understood and manipulated in the making of multi-ingredient medicines. Taking the Tibetan umbrella term *nüpa* (*nus pa*) as our starting point, we draw on insights gained by learning from and working side by side with amchis as apprentices and participant-observers, and from the lineages and accumulated experiences of our respective Sowa Rigpa teachers. We also bring in reflections on selected Tibetan medical works that shape amchis' artisanal practice, as well as contemporary theoretical perspectives from Dharamsala and eastern Tibet. From these vantage points, we explore how the therapeutic potential of Sowa Rigpa medicines or *men* (*sman*) is sculpted through both material processes and ritual means. Along the way, we also ask how amchis learn medicine-compounding or *menjor* (*sman sbyor*), and what changes when artisanship is passed on in institutional settings as compared to lineage-based training.

The practices, processes, and perspectives under investigation are plural and dynamic. Moreover, we four authors approach and interpret them in slightly different ways, since we work across social and biocultural anthropology and have different relations to Sowa Rigpa as a field of medical practice. This book is therefore a somewhat palimpsestic experimental mélange in the sense that it

1 Amchi is a Mongolian-derived word for a Sowa Rigpa medical practitioner used widely across the Himalayas and to a lesser extent in other regions. We use the title of "Dr." when referring to amchis who themselves use it; this is legal for registered amchis in countries where Sowa Rigpa is recognized. Amchis are also called *menpa* (*sman pa*).

takes a metadisciplinary approach that has required translations across linguistic, epistemological, and ontological boundaries, leading us to trouble familiar categories in search of more suitable ways to approach potency. Our use of the term "potency" cannot therefore be identical to amchis' conceptions of *nüpa*; it rather serves as an analytical tool to help us talk about *nüpa*, as well as associated terms and techniques. While amchis craft *nüpa*, we craft a hermeneutics of potency by weaving together in the English vernacular ethnographic and textual materials derived from various Sowa Rigpa perspectives. Our analysis through much of the book is inspired by Tim Ingold's ecologically attuned phenomenology and Pamela Smith's material experimental methods for interpreting early modern science and technology, but we also pay attention to amchis' sensory-based approach as described textually and transmitted nowadays through the chosen scientific vernacular of those who teach and learn at two of the principal Tibetan medical colleges (Chapter 3).

Although often referred to in English as Tibetan medicine, Sowa Rigpa means knowledge or science (*rigpa*) of healing (*sowa*). Broadly, the English term "science" refers to systematic inquiry into the natural world through observation, experimentation, and evidence-based theory testing. While often associated with modern techno-scientific disciplines, such approaches are evident across diverse knowledge traditions, including Tibetan ones. As Janet Gyatso (2015, 5) notes in her study covering the mid-sixteenth to the early eighteenth centuries, terms like *rigpa* in Sowa Rigpa and *chepa* (*dpyad pa*) in *menché* (*sman dpyad*; often translated as "medical science") denote "critical and often empirically based ways of investigating and knowing about the world." While these terms are frequently associated with transcendental aims in Buddhist contexts,[2] Gyatso heuristically interprets the epistemic orientations of early modern Tibetan medicine as "reaching toward a scientific sensibility." Our understanding of science in this book is not confined to Eurocentric method-based empiricism; rather we see science as a situated, evolving practice for acquiring knowledge through embodied interaction, empirically evaluated experimentation, and nuanced rigor in craft—a mode of inquiry grounded in making, doing, and experiencing. As Smith (2022, 18) puts it, "the work of *making* is related to *knowing*, and … making is an epistemic activity and an active form of knowledge in its own right." Like both Ingold and Smith, we reject

2 Following Kapstein (2006, 205), our general use of the term "Buddhism" in the Tibetan and Himalayan context is inclusive of Bön in its "organized, clerical dimension." We use the designation Bön when referring to specific Bön institutions or practices, such as the Sorig Bumzhi School (Chapter 4) and Bönpo *mendrup* ritual (Chapter 5), or when we are highlighting differences from other Tibetan Buddhist traditions.

the long-held philosophical assumption that mind- and language-based cognition are the only sources of abstract or conceptual knowledge about the world, and instead foreground the preeminence of practice as the generator of knowledge (see Smith 2022, 232). By approaching scientific endeavors in this way, we strive for a better approximation of what in Sowa Rigpa is termed "knowledge" or *rigpa*.

Our aim is to unpack potency as a potential that is molded and actualized in practice. Along the way, we draw on and test the Ingoldian concepts of "skilled practice," "taskscapes," and "meshworks" (Ingold 2000, 2011b), as well as the idea of "artisanal epistemologies" (Smith 2004). In line with these perspectives, we approach practitioners as deeply immersed in their socio-ecological environments, allowing for embodied applications of Sowa Rigpa epistemologies. Thus, this book is more about craft as practice and process than it is about histories and theories. It is also about people and places at the peripheries of the larger contemporary Sowa Rigpa landscape (see Pordié and Kloos 2022), calling attention to amchis who engage in small-scale artisanal production and are embedded in lineage-based systems of expertise. These practitioners increasingly represent a minority compared to the larger group of amchis trained institutionally in India and Nepal. We highlight how they work with substances, sculpt potency, and pass on technical skills to the next generation of medicine-makers by means of a practice-centered approach toward artisanship and materiality. Like the amchis we work with, we acknowledge that substances have certain inherent (inter)active qualities. But our emphasis here is on how potency emerges as a capacity to have an effect rather than on static properties of supposedly stable ingredients. As laid out below, we analytically distinguish potency from efficacy by loosely defining the latter as the degree to which a substance might manifest its ascribed characteristics or benefit for a patient or consumer. Potency, we argue, is efficacy-in-becoming.

Potency in Sowa Rigpa is crafted through interlaced medical and ritual practices that facilitate the layering, melding, and integration of substances and properties. We heuristically define "ritual" as patterned, repetitive, and symbolic expressions of cultural and religious practice (largely but not exclusively Buddhist), and "medicine" as broadly empirically-based ways of healing. These cannot be regarded as two neatly separate domains, nor can they easily be confined to the temple, clinic, or pharmacy (*sman sbyor khang*; lit. medicine-compounding house). Medicine and ritual constitute interrelated areas of expertise in the Tibetan cultural sciences (*rig gnas*), where Buddhism (*nang don rig pa*) and medicine (Sowa Rigpa) form a nexus of entanglements between practitioners, lineages, materials, deities, and texts (Adams, Schrempf, and Craig 2011). "Ritual" is a common translation of the Tibetan term *choga* (*cho ga*), which is often used to refer to procedures, particularly of a medico-ritual type and often involving substances. But as William Sax (2010, 4) points out, what we label as "ritual" can be understood by those engaging in

it more simply as work: "what we see as ritual, they see as technique." In Sowa Rigpa, *choga* can refer to transforming substances into consecrated pills, but also to pharmacological processing in—often ritualized—medical settings. We do, however, make clear distinctions between technical terms and classifications as they appear in specialized texts, while exploring entanglements in practice through the relationships that experts have with the texts and materials they use.

In manifold ways, amchis rely on the foundational medical work the *Four Tantras* or *Gyüzhi* (*Rgyud bzhi*), or the Bön equivalent the *Four Collections* or *Bumzhi* (*'Bum bzhi*), and their later commentaries. Largely dating back to the twelfth century, the *Four Tantras* is partially memorized by most Sowa Rigpa students until this day (Tidwell 2017). The text draws on several sources, including the Tibetan translation of the Indian medical compendium *Aṣṭāṅgahṛdayasaṃhitā* by Vāgbhaṭa (Yang Ga 2010). Later, the Nyingma tantric cycle of the *Yutok Nyingtik* (*G.yu thog snying thig*) became one of the central spiritual sources for the medical tradition (Garrett 2009, Van Vleet 2016) and is still practiced by many Sowa Rigpa physicians (see Chapters 3, 4, and 5).[3] Nevertheless, contemporary Sowa Rigpa training and practice vary considerably between institutions (see Chapter 4 for Kathmandu), and across its vast homelands, from Tibetan regions in the PRC to India, Nepal, Bhutan, Mongolia, and the Russian republics of Kalmykia, Buryatia, and Tuva.

Sowa Rigpa theories surrounding potency, elemental properties, and conceptions of the body align with Buddhist cosmologies but are simultaneously articulated in modern scientific terms by institutionally trained amchis (Chapter 3). We note the emergence of Sowa Rigpa industries (Kloos et al. 2020) and various governments' attempts to standardize and regulate Sowa Rigpa education and practice. At the same time, forms of amchi artisanship deeply immersed in ritualized local environments persist in Himalayan valleys (Singh and Gerke, 2025; Surbhi and Van der Valk, 2025) and across the Tibetan Plateau (Tidwell 2021), offering insights into how *menjor* practices adapt across generations, changing environments, and socio-political contexts (Blaikie 2013, 2014, 2018, 2022, 2025). Meanwhile, new modes of engagement with this regional body of artisanship are also emerging beyond Tibetan and Himalayan worlds through figures such as Dr. Arya Pasang Yonten—born in Tibet and trained in Dharamsala—who now teaches aspects of medicine making in Switzerland to international students and anthropologist-apprentices (Chapter 2).

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3 The *Yutok Nyingtik* or *Yutok Heart Essence* is part of the collection known as the *Treasury of Rediscovered Teachings*, or *Rinchen Terdzö* (*Rin chen gter mdzod*). For centuries, amchis have practiced it to develop therapeutic skill and meditative sensibilities, as well as to consecrate their own medicines (Garrett 2009).

While the ethnographic and textual materials we draw upon only allow us to capture a glimpse of this diversity, they have enabled us to explore potency and its crafting from several different vantage points. Before turning to a more in-depth discussion of our methods and fieldsites, however, we first address the key question of why we have chosen to foreground potency as well as artisanal perspectives and practices.

Foregrounding potency

While writing our proposal for the project from which this book emerged, we built upon Van der Valk's (2017) combined Ingoldian and science studies approach to Sowa Rigpa medicine making. We were also inspired by Vivienne Lo and her collaborators' work on potent substances, which addresses key historical, ethnopharmacological, and regulatory transitions between foods and medicines across Eurasia—especially highlighting the role of spices as boundary objects. The latter provided us with many relevant insights, for instance on the global trade in cherished exotica, or the potency attributed to flavors and aromas and "the transformative potential of the culinary arts" (Lo et al. 2015, 3). Later, this inspiration found expression in the *HIMALAYA* special section edited by Gerke and Van der Valk (2019), which focused on materiality and artisanship in the crafting of potent compounds such as ayurvedic iron tonics (Wujastyk 2019), Burmese alchemical gold ash (Coderey 2019), and Tibetan pills containing semi-precious stones (Gerke 2019a) and highly poisonous plants (Van der Valk 2019). Other contributions explored the ritual deployment of Asian materia medica (Sehnalova 2019a) and built novel bridges between Sowa Rigpa concepts and modern pharmacology (Schwabl and Van der Valk 2019, Tidwell and Nettles 2019).

This book seeks to move beyond a palpable academic partiality (including our own) toward exotic substances in Sowa Rigpa, such as precious stones, metals, poisons, panaceas, and unusual animal parts.[4] We instead take the reader through the life-stories of ordinary and ubiquitous substances, such as limestone and medicinal butter containing extracts of common fruits and rhizomes. This allows us to explore seemingly mundane yet surprising complexities involved in the cultivation of potency. To explore more fully the many dimensions on which

4 On the use of insects in Tibetan materia medica see Czaja 2019a; on animal substances, especially musk, see Craig 2012; on precious stones and metals, see Gerke 2016, 2019a, 2021; on poisons, see Gerke 2023, Tidwell and Nettles 2019, Van der Valk 2019; and on bezoars and theriac, see Simioli 2016, 2025.

potency is understood to operate, however, one chapter focuses on a group of highly complex yet hitherto understudied consecrated compounds known as *papta* (*phabs rta*). While our selection of substances is by no means exhaustive or fully representative of Sowa Rigpa's rich pharmacopeia, it does illustrate the various constituent layers of potency.

There is an "ocean of Tibetan medical literature" (McGrath 2019) on which amchis and researchers rely to various extents, much of which concerns medicinal substances and formulations. However, each act of medicine making is, in a sense, unique. This is not just because ingredients have fluid identities and variable qualities or may be subject to substitution (*sman tshabs*).[5] Even "classical" formulas are dynamic, both as written recipes (Gerke 2018a) and due to divergent modes and conditions of production (e.g., Blaikie 2015). This book emphasizes how substances undergo various processes of transformation that revolve around the crafting of potency. In an effort to make their best medicines, amchis sculpt layer upon layer of potency through the confluence and manipulation of materials, mantras, meditative stabilization, interdependence, shape, moonlight, and lineage, to mention but a few elements introduced in this book.

Our aim is not to assess whether a Tibetan pill or ritualized action is efficacious according to specific criteria, but rather to show how amchis—and those who are medicine makers in particular—come to know, perceive, and craft potency. Potent substances can certainly evoke powerful effects on human body-minds. Once ingested they interact within a bodily context, manifesting their full potency as understood by amchis. Yet, before these effects can be experienced in the form of beneficial qualities (*phan yon*) or benefit (*phan thogs*), a fundamental series of theoretically informed yet highly pragmatic categorizations, skillful manipulations, and material transformations has already taken place. All this occurs *before* potency becomes measurable as effectiveness or efficacy in the biomedical paradigm when administered as a drug (see Pittler and White 1999). We analytically distinguish this creative manifestation of power prior to efficacy as potency.[6] This efficacy-in-becoming therefore has a much broader sense than

5 On substitution, see Czaja 2017, Glover 2021, Sabernig 2011, Schwabl and Van der Valk 2019.

6 The Tibetan term *nüpa* is often combined with the term *pentok* (*phan thogs*) to make *pennü* (*phan nus*), "beneficial potency." Although *pennü* is often glossed as "efficacy," it actually comprises a complex set of ideas that describe various effects of medicines and ritual compounds (Craig 2012, 6–8; Schrempf 2015, 288). In formularies, *pentok* and *pennü* typically link formulas to the treatment of specific diseases, but these indications do not fully explain the *nüpa* of the substances themselves.

the standard pharmacological meaning of potency, which denotes the intensity of dose-related drug activity.

Our conceptualization of potency here is derived from the Tibetan term *nüpa*. *Nüpa* is both an intransitive verb and a noun. As an intransitive verb that takes no direct object, *nüpa* denotes the capacity to do, enact, or confer something. In the medical and ritual contexts that we are concerned with in this book, it is the capacity to affect change upon a body of matter-energy: *nüpa* can roughen, lubricate, lighten, make heavier, heat, cool, dull, or sharpen (we explain how this works in Chapter 3). As a noun, it is a characteristic of a substance that emerges when it comes into contact with another entity. *Nüpa* also has broader semantic networks as applied both within and beyond Sowa Rigpa and Buddhist contexts, which connect it to the notions of benefit, strength, and power.[7] The rich and nuanced language surrounding the concept of *nüpa* hints at the myriad forms in which potency is cultivated, layered, and nurtured through both material processes and ritual means in artisanal practice.

Efficacy and efficacy-in-becoming

Potency in the sense of efficacy-in-becoming, and the ways in which practitioners-as-artisans modulate it by means of embodied medicine making, are the foci of this book. While this distinguishes our approach from research focused on questions related to efficacy (e.g., how medicines affect those who consume them and how this is understood and measured), it is important to acknowledge relevant developments in studies of efficacy across both anthropology and pharmacology.

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7 The semantic breadth of *nüpa* is reflected in Tibetan medical and standard dictionary entries. For example, the *New Orthographic Dictionary* (Sönam Tsering 1979, 434) describes *nüpa* as "a force that causes change to a substance, classified by type," offering a few illustrative examples: *nüpa* of a substance's materiality, *nüpa* of a medicine, and *nüpa* of saffron as a medicinal substance in alleviating hot illnesses. However, it also offers a secondary definition that defines *nüpa* in a much broader sense as "a term for power and qualities," using the example, "he has the power to alleviate hardship." The *Great Tibetan Dictionary* (Trang yi sün 1985) adds several synonyms to its entry on *nüpa*, which also point to its broader meanings: 1) *tsel* (*rtsal*), which connotes skill, dexterity, accomplishment, potential, potency, dynamic energy, strength, creative play/power, manifestation, capacity, expression, and effort; 2) *penwa* (*phan ba*), to benefit, to improve, to be useful; 3) *tup-pa* (*thub pa*), to be able to, to be capable, to withstand; and 4) *pöpa* (*phod pa*), to have the power to, to dare, to have capacity to endure.

Within the social sciences, researchers have long foregrounded the efficacy of symbols, the importance of meaning-making, and the way objects take on various significations as they move through different social contexts (Appadurai 1986, Moerman 2002). Elisabeth Hsu (2010, 23) noted that early on pharmaceutical anthropologists were "curiously uninterested in the materiality of drugs," having "left the discussion of the drugs and their physiological effects to biomedicine, accounted for sociocultural aspects, and thereby inadvertently reinforced the Cartesian dualism that has set the agenda for the medical anthropological project." Over recent decades, however, researchers of Asian medicines have made significant progress in dismantling nature-culture, body-mind, and biomedical-social efficacy dichotomies. The social lives of things approach has, for instance, been applied with nuance to the development of a randomized controlled trial (RCT) of the Tibetan "birth-helping pill" Zhijé 11 (Craig 2012, 215–52) and to investigating plural perceptions of mercurial medicines (Gerke 2013).

Over the past two decades our colleagues have critiqued the dominant approaches to how efficacy is determined and produced in the pharmaceutical industry. They have highlighted the appropriative application of RCTs to Sowa Rigpa as "randomized controlled crime" (Adams 2002), but also unveiled how identity politics are shaping the dynamics of global pharma in the case of Tibetan medicines (Craig and Adams 2008, Kloos 2017a). Similarly, they have addressed the "political efficacy" of Tibetan medicine in exile as a form of soft power (Kloos 2017a), as well as the paradoxical cultural survival of traditional medicine in today's market economy through the adoption of modern quality control methods in India, the PRC, and Switzerland (Craig 2011a; Cuomu 2022; Kloos 2015, 2017b; Saxer 2013; Van der Valk 2017, 159–201). Moreover, scholars studying efficacy through the lens of an integrative social ecologies framework have addressed the entanglement of ritual action and *menjor* practice (Craig 2011b, 2012), as well as the marginalizing effects of the shift of focus away from efficacy toward bureaucratic biomedical notions of safety in both regulatory frameworks and research (Gerke 2015, Kadetz 2015, Schrempf 2015), and the contingency of efficacy when amchis are caught up in overlapping regimes of legitimacy and ideologies of development (Blaikie and Craig 2022, Chudakova 2015, 2021).

Indeed, efficacy studies continue to be dominated by Cartesianism, relying on conventional pharmacological assessments of isolated material constituents and receptors in the drug development pipeline (Tidwell and Nettles 2019), with RCTs as the gold standard. RCTs still struggle with the placebo/nocebo response (Pardo-Cabello, Manzano-Gamero, and Puche-Cañas 2022). This is itself an artifact of a rigidly imposed body/mind dichotomy that can be fruitfully unpacked through lenses such as embodiment (Thompson, Ritenbaugh, and Nichter, 2009) and ritual theory (Kaptchuk 2011) that move beyond both cultural and biological reductionisms (Apud and Romaní 2019).

Sowa Rigpa medicines and therapies are only beginning to be "discovered" by scientists; compared to biomedical interventions, they are still in an exploratory research stage (Luo et al. 2015, Reuter, Weißhuhn, and Witt 2013). Major pharmaceutical companies with the resources for extensive clinical trials often show limited interest in multi-compound herbal formulations. This is largely due to the technical challenges and extreme costs involved in applying standard drug discovery and testing procedures to complex mixtures (Tidwell and Nettles 2019), but also because entire plants and traditionally documented recipes cannot be patented for exclusive sale by drug companies—that would be biopiracy as these are not laboratory inventions or innovations (Laird 2013). Nevertheless, other avenues toward the transformation of Sowa Rigpa formulas into "modern medicinal products" have been pursued, one example being the registration of Traditional Herbal Medicinal Products within the EU (Schwabl and Vennos 2015). Philip Reuter, Thorolf Weißhuhn, and Claudia Witt (2013) report around forty clinical studies of Sowa Rigpa treatment approaches published in Western languages (excluding Russian), and Luo et al. (2015) reviewed more than 200 randomized controlled trials performed in the PRC.[8]

In this book, we shift the analytical focus away from the efficacy of compounded medicines, to pre-efficacy and both the inherent and crafted potency of substances. While not necessarily articulated as such, potency in the sense of efficacy-in-becoming has received previous attention. In particular, scholars of Buddhist and Tibetan studies such as Cathy Cantwell (2015), James Gentry (2017, 2023a, 2023b), Olaf Czaja (2013, 2015), and Anna Sehnalova (2019a, 2019b) have paid close attention to powerful substances and objects, notably in tantric ritual, and have sometimes worked extensively with amchis to observe how they make and consecrate medicines. While we draw on these studies where relevant, especially in Chapter 5, we pivot in new directions by foregrounding artisanal perspectives and practices, mapping out a craft-based understanding of how amchis shape and enhance the perceived *nüpa* of substances.

Our outlook resonates with Anita Hardon and Emilia Sanabria's notion of "breaking open the pharmaceutical object" (2017, 118) and unsettling the rigid "Western" dichotomy of a thing and its representation. Like us, they are inspired by Ingold's (2011b, 2012) approach to materials-in-becoming, which they apply to the de- and re-articulation of "pharma-matter" in shifting environments, including leaky bodies metabolizing medicines. Recognizing that pharmaceutical materials

8 There are promising preliminary results using Sowa Rigpa for cancer treatment (Bauer-Wu et al. 2014), vascular dementia (Wu et al. 2016), ischemic stroke (Zhang et al. 2023), chronic gastritis (Dhondrup et al. 2023), and COVID-19 (Tidwell et al. 2024).

are always in flux and their actions are always-emergent, we concur with their view of "pharmaceuticals as never finished and as 'always on the way to becoming something else'" (Hardon and Sanabria 2017, 118, citing Ingold 2011b, 3). However, we anchor ourselves in the lifeworlds of amchis, who focus on processes that culminate in finished products and are motivated to perfect their *menjor* practice to benefit suffering beings. For us, efficacy-in-becoming includes all of these dimensions.

Artisanal epistemologies

Theoretically, we are inspired by historian of science Pamela Smith, who coined the term "artisanal epistemologies" to refer to knowledge attained through the manipulation of natural substances. Smith's research focuses on how artisans contributed to the scientific revolution in early modern Europe, specifically through their skilled crafts. In *The Body of the Artisan* (2004) and subsequent works (2010, 2013, 2014, 2022; Smith, Meyers, and Cook 2014), she explores the close relationship between the artisan and "nature," articulating the pivotal role of intimate engagement with materials and artisanship as a source of knowledge. Smith's work encourages us to learn the artisans' "material language" (2004, 8) and to recognize the many forms of expertise or literacy embodied in their unique methods, including the ways they work around and with textual imprecisions. Taken together, these aspects are key to what Smith terms "artisanal epistemology." While the lifeworlds of contemporary Himalayan amchis differ substantially from those of artisans in early modern European workshops, Smith's work resonates with our material because both explore the intersection of craft-based forms of making and empirical ways of knowing.

In her examination of late-medieval and early modern metalworking, Smith (2010) emphasizes that artisans perceived many substances as alive and transformable. She posits that their engagement with materials was inherently investigative and empirical, though not "scientific" in a modern sense. Artisanal practices were not routine, but intricately woven into a lived theory, often unspoken but nevertheless foundational to their practice (48). Smith encourages us to discover and decipher these underlying theories from the artisans' perspectives. Artisans were immersed in material exploration within vernacular worldviews, which incorporated religious and alchemical ideas, and opened onto the mysteries of their cosmologies. Her analysis of the red pigment vermilion exemplifies this, revealing a "vernacular science of matter" (41) that, in her later work, she terms "material imaginary" to emphasize the "deeper systematic understanding of materials" that informs artisanship (2022, 14, 45). Vermilion as a red powder, beyond

being a pigment, symbolized blood, embodying heat and life. Coral, also red, was employed to stop bleeding, and blood was applied to cut gemstones. Such potent qualities like redness and vitality were attributed to humans, animals, and minerals alike, reflecting a worldview in which such properties resonated across all forms of life and matter. Knowledge of these associations was inseparable from the act of making, infusing properties of substances across human and nonhuman realms with symbolic and spiritual meaning through a "web of correspondences" (Smith 2010, 47). The artisanal practices discussed in this book reveal their own webs of correspondences, for example, between the whiteness and cooling potentialities of *chongzhi* (*cong zhi*) (specific kinds of limestone), milk, and moonlight.

Sowa Rigpa theories pertaining to the five elements, called *jungwa nga* (*'byung ba lnga*), the three *nyepa* (*nyes pa gsum*), and the eight potencies or *nüpa gyé* (*nus pa brgyad*), engage with substances based on their properties and qualities (see Chapter 3).[9] *Menjor* techniques are applied to cultivate, manifest, and extract these qualities, transforming them into beneficial medicine. Amchis further enhance the *nüpa* of formulas through mantras, prayers, meditative visualization, and the addition of blessed substances. All these threads come to life as amchis manually grind, sublimate, incinerate, and infuse substances. These processes constitute integral parts of their epistemology and worldview, illustrating the interconnectedness of knowing and making across the realms of artisanal empiricism and Buddhist ritual.

Like Smith, we found a profound intimacy between amchi artisans and materials, forged through their sensory engagement with the substances at hand. Smith's (2016) Making and Knowing Project, based at Columbia University, engaged students in reconstructing sixteenth-century French recipes in a laboratory by experimenting with materials such as pigments through trial and error, leading to skill development and the refinement of practices. Notably, no text provided complete instructions; rather, mastery emerged from direct engagement with materials, involving errors, experimentation, and serendipity.[10] Her findings accord

9 The three *nyepa* in Sowa Rigpa are physiological pathways in the body that integrate the activities of the five elements. Though misleading, at times they are translated as "humors" to relate to similar historical correlates of the *doṣas* in Ayurveda. Their translation as "defaults" retains the literal meaning of *nyepa* as "default systems" that can incur fault in function when imbalanced. The eight *nüpa* are fundamental components of potency, closely linked with the six tastes and the three post-digestive tastes of substances. See Chapter 3 for the theoretical framework they provide for the crafting of potency in Sowa Rigpa.

10 Elisabeth Hsu and her colleagues drew similar conclusions from their ethno-archaeological experiments on the preparation of antimalarial juice from the plant *Artemisia annua* using ancient Chinese texts (Hsu 2015, Wright et al. 2010).

Figure 1 The main grinding stone of the Nee Amchi Association (Ogyan Sorig Tsogspa) pharmacy operated by Amchi Nawang Tsering. Nee, Ladakh, October 2018. Photo J. van der Valk (CC-BY-SA 4.0).

well with Gerke and Van der Valk's experiences described in Chapter 1 of making moonlight *chongzhi* with different amchis, and Van der Valk's description in Chapter 2 of hands-on apprenticeship in making medicinal butter.

In the *menjor* practices we observed in Ladakh, the grinding stone takes center stage as the most intimate tool connecting the practitioner with medicinal materials (figs. 1, 2) (see Singh and Gerke, 2025). The countless hours, months, and years dedicated by amchis to manually grinding herbs and minerals foster an enduring relationship between skilled bodies and tools (figs. 3, 4). Amchi Nawang Tsering, a lineage amchi and manual medicine maker in Nee (on the banks of the Indus River in Changthang) who features in several chapters, considers the grinding stone as a sacred space "where the gods live." Here, he recites auspicious prayers, mantras, and visualizes the Medicine Buddha (*Sangs rgyas sman bla*), infusing materials with blessings during the grinding process. In the interplay between materials, tools, and practices, a material language unfolds as a dynamic assemblage of *menjor* techniques, crafting a delicate balance that results in suitably potent medicine.

The distinct methodological approach that Smith takes, which involves meticulously following nontextual materials and processes, probes into the knowledge gained through "experience and labor," thereby showing due respect for what she

Figure 2 A smaller grinding stone with ground up limestone pieces at the Nee Amchi Association pharmacy operated by Amchi Nawang Tsering. Nee, September 2018. Photo courtesy of T. K. Shor (all rights reserved).

Figure 3 Amchi Nawang Tsering's hand holds the pestle; the two rabbit feet are used as brushes. Nee, August 2022. Photo J. van der Valk (CC-BY-SA 4.0).

Figure 4 Amchi Nawang Tsering grinding herbal raw materials. Nee, August 2022. Photo J. van der Valk (all rights reserved).

terms "artisanal literacy" (2004, 7–8). In this way, she seeks to overcome the widespread division between scholasticism and manual labor. This split is evident to varying degrees in Sowa Rigpa education in both institutional and lineage-based systems (see Chapter 4). Yet, Sowa Rigpa represents a living medical tradition that continues to draw on and internalize knowledge that was codified both in writing and embodied skill transmitted across centuries. Sowa Rigpa practitioners therefore navigate realms where literacy extends beyond the written word and where knowledge is deeply embedded both in and beyond texts. Proficient in Tibetan, amchis study medical texts, absorbing knowledge through the acts of reading, reciting, and memorizing, perpetuating a tradition that anchors their connection to the profound wisdom encapsulated in the *Four Tantras*. In other words, they "imbibe the text" and embody its knowledge (Tidwell 2017). At the same time, they are part of living amchi lineages and receive oral transmissions and practical training. Crucially, many formulary texts are short and incomplete. Drawing on Ingold (2001), we approach these formulary texts as scripts for guided rediscovery, which amchis "read" through observation and imitation of their teachers, and through careful improvisation based on years of experience (Chapter 1).

The amalgamation of oral and written traditions is crucial for the cultivation of artisanal expertise, just as the ways of transmitting knowledge, becoming an apprentice, and being part of a living lineage-based tradition are key to understandings of artisanal literacy in Sowa Rigpa (Chapters 1, 2, 4). Our aim is to show how the varied ways of being literate, although quite different modes of engaging with Sowa Rigpa praxis and materials, reveal a multiplicity of skills and knowledge forms that together materialize efficacy-in-becoming. They also allow for a comparative discussion across chapters, offering insights into how practitioners navigate ways of knowing, speaking, and writing about *menjor* in various settings. That said, we are aware of the complex histories of Tibetan medical texts themselves. No matter how strongly Tibetan ritual and medical experts emphasize their stable roots in past tradition, a historical perspective on textual production and reception reveals that these are anything but static (McGrath 2017a, 2017b, Yang Ga 2010). However, a philological analysis of the ways in which Tibetan authors wrote about *menjor* practices across time and different sources is not the focus of this book.[11] Clearly, in the daily *menjor* practices of the amchis we work with, pharmacological texts are granted a higher degree of authoritative stability and temporal intransigence than they are by philologists and Tibetologists.

11 See Gerke 2019a for a detailed example of intertextualities between three descriptions on the processing of precious stones.

Smith's contributions to the history of science also resonate with ongoing debates at the intersection of science and religion in Tibetan and Himalayan studies, as exemplified by the work of scholars like Janet Gyatso (2015). Gyatso explores the deployment of science and religion as analytical heuristics, focusing on seventeenth-century intellectual developments in Tibet. As previously noted by Gerke (2021, 134–35), Gyatso provides an areligious reading of empiricism in Sowa Rigpa, concluding that it emerged from challenges to tantric belief systems, thereby demonstrating a shift toward material realism in Tibetan medical thought. Gerke argues that this makes sense in certain contexts, but not necessarily in *menjor* practices that are deeply linked to Vajrayāna Buddhism, such as the taming of mercury or the ritual consecration of medicines. Gyatso's view of Tibetan medical empiricism remains thought-provoking and sensitizes us to more carefully analyze how Sowa Rigpa knowledge is expressed in situated practices. However, Smith (2013, 216) offers another way of rethinking *menjor* epistemologies when she argues that "all science begins with matter," encouraging us to look at the history of science "as the deep history of human engagement with natural materials." The bigger point here is that knowledge, materials, and skills flow together in historical processes emerging "from the work of craftspeople manipulating materials with certain properties to produce a substance with particular cultural resonance" (217).

As we synthesize the insights of Smith and Gyatso in the context of *menjor* artisanship, we are confronted with probing questions about the interplay of materials, techniques, and practitioners, about the empirical observations of amchis, and about their ways of theorizing the potency of substances. Are we surprised by forms of artisanship in which amchis recognize potencies as shaped by form and color, and by particular methods of drying, storing, grinding, or consecration? Understanding the epistemic logic of amchis within *menjor* practice requires nuanced exploration of the dynamic interplay between historical processes and contemporary practices, and between skilled practice and materials.

Skilled practice, taskscapes, and meshworks

> *Making, then, is a process of correspondence: not the imposition of preconceived form on raw material substance, but the drawing out or bringing forth of potentials immanent in a world of becoming.*
> *Tim Ingold,* Making *(2013b, 31)*

Alongside Smith's work on artisanal epistemologies, Ingold's applied phenomenology has served as an important source of inspiration for how we approach the

crafting of potency in this book. Ingold has repeatedly critiqued the concept of materiality as presented within material culture studies, challenging the notion that materiality can be studied separately from lived experience (Ingold 2011b, 2012, 2013b). Instead, he proposes an "ecology of materials" (Ingold 2012) in which things are not reduced to objects but recognized as tangles of materials enmeshed in dynamic lifeworlds. This reframing moves away from Aristotelian hylomorphism, in which objects are conceived as composites of a preconceived form imposed on matter. Rather than prioritizing ideas as ready-made cognitive blueprints, Ingold invites us to appreciate the gradual, processual emergence of material forms in-the-making. This counters the entrenched polarization of mind versus (and over) matter, as well as the related tendency to reify the nature/culture dichotomy. In Ingold's words: "Materials do not *exist*, in the manner of objects, as static entities with diagnostic attributes. … Rather, as substances-in-becoming they carry on or *perdure*" (2013b, 31).

Surbhi and Van der Valk (2025) experiment with applying an Ingoldian hermeneutical lens to their analysis of medicinal plant harvesting among Spitipa and Kinnauri amchis, finding it particularly pertinent for describing the often tacitly embodied and environmentally embedded aspects of Sowa Rigpa medicine making and—to a lesser extent—ritual consecration.[12] We thus propose along with Ingold that artisans' skillful working *with* the properties of materials through practical sensory engagement is an essential source of their potency: "The properties of materials, in short, are not attributes but histories" (Ingold 2011b, 32). In other words, our understanding of materials should not be limited to their supposedly stable properties but rather encompass the processes they continually undergo. Potent substances are always in a state of becoming. We therefore pay close attention to material meshworks, which Ingold (2007a, 80; 2011b) defines as dynamic entanglements of materials in movement, as well as to taskcapes, a term we borrow from Ingold to capture the patterns of activity that gather, weave, and patch together these dynamic threads into more or less durable things such as medicinal pills or powders.

Ingold (2000, 5) sees skills not just as bodily techniques, but as "capabilities of action and perception of the whole organic being (indissolubly mind and body) situated in a richly structured environment." He characterizes the practice of technical skill based on the following five dimensions (352–54), which we will explore in the course of the chapters: (1) processual emergence of intentionality and function, (2) relational immersion in environments, (3) qualities of judgment, dexterity and

12 See also Surbhi and Van der Valk 2025 for a discussion of Ingold's critique of Bruno Latour's actor-network theory and the latter's impact on Gentry's (2017) inspiring work on "power objects" in Tibetan Buddhism.

care, (4) hands-on learning through guided repetition, and (5) form generated by movement rather than mechanical execution of a design. The form-generating aspect of Ingoldian skill, however, may not readily apply to making powders or amorphous butter pills (Chapter 2). Can you weave a medicine as one would a basket? The obvious answer is "no." What is crafted in *menjor* practice, we argue, is not form but potency. Potency can indeed be said to be woven or sculpted through engagement with/in a field of forces—following, enhancing, and perfecting the intrinsic qualities of medicinal materials—through patterned incremental behaviors which may include grinding and stirring, as well as visualizations and the recitation of mantras.[13] We nevertheless indicate where Ingold falls short. For example, his approach feels peripheral in Chapter 3 where descriptions drawing from modern technoscientific disciplines are preferred by amchis translating Sowa Rigpa theory into the English vernacular; it also has clear limits in Chapter 5 where it struggles to fully capture the multiple potencies of consecrated compounds.

We follow a "skilled practice" approach to artisanship. First developed by Cristina Grasseni (2007), this approach describes how people learn and refine specialized ways of perceiving and acting through apprenticeship and guided participation. Building on Ingold (2000), Grasseni emphasizes the social and situated nature of learning: novices become insiders to a particular craft or profession by gradually acquiring an "education of attention" within communities of practice (2007, 10). As part of this approach, we also use "taskscape" as a convenient lens that facilitates an integrated focus on the interlocking sets of activities that an amchi needs to master, from theoretical, diagnostic, and therapeutic skills to the sourcing of raw materials and the making of medicines (Blaikie 2014, Pordié and Blaikie 2014). While Ingold (2000, 190) developed the idea of taskscape to connote "a pattern of dwelling activities," we find this concept particularly useful in the context of *menjor* education. Surbhi and Van der Valk (2025) emphasize how medicine and ritual interlock in amchi taskscapes, and how the latter are enmeshed in animate landscapes. They coin the term "ritualized meshwork," extending Ingold's more secular vision of artisanship and dwelling to incorporate ritual practices, such as mantras, and sacred ecologies of land spirits and deities. Continuing along these lines, we pay attention to these phenomena in our exploration of the crafting of potency, but also highlight the divergent amchi taskscapes emerging through modern institutionalization, and how medicine-making is being pushed to the margins of Sowa Rigpa education (Chapter 4).

13 Chudakova (2017, 352) coined the term "pharmacopoeisis" to describe this laborious, highly contingent, more-than-human process of "making things medicinal" based on her engagement with Sowa Rigpa in Buryatia.

Collaborative methods and multi-sited fieldwork

A metadisciplinary approach

This book is a collaboration between a team of four authors. Each of us has been immersed in distinct geographies of Sowa Rigpa and studied with different amchis privately or in institutional settings. Our backgrounds involve different forms and degrees of engagement with Tibetan language, Sowa Rigpa, Buddhist studies, and anthropology, which make for productive and at times uncomfortable multiplicities. Methodologically, we consciously adopt a metadisciplinary stance (Salguero 2020) that stimulates cross-epistemological fertilization while also allowing the different perspectives of multiple intellectual traditions to exist simultaneously, without seeking to suppress or replace one another. Through this we aim to create a palimpsestic or layered perspective of different voices. That being said, the particularities of our training, research interests, and fieldwork experiences have resulted in the book exploring potency mainly from a medical and anthropological rather than a religious or philological perspective.

We conceived this book not as an edited volume but as a concise coauthored project monograph. Nevertheless, since we are shaped by our disciplinary backgrounds and personal perceptions of practice, we express ourselves in varied ways and draw on differing terminology and translations. The reader might find varying English translations for Tibetan medical terms across chapters and can refer to the glossary for succinct explanations. They will also find sections written from various perspectives, including fieldnotes in the first person (singular or plural) and third person narratives. Rather than smoothing over or editing out our differences, we decided to make them a strength of the book, having discussed and debated them as a team on many occasions.

When we came together as a team in the FWF-funded project Potent Substances in Sowa Rigpa and Buddhist Ritual, based at the University of Vienna (2018–2024), we were at various stages of our lives, with different levels of project employment, academic experience, and time commitment. From the outset, the fieldwork was multi-sited, spanning Dharamsala, Kathmandu, Leh, the Indus River valley of Ladakh, and a *menjor* workshop in Switzerland. Some places were familiar, some new. Fieldwork connected us as we relied on each other's previous movements across time and space. Chapter 5, for example, draws on Calum Blaikie's first fieldwork of 2007 in the amchi community of Nee, Ladakh (Blaikie 2014), Barbara Gerke's field visit to the same community with Jan van der Valk ten years later in 2018 (Gerke 2018b), and follow-up visits by Van der Valk and Blaikie in 2022, and Blaikie and Gerke in 2023 and 2024. Tawni Tidwell visited the same village in 2008, where she also observed the relationship between medicine

making and consecrated lineage substances. These experiences, as well as her studies and *menjor* apprenticeships with amchis in Dharamsala and eastern Tibet, inform her more theoretical considerations in Chapter 3.

As field researchers we relied on collegial contacts, personal letters of reference, and descriptions of previous visits. These shaped our relationships in the field and allowed for participation in "the same" medicine accomplishment or *mendrup* (*sman grub*) ritual event in Nee a decade apart. Our ethnographic experience was therefore molded by transferences between the field visits. We suggest that methodologically, such forms of continuity enable teams of researchers to conduct more fruitful work and better understand the dynamism of ritual and medical practices over time. Transmitting information, contacts, results, and insights to each other also brought us together as a team.

To contextualize our metadisciplinary approach to potency, in what follows we briefly introduce our respective encounters and engagements with various Sowa Rigpa experts and institutions. Our collaboration drew ethnographically from fieldsites and practitioners from the Himalayan regions, while also incorporating broader perspectives, since Tidwell trained in both Dharamsala and Qinghai with institutionally trained and private lineage practitioners, and Van der Valk has both researched and been trained in *menjor* in Europe as well as in the Himalayas. While we include Tibetan medical texts as sources, as a group of anthropologists and practitioners, we readily acknowledge our bias toward ethnographic rather than philological and historical research methods.

Encounters with Sowa Rigpa experts

Barbara Gerke studied Tibetan medicine with private teachers in Dharamsala from 1989 to 1992. During her year at Chagpori Tibetan Medical Institute (CTMI) in Darjeeling (1992–1993) she joined students making medicines by hand under lama-physician Sampel Norbu Trogawa Rinpoche (1932–2005), founding director of CTMI. Trogawa Rinpoche often visited Nee (Gerke 2018b), where he prepared *dütsi chömen* (*bdud rtsi chos sman*), processed mercury sulfide into an organo-metallic powder known as *tsotel* (*btso thal*), and bestowed the *Yutok Nyingtik* empowerment to the group of amchis we later met. In 2018, Gerke learned some of the steps of *chongzhi* processing with Amchi Nawang Tsering in Nee and participated in the *mendrup* ritual, documenting how lineage and empowerment merged with *menjor*, one of her research interests (Gerke 2016, 2018a, 2019b, 2021). She also spent time with Dr. Penpa Tsering, who trained at the Dharamsala Men-Tsee-Khang (MTK) and is one of the most senior and experienced private amchi entrepreneurs in the Dharamsala area. As well as interviewing him several

times on potency and the processing of precious substances (Gerke 2019a, 2021), she documented his processing of moonlight *chongzhi* in 2018 (see Chapter 1).

In 2011, together with Calum Blaikie, Sienna Craig, and Theresia Hofer, Gerke participated in an eight-day *menjor* workshop in Nepal with forty, largely non-institutional Sowa Rigpa practitioners (Blaikie et al. 2015). Participants sourced, cleaned, and prepared raw herbal materials into three formulas, which they also consecrated. Over the course of the workshop, they discussed potency, efficacy, and *menjor* techniques, while also receiving the *Yutok Nyingtik* empowerment from the late Tsikey Chokling Rinpoche (1953–2020). This direct engagement with medicine making, combined with her training in medical and social anthropology at Oxford, inform Gerke's mixed-methods approach, which combines textual analysis, history, and ethnography.

After obtaining degrees in biology and ethnobotany, Jan van der Valk decided in 2012 to merge his lifelong passion for plants with a newly found interest in Tibetan Buddhism by commencing a three-year course through the Tibetan Medicine Education Center (TME), learning directly from the founder-director Dr. Arya Pasang Yonten. He was so impressed by Dr. Pasang's teachings that he only wanted to do a PhD if it was about Sowa Rigpa. His doctoral research (2012–2017) in anthropology traced the transformations of plants into pills based on close collaboration with the pharmaceutical company PADMA AG in Switzerland and MTK in Dharamsala. Working with these larger institutions made him aware of the scientific, economic, technical, and regulatory forces that shape the mass-production of Tibetan medical and herbal products. In the meantime, he completed further courses and clinical internships with Dr. Pasang, received the full oral transmission of the *Four Tantras* along with related texts and formularies, and memorized the *Root Tantra* in Tibetan. In 2017, he set up the first Sowa Rigpa practice in Belgium with its own herbal dispensary, and since 2021 has been editing Dr. Pasang's educational materials in Tibetan and English for Bedurya Publications.

Van der Valk's personal trajectory is akin to lineage modes of transmission in Sowa Rigpa. It prepared the ground for two postdoc positions at the University of Vienna, which involved interviewing and making medicines with privately practicing amchis from Ladakh and Kathmandu. It proved meaningful to retrace steps of Dr. Pasang's life journey: to Kathmandu, where some of his family members had fled across the border from Kyirong, Tibet and still live; to Dharamsala, where he graduated and became MTK college principal; and to Ladakh, where he taught at the Central Institute for Buddhist Studies (CIBS). These connections opened many doors, for instance when meeting Dr. Pasang's senior students Drs. Padma Gurmet, Nawang Tangyas, and Karma Choden in Ladakh. He also received extensive *Yutok Nyingtik* teachings, transmissions, and guided practice

from Lama Justin von Bujdoss (2021–2023), especially those on Dzogchen (Great Completion). The layering of identities generated by this trajectory influenced Van der Valk's epistemological stance in nuanced ways. This comes to the fore in Chapter 2 but was also present in other encounters that inform his contributions to this book. In Nee, for instance, intensively engaging in *menjor* alongside Amchi Nawang Tsering also blurred the boundaries between participant observation and master–disciple apprenticeship. These experiences were not just data collection, but part of his journey toward becoming a better practitioner.

Tawni Tidwell began studying Tibetan medicine privately with Dr. Khenrab Gyamtso, Vice Principal of MTK in Dharamsala in 2008. With his encouragement, she spent three years preparing for the next medical entrance exam to MTK and, upon passing, entered with Batch 17 in 2011 for the *kachupa* (*dka' bcu pa*) degree program. Their class had annual medicinal plant expeditions and trained in medicine compounding practices under the head of the MTK pharmacy Jamyang Tashi, including the preparation of moonlight *chongzhi*. Having received a ten-day extensive *Yutok Nyingtik* empowerment from Taklung Tsetrul Rinpoche in 2005, Tidwell also received elaborate Medicine Buddha empowerment and commentarial transmissions alongside her classmates in 2013 from Dzogchen Ganor Rinpoche, culminating in a *mendrup* ritual. Venerable Nyima, attendant to Chatral Rinpoche for decades prior to serving at MTK, guided her class for monthly *Yutok Nyingtik* offering ceremonies.

In her third year, Tidwell transferred to Sorig Loling Tibetan Medical College at Qinghai University in Amdo, continuing her *kachupa* degree. Under Drs. Tashi Dhondup and Choying Rangdrol's expert guidance, she underwent focused *menjor* training, in addition to receiving teachings from Drs. Tsuntarjial, Tsiba, and Druktsé, among other *menjor* faculty. Her class went on annual medicinal plant expeditions to different regions and smaller nearby weekend trips. As a student, she interned with the Gastroenterology Department at Qinghai Provincial Tibetan Medical Hospital (QPTMH) from the end of her third through fifth years, joining morning rounds before class and grand rounds led by senior physicians. She also underwent the annual hospital medicinal plant expeditions and examinations. She extended her time in the Menjor Department to deepen her learning of *khenda* (*khaNDa*), medicinal butters, ashes, alcohols, and *chülen* (*bcud len*). Gyayé Aku Nyima invited her to apprentice in his outpatient clinic, and she received clinical oral instructions and commentarial transmissions of, for example, *Shelgong Sheltreng* (Deumar 2005) and *Zintik Yangtik* (Jamgön Kongtrul Lodrö Tayé 2005). Dr. Tsering Namjial taught her unique medicinal bath *menjor* at Drangsrong Clinic in Rebkong. As a postdoctoral fellow at the Austrian Academy of Sciences in 2018, she documented *menjor*-specific lineages across Amdo and Kham, receiving mentoring from Aku Jigmé Tsondue of Tsekhok, Aku Tingdzin of Darlag, Golok, Dr. Dukar

Tashi of Luchu (venesection), and Gansu Aku Nyima (veterinary medicine). In 2019, she attended the channel cleansing and special *menjor* workshop and transmission under Dr. Tensung Drakpa at Sangchu Hospital near Labrang Monastery. This immersive learning informed her theoretical contributions to this book.

Calum Blaikie first became interested in Sowa Rigpa in 2000 while conducting his master's research in eastern Ladakh. This interest led to a series of jobs (2001–2006) with the French NGO Nomad Recherche et Soutien International and its Indian partner organization, Ladakh Society for Traditional Medicine, both of which were supporting amchi communities in various ways through a period of considerable difficulty. Blaikie's early exposure to Sowa Rigpa thus came through his engagement in practical tasks such as supporting the training and subsequent practice of twenty young amchi students from rural areas, organizing seminars and workshops, developing an amchi-led medicinal plant conservation project, and hosting visiting researchers (see Pordié and Kloos 2022). Through this, he developed a fascination for small-scale medicine production processes and the medicinal plant trade, which became the main foci of his doctoral research (2006–2014) and have continued to influence his work ever since.

Blaikie has spent extended periods with amchis in both rural and urban settings, documenting their collection, trade, and exchange of raw materials, working alongside them to transform these materials into medicines, and tracing their subsequent dispersal patterns. He attended a *mendrup* ritual in Nee in 2007 and developed a strong connection with Amchi Nawang Tsering, which has endured over the years and expanded to include Gerke and Van der Valk. Blaikie's subsequent work has retained a major focus on *menjor* activities, including the abovementioned 2011 workshop in Kathmandu, the European Research Council-funded Reassembling Tibetan Medicine project on the emergence of a Sowa Rigpa industry (2014–2019), and the Potent Substances project at the University of Vienna (2018–2024) which inspired this book. He is currently Principal Investigator of the Austrian Science Fund project Integrating Traditional Medicine: Sowa Rigpa and the State in India, based at the Austrian Academy of Sciences (2021–2025), which explores the impact of the official state recognition of Sowa Rigpa in 2010 on the handling of its pharmacological knowledge, as well as on patterns and practices of medicine production, regulation, and distribution.

Fieldsites

The findings of this book rely primarily on long-term contacts in Ladakh (especially Leh, Choglamsar, and Nee), the Dharamsala area, and Kathmandu. We refrain from characterizing these locales here, as relevant details and the practitioners

are introduced in the respective chapters. Instead, we provide a brief overview of the main institutions that have increasingly shaped Sowa Rigpa education and pharmaceutical production across India and Nepal, and how we have each engaged with them during fieldwork. The following chapters then clarify the extent to which this larger context has influenced medicine making and different aspects of potency in specific settings.

Alongside various private clinics and pharmacies, seven educational Sowa Rigpa institutions recognized by the Ministry of AYUSH currently operate in India: in Leh, Choglamsar, Dharamsala, Sarnath, Darjeeling, Gangtok, and Bengaluru.[14] MTK in Dharamsala, founded in 1961, is the pioneering Sowa Rigpa institute in India dedicated to medical training, clinical work, and large-scale pharmaceutical production. Van der Valk (2017, 2019) conducted doctoral research in MTK's pharmaceutical department, while Gerke has collaborated closely with MTK and several private pharmacies in the area since 2008 (Gerke 2018a, 2019a, 2021). Tidwell spent the early years of her Tibetan medical education at MTK College (2008–2013).

In Ladakh, we visited three Sowa Rigpa institutes and several private amchis. The National Institute of Sowa Rigpa (NISR) in Leh operates as an autonomous institution under AYUSH, offering outpatient care and a college-level Menpa Kachupa degree (Bachelor of Sowa-Rigpa Medicine and Surgery, BSRMS). NISR procures medicines from surrounding pharmacies, especially that of the Ladakh Amchi Sabha, which was an important fieldsite for Blaikie during his doctoral fieldwork and which Van der Valk also visited in 2018 and 2022. We also contacted Buddhist nuns trained in Sowa Rigpa through the Ladakh Nuns Association (LNA) directed by Ven. Dr. Tsering Palmo. Some LNA nuns were partially trained at CTMI in Darjeeling; one now works at a pharmacy in Shey, near Leh. All four authors established long-term connections with the amchi community in Nee, which became the focus of an ethnographic study of ritually consecrated substances (Chapter 5). CIBS in Choglamsar, Ladakh, was founded in 1959 and has the status of a "deemed-to-be university." Its Sowa Rigpa faculty opened in 1989 with Dr. Pasang as its first teacher, and around seventy students have since graduated. Blaikie has conducted research at CIBS repeatedly since 2010, while Gerke and Van der Valk visited in 2018, observing students making medicines under the guidance of the Tibetan amchi Dr. Karma Choden, who also ran a private clinic

14 AYUSH is the Government of India ministry responsible for the education, research, and regulation of several traditional medicine systems, including Ayurveda, Yoga, Unani, Siddha, Sowa Rigpa, and Homeopathy. Sowa Rigpa became the newest member of AYUSH following its governmental recognition in 2010 (see Blaikie 2016, Kloos 2016).

in Leh and was interviewed several times. Van der Valk followed up with visits in 2022, Blaikie in 2022 and 2024, and Gerke in 2024.

In Kathmandu, Van der Valk visited medical schools, clinics, and pharmacies in 2019 and 2022, focusing on shifts in *menjor* education instigated by institutionalization efforts. Although (at the time of writing) the government of Nepal has not formally recognized Sowa Rigpa as a medical system akin to Ayurveda, Chapter 4 discusses how Sowa Rigpa International College (SRIC), the Traditional Buddhist Sorig Institute (TBSI),[15] and the Sorig Bumzhi School (SBS) operate within different structures of government, international, and religious support. The Himalayan Amchi Association (HAA) founded in 1998, and more recently the Sowa Rigpa Association Nepal (SRAN) founded in 2017, have been advocating for professionalization, government recognition, and state-certified education. The HAA mainly consists of lineage practitioners from the Nepali Himalayas, whereas SRAN is registered under the Social Welfare Council (Government of Nepal) and is associated with SRIC, though it aims to represent all educational organizations. University-accredited programs now exist, and in 2019 a Medical Education Commission was set up to standardize degree entry requirements.

These institutional developments provide a significant context to situate the small-scale and cottage-industry *menjor* practices we observed across the Himalayas. They also raise broader questions about the future of *menjor* artisanship as described in this book, which we will address in the concluding chapter.

Chapter outline

Chapter 1 introduces *nüpa* in practice, focusing on amchis and their interactions with substances from sourcing, transforming, and potentizing, to prescribing medicines. We analyze how different processing techniques transform one substance—*chongzhi*—into a medicinal ingredient with either cooling or warming properties, or into a coating for pills. Two detailed ethnographic examples illustrate amchis' artisanal literacy, as well as Sowa Rigpa understandings of *nüpa* and how it can be directed. The first follows Amchi Tsultim Gyatso processing *chongzhi* under moonlight in Ladakh; the second documents similar techniques employed by Dr. Penpa Tsering near Dharamsala. Taking inspiration from Ingold and Hallam's (2014) discussion on making and growing and Smith's concept of artisanal epistemologies, we argue that the skillful art of the practitioner and the potency of the substance cannot be separated.

15 TBSI was renamed Samye Sowa Rigpa School of Traditional Tibetan Medicine in 2022.

Chapter 2 explores the interconnection of knowledge and practice in Sowa Rigpa through a more-than-ethnographic account of a workshop led by Dr. Arya Pasang Yonten, in which medicinal butter, or *menmar* (*sman mar*), was crafted and consecrated. Situating *menmar* within broader Sowa Rigpa and Vajrayāna rejuvenation currents of tradition, we show that learning from a skilled teacher involves more than assimilating textual or oral knowledge; it unfolds as a collaborative, practical, and improvisational process with dynamic materials, guided instructions, and ritual action in a responsive environment. Drawing on Ingold's (2018a) discussion on education and learning, this chapter pays particular attention to the correspondence of external and internal processes of transformation and the self-cultivation integral to learning, making, and becoming medicine.

Chapter 3 introduces textual understandings of potency that shape the artisanal practices explored in each of the more practice-based ethnographic chapters. It addresses questions that are at the heart of this book: What makes a substance potent? How is potency defined, attributed, and enhanced? Drawing on key Sowa Rigpa texts, the chapter outlines the theoretical framework informing amchis and *menjor* specialists as they cultivate potency through multiple steps and layers, from specimen identification, harvesting, drying, and storing, to processing, combining, compounding, and consecration. This includes discussion of the different ways in which various forms of potency are conceptualized, categorized, and elucidated, along with explanations of other core concepts that are foundational to how amchis develop formulas, compound medicines, and imbue substances with specific qualities through ritual means.

Chapter 4 explores contemporary *menjor* education and its changing dynamics in Kathmandu. Situating our discussion in the broader context of the marginalization of *menjor* in Sowa Rigpa education in India and Nepal, we examine how different learning models have been instituted by three relatively recently founded Sowa Rigpa colleges. Each is characterized by a different taskscape shaped by a complex interplay between professionalization, government recognition, international funding, and contestation over integration with biomedicine. A key point of difference is the relative emphasis placed on practical enskilment in medicine making and, by extension, lineage-based education and the interpenetration of medicine and religion. How does (not) learning how to make medicine shape potency in Sowa Rigpa? In what ways do these contemporary colleges constitute (im)potent modes of education?

Chapter 5 explores the intricate relationship between Sowa Rigpa formulas, spiritual empowerments, and Buddhist Vajrayāna lineages. Focusing on a group of complex consecrated compounds called *papta* as they come together in an amchi community in Ladakh, we discuss how these substances both embody and carry the potency of mantra, meditative practices, and medicinal ingredients across

both time and space. Situating *papta* within a broad array of powerful substances used in ritual and medical practices, we argue that they possess two distinct but interconnected sets of properties, relating to continuity and perpetuation on the one hand, and to transformation and catalyzation on the other. Approaching *papta* as emergent entities that combine numerous substances, potencies, blessings, empowerments, and ideals, allows us to better understand their material, spiritual, and relational dynamics.

In the concluding chapter, we draw together the threads of our explorations of potency and its crafting to reflect on some of the cross-cutting themes that have emerged about *menjor* and artisanship, about writing and anthropology as forms of imperfect craft, and about the histories and future trajectories of medicine making in Sowa Rigpa.

CHAPTER 1

Menjor, Materiality, Artisanship

This chapter introduces *nüpa* in practice, focusing on amchis and their interactions with substances from sourcing, transforming, and potentizing, to prescribing medicines. Its ethnographic heart presents two detailed examples of *menjor*. The first centers on a medical practitioner in Ladakh processing limestone, referred to in Tibetan as a type of *chongzhi*; while the second documents a similar process but using different techniques, conducted by a private Tibetan physician near Dharamsala. The sourcing and processing activities involved in the transformation of *chongzhi* into a medicinal substance lend themselves particularly well to analysis using the lens of "making and growing" (Ingold and Hallam 2014) and the concept of "artisanal epistemologies" (Smith 2004, Smith, Meyers, and Cook 2014). Our focus is on the ordinary, both in terms of practices and substances. Limestone is commonly used, widely available, and relatively easy to process, even though its preparation can involve astrological considerations and ritual consecration. We wish to highlight that *menjor* is not always exotic and highly complicated like mercury processing (Gerke 2021). To the contrary, it is largely an everyday activity for amchis, who spend much of their time making common medicines for common diseases. Crucial insights concerning the properties of substances and the crafting of potency can thus be drawn from the study of quotidian materials and practices.

Chongzhi can be steered toward becoming a cooling or a warming medicine depending on the techniques used. The different ways that amchis work with it thus exemplify how skilled processing directs the *nüpa* of substances through certain techniques. In our initial discussion on processing, we touch upon a method that involves the boiling of *chongzhi* rocks to accentuate its warming properties. In our more detailed ethnographic examples, we document how, during the full moon of the eighth Tibetan month, *chongzhi* is processed to generate greater cooling effects. Both the process and the end product are known as "moonlight *chongzhi*" or *chongzhi daö* (*cong zhi zla 'od*). The entire *menjor* process thus rests

on the amchi's skill in transforming and enhancing the capacities of a substance to make it more potent and digestible in accordance with the desired medicinal use. *Chongzhi daö* is never used singly but is added to specific formulas. As the final part of this chapter explores, processed *chongzhi* is also used as a pill coating for certain formulas.

Skillfully processing *chongzhi* is not just about "making" or finishing a pill. It also concerns what Tim Ingold and Elizabeth Hallam (2014) refer to as a phase in the life story of a substance. Starting out as a piece of rock that "grows" in remote mountain areas, *chongzhi* is then collected by amchis and processed or "tamed"—in Tibetan *tülwa* (*btul ba*)[16]—in their pharmacies. While the Sowa Rigpa practitioners we met all acknowledged that *chongzhi* and other substances have inherent qualities, they understand *nüpa* as the capacity to have an effect. This means that substances and their potencies must be purified, compounded, transformed, and directed in order to manifest the desired properties in the form of beneficial medicines. In what follows, we explore how interactions between maker and material unfold in *chongzhi* processing.

The growing and making of *chongzhi*

In *Making and Growing*, Ingold and Hallam (2014) challenge rigid distinctions between organisms and artifacts, and making and growing, arguing that the latter are both continuous, entangled processes of transformation. Substances like *chongzhi* that are used in crafts or medicine are not inert materials but have life courses shaped by their environments, whether they are growing in soil, forming in rock, or transforming in an artisan's workshop. The artisans' role is not to impose form but to engage with the evolving lives of the materials they work with. We sensed this deeply when grinding *chongzhi* from the high Himalayas; touching these fossilized remnants of ancient oceans revealed long timelines embedded in the materials.

On the Tibetan Plateau many forms of gypsum (a calcium sulfate mineral) are identified as *chongzhi*, but in the areas where we conducted fieldwork, the carbonate mineral calcite and other forms of Himalayan sedimentary limestone were used. The most common natural forms of calcite are chalk, limestone, and marble. However, *chongzhi* is not simply "calcite" or "gypsum"—though frequently translated as such—as these minerals appear in various forms, including in combination with other minerals, that amchis do not recognize as *chongzhi*. We chose limestone

16 *Tülwa* is the past tense of the verb *dülwa* (*'dul ba*, "to tame").

Figure 5 A large piece of *chongzhi* rock that Amchi Nawang Tsering carried from the high mountains in Ladakh to his pharmacy. Nee, September 2018. Photo courtesy of T. K. Shor (all rights reserved).

as the most apt vernacular and inclusive term for the *chongzhi* processed at our fieldsites (e.g., fig. 5), where it is harvested from the prevalent sedimentary rock formations predominantly composed of calcium carbonate ($CaCO_3$). However, it should be noted that not all calcite (or gypsum) originates from sedimentary rock formations. Marble, for instance, is metamorphic and anhydrite (another form of calcium sulfate) is evaporitic, while chalk is primarily composed of compressed, sedimented microplankton, with only some coral and shell fossils.

Calcium carbonate is a chemical compound used in the manufacture of many products. It is used as a filler and whitening pigment, and in products like food supplements, baking powder, toothpaste, and antacids. Limestone, along with related carbonate rocks like aragonite and dolomite, exists in many natural forms, each with a unique composition. Similarly, Sowa Rigpa recognizes different characteristics of *chongzhi*, including appearance, texture, taste, and varying degrees of warming or cooling properties. The amchis we met selected diverse types of limestone for processing, depending on availability and perceived potency.

In Sowa Rigpa, *chongzhi* is one of the quintessential stomach medicines (*pho ba'i sman*), akin to an antacid. It appears in texts detailing multi-compound formulas for indigestion in the fifteenth century (Zurkhar Nyamnyi Dorjé 2005, 521–23). This whitish calcium-rich rock is processed using a hot, cold, or wild

method, each influencing the *nüpa* of the material, either enhancing the digestive heat, or *medrö* (*me drod*), or instilling slightly cooling or neutral properties to alleviate excess stomach acid. The Tibetan physician Karma Choden, who had her clinic in Leh and was teaching at the Sowa Rigpa Department of the Central Institute for Buddhist Studies (CIBS), Choglamsar, in 2018, explained the meaning of *chongzhi*: "*Chong* comes from *chongné* [*cong nad*, also *gcong nad*], which translates [broadly] as indigestion;[17] *zhi* means pacifying. So *chongzhi* actually means 'pacifying indigestion.'"[18] A contemporary Tibetan formulary lists around twenty formulas that include *chongzhi* as their primary ingredient (Ridak 2003, 488). The gut medicine Druptop Rilkar (*grub thob ril dkar*, "Siddha White Pill"), known as Drupril, is a well-known formula containing *chongzhi* as a key ingredient as well as an additional coating in many cases.

Medicine making in Sowa Rigpa follows distinct phases outlined in the *Four Tantras* (IV, 12) as the Seven Essential Practices for Cultivating Medicinal Quality (*sman la gces par 'os pa'i yan lag bdun*). The seven practices address: (1) collection location, (2) timing, (3) removal of toxins, (4) drying environment, (5) storage, (6) refining characteristics, and (7) compounding based on specific properties (see Chapter 3). Each step contributes to shaping a substance's potency (Hofer 2014, 50–51; Yutok Yönten Gönpo 2006, 696–700). In comparison, Ingold and Hallam (2014) approach the story of materials through three phases: separation (sourcing things from nature), transition (processing substances), and reincorporation (distributing and imbibing medicines). In what follows, we have chosen to structure our discussion around the phases of sourcing, processing, and distribution/ingestion, since they logically speak to the changes that the substances undergo, allowing us to highlight how potency is sculpted throughout this emergent process.

First, materia medica must be sourced. They are removed from their former lives in soil, water, trees, mountains, and so forth. Place is important in how a substance's potency is conceptualized; substances sourced from sacred sites are considered to have extra potency. But contemporary practitioners are also pragmatic. In the ethnographic examples that we present, Amchi Nawang Tsering narrates his story of collecting *chongzhi* from the high mountains near Nee, while Dr. Penpa Tsering, who trained at the Men-Tsee-Khang (MTK) in Dharamsala, sources his *chongzhi* from the wholesale market in Amritsar.

Second, materials are processed in the pharmacy, which is the amchi's artisanal workshop. None of the amchis who we met bought ready-made, chemically pure calcium carbonate powder from a supplier, as is done by PADMA in Switzerland for

17 *Chongné*, which literally means chronic illness, is rooted in indigestion (*ma zhu ba*).

18 Dr. Karma Choden, interview with Gerke and Van der Valk, Leh, September 25, 2018.

use in their Aciben/AciTib food supplement that mirrors the formula Chongzhi 6.[19] Amchis considered it essential to process *chongzhi* themselves. This phase in particular highlights how *menjor* depends on experiential learning, experimentation, and improvisation, rather than straightforward adherence to textual authority, which is—by design—incomplete. In this chapter, we therefore start our discussion of processing by introducing the notion of "guided rediscovery" (Ingold 2001) to conceptualize the interplay of written formulas and experience in knowledge and learning. We then ethnographically document the transformation of limestone into moonlight *chongzhi* in two small-scale Himalayan pharmacies, which operate under different climatic and labor conditions.

Finally, substances continue their life stories after leaving the workshop; medicines are distributed, prescribed by amchis, and ingested. As *chongzhi* interacts with the human gut it unfolds its potency. We show how the preparation of medicine for consumers can incorporate the *nüpa* of *chongzhi* in different ways by examining its use as not only an ingredient but also a coating for the popular Drupril formula.

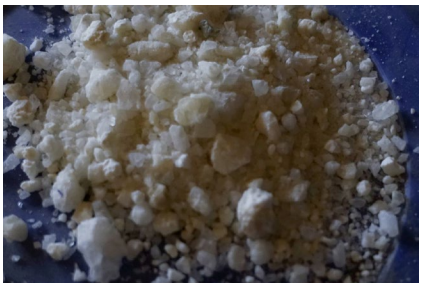
Sourcing substances

Tibetan medical literature mentions many types of *chongzhi*, illustrating the importance that amchis place on their diverse environments, lineages, and the sourcing of their substances. At Urgyen Tsewang Dorjey Rinpoche's Sowa Rigpa clinic in Shey, near Leh, the amchis used a rare type of "male" *chongzhi* or *pochong* (*pho cong*) called "*chongzhi* that resembles broken horse teeth" (*rta so chag pa 'dra cong zhi*) (fig. 6), which leading *menjor* scholar Gawé Dorjé identifies as a form of rhombohedral calcite (2018, 51). Amchi Tsultim Gyatso in Leh utilized a type of "son" *chongzhi* or *buchong* (*bu cong*), a form of limestone sourced from hot springs in Ladakh (fig. 7). At the Sowa Rigpa Department at CIBS in Choglamsar, a half-hour-drive south of Leh, the classroom had cabinets filled with materia medica samples. Among them were five types of *chongzhi* (fig. 10) out of the more than twenty described in modern Tibetan medical literature (Kelden Nyima 2010, 90–97; Gawé Dorjé 2018: 51–54).

However, not all the amchis we spoke with knew the exact type of *chongzhi* they were using. Most amchis in Ladakh referred instead to the particular place where they had collected *chongzhi* for generations. They sourced it from various mountain sites, following their respective lineages and teachers (Blaikie 2014,

19 Herbert Schwabl, conversation with Gerke, Wetzikon, Switzerland, June 29, 2019.

6



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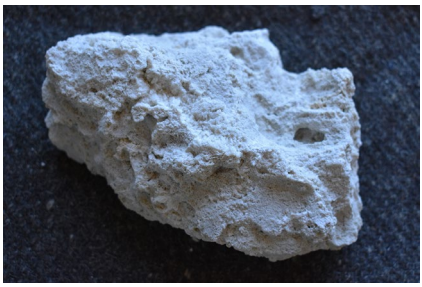

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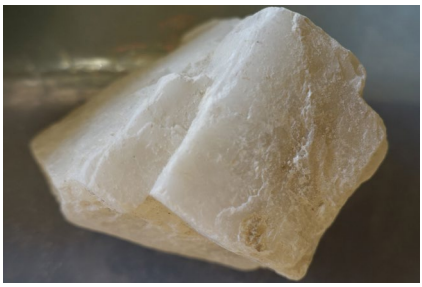

Figures 6–9 Four types of *chongzhi* used in *menjor* (from top left): *pochong* that resembles broken horse teeth at Urgyen Rinpoche's clinic in Shey (fig. 6); Amchi Tsultim's *buchong* sourced from hot springs (fig. 7); Amchi Nawang Tsering's *chongzhi* collected from high mountains near Nee (fig. 8); Dr. Penpa Tsering's *chongzhi* bought in Amritsar (fig. 9). Ladakh and Sidhpur, 2018. Photos B. Gerke (figs. 6, 8, 9) and J. van der Valk (fig. 7) (CC-BY-SA 4.0).

154). Amchi Nawang Tsering from Nee embarked on a perilous trek to a high mountain range once every few years to collect large pieces of *chongzhi* for his pharmacy (figs. 5, 8), sufficient for several years of *menjor*. It was such a hazardous journey that before embarking he would write a will and give instructions to his wife in case he did not return. In contrast, for many other contemporary amchis, wholesale spice markets in India are often the main source of many ingredients. Dr. Penpa Tsering sourced his *chongzhi* from Amritsar without knowing either its exact type or origin (fig. 9).

When Gerke discussed types of *chongzhi* with Dr. Penpa Tsering, showing him the illustrations from Kelden Nyima's book, he explained:

> Everyone uses what they can get without knowing if it is *po*, *mo,* or *maning chong* [*ma ning cong*]. It does not matter; we cannot identify the type from the books. It is too complicated; there are too many types. The Men-Tsee-Khang used to source *chongzhi* from Spiti, then later from

Figure 10 Five types of *chongzhi* samples at the Sowa Rigpa Department at CIBS. Choglamsar, Ladakh, 2018. Photo B. Gerke (CC-BY-SA 4.0).

> Dehradun where it was more yellowish. I get my *chongzhi* rocks from the wholesale market in Amritsar … we have to use whatever type we can get.[20]

Contemporary practitioners tend to take a pragmatic approach to sourcing raw ingredients. When seeking out *chongzhi*, they focus primarily on availability and color, generally favoring the whitest varieties, which are described as "finest" (*rab*) in the texts (see, e.g., Gawé Dorjé 2018, 51).

Processing substances

In her Making and Knowing Project, Pamela Smith's students made extensive use of experimentation to address gaps in sixteenth-century French artisanal texts (Smith 2016, 2022). Similarly, in Sowa Rigpa, gaps in instructions (oral or textual) may encourage students to experiment. We propose that written recipes for *menjor* can be viewed as scripts for "guided rediscovery," a concept developed by Ingold that emphasizes the dynamic nature of learning and making. Ingold (2001) suggests that rather than following instructions rigidly, artisans engage in processes of copying, imitating, and improvising, adapting their methods to the specific conditions they encounter (141). Using the example of a cookbook, he argues: "The information in the recipe book is not, in itself, knowledge. Rather, it opens up a path to knowledge, thanks to its location within a taskscape that is already partially familiar by virtue of previous experience" (137). Similarly, the

20 Dr. Penpa Tsering, interview with Gerke, Sidhpur, November 21, 2018.

recipes that amchis "read" for medicine making—or that other artisans use for their crafts—are not fixed sets of instructions but are instead flexible frameworks that guide practitioners toward rediscovering the making process in ever-changing environments. As environments and materials evolve, so too do techniques, requiring ongoing adaptation and creative problem-solving rather than mere repetition (see also Smith 2022).

Amchis study medical texts in classical Tibetan, but many *menjor* skills are transmitted orally and formulary texts are often quite brief. This keeps medical knowledge secret, protects artisans and their skills, and binds students to their teachers for longer periods of time. It can also encourage experimentation, despite the greatest value being placed on emulating one's teacher as closely as possible. Anthropologist Tatiana Chudakova (2021) describes how Buryat amchis (emchi) learn through trial and error when key steps are intentionally omitted by teachers. One student, Aleksandra, struggled to tame *chongzhi*, only later discovering that it needed to be quenched in milk or vodka while red hot. The resulting substance, resembling thick sour cream, emerged through hands-on experimentation rather than detailed instructions (249). This shows how experiential learning and improvisation fill the blanks in oral or written instructions, aligning with the trial-and-error approach employed by Pamela Smith. It is also an example of how incomplete recipes lend themselves as tools for guided rediscovery of medicine making.

Chongzhi recipes as guided rediscoveries

One of the processing methods we followed with Amchi Tsultim Gyatso was called "hot taming of *chongzhi*" or *chongzhi tsadül* (*cong zhi tsha 'dul*). Its description in a twentieth-century Tibetan textbook serves as an example of a written *chongzhi* processing script that guides rediscovery of making medicines, rather than providing a fixed set of instructions. Short and pithy, the text gives little detail on variations in timings and measurements, requiring an experienced teacher to put it into practice:

> Take approximately 1,000 units of crushed *chongzhi*, pour it into [a bowl of] water, and add ten units of saltpeter [*ze tshwa*]. Boil it for three hours. Pour off the yellowish liquid. Change the water and rinse [the *chongzhi*] ten times with cold water. In the end, the water should have no color. Dry it. It can [then] be used in medicine for beneficial application.[21]

21 Gerke's translation of Tupten Tsering 1990, 361, 14–17: *cong zhi khe 1000 rgya sran tsam brdungs nas chu nub par blugs pa'i steng ze tshwa khe 10 btab ste chu tshod gsum btsos*

The same textbook also includes a similarly sparse textual description of the cold taming of *chongzhi*, called *chongzhi drangdül* (*grang 'dul*) or *"dzomo* milk" (*mdzo 'o*):[22]

> Continue as before and first make the hot taming of *chongzhi*. Then, grind it into fine powder, pour in the milk of a high altitude *dzomo* and thoroughly knead [the mixture]. After forming [the mixture into] lumps, let [them] dry in the shade. Then they should be used in medicines for beneficial effect.[23]

Dr. Penpa Tsering clarified that in Tibetan *menjor* books, *chongzhi* usually refers to *chongzhi tsadül*.[24] Specific variations such as moonlight *chongzhi* are called *chongzhi daö* or *chongzhi dzo* (*cong zhi mdzo*) and would be specified when used in formulas.

Gerke discussed these textual sources with Dr. Penpa, specifically regarding how the processing would change the *nüpa* of *chongzhi* so that it becomes a warming or cooling medicinal substance. While sitting together in his living room, Dr. Penpa opened a copy of the *Four Tantras* and read from the chapter on ash medicines (*thal sman*) (IV, 8), which are warming in nature and used to treat cold diseases (Yutok Yönten Gönpo 2006, 684). That chapter describes two methods of processing *chongzhi*: *trültel* (*'phrul thal*), which translates to "magical ash," and *götül* (*rgod btul*) or "wild taming" through the sudden application of heat. Both techniques reveal forms of skilled artisanal practice.

Trültel exemplifies a special type of *chongzhi* processing particularly suitable for essence extraction therapies aimed at rejuvenation (see Chapter 2). Dr. Penpa recited the relevant verse from the *Four Tantras* and then explained the process.[25] *Chongzhi* is added along with a few other ingredients into a pot along with sulfur

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rjes btsos khu ser zhas can de phyir 'pho la cong zhi chu grang gis thengs bcu tsam bshal nas mthar chu'i mdog ma gtogs ser khu don rgyu med na skam nas sman nang bed spyod dgos.

22 A *dzomo* is a female yak–cow hybrid; *dzo* (*mdzo*) is the male version.

23 Gerke's translation of Tupten Tsering 1990, 361, 18–20: *cong zhi grang 'dul lam mdzo 'o ni / gong bzhin byas pa'i cong zhi tsha btul de phye ma zhib par btags rjes mdzo mo yar ma'i 'o ma blugs la 'dam 'thag legs par zin nas 'phang lo bzos te grib skam btang rjes sman nang bed spyod byed dgos.*

24 Dr. Penpa Tsering relied on the *Four Tantras* (Yutok Yönten Gönpo 1982) and the *Dütsi Bumzang* (Khyenrap Norbu 2007), of which he used an early copy from the 1980s, published by the Department of Religion in Dharamsala.

25 *Trültel* was also included in the famous fifteenth-century medical collection *Relics of Countless Oral Instructions* (*Man ngag bye ba ring bsrel*) (Zurkhar Nyamnyi Dorjé 2005, 521–23).

(*mu zi*); the pot is then sealed with mud and heated on a charcoal fire. The text states that "the indication it is cooked fully is when the sulfur smell has cleared,"[26] which Dr. Penpa clarified as meaning that the burning process is complete when the sulfur has dissipated. The ash is then further ground into a fine powder and mixed with white sugar. We note the artisanal timestamp involving the sensory engagement of smell. Following Smith (2004), we interpret this as a form of artisanal literacy.

Dr. Penpa then moved on to explaining *chongzhi götül*, known for its heating qualities. Discussing the semantics of the term *gö* or "wild," Dr. Penpa explained that a wild animal is considered more robust than a domestic one. *Götül* thus refers to the wild or stronger potency created through this taming method. Despite its potential for enhancing digestive heat, *chongzhi götül* has a sharp potency (*rno ba*) that can make medicines excessively hot; Dr. Penpa said that it is therefore used sparingly and with caution in medicinal formulations. It acts more as an add-on (*kha tshar*), than a main ingredient. Dr. Penpa clarified that most published formulas that include *chongzhi götül* mention large amounts of it, but nowadays no one uses such quantities because it would render the *nüpa* of the medicine far too hot. This left us pondering whether, historically, formulas were made that perhaps needed to be more potent to address different therapeutic needs in different geographies or if bodies might have changed over time.

Dr. Penpa's explanation of the *chongzhi götül* process also illuminates the intersections between medicinal preparation and broader artisanal practices known across the Himalayas and beyond. *Chongzhi* pieces are heated over a charcoal fire until they adopt a whitish hue, and then rapidly cooled in a liquid medium, which according to the texts should be fermented barley beer (*chang*) or buttermilk (*dar ba*), although nowadays Dr. Penpa uses water. This method not only alters the physical state of *chongzhi* but also changes its potency and hence its medicinal properties. The transformative moment is marked by a distinctive hissing sound as the hot *chongzhi* meets the cold liquid and turns into powder. This is reminiscent of the process used in creating whitewash paint, a substance popular across the Himalayan region for protecting and decorating buildings, and known for its brightness. In both cases, the interaction between heat, material, and a sudden change in temperature plays a critical role in achieving the desired outcome—whether it be a medicinal powder or a protective coating for walls. This parallel is not merely coincidental but speaks to a deeper understanding of materials and their interactions that pervade day-to-day skills, and the overlapping of techniques shared between amchis and other craftspeople. The artisanal knowledge embedded

26 Gerke's translation of Yutok Yönten Gönpo 1982, 596/1: *mu zi'i dri sangs 'tshos pa'i tshad yin 'don* (translated in conversation with Ploberger 2015, 134 and MTK 2011, 109).

within these practices, which all involve manipulation of material properties to leverage changes in temperature and state, serves both everyday practical crafts and therapeutic purposes.

Looking at these processing techniques with a focus on making and growing involves more than simply emphasizing the physical act of making; it requires us to follow how the life processes of both substances and artisans develop, mature, and evolve in unpredictable and contingent ways. Making (as human directed) and growing (as natural and autonomous) are intertwined (Ingold and Hallam 2014). This will become more evident in the two detailed accounts that follow. The amchis' interactions with limestone as they transform it from a grown rock to a processed and storable moonlight *chongzhi* "cake" highlight their experimentation—with different ingredients, various types of milk, or shapes of *chongzhi* cakes—and artisanal literacy. We specifically pay attention to their perceptions of *nüpa* and how it is directed and sculpted through different processes, or in Ingoldian terms, how makers and materials interact and coevolve.

Moonlight *chongzhi* in Ladakh

Amchi Tsultim Gyatso invited Gerke and Van der Valk to make *chongzhi daö* with him in Leh in September 2018. A Gelukpa monk from Nubra, Amchi Tsultim graduated from MTK in 1973 before its enlargement and institutionalization led to a greater separation between the pharmacy and the medical college (Pordié and Blaikie 2014). He thus received extensive *menjor* training, learning hands-on with senior teachers such as Lamenpa Jamyang Tashi of Tsona (1918–1986), who studied in Lhasa and later became head of the MTK pharmacy and the Fourteenth Dalai Lama's personal physician.[27] When we visited, Amchi Tsultim was living alone in a large building with rooms for drying, storing, and processing medicines, and saw patients in the adjacent Chirde Sorig Khang clinic, where he prescribed about seventy types of handmade pills and powders (fig. 11). His altar room, which housed his library of Buddhist and medical literature, was used for drying and consecrating substances and reciting prayers. Amchi Tsultim collected raw ingredients from far and wide, going into the mountains, buying them from collectors, and trading them with colleagues. In Sowa Rigpa, a minimum of three and up to over a hundred raw ingredients form a medicine. The vast majority are individually preprocessed before adding their specific *nüpa* to the synergy of the formula.

27 *Lamenpa* (*bla sman pa*) is the honorary title given to personal physicians of lamas and rinpoches, notably the Dalai Lama.

Figure 11 Amchi Tsultim dispenses medicines to a patient in his clinic. Leh, September 2018. Photo B. Gerke (all rights reserved).

Amchi Tsultim makes *chongzhi daö* once a year during the most auspicious and brightest full moon, which occurs in the eighth month of the Tibetan calendar, typically late August or September. The following narrative is based on Gerke and Van der Valk's fieldnotes:

> During the first day at Amchi Tsultim's clinic, it took us two hours to crush two bags of solid rock *chongzhi* into small pieces. About ten percent of the rocks were waste. The good parts looked whitish and hard, the bad parts dark and soft. Sometimes we found green, orange, and gray pieces. The process to remove the harmful, dark parts is called *dukdön* (*dug 'don*). Amchi Tsultim silently demonstrated what we should do: hit the *chongzhi* rocks carefully but firmly to break them down into smaller pieces, about the size of the tip of our thumb. The goal was to create pieces of roughly the same size without reducing too much of the rock to fine dust.
>
> While grinding *chongzhi* we contemplated the life cycles of substances: their becoming, growing, and transformations. While using our hands, we realized that *making* seems to be more about the process than its final form, and that making requires unmaking (fig. 12).
>
> We discussed how this *chongzhi* was actually an old seabed of corals and shells. Crushing it now after millions of years, we continued the

Figure 12 J. van der Valk crushes *chongzhi* rocks into smaller pieces. Leh, September 2018. Photo B. Gerke (CC-BY-SA 4.0).

transformation of organic fossilized creatures into medicine. We saw worm-like burrowing holes, corallic columns, and imprints of shells (see fig. 13). We felt awed by the eons of time we held in our hands and by all things constantly interacting with their environment. *Chongzhi* is the result of that ongoing process. Processing is based on interaction between the artisan and substance over time. Under the weight of our round working stones, we realized that *chongzhi* can be used and processed because it is relatively soft. Amchi Tsultim said it is the easiest of the rock medicines (*rdo'i sman*) to process. If it were as hard as granite, its use would differ. Crushing and grinding pearls, turquoise, or lapis lazuli is a lot more difficult. Properties of materials are not merely ideas; they are what amchis work with.

Figure 13 An unprocessed piece of *chongzhi*. Leh, September 2018. Photo B. Gerke (CC-BY-SA 4.0).

When reflecting back on our fieldwork experiences, we discussed Ingold and Hallam's (2014) questioning of where acts of making begin and end, and how this troubles notions of completion, fulfillment, and "end products." They propose that making things is akin to storytelling, without a clear beginning or end. The story is not only that of the makers who intentionally work with materials and who are deeply involved in the transformation of matter, but also that of the material itself. This approach resonated strongly during our fieldwork, as we further immersed ourselves in the life story of *chongzhi*:

> We worked the entire morning, new to the practice, and slow. Fortunately, a local woman who had been assisting Amchi Tsultim for more than ten years, guided us. Her movements looked smooth and easy, and she ground most of the rocks in much less time than we did. By noon, we had crushed twenty kilos.
>
> In the afternoon, we moved these twenty kilos of rocks into a large aluminum pot (fig. 14), which we then filled with water. We boiled them several times on a gas stove. Each time, Amchi Tsultim changed the water, until after four rounds of boiling, the water looked clear (see figs. 15–18). This way of processing is known as "hot taming of *chongzhi*" or *chongzhi tsadül*.
>
> Amchi Tsultim explained that the *nüpa* of *chongzhi* comes from its nature, called *ngowo* (*ngo bo*), not its taste, *ro* (*ro*).[28] The process of

28 See Chapter 3 on the distinction between *ngowö nüpa* (*ngo bo'i nus pa*), "essence potency," and the "potency of taste" (*ro yi nus pa*), also known as "material potency" or *dzé kyi nüpa* (*rdzas kyi nus pa*).

Figure 14 Amchi Tsultim and Gerke prepare crushed *chongzhi* rocks for boiling. Leh, September 2018. Photo J. van der Valk (all rights reserved).

boiling, called *chongzhi dukdön*, does not change the nature of *chongzhi*, it simply removes the *duk* (*dug*). In this context *duk* is not poison, but "what we don't want": dirt, other minerals, impurities of all kinds. Through boiling, the *chongzhi* becomes clean (*gtsang ma*). Amchi Tsultim said: "We don't use unclean materials in medicine, as this makes the medicine rough and difficult to digest." During the boiling, we saw soap-like yellowish frothy bubbles. This was the *duk*. With each round of boiling, the water became less murky and yellowish, and fewer bubbles appeared. During the third round of boiling, the water in the pot became clear enough to see the rocks underneath. After the fourth round, the water was almost transparent and not yellowish anymore. After the boiling, the pieces had to be soaked and washed in cold water four times and then laid out to dry.

Amchi Tsultim explained that this *dukdön* process had been carried out by generations of expert amchis, who gained experience by doing it. Jan asked if they also relied on texts. Amchi Tsultim smiled, saying that, "the text *is* experience."

Five days later, we returned for another two days of grinding. This time, the boiled *chongzhi* rocks had to be ground into fine white powder.

Figure 15 First round of boiling *chongzhi*. Leh, September 2018. Photo J. van der Valk (CC-BY-SA 4.0).

Figure 16 Amchi Tsultim pours out the water after the second round of boiling *chongzhi*. Leh, September 2018. Photo J. van der Valk (all rights reserved).

Figure 17 The water looks clearer after the third round of boiling. Leh, September 2018. Photo J. van der Valk (CC-BY-SA 4.0).

Figure 18 The water appears clear after the fourth round of boiling. Leh, September 2018. Photo J. van der Valk (CC-BY-SA 4.0).

Figure 19
Grinding the pre-boiled and dried *chongzhi* pieces by hand into fine powder. Leh, September 2018. Photo B. Gerke (CC-BY-SA 4.0).

Figure 20
Sifting the ground-up *chongzhi* powder. Leh, September 2018. Photo J. van der Valk (CC-BY-SA 4.0).

We used the same stone trough and round pebbles as before (fig. 19) and then passed the powder through a metal sieve into clean plastic sacks (fig. 20). It was a dusty affair, and we used gloves and masks. Amchi Tsultim showed us some techniques. His rapid hitting of the sieve against the palm of his hand was very efficient, causing much less dust to escape since the bag containing the fine powder was moved less. We were unable to imitate the elegance and efficiency with which he accomplished his fine grinding; we realized this takes years of practice.

The next day, we brought our sleeping bags, since the *chongzhi daö* processing would happen during the night of the full moon. We spent the afternoon making *chongzhi* powder. In the evening, Amchi Tsultim

Figure 21
View from the rooftop of Amchi Tsultim's clinic. Leh, September 2018. Photo B. Gerke (CC-BY-SA 4.0).

prepared a simple but delicious meal: flatbread *roti* with green beans. He told us to eat well, since we had hard work ahead of us. At around 8 p.m., we went up to the rooftop of his building (fig. 21).

This housing colony had grown steadily over the years. Its roofs were littered with satellite receivers, prayer flags, plastic sheets to prevent rain from seeping in, rubble, and water tanks. When it got dark, we started using our head torches. The moon was covered by a thin layer of cloud.

Amchi Tsultim had organized six liters of fresh *dzomo* milk, which had already been boiled. He started mixing some of the white *chongzhi* powder with the *dzomo* milk in a large metal bowl (fig. 22). When he judged that the consistency was right, he gave each of us a pile of wet *chongzhi* dough in a smaller shallow metal bowl, so we could knead the mixture. The three of us sat in a row, facing the moon, each with our bowl in front of us. We could hear dogs barking in the streets below. As instructed by Amchi Tsultim, we wore disposable gloves to prevent our hands from getting soaked, which would be very unpleasant when kneading *chongzhi* for three and a half hours. The mixture was not as elastic as clay, and heavier and less sticky than bread dough. The predominant sensation was its coldness. Amchi Tsultim explained that this was a combination of the mixture's exposure to the cold night air and to moonlight, which "is always cold." Indeed, the main aim of our kneading was to thoroughly expose every particle of the mixture to the moonlight, while reciting the Medicine Buddha mantra.

We specifically asked if the *nüpa* of the *chongzhi* paste would change. He explained that the mantras added the potency of mantra, *ngak kyi*

Figure 22
Amchi Tsultim mixes boiled *dzomo* milk with the *chongzhi* powder. Leh, September 2018. Photo B. Gerke (all rights reserved).

nüpa (*sngags kyi nus pa*), and the light of the moon increased the *chongzhi*'s cooling power. We asked if the *dzomo* milk had an influence. He explained: "It adds nutrition or *chü* [*bcud*]. It makes the *chongzhi* more nutritious, but does not significantly influence the cooling/warming balance because it is considered neutral. *Dzomo* milk has a balanced *nüpa*. Cow's milk, on the other hand, is more cooling."

Amchi Tsultim described to us how he visualized the eight Medicine Buddhas in a horizontal row, facing him, together with all of the dharma and medicine teachers who had been kind to him, including the Dalai Lama (his root guru). He requested them to bless the medicine, since this is believed to add more *nüpa*. Amchi Tsultim said: "Making medicine generates merit, we should rejoice in that. It is not like selling wine. It is meaningful because you are helping sentient beings." This idea added an extra dimension to what seemed like arduous, repetitive, ordinary work.

We stopped kneading at around 11:30 p.m. and formed and placed round, uneven *chongzhi* cakes—some with holes—on clean plastic sheets. In the end, we had more than a hundred donut-shaped cakes spread over four plastic sheets on wooden planks. These were exposed to the light of the full moon throughout the night (fig. 23). Tired and happy, we retired to our sleeping bags. Early the next morning, before sunlight directly touched the cakes, we moved them into the shrine room to dry in the shade for six or seven days. Once dry, they were ground into white powder that could be stored for use in specific formulas.

Figure 23
Chongzhi cakes in the morning after their immersion in the light of the full moon. Leh, September 2018. Photo B. Gerke (CC-BY-SA 4.0).

Making *chongzhi daö* with Amchi Tsultim showed us that only by doing and making could we get a sense of the intricacies of the amchi's skills, dexterity, and empirical knowledge, as well as the practical necessities and limitations involved. Only by engaging in each of the constituent processes could we really begin to understand the dynamic interactions unfolding between the substances, the practitioner and—in this case—the power of moonlight.

Moonlight *chongzhi* in Himachal Pradesh

One month later, in October 2018, Barbara Gerke documented the *chongzhi daö* process with Dr. Penpa Tsering. It was the full moon of the ninth Tibetan month, which in the lower Himachal regions typically offers clearer skies than the monsoon cloud-covered full moon of the eighth month. After his training at MTK, Dr. Penpa spent years working in its pharmacy before establishing his own. While

still based in the Dharamsala region, he had become a supplier of many Sowa Rigpa formulas to privately practicing amchis worldwide. The following narrative is based on Gerke's fieldnotes:

> On the afternoon of the full moon day, Dr. Penpa took me around the pharmacy, showing me the various types of processed *chongzhi* and the preliminary *dukdön* he had already completed to make the moonlight *chongzhi*. He explained that he had boiled the *chongzhi* pieces for three hours in water with saltpeter to make the stones "smoother," which means they would be easier to digest.[29]
>
> One of his skilled assistants had then ground the clean, dry *chongzhi* rocks using an electric grinding machine. Most amchis in Ladakh told us that *chongzhi* must be manually ground to avoid clogging up the grinding machine. Dr. Penpa adopted a gradual approach. He added small amounts of *chongzhi* to the machine and monitored its sound to determine when the substance was sufficiently ground. Overloading the machine with *chongzhi* not only risks jamming it but also leads to the loss of valuable raw materials in the form of dust. Proper machine maintenance and operational skill are critical to avoid these issues and ensure the production of very fine *chongzhi* powder. Dr. Penpa's team included sixteen Indian workers, trained over a decade. He had one skilled assistant who knew the grinding machine so well that he had ground 154 kilos of very fine *chongzhi* powder in preparation for the *chongzhi daö* without clogging the machine.
>
> On the rooftop, sacks of *chongzhi* powder were mixed with milk by a group of laborers (fig. 24), who worked overtime in exchange for extra tea and a taxi ride home. They began kneading in the late afternoon, kneeling around large plastic bowls (fig. 25), using the full force of their upper bodies to mix the powder and milk by hand (fig. 26). Dr. Penpa instructed them to wash their hands frequently. Unlike Amchi Tsultim, Dr. Penpa was concerned about the chemicals in disposable gloves and avoided using them, fearful of contaminating the medicines. Every four kilos of *chongzhi* required one liter of milk. Forty bags, each containing one liter of dairy cow milk from the Punjab had been readied for processing. Since this milk was pasteurized, no precooking was necessary. Dr. Penpa acknowledged that cow milk possesses cooler properties than *dzomo* milk, but explained that its use was acceptable given that the full

29 This is also a common method for preprocessing precious stones (Gerke 2019a, 101).

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Figures 24–29 Processing *chongzhi* with Dr. Penpa Tsering. Sidhpur, October 24, 2018. Photos B. Gerke (all rights reserved).

moon processing also increased the cooling *nüpa* of the *chongzhi*. What troubled him more were the undisclosed additives like soybean powder, which is added by Indian dairy farms to milk labeled as "fortified with Vitamins A and D, containing Solids-Not-Fat [e.g., lactose, vitamins, calcium] and milk fat" (fig. 27). Dr. Penpa explained that obtaining forty liters of fresh milk in his area was impossible, making commercially packaged milk the only available option. It was a pragmatic compromise. He clarified: "You cannot always follow the text, but have to use what is available."

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Figures 30–32 Processing *chongzhi* with Dr. Penpa Tsering. Sidhpur, October 24, 2018. Photos B. Gerke (all rights reserved).

As dusk fell, the workers—who had already spent several hours mixing *chongzhi* powder with milk—laid out large plastic sheets on the rooftop (fig. 28). Dr. Penpa checked the consistency of the paste and instructed his assistants when to add more milk or powder. Over the years, Dr. Penpa adapted his techniques to suit the climate and materials. Unlike the round *chongzhi* cakes with holes typical in Ladakh, and the round flat cakes made by MTK, Dr. Penpa preferred to have his assistants flick pieces of *chongzhi* paste onto large clear plastic sheets (figs. 28, 30). He invited me to assist in this. The paste felt cold to the touch and had a perfect consistency—not so firm as to break, yet not overly liquid. We discussed the size of the pieces. If they ended up slightly large, they could simply be broken into two once dried, offering some flexibility and speed in our work.

We discussed the doughnut-shaped *chongzhi* cakes I had seen in Ladakh. Dr. Penpa acknowledged that they dry faster but said he had not seen that technique in Himachal Pradesh. At MTK, they traditionally made flat cakes without a hole; he made one to show me its size and shape (fig. 29). They first made *chongzhi daö* in exile in the 1980s. Dr. Penpa recalled facing many difficulties, since they had to

do everything manually on rough grinding stones and the newspaper on which they placed the cakes stuck to them while they were drying. Nowadays, everyone uses clean plastic sheets. He believed his method of creating flaked pieces not only allowed the paste to dry better in the humid climate but also significantly reduced labor time. For comparison, we made one Ladakhi-style doughnut with a hole and placed it with the flat MTK-style shaped cake to dry on one corner of the plastic sheet (fig. 31).

Dr. Penpa emphasized the importance of experience and experimentation and wondered how amchis figured out how to process *chongzhi* hundreds of years ago: "We do not have machines like modern science to test our methods." This led to a discussion on the use of the human body and its senses. We wondered how amchis historically identified *chongzhi*'s utility for stomach ailments. Did they associate whiteness and coolness—milk, *chongzhi,* and the moonlight all being white and having cooling potentialities—with the relief of hot-natured conditions like gut acidity, despite most stomach ailments needing warming potencies?

We talked about how calcium carbonate is now widely known as an antacid, and how *chongzhi* from the Himalayas originated from coral and seashells on the ocean floor before the Indian subcontinent's uplift brought them to the high altitudes of the Himalayas. For Dr. Penpa this made his *chongzhi* original, even if it is chemically identified largely as a form of calcium carbonate, which he could buy in sacks from a chemist store. Thinking about this transition from sea level to mountainous heights over millions of years added to his sense of the unique properties of *chongzhi*. His *chongzhi* was also unique in its material makeup, considering that limestone is not just calcium carbonate, and milk is not just "milk."

Since his workers were Hindu and not Tibetan Buddhists, his *chongzhi daö* practice had no obvious ritual elements such as those we observed with Amchi Tsultim in Leh. Dr. Penpa performed his prayers by himself in the morning and consecrated his medicines by adding blessed substances such as *mani rilbu* (*ma Ni ril bu*) and *dütsi chömen* in small quantities to his formulas. He acknowledged that nowadays amchis do not have the time to perform all the rituals for consecration. Adding blessed substances to each batch was a way to imbue blessings while keeping up with a demanding manufacturing schedule.

By 7:00 p.m., the full moon rose above the Dhauladhar mountain range. The workers had prepared five large plastic sheets, each laden with more than thirty kilos of *chongzhi*, now denser with the added forty

liters of milk. These *chongzhi* pieces would be left out for exposure to the moonlight (fig. 32). The laborers were done for the night and packed up to go home. Dr. Penpa would cover the *chongzhi* pieces by 6:30 a.m., before sunrise. By 9:00 a.m., his workers would move the sheets of *chongzhi* into the pharmacy's drying rooms.

When we met again a month later, I inquired about our experiment of forming the two *chongzhi* cakes. He laughed, recounting how they had broken while the sheets were being transported to the drying room the following morning. His technique, it turned out, was the most suitable one for the place and the amount of *chongzhi* made during that full moon event.

Distributing and imbibing substances

Processed *chongzhi* can be stored safely for longer periods until used in medicines. Some amchis regrind the cakes into powder for storage, while others prefer to keep them in larger forms and only grind them when they are ready to prepare medicines. Once the *chongzhi* formulas are made, these materials have become medicines and leave the amchis' workshops on the next stage of their journey. Some find their way into local dispensaries or to practitioners across South Asia, while others are shipped worldwide to Sowa Rigpa clinics. These medicines are then prescribed by amchi practitioners or sold over the counter before being ingested by patients. Thus, cycles of growth and making transition into a phase of transference that culminates in the potencies of substances being imbibed into the bodies of patients, skilled production meeting with digestion. In the skill of coating, we see a different way of reincorporating the *nüpa* of *chongzhi* into the body as a medicine.

Coating pills

Preprocessed *chongzhi* powder (not exposed to moonlight) is used to coat certain pills or *rilbu* (*ril bu*), giving them a distinctive, beautiful white finish. Slightly different concepts of potency apply when *chongzhi* is used as a primary ingredient in a medicine than when it is used as a pill coating. As a primary ingredient processed for its warming capacity, it will enhance digestive heat (see Chapter 3), while the examples we have presented here show it being steered toward becoming a slightly cooling medicine. Amchis listed several reasons why and how *chongzhi* is also used as coating. It initially acts in the stomach and concurrently preserves the

intrinsic *nüpa* of the pills' components, but it is also used for its whitening capacity. While the other ingredients in a formula can alter a pill's final color, achieving a certain aesthetic is an integral aspect of this coating technique. According to Amchi Nawang Tsering, color also matters to patients who, for instance, expect a Siddha White Pill, or Drupril, to be white.[30]

The Drupril formula has been documented in Tibetan medical texts since the fifteenth century and continues to be produced today. In Amdo, it has become a popular over-the-counter (OTC) remedy for stomach acidity (Nianggajia 2015), while in India, MTK produces it in a granular form sold as the OTC digestive Men Sum. Another formula with a *chongzhi* coating is Rilkar Pedong or Rilpé, which combines Drupril and the golden flower of *sergyi metok* (*gser gyi me tog, Herpetospermum pedunculosum*). The whitening of the pill is achieved with a *chongzhi* coating using hot-tamed *chongzhi tsadül*.

Our collection of Drupril samples from various pharmacies revealed that this coating process is labor intensive, leading some pharmacies with limited manpower to skip it. Moreover, the coating is an art marked by unpredictability. During Van der Valk's visit to Nee in 2022, Amchi Nawang explained that he sometimes applied up to four layers of *chongzhi* coating: "It depends on the process. Sometimes we succeed with one coating, sometimes we need three; it is not fixed. It is also a luck factor. Sometimes, coincidentally, everything is going right; sometimes, however much we care, it is not going the right way."[31]

Van der Valk had observed this process in 2018, watching Amchi Nawang applying consecutive layers of *chongzhi* coating onto roughly rolled brownish Drupril pills (figs. 33–36). His fieldnotes summarize the process, pointing out some of its intricacies while also necessarily skirting over many details:

> Nawang had mixed very finely ground preprocessed *chongzhi* powder with water to make a yogurt-like paste. He added about three or four soup spoons of this paste to a bowl containing around 1,500 Drupril pills, rhythmically stirring and turning them. He noted that adding too much paste makes the pills too wet, so the coating process has to be done in several layers. Sometimes the coating achieves a good white result, sometimes not. The *chongzhi* coating container was covered with a lid to shield it from too much sunlight, while the pills were turned in the sun to dry them more quickly. This batch was enough for a year's supply.

30 Van der Valk, fieldnotes, October 2, 2018.

31 Amchi Nawang Tsering, interview with Van der Valk, Nee, August 9, 2022.

Figure 33 Extremely finely ground pre-processed *chongzhi* powder mixed with water to make a yogurt-like paste for pill coating. Nee, August 2018. Photo J. van der Valk (CC-BY-SA 4.0).

Figure 34 Amchi Nawang Tsering's layered *chongzhi* coating; there is already a clear color difference between the uncoated and partially coated batches. Nee, August 2018. Photo J. van der Valk (CC-BY-SA 4.0).

Figure 35 Amchi Nawang Tsering immerses partially coated Drupril pills in a *chongzhi* paste to add another layer. Nee, August 2018. Photo J. van der Valk (all rights reserved).

Figure 36 Amchi Nawang Tsering's best quality Drupril with *chongzhi* coating: milky white and smooth. Nee, August 2022. Photo J. van der Valk (CC-BY-SA 4.0).

> After the stirring, Amchi Nawang rolled the pills in a large dark blue cloth bag, tied shut, while reciting Medicine Buddha mantras. The rolling must be gentle to avoid rubbing off the coating, but firm enough to ensure the pills dry while developing a smoother surface. Once rolled, the pills were laid on a rack to dry indoors at the pharmacy. Nawang explained that the *chongzhi* coating protects the pills much like chalk whitewash protects houses from extreme heat, cold, and moisture. The coating helps preserve the pills' potency, and the white color is what patients expect.[32]

These observations highlight some of the challenges of amchi artisanship. Patients expect a beautiful white pill, but labor limitations and the variables of dilution, adhesion, drying, pill rolling, and interactions between ingredients do not always bring the desired results. Among all the Drupril pills we collected, Amchi Nawang's were the whitest and most beautiful. When Gerke showed some to Dr. Penpa, he acknowledged their fine craftsmanship, achieved by a single dedicated amchi in the most remote pharmacy we visited.

In 2018, Van der Valk and Gerke visited Orgyen Dongak Shedrup Ling, locally called Urgyen Rinpoche's Gompa, in Ladakh (fig. 37). Established by the Nyingma lama Urgyen Tsewang Dorjey Rinpoche, it houses a monastery with monks and nuns and a Sowa Rigpa clinic where medicines containing *chongzhi* are prescribed to patients. In 2018, the clinic was managed by two women: Urgyen Rinpoche's late sister Amchi Sherab Dolma (d. 2020) and Ani Oeser from the Ladakh Nuns Association, who studied Sowa Rigpa at Chagpori Tibetan Medical Institute in Darjeeling. We had the opportunity to visit these two female amchis multiple times. During the September full moon, while we were with Amchi Tsultim, they were preparing *chongzhi daö* in Shey, making only a few kilos since they still had cakes from the previous year. We saw their cakes still drying in the gompa when we visited the clinic a few days after the full moon (fig. 38). Made with the superior white *pochong* variety of *chongzhi* and two liters of *dzomo* milk, the doughnut-like cakes appeared beautifully white and creamy, each uniquely shaped and of varying size.

The amchis incorporated the cakes into some of their *chongzhi* formulas (fig. 39), grinding them in an electric grinding machine instead of by hand on a grinding stone. Due to their limited staff, they utilized the machine for most tasks. During our visit to the dispensary (fig. 40), they showed us their Drupril

32 Van der Valk, fieldnotes, October 2, 2018.

Figure 37 Urgyen Rinpoche's Gompa with the Sowa Rigpa clinic on the right. Shey, September 2018. Photo B. Gerke (CC-BY-SA 4.0).

Figure 38 *Chongzhi* cakes drying inside Urgyen Rinpoche's Gompa. Shey, October 2018. Photo B. Gerke (CC-BY-SA 4.0).

Figure 39 Two formulas containing processed *chongzhi* at Urgyen Rinpoche's Sowa Rigpa clinic: Drupril, which both contains and is lightly coated with hot-tamed *chongzhi* (left); and Dashel Dütsima, which contains moonlight *chongzhi* but has no *chongzhi* coating (right). Shey, October 2018. Photo B. Gerke (CC-BY-SA 4.0).

Figure 40 The two female amchis working at the busy dispensary of Urgyen Rinpoche's Sowa Rigpa clinic. Shey, October 2018. Photo B. Gerke (all rights reserved).

Figure 41 Lightly coated Drupril pills at Urgyen Rinpoche's Sowa Rigpa clinic. Shey, October 2018. Photo B. Gerke (CC-BY-SA 4.0).

pills. Despite containing and having been lightly coated with hot-tamed *chongzhi,* they were still quite dark (figs. 39, 41).

Discussion

We have seen that *chongzhi* can yield a spectrum of effects—from slightly cooling to warming—depending on the preparation method employed. This ability to direct therapeutic action by altering the *nüpa* of ingredients reflects a complex interplay between textual instructions, material properties, and amchi artisanship. The concept of modifying a substance's qualities through processing is not unique to *chongzhi*. It is part of a far broader set of *menjor* practices, such as *sek* (*bsregs*), a process involving the burning of substances into ash medicines, which enhances their warming properties to treat cold diseases (*Four Tantras* IV, 12).

Amchis' engagements with materials and reliance on a range of knowledge transmission methods—reading, seeing, memorizing, direct instruction, hands-on experience, and, at times, experimentation—are emblematic of what Ingold calls skilled practice. They help us understand *chongzhi* processing in Sowa Rigpa as a dynamic interplay between the textual and the experiential, with written scripts acting as gateways to deeper, embodied forms of knowledge. *Chongzhi* processing is not merely about replicating a set of instructions. It involves improvisation that draws from both collective and individual experience, as well as lineage transmissions. Through this lens, we can begin to see how knowledge is a set of skills developed through active engagement with materials and environment, a process that Ingold terms "enskilment." We explore this further in the next chapter, when we look at the making of medicinal butter. Moreover, we can better appreciate the complexity of *menjor* in which the potency of substances like *chongzhi* emerges from a confluence of material engagement, environmental attunement, and skilled practice.

Our exploration of *nüpa* in practice shows that the concept of potency extends far beyond isolated active ingredients within a substance. Potency is not fixed.

It is a dynamic capacity that can be crafted through the meticulous process of medicine making. *Nüpa* is not solely inherent. It is something that continues to emerge and is enhanced as substances undergo their transformative journey from raw material to ingested medicine. This process of becoming, as shown in the practices and insights of various amchis, again illustrates how *menjor* craft is guided by skill, material properties, and environmental conditions.

Smith's work on artisanal epistemology gives us four key insights that help us understand this process. They also resonate with the theoretical contributions of Ingold and Hallam. First, skills are constantly refined through practice. Smith (2016, 2022) shows how the intimacy between practitioner and materials is fostered through sensory engagement, reconstruction, and experimentation. We saw this in Dr. Penpa Tsering's innovations when he employed a process of gradual mechanical grinding to produce larger quantities of fine powder without clogging the machine or losing valuable raw materials, or when he reshaped *chongzhi* cakes to dry them more easily. These skills embody the intimate and responsive relationship between practitioner and material. Each cake is shaped differently and each batch of *chongzhi* coating is unique.

Second, Smith (2010) reminds us to take seriously the "lived theory" (48) of early artisans and the underlying principles of their workings with materials, even if these are hard to put into words. If substances are considered alive and transformable (Smith 2010), they speak to the artisan in many ways. Different kinds of milk (cow, *dzo*, processed milk with additives) feel different and act differently when mixed with *chongzhi*. Each brings their own *nüpa* into the processing—adding, changing, and transforming the cooling and warming properties and consistency of the final paste.

Third, we should acknowledge a specific artisanal literacy among amchis. In this chapter, we followed what Smith calls "nontextual materials and processes" (2019, 22). This has allowed us to answer some of our questions about the specific instances of *chongzhi* processing in which we engaged, but offers no singular blueprint or protocol that could be universally applied. How exactly should the rocks be ground? What are the precise parameters for the subsequent boiling? How long should *chongzhi* be exposed to the light of the full moon? What is the most effective way to knead the paste by hand, and how might the use (or not) of gloves affect the outcome? Different answers to these questions would result in quite different processes and thus in different final products, yet such detailed processing questions are rarely addressed in Sowa Rigpa formulary texts (see also Van der Valk 2019). We see these as integral parts of each amchi's artisanal literacy. They are passed on through guiding explanations or *tri* (*khrid*), a lineage of practical experience or *laklen* (*lag len*), and engaged observation or *tongwé gyü* (*mthong ba'i rgyud*). This often includes aspects that are transmitted orally through

pith instructions or *men-ngak* (*man ngag*), some secretly (*gsang ba*). We note that a lot of Sowa Rigpa *menjor* knowledge is enacted rather than written down, often transmitted as tacit knowledge in what Smith describes as "nontextual, even a nonverbal literacy" (2004, 8) or, more recently, as a "material imaginary," that is, a practice-based knowledge system, partially written down in recipes but also emerging "out of the experience of practitioners working with materials" (2022, 13).

Fourth, imprecision in recipes (and other texts) makes sense. Smith (2010) highlights how artisanal recipes and treatises employ many measurements that sound imprecise and unfamiliar, "as they attempt to put into words the experiential and sensory knowledge of artisans that was almost always left unarticulated" (32). These textual imprecisions are not a limitation but rather an invitation to engage with the material language of artisans. For example, amchis' measurement of time does not always correspond to clock time. Amchi Tsultim boiled *chongzhi* four times, guided by sensory cues such as the quality of the bubbles and the changing color of the water, even though he generally knew it would take three hours. Time indicators are complex. Dr. Penpa Tsering's assistant could hear by the sound of the grinding machine whether the *chongzhi* was sufficiently ground. In *menjor* texts, we often find imprecise descriptions, such as "boil it for the amount of time it takes to boil a soup" (*khu ba thon nges skol*) or "boil until the color has changed" (*mdog 'gyur tsam du btso*).[33] And recall Dr. Penpa's explanation of how the disappearance of the sulfur smell indicated the readiness of an ash medicine. Ethnographically, we have paid attention to and tried to learn the artisan's material language, a form of knowledge that imprints on our hands, bodies, and senses.

By focusing on the skilled practice, lived theories, and material language of artisans like Amchi Tsultim and Dr. Penpa, we discover that, in Sowa Rigpa, it is the processes of dealing with the properties of substances that make for their potency. As we have seen, this involves negotiation, adaptation to new environments, and the use of substitutions, such as cooling cow's milk instead of balanced *dzomo* milk. The way that *chongzhi* cakes are variously mixed and formed in different *menjor* settings exemplifies this process of experimentation and adaptation. In Himachal Pradesh, using pasteurized packaged milk from the Punjab and making smaller *chongzhi* flakes allowed Dr. Penpa to craft *nüpa* and produce the best possible long-lasting processed *chongzhi* pieces in a climate with high humidity. Here, we note the role of embodied practices-in-environments in shaping human engagements with materials, something that Ingold highlights

33 Gerke discusses this elsewhere in the context of processing precious stones (Gerke 2019a, 104).

in his call for a more ecological perspective on craft—one that views materials as active agents in the making and unmaking of things.

Broader economic, social, and political contexts also shape potency. Factors such as labor availability, economies of scale, technology access, regulations, market demands, and raw materials influence what is practically possible and when deviation from what might be considered ideal may be required. These constraints shape amchi practices, becoming part of their artisanal epistemologies. Labor limitations affect many tasks in cottage industry production, since workers may have varying connections to Sowa Rigpa, such as religious commitments (e.g., Hindu laborers not reciting Buddhist mantras), or limited availability. For instance, at Dr. Penpa's facility, *chongzhi* could not be kneaded during the full moon night as traditionally intended because the workers could only stay one extra hour. Potency, then, is not only a matter of textual knowledge and skill, but also about navigating the limitations of production in specific social and economic settings. It should be noted that our examples in this chapter have shown highly experienced amchis at work. Though aided by long-term assistants, none of them trained students in their pharmacies, which raises questions about the state of contemporary *menjor* education and the passing on of medicine-making skills, a topic we discuss in Chapter 4.

To conclude, the skillful art of the practitioner and the potency of the substance cannot be separated. There is no dichotomy between a substance's innate capacity and the potency that is shaped through processing. As Ingold and Hallam (2014) argue, we must move beyond artificial binaries between organisms and artifacts. Potency is a dynamic process of becoming in which properties emerge through skillful practice. Potency thus materializes from a field of practice where latent properties are recognized, enhanced, activated, and directed to restore balance in the body.

CHAPTER 2

Learning, Making, and Becoming Medicine

This chapter examines the interplay between knowledge and practice in Sowa Rigpa, with particular attention to the processes of self-cultivation that are integral to learning, making, and becoming medicine. Its focus is on the traditions of rejuvenation and essence extraction, known as *chülen*, which we approach through the making of medicinal butter or *menmar*. *Menmar* and *chülen* techniques engage with particular aspects of potency that manifest through the transmission and enactment of these practices. In what follows, Jan van der Valk recounts his immersive experience of participating in a medicinal butter and rejuvenation workshop led by the senior Tibetan physician Arya Pasang Yonten in Switzerland. Van der Valk's participation as both an anthropologist and a practitioner offers a unique vantage point from which to highlight some of the artisanal *menjor* aspects of medicinal butter preparation, but also to reflect on the deeper, transformative experiences of those involved.

Medicinal butter is revered for its nourishing and strengthening properties, as detailed in the *Four Tantras* (IV, 7). The teachings of Dr. Pasang—as he is commonly called by his students—draw heavily on this foundational treatise and its commentaries, as well as his own Buddhist learning, situating the workshop within broader rejuvenation currents of tradition. While we briefly introduce this wider context, the main focus of analysis is the transmission from a skilled teacher to his pupils and their mutual engagement in the learning and instantiation of a specific set of craft practices. By exploring this artisanal journey in a spiritual retreat setting, we underscore how learning or "education" transcends the mere assimilation of texts or oral teachings. In line with Tim Ingold's (2000) ecophenomenology and building further on the concept of "ritualized meshworks" (Surbhi and Van der Valk, 2025), we identify distinctive threads that come together in the making of medico-ritual potency. In the case of Dr. Pasang's workshop, this meshwork includes textual sources (including recipes), ingredients (emphasizing taste, color, and form), stages

of preparation, and contemplative Buddhist practices of consecration (offerings, visualizations, mantras, and prayers).

The workshop took place in the Swiss Alps but transmits a Tibeto-Himalayan tradition that Dr. Pasang himself was trained in and has practiced and taught over many years. He was a renowned Sowa Rigpa teacher in institutions in both Dharamsala and Ladakh before settling in Italy, where he passes on medical and tantric lineage instructions received from his teachers. While he has certainly adjusted his teachings to European environments and international participants, we see this event as a continuation of both his institutional training in the precarious yet intimate early days of the Men-Tsee-Khang (MTK) in exile (Kloos 2008) and the *menjor* crafts we observed across the Himalayas. Before getting to the workshop, however, we first introduce the idea of *chülen* and its histories and the various forms of potency that are sculpted and layered in the making of rejuvenating medicinal butter.

Butter, essences, and rejuvenation

The Tibetan Plateau has long been home to nomadic pastoralist communities among whom butter was and remains a staple food. It is therefore not surprising that butter also became a crucial component in the preparation of medicines. In the *Four Tantras* (IV, 3), *menmar* is one of the five forms of pacifying medicinal preparations, along with decoctions (*thang*), powders (*phye ma*), pills or *rilbu*, and pastes (*lde gu*) (Yutok Yönten Gönpo 1982, 572). The milk used for making medicinal butter contributes its own potency or *nüpa*, just as it does when mixed with limestone in the making of moonlight *chongzhi* (Chapter 1). Cow and goat butters are cooling, for example, whereas sheep butter and all aged butters are warming (Yutok Yönten Gönpo 1982, 594). Depending on which substances are added, the *nüpa* can be further directed to treat specific heat or cold disorders.

The *Four Tantras* covers the making of medicinal butter in Chapter 7 of the *Subsequent Tantra* (IV, 7; Yutok Yönten Gönpo 1982, 591–94). The focus is on preparation techniques, the ingredients of different recipes, and how those techniques and ingredients affect the three psychophysiological systems or *nyepa*: *lūng* (*rlung*), *tripa* (*mkhris pa*), and *beken* (*bad kan*).[34] Although not identical to the Greek "humors," *lūng*, *tripa*, and *beken* are sometimes translated as "wind," "bile,"

34 For further discussion of these concepts, see Chapter 3. Although the standard phonetic conversion for *rlung* is "*lung*" (Germano and Tournadre 2010), we have chosen to use *lūng* to prevent confusion with the lung as an organ.

and "phlegm," including by Dr. Pasang. Butter might be a common ingredient, but it poses challenges to *menjor* practitioners because of the specific skill set required to process it. The *Subsequent Tantra* (IV, 7) explains that the potency of medicinal butter formulas hinges on careful heating processes. If the butter is heated beyond the point where the water has fully evaporated, the resulting *menmar* is less potent, but if the water is not fully evaporated, the *menmar* is more difficult to digest (Yutok Yönten Gönpo 1982, 594). This also applies to the heating and drying of honey or *drangtsi* (*sbrang rtsi*) and jaggery or *buram* (*bu ram*), substances added to the *menmar* made during Dr. Pasang's workshop. As we shall see, these processes were among the most challenging technical aspects encountered.

Amchis integrate this knowhow on ingredients and techniques with related chapters on *chülen* and rejuvenation (*Four Tantras* III, 90–91), which bring in ideas of potency from Vajrayāna Buddhism. This is why the potency of medicinal butter cannot be understood in isolation. *Menmar* formulas and practices involved in its production often have *chülen* qualities that can strengthen and rejuvenate both patients and practitioners. The central idea of *chülen* is "that vital essences can be extracted from various substances, either pharmacologically or meditatively, for the purpose of promoting longevity" (Gerke 2012 [2013], 330). *Chülen* can be taken for both preventing and treating signs of aging as outlined in the chapter on "Treating the Aged" in the *Oral Instruction Tantra* (III, 90), which presents *chülen* as increasing lifespan and enhancing complexion, the sense organs, a sharp mind, a melodious voice, and virility (Yutok Yönten Gönpo 2006, 632).

Notably, many *chülen* recipes contain butter, since it is considered rich in nutritional essence or *dangma* (*dwangs ma*), which is a pure essence of the five elements in their refined state—potent and rich in *chü* (*bcud*).[35] Its specific potencies are intimately linked to its nourishing capacity across different forms: fresh, aged, clarified, or as buttermilk in medicinal variations. In the *Oral Instruction Tantra* (III, 90), white butter is also listed as one of the five essences (*bdud rtsi lnga*), a *dütsi* or nectar that nourishes the body as it is the essence of grass. The others are honey, jaggery, limestone or *chongzhi*, and bitumen (*brag zhun*), which are the essences of flowers, trees, rock, and earth, respectively, and nourish radiance, strength, bones, and muscles.[36] *Dangma*, *dütsi* and other essences can be extracted from the natural world and have strong therapeutic potential. In the words of Desi Sanggyé Gyatso (1653–1705), the regent of the Fifth Dalai Lama:

35 *Chü* has multiple meanings such as essence, elixir, sap, moisture, potency, nutrition, extraction, taste, and nutriment, to mention a few (see Gerke 2012 [2013], 330). On the five elements or "elemental dynamics," see Chapter 3.

36 For details, see Gerke 2012 [2013], 348–49.

"…the nourishing essences of the outer elements heal the inner elements."[37] Furthermore, butter's meltability combined with its smooth and oily characteristics make it the perfect substrate into which other substances can infuse. It thereby takes on the role of a vehicle carrying other *chülen* substances, such as the three myrobalan fruits.[38]

In the early Buddhist Nyingma tradition, *chülen* signals a variety of meanings beyond pills and decoctions used for meditation retreats but typically centers the bodily aspects of "imbibing the essence juice" (Cantwell 2017, 181; Mei 2010). *Chülen* is also part of a broader set of *dütsi* and accomplishing medicine or *mendrup* practices (Cantwell 2017), discussed in more detail in Chapter 5. These are mentioned in Tibetan Buddhist literature of the thirteenth century incorporating dietary conceptions (Garrett 2010) and in the medically oriented *Yutok Heart Essence*, known as the *Yutok Nyingtik* (see Chapters 3, 4, and 5), and are relied upon to consecrate, bless, or "accomplish" pills and other treatment methods (Blaikie 2013, Garrett 2009, Samuel 2016). Essence extraction is frequently included in larger tantric cycles (Cantwell 2015, Sehnalova 2019) and thrived in Central Tibet around the time that the *Four Tantras* became a significant medical text (Garrett 2010, 302). *Chülen* practices are also part of the three principles of the yoga of food, which became popular in Tibet in the eleventh century and was systematized further in the fourteenth (Germano 1997). *Chülen* pills are found in many Buddhist instructions for practitioners on retreat (Cantwell 2017, Oliphant 2016) and are still produced for this reason (Yeshe 2010). More recently, they have also made their way into over-the-counter Sowa Rigpa supplements, including those made by MTK in India (Gerke 2012b) and those made in Tibetan regions in the PRC.

The *Four Tantras* (III, 90–91) describes essence extraction at a substance level without elaborating on ritual or alchemical processes (Chui 2019, 231). However, in Tibet, by the seventeenth century, Sowa Rigpa had witnessed a significant shift toward incorporating tantric rituals into *chülen* rejuvenation practices, particularly under the influence of Desi Sanggyé Gyatso (Chui 2019). That his conceptualization of *chülen* differed from that of the *Four Tantras* is evident in his extensive commentaries: the *Blue Beryl* (*Vaiḍūrya sngon po*) and the *Extended Commentary on the Instructional Tantra* (*Man ngag lhan thabs*) (Sanggyé Gyatso

37 Gerke's translation of: *phyi 'byung gi dangs mas nang 'byung gi gsos byed pa* / (Sanggyé Gyatso 1982, 1138, cited in Gerke 2012 [2013], 347).

38 These are chebulic myrobalan or *arura* (*a ru ra*, *Terminalia chebula*, Skt. *harītakī*), beleric myrobalan or *barura* (*ba ru ra*, *Terminalia bellirica*, Skt. *vibhītaka*, also spelled *bibhītaka*), and emblic myrobalan or *kyurura* (*skyu ru ra*, *Phyllanthus emblica*, Skt. *āmalakī*).

1982, 1991). His approach emphasized not just the physical extraction and ingestion of essences from natural substances (such as minerals and plants) for health and longevity, but also spiritual-alchemical extraction involving complex ritual, deity invocation, and meditative practices. As we will see, Dr. Pasang integrated these practices into his workshop. Their aim is to restore physical vitality and prolong life, primarily to allow more time for spiritual practice. By engaging with protective deities and extracting the essences from the surrounding elements through visualization, *chülen* practices become a deeply spiritual endeavor reflective of broader socioreligious frameworks and Vajrayāna Buddhist cosmologies.[39]

These complex histories reverberate in the ways in which medicinal butter practices are taught today by scholarly medical and religious practitioners. In what follows, we explore *menmar* in its wider *chülen* context. What does the practice of *menmar* teach us about potency in Sowa Rigpa? Why is *menmar* important in *chülen* practices? We explore answers to these questions by looking at medicinal butter as a specific carrier or *menta* (*sman rta*)[40] of potency, through which it provides certain kinds of qualities. We also highlight consecration practices that were carried out during the workshop, which added additional forms of potency.

Forms of potency

In this and other chapters we see how potency is not easily separated into "religious" or "medical" realms, being sculpted and layered through entangled meshworks of materials and integrated body-mind practices that together create potent medicines while also transforming their makers. This is illustrated below through Van der Valk's accounts of sessions of *menmar* preparation, body-mind cleansing, and consecration. Since *menmar* is considered a rejuvenating substance, it is consecrated in a specific way after its production. During the workshop, this ritual consecration followed the Lesser Elixir of Rejuvenation (*bcud len chung ba*) rite,[41] which is dedicated to Amitāyus (*Tshe dpag med*), the Buddha of Long

39 The transmission of *chülen* practices has been continued through longevity cycles such as the revelatory *Immortal Life's Creative Seed* (*'Chi med srog thig*) propagated by Dudjom Rinpoche in the twentieth century (Dudjom Rinpoche 1979–1985, 513–17, cited in Cantwell 2017, 185), alongside many other contemporary lineages.

40 *Menta* also refers to individual substances used as "vehicles" in *menmar* recipes, such as milk, butter, and water.

41 For a medical painting of the related visualizations, see Parfionovitch, Gyurme Dorje, and Meyer 1992, vol. I, 121–22.

Life.[42] This longevity ritual, which involves visualization and mantra recitation practices, is one of the two *chülen* consecration practices briefly mentioned in the *Oral Instruction Tantra* (III, 90–91), and detailed by Sanggyé Gyatso in his *Blue Beryl* commentary (translated in Gerke 2012 [2013], 353).

The potencies crafted through visualization, mantra recitation, and prayers are among the various types of *nüpa* the reader will encounter in this book. Amchi Tsultim Gyatso mentioned that our recitation of the Medicine Buddha mantra as we mixed *chongzhi* with milk under the light of the full moon added *ngak kyi nüpa* (Chapter 1). As we will see, the preparation of medicinal butter during Dr. Pasang's workshop also relied on this mantric potency, as well as the potency of prayer (*smon lam gyi nus pa*). Workshop participants also paid attention to the potencies of shape (*dbyibs mthun gyi nus pa*) and color (*kha mdog gi nus pa*)—which are articulated through correspondences between ingredients and anatomical or pathological structures, as described in texts by the Tibetan polymath Deumar Geshé Tendzin Püntsok (b. 1672). Moreover, the ingredients added to the medicinal butter all have their own material potency, known as *dzé kyi nüpa* (*rdzas kyi nus pa*). All these forms of potency are outlined in Chapter 3 and expanded upon in Chapter 5, where we find amchis adding blessed compounds to medicines, thus adding the potency of blessings or *jinlap kyi nüpa* (*byin rlabs kyi nus pa*), and the power of realized masters transmitted through both meditative concentration and lineage, called *ting-ngédzin gyi nüpa* (*ting nge 'dzin gyi nus pa*) and *gyü kyi nüpa* (*rgyud kyi nus pa*), respectively.

This chapter engages with Ingold's (2018a) discussions on education and learning and his notion of correspondence to explore these various forms of *nüpa* in the making of a rejuvenating butter formula. Through this lens we aim to comprehend the crafting of *menmar* as efficacy-in-becoming, sculpted by a nuanced ensemble of skilled tasks. By presenting Van der Valk's experiences at the rejuvenation workshop, we invite readers to perceive medicinal butter preparation not merely as a technical endeavor but also as an educational journey, a transformative engagement with craft embedded in spiritual practice. Highlighting correspondences between learning and becoming, Van der Valk offers intimate glimpses of *menjor* aspects that are rarely put into words by practitioners and therefore tend to be overlooked by textual scholars. As we will see, the process of making *menmar* foregrounds hands-on experience—learning by doing under the guidance of a master teacher (*dge rgan*), often referred to respectfully as

42 See Samuel 2012 on the historical development of longevity practices associated with Amitabha (*'Od dpag med*) and Amitāyus. On longevity rituals and empowerments, see Gerke 2012a, 229–86.

Genla (*rgan lags*).[43] It also highlights the correspondence between external processes of transformation, such as making *menmar*, and internal processes such as body metabolism and spiritual transformation. This results in the cultivation of perceptual acuity and the transformation of both the maker and the product.

Crafting potency during a rejuvenation workshop: Setting the scene

In the late spring of 2019, in the Earth Pig year, I (Jan van der Valk) participated in a week-long rejuvenation workshop on the outskirts of a Swiss alpine village called Jaun together with Dr. Pasang and eighteen other students. The workshop was organized by the Tibetan Medicine Education Center (TME), a small nonprofit co-founded by Dr. Pasang in Neuchâtel in 2006 and dedicated to the transmission of Sowa Rigpa in "the West." The workshop participants, many of whom were professionally active in the fields of health and well-being,[44] formed a diverse group, hailing from over ten different countries and presenting a 2:1 female-to-male ratio. They had all previously completed a three-year distance learning course with two on-site TME workshops, or a four-year weekend course at the New Yuthok Institute (NYI) in Milan, co-founded by Dr. Pasang in 1999. This meant that they were already familiar with each other, with Dr. Pasang's way of teaching, and with the basic tenets of Sowa Rigpa epitomized by the dynamics of the three *nyepa*.

The workshop took place in a large wooden chalet, where almost all of the participants also ate and slept, enveloped in the sound of a nearby waterfall and surrounded by green alpine pastures and pine forest. As shown by Blaikie et al. (2015), who participated in the making of Sowa Rigpa medicines in Kathmandu, workshops are fruitful platforms for anthropological engagement, especially when envisioned as collaborative events of coproduction and praxis. Besides the location and participants, however, what makes this event different is my positionality as both a researcher and close student of Dr. Pasang. Instead of feigning analytical distance, I therefore refer to Dr. Pasang as "Genla," an honorific designation that

43 With some exceptions, the respectful suffix *lags* is commonly transcribed as "la" rather than "lak."

44 The participants included two biomedical doctors specialized in oncology and hematology, a dentist, a midwife, a naturopath, an aromatherapist, a Reiki master, a veterinarian, a Chinese Medicine practitioner, and teachers of Indian and Tibetan yoga. Several of these participants had integrated aspects of Tibetan medical and Buddhist praxis into their professions and personal lives.

signals my closeness to him. In this chapter, my aim as a student-practitioner-anthropologist is to take the reader along on the transformative journey of making and consecrating medicinal butter by sharing prominent moments of apprenticeship and reflection based on my personal experience, the sixty-four-page workshop booklet, forty-five A4-sized pages of handwritten notes, over six hundred photographs and video clips, and three recorded introductory lectures.

As we retrace the steps of this journey, I aim to convey a sense of how knowledge and practice are inextricably intertwined in the process of learning a craft, in ritual, and in anthropological participant observation. This synthetic approach is inspired by Ingold's reflections on education and learning, which emphasize the acquisition of knowledge as being deeply embedded in direct participation and immersion in practical activities alongside the teacher and as part of a broader community of practice (see also Wenger 1998).[45] Apprenticeship, ritual, and ethnographic practice all involve an "education of attention" (Gibson 1979, 254, cited in Ingold 2000, 166–67):

> [T]o observe *with* or *from* is not to objectify; it is to *attend* to persons and things, to learn from them, and to follow in precept and practice. This is how the apprentice observes in the practice of a skill, how the devotee observes in the routines of worship, how the anthropologist observes in the tasks of everyday life in the field. … To practice participant observation, however, is also to undergo an education. Indeed I believe there are grounds for substituting the word "education" for "ethnography" as the most fundamental purpose of anthropology. (Ingold 2018a, 61)

This chapter is not meant to resolve the broader debate around the relationship between theory and ethnography stirred by Ingold (2014, 2017; see also da Col 2017). In line with this book's focus on artisanship and the crafting of potency, it instead seeks to argue that the learning-by-doing of preparing and ingesting a ritually empowered rejuvenating medicinal butter is a self-cultivation process in which the participants themselves are equally transformed: a crafting that generates and enhances potency in both the medicines and their makers.

Over lunch on the day of our arrival, Genla welcomed us to what he called an ideal place for rejuvenation, handing out a new workshop booklet. At the very outset, he emphasized:

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45 Within anthropology, engagement in forms of apprenticeship that go beyond participant observation has a long pedigree. For a recent overview, see Selim (2024, 52–58), who introduces the notions "dual apprenticeship" and "affective pedagogy" to highlight the experiential aspects of both "knowing from the inside" (Ingold 2013b, 2) and the situated learning of how to do fieldwork.

> This is a *work*shop. *You* have to work, you must touch with your hands, body and mind together. You might burn yourself or feel nauseous, whatever, you must do it. It is not enough to look at a video, or to attend a lecture. This is pharmacy. You must work! One, two, three times, then only you begin to understand: "Ah, this is the way."

Genla's foregrounding of manual work, the senses, practice, and experiential knowledge in the making of medicine closely parallels Ingold's artisanal phenomenology. Through colorful storytelling, Genla then shared how he had himself started to seriously learn *menjor* after graduating from MTK in 1977, when he was selected for several years of further specialized training in pharmacy.[46] At that time, *menmar* was only made in winter and even then, only on demand.

The *menmar* chapter of the *Four Tantras* lists formulas to treat heat and cold disorders (IV, 7). But amchis as well as many patients know that the nourishing qualities of butter alleviate excess *lūng* and strengthen the body. It is therefore not surprising to find *menmar* as a principal treatment option in the *Explanatory Tantra*'s chapter "Abiding in a State of Health" (*Mi na ba gnas par bya ba*; II, 23). Genla drew on this chapter to explain why TME had set up this week as an intensive three-in-one workshop (making *menmar*, body-mind cleansing, and *menmar* consecration), commencing on an astrologically auspicious Earth-Water day.[47] *Menmar* is excellent for longevity, he said, but without preliminary cleansing there would be little benefit upon taking the medicine: "Preparing fresh food in a dirty cooking pot, does that make sense?"

In addition to the cleansing of our bodies to become suitable vessels for rejuvenation, the main goal of the workshop was the preparation of Dresum Menmar (*'bras gsum sman mar*), a medicinal butter recipe based primarily on the three myrobalan fruits. According to the *Oral Instruction Tantra* (III, 90): "Medicinal butter of the fruits *arura*, *barura*, and *kyurura* clears the senses, generates strength, eliminates combined disorders [of the three *nyepa*], and sublimely maintains one

46 Dr. Pasang was given the privilege of this further training because he graduated top of his class. His *menjor* teachers were Lamenpa Jamyang Tashi of Tsona (1918–1986) and Tsering Wangyel Dozur (1931–1975), husband of the renowned Tibetan physician Ama Lobsang Dolma Khangkar. In 1982, he participated in the highly complex processing of mercury sulfide into precious pills (*rin chen ril bu*) under the guidance of Lamenpa Tenzin Chödrak (1922–2001). This event is discussed in Gerke 2021, 108–16.

47 According to Tibetan astrology, Earth-Water days are more auspicious because of the matching nourishing elements, which together are called a "youth combination" (*lang tsho sbyor*), and are also an ideal time for communal gatherings.

at the prime of life."[48] Its preparation consisted of much more than simply adding together ingredients. It involved a step-by-step process of removing impurities and extracting the essence or *chülen*. In a final stage before ingestion, the now medicated and clarified butter was ritually perfected and consecrated.

On the day after our arrival, we got up at 5:30 a.m. for a short Medicine Buddha practice (Skt. *sādhanā*),[49] Tibetan yoga and breathing exercises, and guided meditation. The formal teaching started after breakfast with an extremely condensed overview of *chülen* practices as expounded in Buddhist commentaries, tantras, and revealed treasure texts called *terma* (*gter ma*). Cutting to the core of this vast field of knowledge, Genla pointed out that besides treating disease, one of medicine's principal goals is prolonging life (*Four Tantras* I, 2). The quest for the transformation of the ordinary body into an enlightened vajra state parallels the alchemical idea that base metals can be transmuted into gold, as well as related mythologies and practices of turning mercury—the "king of poisons"—into the ultimate medicine. The section on medicinal *chülen* in our booklet further summarized that "[t]he essential purpose of *chülen* is to amplify medicines' potency for development of strength and prolongation of life, by the use of detoxified substances." The key is to transform and empower the five elements of which both raw materials and our bodies are made into deathless nectar, or *dütsi*.

The *Oral Instruction Tantra*'s chapter entitled "Treating the Aged through Essence Extraction" (*Rgas pa gso ba bcud len*; III, 90) outlines the benefits, places, and supporting behaviors for rejuvenation practices, followed by treatment methods organized along with a dozen listed formulas. It concludes with a note on the duration for which the elixirs should be taken. While covering these aspects, Genla hinted at how the gradual metabolic refinement of the *lüzung dün* (*lus zungs bdun*, "seven bodily constituents") into radiance (*mdangs*) is related to the quality of the sexual fluids and libido (*ro tsa*), as well as its importance for tantric practices involving essence drops (*thig le*). Throughout the week, kitchen metaphors that associated cooking with digestion, as well as with medicine making and purification of both body and mind, were a recurring theme. As illustrated in what follows, this correspondence of external and internal processes of transformation—of making and becoming—is a key feature of both learning the craft of *menjor* and learning as an anthropologist through participant observation.

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48 Van der Valk's translation of: *a ru bar skyur 'bras bu'i sman mar gyis / dbang gsal stobs skye 'dus pa'i nad sel te / na tshod dar la 'jog pa'i dam pa yin /* (Yutok Yönten Gönpo 1982, 549).

49 For the concise practice text, which was compiled by Dr. Pasang for daily recitation, see Arya 2022, 233–38.

Preparing Dresum Menmar

Formulation

The twenty stanzas that describe the procedure for making medicinal butter in the *Four Tantras* were elaborated across five pages in our workshop booklet, although no single script was closely followed during any of the *menjor* practices we carried out. The proportions of the butter recipe (Table 1) also diverged from the text, adapting to the availability and quality of the ingredients, the particularities of the extraction processes, and the intuition of our teacher and his main assistant Elena Gherlone—an Italian nurse who had twice attended the NYI four-year course and became an expert in making Genla's medicinal butter and cleansing decoction. After two hours of teaching and a tea break, we started the manual work, the first stage of which was grinding.

Table 1 Composition of the recipe for Dresum Chülen Menmar (Three Fruits Elixir Medicine Butter). The amounts were measured after cleaning and sorting, except for those indicated with an asterisk (*), which were weighed prior to further processing.

Tibetan name	Botanical name	Vernacular name	Amount
Main ingredients			
arura (*a ru ra*)	*Terminalia chebula*	chebulic myrobalan	500 g
barura (*ba ru ra*)	*Terminalia bellirica*	beleric myrobalan	300 g
kyurura (*skyu ru ra*)	*Phyllanthus emblica*	emblic myrobalan	350 g
Additional ingredients			
buram (*bu ram*)	*Saccharum officinarum*	jaggery	750 g*
drangtsi (*sbrang rtsi*)		honey	600 g*
dzati (*dzA ti*)	*Myristica fragrans*	nutmeg	25 g
kharutsa (*kha ru tshwa*)		Himalayan black salt	50 g
pipiling (*pi pi ling*)	*Piper longum*	long pepper	50 g
sukmel (*sug smel*)	*Elettaria cardamomum*	green cardamom	50 g
chaga (*bca' sga*)	*Zingiber officinale*	ginger	50 g
chawa (*lca ba*)	*Angelica sinensis*	Chinese angelica	50 g

Table 1 *Continued*

Tibetan name	Botanical name	Vernacular name	Amount
sedru (*se 'bru*)	*Punica granatum*	pomegranate	100 g
	Vehicles		
oma (*'o ma*)		local cow milk (raw)	5 l
mar (*mar*)		local butter	5 kg
chu (*chu*)		tap water	14 l + 9 l + 9 l
	Pill coating		
kara (*ka ra*)	*Saccharum officinarum*	rock sugar	500 g (partly used)

Grinding

First, we crushed the three myrobalan fruits to grain size using mortar and pestle, making sure to remove the stones and other impurities. Genla was rather strict, dictating that the grinding should be done without distraction and preferably while reciting the Medicine Buddha mantra. The fragments were not to be ground too finely, for they would then sink to the bottom of the cooking vessel and easily get burnt, nor were they to be too coarse as this would impede proper extraction. This rather monotonous and tough labor is nothing less than spiritual practice, Genla explained as we worked. The hard ingredients represent our ignorance and delusions while each beat is an instance of mind training. Mortar and pestle represent wisdom (*she rab*) and method (*thabs*). Only by simultaneously cultivating the six perfections (Skt. *pāramitā*) and striving toward enlightenment for the benefit of all beings (Skt. *bodhicitta*) can the raw materials truly be transformed into nectar.[50] This medicinal butter was to be an antidote to the demons of aging and death, so outer and inner transformation ought to go together. The students diligently tried to put this into practice, effectively learning by simultaneously making and becoming medicine, increasing their healing potential. In Ingold's terms (2017, 2018a, 2018b), this is an education through correspondence that takes

50 Dr. Pasang often communicated using Sanskrit Buddhist terminology instead of Tibetan because the former is more familiar to many non-heritage practitioners.

place through careful participation alongside mentors, fellow students, and alive substances. Artisans join with and attend to the ways of their materials, just as I attended and responded to them as an (anthropological) participant-observer.

Extraction into water

After grinding the fruits, we prepared the additional ingredients and started the first round of extraction by adding the ground ingredients one by one to a large pot of boiling water while stirring continuously (fig. 42). Genla once again stressed the need to integrate medical knowledge on metabolism and the physiology of the three *nyepa* in order to gain deeper pharmacological insights. The *Four Tantras* provides an explicit metaphor that compares the churning stomach to the stirring of a cooking vessel (II, 3, 5). The digestive process is activated by metabolic heat—*medrö*—which consists of decomposing phlegm (*bad kan myag byed*, the water in the pot), digestive bile (*mkhris pa 'ju byed*, the fire), and fire-accompanying wind (*me nyam rlung*, which acts like combustible gas). In the same vein, we were told to stir the pot clockwise while preparing the medicinal butter, aligning with the absorption of food as it passes through the stomach and large intestine. The step-by-step refinement of the raw materials into butter essence not only parallels

Figure 42 Dr. Pasang shows participants an ingredient he is about to add to the pot for extraction, while a student stirs the mixture clockwise. Jaun, June 2019. Photo J. van der Valk (all rights reserved).

the gradual refinement of the seven bodily constituents, from nutritional essence to reproductive fluids and radiance; the potencies of the medicine also impact these bodily processes upon ingestion, effecting a direct correspondence of elements, tastes, and qualities (see Chapter 3).

The next several hours were spent stirring, boiling down the watery liquid to a thick soup (initially to about half of its volume), filtering out the residue, tasting it, and then repeating the cycle in newly added water until the decoction pieces lost their taste. These consecutive stages of filtration purified the gross elements into their subtle essences, mirroring the transformation of nutrients to more and more subtle constituents in the body through the removal of waste products (*snyigs ma*). In the words of Genla: "To increase our subtle radiance, we need a subtle butter." Purification thus occurs in interdependence with the three tantric activity levels of body, speech, and mind: outer (cooking), inner (digestion), and secret (emotions). Genla also repeatedly applied the Buddhist Middle Way (Skt. Mādhyamaka) perspective in his insistence on avoiding all extremes in a pragmatic sense. The final butter, for instance, should not be too strong nor too weak. Adding a high amount of ingredients relative to milk and butter would not be conducive for long-term use, for which a blunt quality is preferable; this quality also counteracts the sharpness of "bile" and fevers. Too mild a butter would have few additional material effects to ghee, which has inherent yet rather mild rejuvenating properties on its own. The three myrobalans together are slightly cooling, but we added several warming ingredients to protect and strengthen the digestive fire.

Processing of jaggery and honey

While the main decoction continued to boil, we processed jaggery and honey into powders (figs. 43–45). *Buram*, the essence of trees, restores bodily strength, while *drangtsi* is the essence of flowers and nourishes radiance. The processing involved cutting the jaggery (fig. 43), dissolving the sweet substances in water, and then evaporating all the liquid in a pan while stirring (fig. 44). Special care and expertise were required to ensure that the substances did not get burnt (excessive caramelization would create a dark and bitter-tasting product) nor remain undercooked (which would create a material that cannot be powdered properly, leading to crunchy bits in the butter). Elena sat on a chair right next to the electric heater, frequently gauging the increasing thickness of the sugary liquid using a wooden ladle, watching its color darken, and paying attention to the amount and intensity of the bubbles and the changing aroma. Explaining that the evaporation process should be halted at the very moment a faint burnt smell is detected, she also attended to other sensorial cues such as the bubbles and strength of the heat source.

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Figures 43–45 Steps in *buram* (jaggery) processing: cutting and dissolving in water (fig. 43); heating (fig. 44); molding the purified paste into rods, which will then be frozen and crushed into powder (fig. 45). Jaun, June 2019. Photos J. van der Valk (CC-BY-SA 4.0).

When it was ready, the semi-liquid was spread out on an oven plate to cool. Precise timing was again key, since the quickly solidifying paste then had to be "pulled" as much as possible using our hands, which we covered in a layer of butter to protect the skin—though not entirely successfully—from the heat. The more the increasingly rubbery material was stretched, the lighter its color became, which is a sign of refinement. The pulling continued until we obtained long, hardened rods the thickness of a finger (fig. 45). If the dry *buram* or *drangtsi* rods still feel sticky to touch, you can infer that there is some residual water left, which is not good. This is part of the embodied knowledge accumulated through a training of the senses that includes learning how textures communicate the qualities of substances. The rods were then folded into oven paper and put into the freezer to harden further, after which they were crushed into powder.

This ensemble of tasks can be interpreted through Ingold's "ecology of materials" as a sensory attunement to the dynamic properties of materials-in-becoming, a generative process in which the artisan "thinks *from* materials, not *about* them" (Ingold 2012, 437; see also Ingold 2000). To borrow from Ingold (2013b, 159), we can recognize that "skill is the ground from which all knowledge grows, that 'imitation' is shorthand for processes of attunement and response of great subtlety and complexity and that skilled practice entails the working of a mind that, as it overflows into body and environment, is endlessly creative." This further underscores the correspondence between making and maker that was taught explicitly by Genla

through the lenses of Sowa Rigpa and tantric Buddhist practice. Mutual processes of becoming were an integral part of undergoing an education in *menjor*, applying as much to learning a craft as to spiritual (self-)transformation.

Extraction into milk and butter

Once the main decoction was ready, we added heated cow milk while reciting verses from the Medicine Buddha *sādhanā* and his mantra, taking measures to prevent the mixture from curdling. We then boiled it down again and added the butter. The essence of the medicinal ingredients was thus extracted into water, transferred to milk, and finally condensed into butter. We applied several tests to verify that all the water had been "cut out" while also repeatedly removing the impurities that collected like algae on the liquid's surface. The purified *buram* and *drangtsi* powders were added the day after, once the butter had cooled down, condensing it further. Our work was only done late in the evening. Genla concluded that "in pharmacy, participation is most important." What was required was "to spend time together, not hurry, talk, eat, share, and wait until the master shows you." When all these conditions are met, "learning is fast." As a participant, I would add the words "intensive" and at times "overwhelming" to the last sentence. It felt like I did not have enough hands and eyes to grasp and capture the key techniques even (or particularly!) with the help of audiovisual recordings and notes.

Space restrictions together with the inadequacy of the deterministic and dissecting logic of explication (see also Ingold 2018c) prevent me from truly sharing the creative subtleties of skilled, responsive thinking-doing. But the togetherness with Genla and overflowing of experience across mind, body, and environment that I experienced are also characteristic of immersive anthropological encounters. Following the celebrated pragmatist philosopher John Dewey (1869–1952), Ingold (2018a, 53) points out that learning—as opposed to passively "being taught"—is more than a process of apprenticeship or training. True educational participation transforms both master and student, who work side by side "in a spirit of patient experimentation, relating in the first place as persons with stories to tell, through endless cycles of demonstration, experimentation and verification."

Cleansing

The second day of the workshop also started before sunrise. This time no breakfast or other meals were served, since we were fasting in preparation for the "body-mind cleansing" (*lus sems bkru sbyong*), scheduled for the day after. In

Figure 46 Cross sections of *honglen* (*Picrorhiza kurroa*) rhizomes of different sizes; the concentric layers are perceived to resemble the gross anatomy of blood vessels. Jaun, June 2019. Photo J. van der Valk (CC-BY-SA 4.0).

addition to finishing the preparation of the medicinal butter, we readied the cleansing decoction. This particular cleansing was invented by Dr. Pasang and had been put into practice in group retreats at least twice yearly for more than two decades. It is based on the extensive purgation chapter in the *Four Tantras* (IV, 14), but the cleansing formula is milder because it excludes potentially toxic laxative ingredients such as *durji* (*dur byid*, commonly identified as the root of *Euphorbia fischeriana*). Genla introduced us to the ingredients one by one, reciting their potencies but also revealing their practical applications, relevant physiological impacts, and indicative sensory characteristics. He showed how morphology is not trivial but didactic. The elongated fruit pods of *dongga* (*dong ga*, *Cassia fistula*), which resemble the shape and segmentation of the colon, stimulate the intestines (thus curing the liver by releasing its waste products). A cross section of *honglen* rhizome (*hong len*, *Picrorhiza kurroa*), which drains impure blood, evokes a blood vessel (fig. 46).

These "similarity medicines" (*'dra sman*) heal by virtue of bearing characteristics similar to anatomical or pathological structures. This correspondence between the universe (macrocosm) and the body (microcosm) and its application to herbal lore is not confined to tantra and Asian scholarly medicines; it is a ubiquitous concept, known as the doctrine of signatures in the West, where its roots can be traced back to the ancient Greeks and later proponents such as Paracelsus (1493–1541). Although much vilified by modern scientists, ethnobiologists have reinterpreted the doctrine of "like is cured by like" (*similia similibus curantur*) as post hoc attribution and accorded it a vital mnemonic function in the transmission of traditional knowledge that may also elicit a placebo effect (Bennett 2007). Expanding the scope of signatures to include olfactory and gustatory clues, Bradley Bennett (2007) further postulates the ethnobotanical law that plants with strong odors and tastes are generally preferred in medicine and ritual, and that these

sensory signs indeed correlate with bioactive molecular compounds. Nevertheless, building on the ecological psychology of James Gibson, Ingold (2000, 164) holds that "the skilled practitioner consults the world, rather than representations." Perception as a skillful mode of action is practical:

> [O]ne learns to perceive in the manner appropriate to a culture, not by acquiring programmes or conceptual schemata for organising sensory data into higher order representations, but by "hands-on" training in everyday tasks whose successful fulfillment requires a practised ability to notice and to respond fluently to salient aspects of the environment. In short, learning is not a transmission of information but—in Gibson's (1979, 254) words—an "education of attention." (Ingold 2000, 166–67)

If we redefine culture as "consist[ing] and persist[ing] in variable skills of perception and action" (Ingold 2018a, 40), there is no need to hide perception behind the interpretation of signs.[51] The abovementioned herbal potencies of shape and color might be labeled "imaginary" constructs or merely symbolic by some, but this categorization exposes an underlying Cartesian dualism of subject and object, of mind (intellection) and body (sensation), epitomized by the idea of the placebo. Following Ingold, we can move beyond the cognitivist-behaviorist ontology underlying such categorizations if we recognize that body and mind "are not two separate things but two ways of describing the same thing—or better, the same process—namely the environmentally situated activity of the human organism-person" (2000, 171). Our teacher entrusted us with what he considered to be one of the secrets of medicine making: the correspondence between sensory and healing properties of raw materials. But he was not just disseminating information. The real secret, which can only be revealed in and through practice, is emulating the master and thus developing one's own perceptual acuity.

After Genla's introduction, we proceeded by grinding the raw materials for the cleansing decoction, as well as infusing the *dongga* seed pulp (figs. 47–49) and pre-boiling *honglen* rhizomes separately. The ground materials were then added to a large kettle of water together with the rest of the ingredients (which will be left unspecified) and boiled down repeatedly for several hours. Throughout the boiling process, we stirred the mixture clockwise and recited the Medicine Buddha mantra. Early the next morning, the decoction was reheated, the *dongga* extract

51 There is a lingering debate in sensory anthropology on the validity of representationalist theories of knowledge production (Ingold 2011a). At the same time, "[t]here is widening recognition that nature or nurture should not be studied in isolation," and "mutual recognition that knowledge-making is a dynamic process arising directly from the indissoluble relations that exist between minds, bodies, and environment" (Marchand 2010, S2).

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Figures 47–49 Processing *dongga*: Dr. Pasang introduces the ingredient to participants (workshop materials are visible in the background) (fig. 47); we crush the *dongga* pods, extracting the black pulp while discarding the seeds and papery septa using a kitchen knife (fig. 48); the pulp is then infused in hot water and sieved to obtain a blackish extract (fig. 49). Jaun, June 2019. Photos J. van der Valk (all rights reserved).

and *honglen* decoction added along with other final ingredients, and then it was ready to be distributed. Once again, Genla emphasized outer-inner relationality, reminding us that "we are micro-beings in the universe, and bacteria are micro-organisms inside us," and that the three mental poisons (*dug gsum*: delusion, anger, and desire) correspond with the three *nyepa*, and the three body locations (upper, middle, and lower). Genla concluded:

> If you study more, understand more, it comes out that diseases are byproducts of the blockage of the waste products. How many years blocked? You never know. Years! … Many causes, but ultimately, the solution is to clean, to give relief to the organs. … If the organs are depressed, the mind gets sad. When the land is humid, clouds develop. … We hide and hold a lot inside. This, we need to release without shame.

After this reflection, the decoction was transformed into nectar through our recitation of verses from our Medicine Buddha practice text. We were then instructed to gradually drink at least one or two cups of the very bitter-sour brownish liquid, followed by at least three cups of hot salted water, while visualizing the decoction as completely purifying the three levels. After practicing some yogic exercises, keeping the abdomen warm with a blanket, and emptying our bowels for the first time, we continued to drink the salty water until our stool became completely liquid and more or less clear. We then switched to plain hot water, which needs to be drunk in a quantity sufficient to remove any traces of the medicine and salt. After taking a rest, a shower, and putting on new and preferably light-colored clothes, we finally consumed a large scoop of medicinal butter by letting it melt on our tongues. We broke our fast with a sober but delicious lunch of rice, nettles, and boiled vegetables. It felt like being reborn. A fresh start. The group was serene and joyful.

Consecration

In the afternoon of the third day of the workshop, we started setting up the altar and offerings (fig. 50) for the consecration of the medicinal butter we had prepared earlier. Placed at its center were a scroll painting, or *tangka* (*thang ka*), a blue translucent statue of the Medicine Buddha, and a Tibetan version of the *Medicine Buddha Sutra* (Skt. *Bhaiṣajyaguruvaiḍūryaprabhārājasūtra*), in front of which saffron water and fresh flowers were offered. A second smaller set of offerings was placed before a print of a medical painting centered on the white-colored Buddha Amitāyus. Offering cakes or *torma* (*gtor ma*) made from slices of bread were offered to the protector deities and local nonhuman beings to prevent obstacles. A heartfelt personal engagement is key to receiving spiritual blessing, but also to learning *menjor*: "One should not just prepare and drink a fixed formula; if we don't use our own feeling, intuition cannot develop," Genla explained. At the same time, he advised us to "give up your self and join with the Medicine Buddha."

Genla cited and commented on the lines of the *Oral Instruction Tantra* (III, 90) that describe the ritual aspects accompanying the Lesser Elixir of Rejuvenation *chülen* consecration rite (Yutok Yönten Gönpo 1982, 550). He elaborated on the visualization and transmitted the mantra that we each had to recite at least 10,000 times. The visualization involved communion between oneself (as one's tutelary deity) and the *maṇḍala* of the Buddha of Long Life, Amitāyus, centering on the medicinal butter and its transformation into nectar. Five-colored nectar light is absorbed into and then emitted from the medicine, refilling the life energy (*tshe srog*) of one's central channel (*rtsa dbu ma*) via the crown chakra, from where it subsequently spreads to the ten directions to increase the lifespan of all beings.

Figure 50 The altar with offerings and three plates of the medicinal butter at its center; a picture depicting the Lesser Elixir of Rejuvenation practice hangs to the left of the Medicine Buddha. Jaun, June 2019. Photo J. van der Valk (CC-BY-SA 4.0).

The next two days were devoted intensely to this practice with four ninety-minute sessions in addition to the usual morning and evening retreat schedule. Our teacher gradually gave more and more extensive meditation instructions. Along the way, he skillfully pushed us to new heights by extolling our exceptionally beneficial circumstances and, later on, boosting our self-discipline and stamina by conversely pointing out how our luxuriously ideal conditions and "rich people dharma" obstruct real spiritual progress. Practicing together created an atmosphere of mutual inspiration and support, a community or sangha of fellow practitioners striving toward the same goal.

The interrelations between body and mind, medicine and spiritual transformation, were a recurring theme for contemplation. Imbibing medicinal butter was not presented as sufficient to reach enlightenment, the importance of dietary discourses and practices in Tibetan Buddhist literature notwithstanding (Garrett 2010, 2019). But this does not imply that *chülen* (and medicines more generally) cannot directly contribute to spiritual healing, here understood as reducing ignorance and the afflictive emotions. These mental poisons pervade our bodies in both gross and subtle forms, the body providing the material conditions for their operation. Natural substances also carry both gross and subtle potencies, which

can be optimized and put to use through medical and ritual processes. Spiritual healing or "dharma medicine" thus encompasses more than *sādhanā* and mantras. Medicine is one of the foremost skillful means available on the bodhisattva path as it offers the gift of life. From a tantric perspective, the capacity to (self-) transform and heal stems from the extent to which the "poison" of samsaric life, marked by the suffering of birth, disease, old age, and death, can be consumed and "digested" into nectar.

The rigorous retreat program and focused concentration (fig. 51), as well as the communal harmony, secluded beauty of the surroundings, and ritualized interactions with one's self, the landscape, and its nonhuman inhabitants, induced spiritual experiences that challenge common perceptions of reality and causation. Workshop participants were sensitized to synchronicity with the environment: subtle changes in weather, unexpected electricity outages, the exact end of a session being marked by unusual church bell ringing, the uncanny presence of crows, flower offerings staying fresh for days—all these phenomena were meaningful. Several participants had vivid dreams, which were interpreted with care at the breakfast table. Some reported colors and visions during or after meditation, which were discussed discreetly with the teacher. On a more relaxed day at the end of the week, one motivated student requested early morning guided meditation to which only a small number of people turned up. Near the end Genla explained a special technique, which we were told not to share with anyone. Following the instruction, I suddenly felt pressure on my sternum and an intense feeling in the center of my chest which made me want to laugh and cry at the same time. The student who had made the request gasped for air and started crying. Genla encouraged her, stating that this technique is a great removal of obstacles, a most potent cleansing.

Some of the more experienced practitioners had participated in Medicine Buddha retreats with Dr. Pasang over the past fifteen years. They had become more familiar with a mode of being that includes interactions with protectors and local serpent spirits known as nagas or *lu* (*klu*). Although it might not seem directly related to the preparation of medicine butter, meditative transformation within an encompassing spiritual ecology is an essential constituent of the generation of potency in and between practitioners and their products. This shows characteristics of an "animic ontology" (Ingold 2006): a relational way of being and becoming in a responsive lifeworld that bridges the division between "reality" and immaterial thought and imagination. There is little to be gained here from applying the etic/emic distinction of the rational social scientist who follows in the footsteps of Francis Bacon (1561–1626), empirically dissecting the "facts of nature" and confirming the authority of materialist-reductionist science. Instead, the experiences shared above are approached more fruitfully as dynamic and

Figure 51 Early morning session in which workshop participants meditate and recite mantras together. Jaun, June 2019. Photo J. van der Valk (all rights reserved).

potentially transformative ways of relating *with* and not as beliefs *about* the world (Ingold 2006, 2013a). This shifts the focus from extracted facts and objects to immersive participation and empathy. From this perspective, imagination can be redefined: rather than understanding it as the ability to form mental images or representations, at a more fundamental level, imagination can be seen "as a way of living creatively in a world that is not already created" (Ingold 2018b, 43).

The creative potential of practices such as visualization, mantra recitation, and aspirational supplication is captured by concepts like the potency of prayer. It is consciously developed and applied for both soteriological and pragmatic purposes, including the consecration of medicinal butter. The latter is an interactive process through which medicines and practitioners together become potent rejuvenators as the essences of the elements are extracted, concentrated, and redistributed to increase the lifespan of all beings. Genla noted repeatedly and pointedly throughout our courses that genuine faith (not belief) and prayer are forces without equal. To take such phenomena seriously and not merely as metaphorical cultural constructs, anthropologists have turned to what Michael Jackson (1989) refers to as "radical participation" (see also Nadasdy 2007). Prerequisites for this approach are deep immersion and the cultivation of skills and the senses, as well as a willingness to treat personal and extraordinary experiences as valid.

Here, the educational impetus of participant observation and of anthropology resurfaces. Both anthropology and education are ways of studying *with* others, along paths of growth and discovery that go beyond the opposition of the production and transmission of knowledge. As Ingold (2018a, 17) puts it: "[e]very way of knowing, then, is a distinct life-line, a biographical trajectory. It follows that becoming knowledgeable is part and parcel of becoming the person you are." As participants undergoing an education of attention in a medicinal butter and rejuvenation workshop, we necessarily became medical as well as tantric artisan-practitioners, however inexperienced we were.

Discussion

Toward the end of the workshop, Dr. Pasang summarized the teachings he had imparted as follows:

> The Amitāyus practice protects life and removes the fear of death arising from attachment to self. This practice of compassion is ultimately the basis for the development of the science of medicine, dharma being the supreme cure for the three [mental] poisons. Physical medicines are all wonderful, but their essence is *chülen*. All therapies are wonderful, but most important is to clean the body-mind. Longevity is the essence of Sowa Rigpa. This is *upadeśa* [the pith instruction], no more.

In this chapter, Van der Valk showed how learning to make rejuvenating medicinal butter is about much more than the assimilation of foundational texts or the oral transmission of authoritative knowledge. Rather, it is an open-ended, collaborative, skill-based, experience-led improvisational endeavor in a responsive environment, which involves working with dynamic substances that transform and are transformed by both material and "imaginary" forces. The master-teacher is equally a co-participant, traveling along the path from raw materials to consecrated *chülen* medicine as a guide, pointing out critical junctures in the taskscape by recounting the steps of the recipe as an exemplary biographical narrative being relived "through endless cycles of demonstration, experimentation, and verification" (Ingold 2018a, 53).

The perceptual system of the workshop participants as novices was fine-tuned as they came to resonate with the relevant properties of materials-in-becoming. Decocting myrobalans and caramelizing jaggery involved "finding the grain of things and bending it to an evolving purpose" (Ingold 2018a, 42). Along the way, the master's secret became the apprentice's journey. As illustrated in the accompanying figures, these transmissions and transformations took place in a community

of practice that was both artisanal and spiritual, and in which bodies—especially hands—and minds collaborated.

It might appear as if craft has not always been highly valued in Sowa Rigpa, given its heavy emphasis on textual mastery and scholasticism. The *Explanatory Tantra*'s chapter on the "Activities and Qualities of the Physician" (*Bya byed sman pa*; II, 31), however, presents dexterity (*rnam pa bzo ba*) as fourth in a set of six qualities that characterize eminent practitioners, the others being intelligence, kindheartedness, commitment, diligence, and proficiency in social mores (MTK 2008, 281, 286).[52] Dexterity here refers to the ability to craft forms, including medical instruments and materia medica, as well as to hone diagnostic skills and therapeutic techniques. The same chapter also states that: "A physician who does not know how to compound pacifying medicines is like a farmer who does not know how to work the field."[53] Intelligence and practical skills come together in the qualities defining an ideal expert or *khepa* (*mkhas pa*). Artisanal skill itself is a form of intelligence. Along with other anthropologists of craft, we therefore question the binaries that hamper clear understanding of "relationships between head and hand, thinking and grasping, knowing and making, belonging and producing," as well as the way "concepts of humanity, materiality and quality" are framed, mobilized, and shaped over time (Greiner and Pröpper 2016, 212).

Artisanship remains a vital quality of physicians up to this day, particularly at smaller scales of production. One reason why we might not find craft processes detailed in texts very often is the importance of certain transmission practices that we frequently encountered while working with amchis, and which we came across in Chapter 1: guiding explanations or *tri*, practical experience or *laklen*, engaged observation or *tongwé gyü*, and closely guarded pith instructions or *men-ngak*. Other scholars have also noted that secrecy protects knowledge from improper intent (da Col 2012, S187; Tidwell 2017, 403–4); as recognized in the *Four Tantras* (e.g., III, 87–89) knowledge of healing can be misused. The evident primacy of skilled practice, however, does not imply that textual knowledge cannot be intricately involved in the training, ethical formation, and spiritual refinement of practitioners. Tawni Tidwell (2017) for instance treats textual memorization and mastery as foundational for Tibetan medical expertise, highlighting the central role of auto-pedagogical processes in this "conceptual-perceptual dialectic" (438). At the same time, she acknowledges that "the textbook [of embodied knowledge] is written through the relationship of teacher and student" (520). It is this aspect of *menjor* that we have focused on in this chapter. We will revisit related ideas and

52 For a detailed exposition of this chapter, see Tidwell 2017, 412–33.

53 MTK (2008, 296) translation of: *zhi sbyor mi shes sman pa de / so nam mi shes zhing pa 'dra.*

consider their connection to contemporary shifts in *menjor* education in Chapter 4, which covers three different institutional environments in Nepal.

Ingold maintains that the transformative, educational potential of anthropology lies in the practice of participant observation, which is "to join in correspondence with those among whom we study" (2018a, 63). In this sense, "to practice anthropology is to undergo an education" (63). Anthropology and education can be seen as parallel or even equivalent undertakings, both being founded on an ontological commitment that honors the participatory coupling of perception and action, knowing and being—of what we owe to others and the world for our formation. Van der Valk therefore approached the workshop on which this chapter is based not as data collection for an "ethnographic case study" (see Ingold 2017), but as an experience that involved speculative reimagining of ways of thinking and be(com)ing.

Through his sharing of this experience, we have learned how natural ingredients become (part of) potent medicines in the tradition of Sowa Rigpa, and how student-practitioners gain practical expertise in *menjor*. Throughout Van der Valk's narrative, we find correspondences between macro- and microcosms, between bodily actions and mind training, between material detoxification and mind purification, and between medicine making and metabolism. We argue that it is these relationships that allow potency to be shaped by a synergy of textual sources, substances (including potencies of taste, color, shape), cooking-related processes, and Buddhist praxis (offering, visualization, mantra, and prayer). The synergistic nature of these ritualized meshworks of refinement and rejuvenation thoroughly blurs dichotomies of body/mind, nature/culture, and medicine/religion.

We do not wish to argue that our interpretation of Ingold's theoretical musings perfectly overlaps with Sowa Rigpa's (or the *Four Tantras*') epistemology, Tibetan Buddhist cosmologies, or the individual perspectives of Dr. Pasang and his workshop's participants. Nor was it our intention to overlook these altogether. We concur with Giovanni da Col (2017, 6), who points out that the aim of ethnographic theory "is not an explanation, a truth-effect, or a judgment of rationality or irrationality but rather a 'felicitous' intelligibility emerging out of the uncertainty of everyday life" that grants a sort of satisfaction. Moreover, participant observation has the potential to be revolutionary when it makes us question our own theories and assumptions about the world, and challenge hegemonic authorities and discourses (Shah 2017). By illustrating some of the auspicious correspondences between artisanship and anthropological fieldwork, we wish to inspire researchers and practitioners to experiment across disciplinary boundaries. And by foregrounding how the knowledge/power of Tibetan medical artisans-in-becoming is generated in the very processes that craft the potency of medicines, we hope to have shown that this kind of making is transformative in multiple ways.

CHAPTER 3

Potency as Potential

Textual Theoretical Foundations

Although Sowa Rigpa is taught, practiced, and regulated differently across regions, its practitioners all share the same foundational medical texts written in classical Tibetan. Tibetan *menjor* has evolved over time and in response to significant historical developments. Yet, given the authority that "classical" texts continue to hold within the tradition, contemporary understandings of how potency is crafted have largely retained fidelity to the theory presented in the *Four Tantras*, despite regional differences in the plants utilized, therapies implemented, and illnesses recognized (Boesi 2006). Drawing upon these foundations, this chapter outlines the theoretical framing for the mechanics of crafting potency that we have explored in Chapters 1 and 2 and introduces concepts relevant to our discussion of blessed substances and tantric ritual consecration in Chapter 5. It presents the perspective of Tawni Tidwell, who studied Tibetan medicine at two of the principal Tibetan medical institutions—the Men-Tsee-Khang (MTK) in Dharamsala and Sorig Loling, the Tibetan Medical College of Qinghai University in Xining—and is both an academic and practicing physician. Intuitive conceptual mappings connected Tidwell's textual classroom learning and experiential clinic and pharmacy practice, informing her understanding of how physician-pharmacists perceive and cultivate potency through compounding medicines to treat specific diseases and through Buddhist ritual—many practitioners being ritual specialists.

This chapter addresses fundamental questions that lie at the heart of this book: What makes a substance potent, and how is potency defined, attributed, and enhanced? It introduces textual understandings that shape amchi artisanal practice by detailing how potency behaves within the substance itself, in the interaction between the cultivator of potency and the recipient of the medicine, and in the interaction between the potentiated substance and the recipient. It also examines how potency is layered and sculpted through harvesting, crafting, compounding, and ritual processes. Along the way we see how practitioners' use of their senses

to engage substances and ascertain, characterize, and track potency is central to *menjor* theory as well as practice. Thus, we explore the many interstices between materials, processes, and interactions in which potency occurs, is crafted, and exerts its effects, weaving in references to *chongzhi* as an illustrative example to enable readers to understand how one substance relates to different aspects of potency. Although our ethnographies in other chapters do not explore the physiological or phenomenological effects patients experience through imbibing these substances, this aspect of potency is a fundamental component of textual expositions and thus merits attention here.

The key texts that characterize potency in Sowa Rigpa include but are not limited to the *Four Tantras* and its most prominent commentaries, among which the most significant elaboration on potency can be found in Deumar Tendzin Püntsok's seventeenth-century *Crystal Orb and Crystal Rosary* (Deumar 2005).[54] Also important are medically oriented texts within the Buddhist ritual literature, most notably the *Yutok Nyingtik* (*Yutok Heart Essence*) (Yutok Yönten Gönpo 2007), from the *Rinchen Terdzö* (*Treasury of Precious Revealed Teachings*), as well as contemporary materia medica textbooks, among which Gawé Dorjé's (2018) *Stainless Crystal Mirror of Materia Medica* is definitive. In what follows, we examine the understandings that these texts contribute. They are certainly not representative of the exhaustive corpus of texts that inform the theory and practice of crafting potency, nor do we provide a philological treatment of them. Rather, we focus on these particular texts as they are the most quoted and referenced by those practicing and teaching *menjor*. Before turning to the theoretical framing that these texts provide, however, we first delineate the language or "voice" employed in this chapter.

Sowa Rigpa as "a basic science"

Both biomedical and Sowa Rigpa intellectual traditions have developed distinct systems of investigative techniques for qualitatively and quantitatively assessing the condition of a patient, and for designing formulas and compounding medicines. A comparative analysis of different assumptions and techniques pertinent to each tradition's approach is beyond the scope of this book. However, during her Tibetan medical training, Tidwell—who herself had a background in physics

54 The other most prominent commentaries are Kyempa Tsewang 2000 (fifteenth century), Zurkhar Lodrö Gyalpo 1989 (sixteenth century), Sanggyé Gyatso 2005 (seventeenth century), Jamgön Kongtrul Lodrö Tayé 2005 (nineteenth century), and Troru Tsenam 2003 (twentieth to twenty-first century).

and pre-medical studies—found that her teachers used synergistic ideas in the Euroamerican disciplines of science to facilitate conceptual bridges between the two traditions. This is reflected in the linguistic and theoretical repertoire drawn upon in this chapter.

During Tidwell’s education at MTK and Sorig Loling, concepts of potency were often explained using analogies from contemporary science. As one of her Sorig Loling teachers, Professor Rinchen Dhondup, said in response to various humanities scholars visiting Xining to research Tibetan medicine: “For us, medicine is a basic science. Using the humanities to describe Tibetan medicine as a cultural system does not make much sense to us. We would assume scientists and physicians would be interested in researching Tibetan medicine because of the insights it provides to the body and treating disease, not cultural scholars.” This is not to suggest that the contributions of scholars in the humanities and social sciences were unappreciated by Tibetan medical scholars and practitioners. What puzzled them was why such scant attention was being paid to Sowa Rigpa’s contributions to medical knowledge for the benefit of patients and the relief of suffering, which they saw as Sowa Rigpa’s truly exceptional quality.

At MTK, Tidwell’s teacher, Vice Principal Khenrab Gyamtso, emphasized the resonance of paradigms in the so-called modern scientific disciplines. When he took a sabbatical semester at Emory University in the USA, he said he wanted “to learn chemistry, physics, and biology” so that he could better translate Tibetan concepts into English for his lectures on the cardiovascular system, neurology, and so forth. He had identified as his starting point “learning the periodic table of elements,” which he pointed out as a natural corollary to understanding elemental dynamics in Sowa Rigpa. He saw Sowa Rigpa and the Euroamerican scientific tradition as two distinct and valid knowledge systems with different perspectives on the categorization of matter and energy but great potential for mutual enrichment. During the summers at MTK, Tidwell’s doctoral advisor, comparative human biologist and developmental neuroendocrinologist Dr. Carol Worthman, convened faculty from Emory University to teach two-week intensive courses there on neuroscience, anatomy, physiology, and clinical chemistry. These sessions paralleled the Emory-Tibet Science Initiative for training monastics in science (Worthman et al. 2021), which was developed according to the vision of the Fourteenth Dalai Lama and inspired by the Mind & Life Dialogues (Hasenkamp and White 2017). Facilitating mutual understandings of each other’s intellectual traditions yielded important insights as well as collaborative efforts toward cultivating broader benefits.

In both Dharamsala and Xining, most students begin their Tibetan medical training with strong foundations in science established during their grade school educations. Sowa Rigpa is recognized alongside biomedicine and Ayurveda in

Figure 52 Tidwell grinding nutmeg and caraway seeds with stone in a Sorig Loling class for making *hormé* (*hor me*) medicinal compresses. Xining, November 2014. Photo courtesy of Kelsang Kyi (CC-BY-SA 4.0).

India, and Chinese medicine in the PRC, and all students are expected to demonstrate proficiency in anatomy and physiology through a biomedical lens. They must also learn the basics of biomedical diagnostics and therapeutics in addition to their own tradition's approaches.

In classes at both MTK and Sorig Loling, professors regularly curated scientific explanations in their communication of both Buddhist and Tibetan medical content. For example, at MTK, Dr. Khenrab Gyamtso described *lūng* through the functions of the nervous system and Dr. Pasang Wangdu used particle theory to describe elemental dynamics. At Sorig Loling, Dr. Tsering Namjial used the language of quantum mechanics to describe apparent paradoxes in Mādhyamaka theory, while Dr. Choying Rangdrol (2015) identified chemical classes for Tibetan medical taste profiles (an area of research also being pursued by other Tibetan medical colleagues in Xining and Lhasa).

While in previous chapters we have drawn on concepts from Smith and Ingold in our theoretical framing of discussions, this chapter seeks to convey the language and explanatory models used by the Tibetan medical professors at both MTK and Sorig Loling in understanding, describing, and working with potency. This perspective is presented to enrich and enlarge our understanding of potency in Sowa Rigpa, as well as to demonstrate the diversity and dynamism that pertains to this field. It exists alongside and in relation to other perspectives, which may be considered equally valid.

Figure 53 Class medicinal plant collection for compiling identification samples near Kumbum Monastery’s medical college. Kumbum, July 2014. Photo courtesy of Kelsang Metok (all rights reserved).

Figure 54 Aku Nyima initiating a medicinal plant expedition for Qinghai Provincial Tibetan Medical Hospital physicians. Qinghai Province, August 2014. Photo T. Tidwell (all rights reserved).

Potency as epiphenomenon of elemental dynamics

Potency in Sowa Rigpa can be understood from the behaviors that emerge from the properties of a substance's constituent elemental dynamics, known in Tibetan as *jungwa nga*. While *jungwa nga* is often translated as "the five elements," we use the term "elemental dynamics" to emphasize that these are interactive properties exhibited by matter and energy, not physical substances. In Tibetan, the five dynamics are referred to simply as earth, water, fire, wind, and space, but are defined by their respective properties of solidity/stability, cohesion/fluidity, maturation/heat, motility/movement, and interactive space, which together shape phenomenal behavior. The *Four Tantras* classify and explicate materia medica according to these dynamics. Even the physiological pathways and activities that link bodily constituents,[55] organs,[56] fluids,[57] and energetic signaling dynamics[58] to provide systemic functions relate to the elemental dynamics.

These physiological pathways and activities belong to the three psychophysiological default systems or *nyepa*, namely *lūng*, *tripa*, and *beken*. *Lūng* exhibits properties of the wind dynamic, *tripa* the fire dynamic, and *beken* a combination of earth and water dynamics. Physiologically, the three *nyepa* are responsible for functions of motility and signaling (*lūng*); metabolic heat, blood production, and thermoregulation (*tripa*); and fluid-nutrient cycling, filtration, joint lubrication, and body structural integrity (*beken*). These systems also have psychological functions that can be influenced or acted upon by substances. For example, *lūng* pathways are animated by attachment, but functionally drive the will to live and socially connect. Dysfunction manifests as addiction, desire, and clinging to objects, experiences, and people. *Tripa* pathways facilitate determination, perspicacity, ambition, and courage, and are overstimulated into dysfunction by extremes of intolerance, rage, anger, and aversion. *Beken* trajectories facilitate satisfaction, contentment, and mental ease. Afflictive forms result in blunted awareness, delusion, perceptual numbness, and cognitive dullness.

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55 The seven bodily constituents or *lüzung* are: nutritional essence, blood, muscle, fat, bone, bone marrow, and reproductive essences.

56 The term *dön nö* (*don snod*) comprises the five vital and six vessel organs.

57 These fluids include: blood (*khrag*); fulvous fluid (*chu ser*), a composite term for the collective fluids of serum, pre-lymph, interstitial, intra-/extracellular, and cerebrospinal regions and linked by similar functions to an interrelated metabolism of constituents, nutritional essences, and waste products; and other fluids (*gsher khu*; *chu khams*) in the body.

58 An activity of *lūng*, the internal winds of the body-mind.

Substances imbued with certain potency characteristics can cause greater function or dysfunction in these *nyepa* activities depending on whether those characteristics enact greater balance or imbalance in the respective *nyepa* qualities (we will return to a more detailed explanation of how this works). *Chongzhi*, for example, is recognized for a general potency that can drive greater balance in both *tripa* and *beken* pathways. Substances imbued with special qualities through meditative concentration and ritual activity can also have specific effects on both body and mind through these pathways. On the supramundane level, from the Buddhist perspective, balanced pathways of *lūng* facilitate equanimous compassion, of *tripa,* piercing wisdom, and of *beken,* boundless clarity and luminosity.[59]

The elemental dynamics provide a key conceptual framing for the crafting of potency by Sowa Rigpa practitioners, analogous to that of chemical properties in globalized scientific discourse.[60] A chemical property is defined as any property that becomes evident from observing a substance's dynamic behavior. Chemical properties are emergent, just as elemental dynamic properties are emergent. Likewise, potency characteristics are emergent in that they arise from their constituent elemental dynamics. Substances themselves, the processes they have undergone, and the interactions in which they engage express properties. In the Tibetan sense, elemental dynamics thus describe the emergent nature of interactions—the mode of reaction between substances—but not the substances themselves.

Pharmacologists of the Euroamerican tradition characterize atomic elements as behaving in different ways depending on temperature, pressure, context, and relationships to other reactive substances (see Tidwell and Nettles 2019). As such, a given atomic element could behave distinctly depending on the context. The periodic table of elements, for example, is arranged by how elements react in different ambient conditions. Thus, atomic elements in the Euroamerican sense can demonstrate behaviors associated with the five elemental dynamics in the Tibetan sense, depending on the context. For example, there is overlap in the behaviors associated with the elemental dynamic properties of *chongzhi*—described in contemporary Tibetan materia medica texts as various forms of calcium carbonate (Gawé Dorjé 2018, 51–54; Kelden Nyima 2010, 91–97)—and the atomic elemental behaviors that characterize the chemical compounds related to these forms of calcium carbonate. This means that in both medical systems we find this substance

59 This was conveyed in oral instructions that Tidwell has received.

60 For instance, Choying Rangdrol and Wuntrang Dhondup (aka Wüntrang Dhondrup, Wuntrang Dang-Zhi) have studied the elemental dynamics as they relate to chemical space in forming taste profiles (see Rangdrol 2015, Dang-Zhi 2016).

being used in the formulation of medicines that target, for example, certain bone conditions or gut inflammation and excess acid.

Chapter 1 pointed to both the cooling and warming potencies of *chongzhi*, which are characteristics of its elemental dynamic properties. However, its most prevalent form before processing is known for its warming sensation. This warming sensation is beneficial for treating *beken* conditions (Gawé Dorjé 2018, 51),[61] which are cold-natured due to earth/water dynamics. Other types of *chongzhi* are yellow, red, blue, or variegated in color and have different potencies. The distinct potencies of the different types of *chongzhi* make each beneficial for particular purposes. However, as mentioned earlier, amchis must work within practical limitations of availability and identifiability. Likewise, preferences vary depending on geographic location and lineage specificities (Chapter 1).

We have observed Amchi Tsultim Gyatso and Dr. Penpa Tsering processing *chongzhi* in various ways to enhance the latent cooling or warming capacities (Chapter 1). As a primary ingredient processed for a warming capacity, *chongzhi* will enhance the digestive fire and protect metabolic activities in all bodily constituents, thus acting as a preventative for chronic illness. This makes it a popular and widely used ingredient. Its capacity to enhance metabolic function contributes to some pills being known as panaceas due their role in strengthening gut function and healing many chronic illnesses (*Four Tantras* III, 6). As a primary ingredient processed for a cooling capacity, it can be used in the treatment of *tripa*-influenced conditions. In this form, it can reduce excess acidity in the gut, ameliorate inflammation in the gastric mucosa (gastritis), and bolster the integrity of the mucosal lining, imbalances that tend to have hot-natured aspects due to the influence of aggravated fire dynamics. As described by Gawé Dorjé, *chongzhi* alleviates both cold- and hot-natured forms of diarrhea; ameliorates compounded hot-natured *beken* conditions; is supreme for treating *beken mukpo* or atrophic gastritis and related conditions; is the nutritional essence or *dangma* for healing bones; and (as one of the five *dütsi* as described in Chapter 2) is considered an ambrosial remedy for both cold- and hot-natured conditions (Gawé Dorjé 2018, 53–54). As a coating, *chongzhi*'s potency is conceptualized slightly differently: it facilitates digestion of the core formula and helps the gut metabolize the contents (Gawé Dorjé 2018, 53). While amchis list several reasons why *chongzhi* coating is used in practice (Chapter 1), in general, all *chongzhi* types are known for their capacity to remove toxins or *duk* (*Four Tantras* II, 20) and can contribute this healing capacity to the gut when used as an added coating.

61 Here Gawé Dorjé cites Deumar's *Crystal Orb and Crystal Rosary* (see Deumar 2005, 112).

Different processing methods can thus heighten a substance's potencies, or differentially "bend" and direct them toward specific types of detoxification aimed at organ systems, wounds, or the entire body. "Detoxification" in this context refers to removing parts or components that are difficult to metabolize. As Dr. Penpa Tsering explained, one method of processing *chongzhi* to enhance its heating potency is wild taming, which requires a flash burn over hot embers after which the substance is immediately cooled (Chapter 1). Gawé Dorjé describes how immersing *chongzhi* in different liquid media can heighten and bend certain potencies: cold water induces a cooling potency to treat hot conditions; aged beer induces a relatively warming potency to treat cold conditions; and buttermilk induces a more neutral potency, for the treatment of neutral conditions (2018, 51–54). *Chongzhi* can also be compounded with *dzomo* milk for different effects. As used by Amchi Tsultim in Chapter 1, *dzomo* milk is balanced in nature, warmer in potency than cow milk but cooler than female yak milk, so can be used to maintain or direct potency.

In what follows, we outline the theory behind how materia medica like *chongzhi* are systematized and classified, and what this reveals about how various forms of potency are conceptualized and categorized.

Conceptualizing potency

Potency as one of the five functional activities

Materia medica in the *Four Tantras* are systematized according to each substance's capacity to manifest interactive properties vis-à-vis five functional activities: (1) the five elemental dynamics, *jungwa nga*; (2) six taste profiles (*ro drug*); (3) three post-digestive tastes (*zhu rjes gsum*); (4) eight technical potencies or *nüpa gyé*;[62] and (5) seventeen qualities (*yon tan bcu bdun*). In simple terms, the tastes, potencies, and qualities (2–5) are characteristics of substances determined by the five elemental dynamics (1).

In Sowa Rigpa, taste comprises a cascade of activities that commences with the initial interaction of a substance on the tongue and related taste faculties in the mouth. We find textual descriptions that reveal a medical paradigm concerning how initial taste complexes facilitate digestive processes in the gut, which then react with the ingested substance to transform and transmit metabolites into

62 The term "technical potency" is used to differentiate the eight potencies from *nüpa* as an umbrella term and our more general use of potency in the English vernacular.

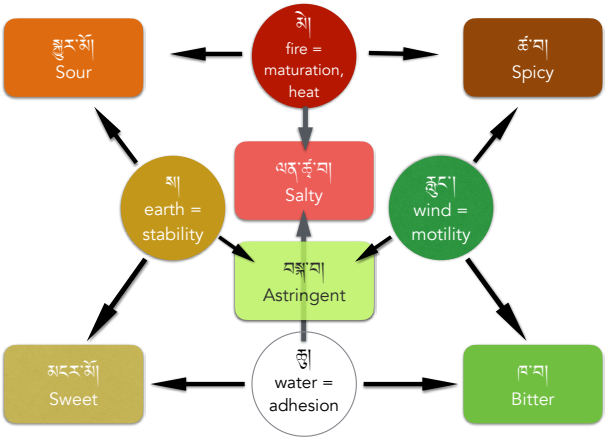

Figure 55 The six tastes as comprised of the five elemental dynamics. Diagram by Tidwell.

pathways and trajectories across organ systems, body fluids, bodily constituents, and mental processes. In Tibetan medical terms, taste describes the *nyepa* system response in the body to the specific elemental properties of which the six taste profiles and three post-digestive tastes are composed.

Each of the six taste profiles—sour, sweet, spicy, bitter, salty, and astringent—is defined by a specific combinatorial interaction of elemental dynamics (fig. 55). For example, the spicy or pungent taste is produced by the fire element, which is heat, and the wind element, which is motility. Examples mentioned in the *Four Tantras* (II, 19) of substances with a spicy-dominant taste profile are garlic, onion, ginger, and long pepper, which help to stoke the digestive fire, facilitate digestion, increase circulation, and calm *lūng*. Substances classified as sweet, such as grapes, honey, molasses, and *chongzhi*, are comprised principally of the cooling earth and water dynamics, causing the body to build mass, stability, and cohesion. Substances with sweet profiles are said to cling to one's mouth upon ingestion, induce a pleasant taste, and create a craving sensation, while substances classified as spicy are said to burn the tongue and cause the eyes to water (II, 19; Yutok Yönten Gönpo 1999, 127). Here we see how the tongue of the *menjor* specialist serves as an investigative instrument to determine the properties of a substance.

Post-digestive taste is the third functional activity. It characterizes the physiological behavior that occurs once a substance reacts in three sequential phases in the digestive environment of the gut: decomposing *beken*, digestive *tripa*, and fire-accompanying *lūng*. Figure 56 illustrates how these three phases transform substances with a specific taste profile into their post-digestive taste profiles. Substances predominantly exhibiting sweet and salty taste profiles are expected

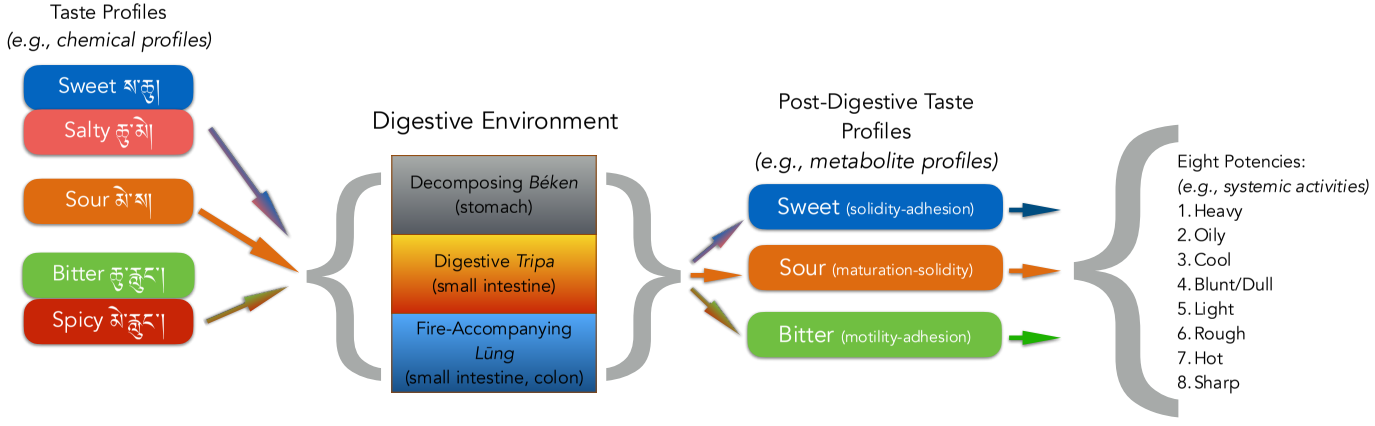

Figure 56 Post-digestive taste profiles produced as reactions of taste profiles to the digestive environment. Diagram by Tidwell.

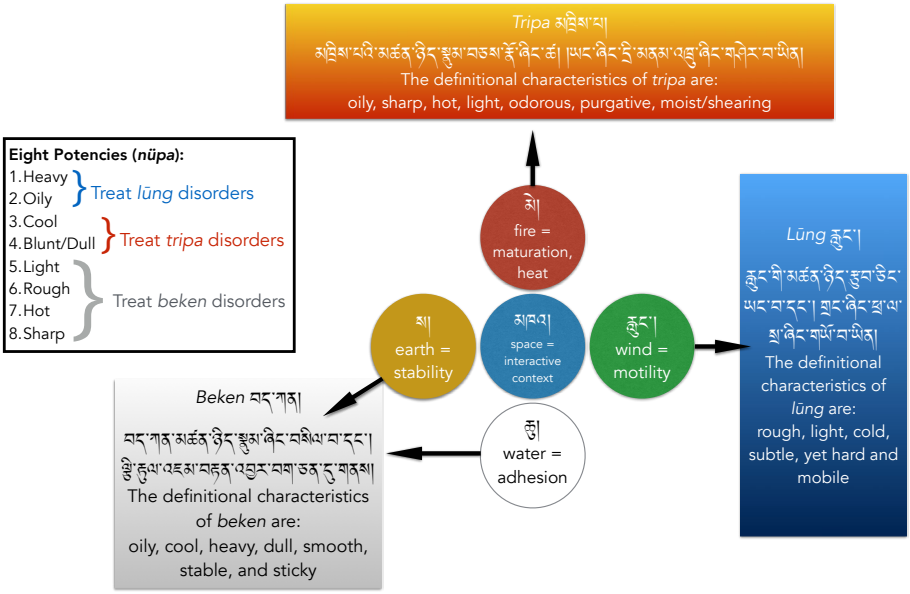

Figure 57 How *nyepa* relate to the elemental dynamics and the potencies that treat *nyepa* characteristics. Diagram by Tidwell (with quotes from II, 5; II, 20).

to produce the post-digestive sweet taste profile (i.e., earth-water or solidity-adhesion characteristics). A sour taste profile produces a sour post-digestive taste (i.e., fire-earth or heat/maturation-solidity characteristics). Bitter, hot, and astringent taste profiles generally produce a bitter post-digestive taste (i.e., *lūng*-water or motility-adhesion characteristics). The conceptualization of post-digestive taste is thus based on the same terminology as that which is actually tasted, but here provides a framework to describe a substance's expected behavioral effects after ingestion.

The technical form of potency (i.e., *nüpa gyé*, the eight potencies) is the penultimate functional activity of a substance. It comprises a set of eight specific activities that result from the three post-digestive tastes (fig. 56). The eight potencies are: heavy, oily, cool, dull, light, rough, hot, and sharp. They are epiphenomena of underlying properties. That is, they are characteristics of substances determined by their elemental dynamics which characterize the taste phenomena a recipient experiences when they are imbibed and the post-digestive tastes that arise from the effects of the metabolic process. The eight potencies also refer to correlating physiological activities that the substances produce in the body. For example, substances with a heavy potency in the *nüpa gyé* framework create mass and dampen the digestive fire. Those with a cool potency slow metabolic

function, reduce fever symptoms, and facilitate body cooling, while substances with a hot potency raise body temperature, heighten metabolic function in specific organs or bodily constituents, and stimulate blood production. In lay terms, these substances might be described as heavy-natured, cool-natured, and hot-natured, respectively.

The functional activities of taste, potency, and post-digestive taste, in this order, tend to be used most frequently to describe a substance's overall activity in terms of its pathway effects. However, some substances can be better described by one functional activity over another. Some substances function as predicted by either their taste or post-digestive taste, while others contradict both those sets of predicted effects and act according to their technical potencies. *Chongzhi* serves as an illustrative example of a substance that functions as predicted by its post-digestive taste. While it has a dominantly sweet taste profile upon ingestion, its post-digestive taste profile is balanced. This means that after digestion it has both sweet *and* sour taste characteristics, giving it both earth-water and fire-earth characteristics. This is what gives it the capacity to either warm cold-natured conditions, such as ameliorate slow digestion, or cool hot-natured conditions, such as ease gut inflammation, depending on how it is processed, compounded, and sculpted. This part of its potency also gives it the capacity to "grow" (i.e., mature in the fire dynamic sense) bone, digestive capacity, and bodily constituents. *Chongzhi*'s characteristic technical potencies—dull, heavy, light, rough, and hot—result from its balanced post-digestive taste. In elemental terms these potencies are stable (earth), cohering (water), and warming (fire). This facilitates the substance's ability to simultaneously build mass such as bone, protect the gut mucosal lining, and stoke the digestive fire.

A substance's characteristics are further delineated according to the fifth functional activity, namely, the seventeen qualities. These qualities, or *yönten* (*yon tan*), are attributes resulting from a substance's taste and potencies, which determine the specific functional activities that substances produce in the body and the way they harmonize, antagonize, or neutrally engage the characteristics of each *nyepa* pathway. As illustrated in Table 2, when amchis are developing a formula, they might calculate its various qualities (assuming a relative proportional distribution of the qualities of each ingredient) and then align those with the *nyepa* characteristics to show how the formula will act on a specific *nyepa*.

Table 2 Qualities of therapeutic modalities as used to treat *nyepa* imbalance. The 17 treatment qualities overcome the 20 characteristics of disorders through qualities in diet, behavior/lifestyle, medicine, and external therapies.

Practice matrix: Balancing the 20 *nyepa* characteristics with 17 treatment qualities							
རླུང་། Lūng Characteristics	རུག་པ། Rough	ཡངས་། Light	གྲང་། Cold	ཧ་ལ་ཐུ། Subtle yet hard		གཡོ། Motile	
Qualities to Treat *Lūng* Disorders	འཇམ། Smooth	ཕྱེ། Heavy	དྲོ། Warm	སྙུམ། Oily		བརྟན། Stable	
མཁྲིས་པ། *Tripa* Characteristics	སྙུམ་བཅས། Oil-accompanying heat	རྣོ། Sharp	ཚ། Hot	ཡང་། Light	དྲི་མནར་མ། Strongly odorous	འཕྲུ Purgative, Cleansing	གཤེར། Moist, Shearing
Qualities to Treat *Tripa* Disorders	གྲང་། Cold	རྨུལ། Dull	བསིལ། Cool	མཉེན། Pliable	སྐྱ། Weak	སྐམ། Dry	
བད་ཀན། *Beken* Characteristics	སྙུམ། Oily	བསིལ། Cool	ཕྱེ། Heavy	རྨུལ། Dull	འཇམ། Smooth	བརྟན། Stable	འབྱུར་བ། Sticky
Qualities to Treat *Beken* Disorders	སྐྱ། Parched	ཚ། Hot	ཡང་། Light	རྣོ། Sharp	རུག་པ། Rough	གཡོ། གཤེར། Motile/Moist, Shearing	

Amchis assess how substances interact physiologically through these five classes of functional activities. The nature of their properties are defined according to these classes through observations and techniques not unlike those applied in pharmacological assays (Tidwell and Nettles 2019). Tibetan physicians draw upon a long-standing intellectual history tracking the characteristics of materials and energetic exchanges in the external environment as related to interactions within the internal environment of our body-minds, and how these interactions are shaped by diet, medicine, lifestyle,

and meditation. The techniques they use to determine the qualities and functional activities of materia medica are known as "recognizing signs" (*ngos 'dzin rtags*) or "markers" of pathway activities, similar to the embodied perceptual techniques used for patient diagnostics, as Tidwell (2017) observed in her ethnographic research.

Taxonomies of potency

In the *Four Tantras,* an entire chapter is dedicated to explicating the "*Nüpa* of Medicine" (*sman gyi nus pa*) (II, 20). It presents the various types of potency and then proceeds to list the specific potencies of the major botanicals, minerals, precious substances, and fauna within the six classes of materia medica.

As shown in Table 3, the "*Nüpa* of Medicine" distinguishes between general and specific forms of *nüpa.* It begins by differentiating the general potency of substances based on their physical constituents. This is known as "material potency" or *dzé kyi nüpa*, or as "potency of taste" (*ro yi nus pa*), and arises from the aforementioned five functional activities. This *nüpa* is grounded in the properties of the elemental dynamics that shape the general characteristics of taste. As already noted, the taste profile tends to transform through the three gut phases in a predictable way to produce the three post-digestive tastes, which in turn characterize the consequent eight technical potencies and seventeen qualities that create physiological effects in the body. Since this is not always the case, and some substances can be best described by post-digestive taste or technical potency characteristics rather than taste, the *Four Tantras* (II, 20) delineates different compounding approaches, which additionally include the method of preparation (see table 3).

Table 3 *Four Tantras* classification of potency.

Potency Class	Definitions and/or Examples
Classes of potency as primary compounding approaches	
By taste profile རོ་སྟེངས།	E.g., *kyurura* (Indian gooseberry, *Phyllanthus emblica*) has a sour taste profile; *pipiling* (long pepper, *Piper longum*) has a hot taste profile.
By post-digestive taste profile ཕྱེ་རྗེས་སྟེངས།	E.g., despite its predominantly sweet taste profile, *chongzhi's* balanced post-digestive taste allows it to alleviate both cold- and hot-natured conditions depending on its processing, compounding, and sculpting, so *chongzhi*-based formulas are often compounded by post-digestive taste profile.

Table 3 *Continued*

Potency Class		Definitions and/or Examples
By technical potency characteristics ནུས་པ་སྟེངས།		E.g., *chongzhi* has technical potencies that are stable, cohering, and warming, facilitating its ability to build mass such as bone, protect the gut mucosal lining, and stoke the digestive fire simultaneously.
By compounding method སྒྲུབ་ཐབས་ཀྱི་སྟེངས།		E.g., preparing medicine in the form of a *khenda*, "smoothes" the properties of the individual ingredients such that they are digestible and do not block channels or inhibit/aggravate *lūng* activities.
Potency taxonomies		
Potency ནུས་པ།		Potency of the substance to create a remedial effect on the imbalanced quality, e.g., stability and heaviness to counter the light and mobile qualities of a *lūng* disorder.
General	Material potency རྫས་ཀྱི་ནུས་པ། (aka, potency of taste རོ་ཡི་ནུས་པ།)	Capacity of a substance that arises from the materio-energetic properties of its constituent five functional activities (elemental dynamics, tastes, post-digestive tastes, technical potencies, and qualities).
Specific	Essence potency ངོ་བོའི་ནུས་པ། (aka, potency of identity, potency of a substance's intrinsic nature)	Specific physiological effects that the substance is recognized to produce when ingested.
Strength སྟོབས།		The relative warming or cooling capacity of the substance due to the dominant dynamic combination driving its physiologic activity.
Power མཐུ།		Core capacity of the essence potency, or specific activities, of a substance. It is the quintessence of the substance's characteristic capacity.

The essence potency or *ngowö nüpa*, also translated as "potency of identity" or "potency of a substance's intrinsic nature," relates to the specific physiological effects the substance is recognized to produce when ingested. It can be extrapolated from the seventeen qualities resulting from taste, post-digestive taste,

and technical potency. The core of the essence potency is called the *tu* (*mthu*) or "power" of the substance, which is the quintessence of its characteristic capacity. As delineated by Deumar Tendzin Püntsok, there are various classes of essence potency, which include the degree of warming or cooling a substance produces, its capacity to behave in accordance with its taste profile, the degree to which it creates a characteristic effect (e.g., laxative or purgative), and its aromatic qualities, among others (see table 4).

Table 4 Deumar Tendzin Püntsok's taxonomy of potency.

Potency Class	Definitions and/or Examples
Classes of potency derived from the elemental dynamics—འབྱུང་བའི་ནུས་པ།—as primary compounding approaches	
By taste profile རོ་སྟེའམ།	E.g., *kyurura* (Indian gooseberry, *Phyllanthus emblica*) has a sour taste profile; *pipiling* (long pepper, *Piper longum*) has a hot taste profile.
By post-digestive taste profile ཞུ་རྗེས་སྟེའམ།	E.g., despite its predominantly sweet taste profile, *chongzhi's* balanced post-digestive taste allows it to alleviate both cold- and hot-natured conditions depending on its processing, compounding, and ritual sculpting, so *chongzhi*-based formulas are often compounded by post-digestive taste profile.
By technical potency characteristics ནུས་པ་སྟེའམ།	E.g., *chongzhi* has technical potencies that are stable, cohering, and warming, facilitating its ability to build mass such as bone, protect the gut mucosal lining, and stoke the digestive fire simultaneously.
Classes of essence potency—ངོ་བོའི་ནུས་པ།—as shaping, sculpting, and directing approaches	
Potency of strength སྟོབས་ཀྱི་ནུས་པ།	Capacity of a substance to produce a warming or cooling effect—its strength relates to the degree of warming or cooling it produces. E.g., ginger tends to be a highly warming substance, but ginseng is even more warming.
Potency of taste proxy རོ་དང་མྱོང་མཐུན་གྱི་ནུས་པ།	Capacity of a substance to act in accordance with its taste profile. E.g., cane sugar behaves in accordance with the properties associated with sweet substances by providing cooling and bulking effects.

Table 4 *Continued*

Potency Class	Definitions and/or Examples
Potency of aromatic quality དྲིའི་ནུས་པ།	E.g., the concentrated potency of nutmeg (*Myristica fragrans*) is attributed to its aromatic properties.
Potency of antidotal quality གཉེན་པོའི་ནུས་པ།	Potency of the substance to create a remedial effect on the imbalanced quality, e.g., stability and heaviness to counter the light and mobile qualities of *lūng* disorder.
Potency of type རིགས་མཐུན་གྱི་ནུས་པ།	The degree to which a substance is recognized for its capacity to create an effect (e.g., laxative effect) creates that effect.
Potency of shape དབྱིབས་མཐུན་གྱི་ནུས་པ།	E.g., the liver-shaped botanical called hepatica (*Anemone americana*) is recognized for its liver benefits.
Potency of interdependence རྟེན་འབྲེལ་གྱི་ནུས་པ།	E.g., *chongzhi* collected from a sacred mountain or *papta* substances that transmit the realization of past masters.
Potency of prayer སྨོན་ལམ་གྱི་ནུས་པ།; potency of meditative concentration ཏིང་ངེ་འཛིན་གྱི་ནུས་པ།; potency of mantra སྔགས་ཀྱི་ནུས་པ།; and potency of blessing བྱིན་རླབས་ཀྱི་ནུས་པ།	E.g., *mendrup* and *dütsi chömen* pills, recognized for beneficial capacities imbued through ritual consecration, prayer, meditative consecration, mantras, and various forms of blessing.

Substance characteristics are classified, enumerated, and explicated to provide the foundation upon which formulas are calculated and composed. The specific physiological effects a substance is recognized to produce when ingested can greatly influence theoretical predictions of how a given formula will work based on the logics of elemental dynamics, tastes, and the transformation of tastes into post-digestive tastes, potencies, and qualities—and thus how that formula may be developed. However, theory does not always reflect how a formula actually behaves. The logics of formulas—that is, how amchis calculate and compose them—tend to be primarily based on the material potency of substances. At the same time, essence potency is more specific and can be shaped, directed, and sculpted in many layers in the process of medicine making, including through ritual means (a point to which we will return).

A substance is primarily classified according to its overall warming or cooling capacities, described by the term *top* (*stobs*) or "strength," due to the dominant

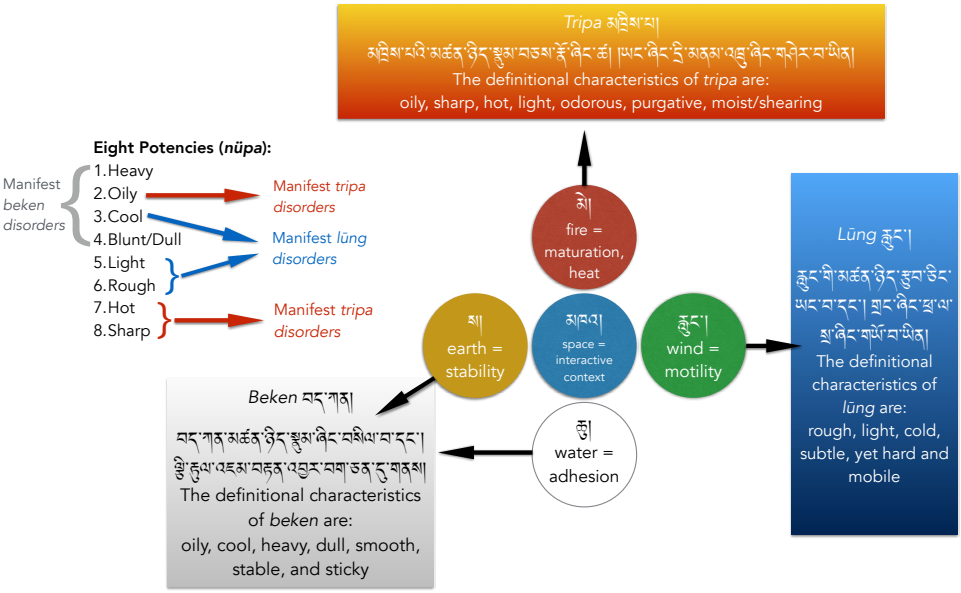

Figure 58 How excesses in potencies can manifest *nyepa* disorders. Diagram by Tidwell (with quotes from II, 8; II, 9).

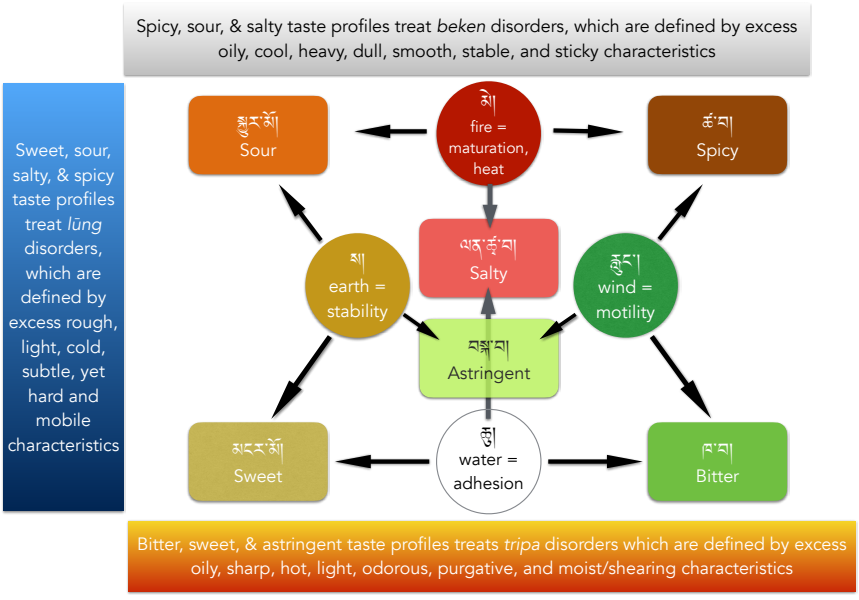

Figure 59 How tastes treat *nyepa* disorders. Diagram by Tidwell.

dynamic combination driving its physiologic activity. In the *Four Tantras,* the potency of *chongzhi*, for example, is described as deriving primarily from its warming effect (Yutok Yönten Gönpo 1999, 135). The substance is then elaborated according to its qualities classified by taste (or, in some cases, post-digestive taste or technical potency). For example, medicine composed of an earth dynamic is heavy, stabilizing, dulling, smoothing, oiling, yet dry in quality; often aromatic; and stiffening, bulking, and cohering in functional activity. Due to its interaction with characteristic properties of *nyepa* pathways, earth-dominant medicine pacifies *lūng* and increases *beken*.

Each *nyepa* system is composed of defining properties (*mtshan nyid*), which characterize its activities in the body (fig. 58). For example, the definitional characteristics of *tripa* are oily, sharp, hot, light, odorous, purgative, moist or shearing. These properties are emulated in the psychophysiological systems that the *tripa* system facilitates: oil production, thermoregulation, metabolic heat, inflammatory and febrile responses, blood production, perspiration and body odor, skin and body oil functions, purging the body through emesis, detoxification, cognitive acuity, intellectual sharpness, courage, fierceness, arrogance, anger, irritation, and rage. Medicines that have the opposite properties, such as cool and dull, provide remedial or pacifying effects on those psychophysiological systems, particularly when *nyepa* characteristics are in excess (figs. 57–59; table 2).

Conversely, substances that have identical properties to one or more of the definitional characteristics of the *nyepa*, such as substances with a heavy potency acting on the heavy characteristic of *beken* pathways, will lead to excess expression of that particular *nyepa* and manifest a disorder. Giving oily, heating, and odor-producing substances to someone who already has a physiological excess of oil, heat, and odor, for example, will exacerbate their *tripa* condition and could result in a variety of *tripa* diseases, such as liver and gallbladder conditions, poor blood quality, and skin inflammation (fig. 58). *Chongzhi* is characterized by both dull and heavy *and* light, rough, and warm potencies, which is why it is understood to treat *beken* disorders, including those affecting digestive and joint systems, even though it shares some *beken* characteristics. It is important to note that substances are rarely given singly in Sowa Rigpa due to the likelihood of side effects.

Understanding potency in ritual contexts: The potency-strength-quality triad

As illustrated by the making of moonlight *chongzhi* (Chapter 1) and medicinal butter (Chapter 2), ritual is an integral part of many Sowa Rigpa practices. The "*Nüpa* of Medicine" chapter (II, 20) provides a key framework for understanding

potency in not only *menjor* but also ritual contexts, namely the *nü-top-yönten* triad (*nus stobs yon tan gsum*). This triad connects potency or *nü*[*pa*] with two other concepts that have already been mentioned: *top* or strength and *yönten* or quality.

We have established that material potency is considered a general potency that arises from the characteristics of the elemental dynamics. For *chongzhi* and many other materia medica, the substance's taste (or post-digestive taste or technical potency) guides the material understanding of its potency and therefore its effects on a body, or its particular physiologic capacities. In short, the six tastes, three post-digestive tastes, and eight technical potencies help in the design and artisanal crafting of a formulation through synergistic, antagonistic, or neutral interactions because, at the most fundamental level, all of these properties derive from the behaviors of the elemental dynamics. Table 5 details how each elemental dynamic informs substance properties and their respective classifications.

Essence potency, however, is much more dynamic and can be sculpted in many layers according to the specific capacities of the substances, such as laxative or purgative effects (see fig. 57, table 4). It can also be altered through various ritual means. In these ritual contexts, *nüpa* specifically refers to the capacity to imbue a substance with other-than-naturally-occurring qualities or capacities through mantra, prayer, meditative concentration, and blessings, some of which we have already encountered in Chapters 1 and 2. Substances can also be imbued with capacities through their interdependent relations, a form of potency known as *tendrel gyi nüpa* (*rten 'brel gyi nus pa*). For example, *chongzhi* collected from a sacred mountain or a limestone formation that has an auspicious form is imbued with this form of potency, as are the complex consecrated *papta* substances that we discuss in Chapter 5, which are vehicles that convey the blessings and realization of former masters. These classes of potency are integral to Sowa Rigpa and delineated in Deumar Tendzin Püntsok's taxonomy of potency (table 4).

We have already introduced the second concept in the triad, *top* or strength, as the overall warming or cooling capacities of a substance due to the dominant elemental dynamic combination driving its physiologic activity. In a ritual context, *top* reflects warming or cooling capacities arising from the power of the moon and sun. However, this strength also operates at more subtle levels, for example, arising from the power of peaceful and wrathful deities during visualization, and is conceptualized through the tantric framework of the "four activities" (*las bzhi*)—pacifying, increasing, magnetizing, or subduing. Peaceful deities provide pacifying influences and increase cooling qualities, while wrathful deities provide subduing or magnetizing influences and a warming quality.

In both medical and ritual contexts, *top* should be carefully understood in relation to *tu* or power, which is defined as the capacity of expressed strength (*stobs rtsal nus pa*). Force is the ability to change the state of another. Power is the

Table 5 Substance properties classified by elemental dynamics. Courtesy of Somānanda Yogi, 2017; adapted with permission.

	ས། **Earth-dominant medicinal substances**	ཆུ། **Water-dominant medicinal substances**	མེ། **Fire-dominant medicinal substances**	རླུང་། **Wind-dominant medicinal substances**	ནམ་མཁའ། **Space-dominant medicinal substances**
Experience	Solidity	Aqueous, moistening	Heat	Motility	Unobstructedness
Function	Resistance/support (firmness of limbs, physical strength, aggregation of body into solid mass)	Cohesion/fluidity (moistens body, makes physical body smooth, aggregation of body into solid mass)	Transformation/ripening (generates heat, matures bodily constituents, improves complexion)	Vibration/growth (physical firmness, movement of limbs, motility and distribution of nutritional essence)	Field of activity for other elements/non-resistance (hollow, spacious nature allows for re-balancing of *nyepa* triad, i.e., *düpa*, disorders)
Activity / Effect on *Nyepa*	Pacifies *lūng*	Pacifies *tripa*	Pacifies *beken*	Pacifies *beken-tripa*	Pacifies *düpa* (*nyepa* triad)
Qualities	Heavy, stable, dull, smooth, oily, dry	Fluid, cool, heavy, dull, unctuous,* flexible	Hot, sharp, dry, rough, light, unctuous,* motile	Light, motile, cold, rough, parched, dry	Pervades all other elemental medicinal substances
Temperature	Mild	Cold	Hot	Cool	None

*Unctuous = greasy, soapy

swiftness with which that force creates change. *Tu* can connote both in different contexts, while *top* expresses the kind of change. In Buddhist practice and ritual contexts, *tu* is the overall impact or force of the potency of meditative concentration, mantra, or prayer, and often relates to the force and swiftness of great compassion, the power of wisdom, and the degree of expression of certain qualities or activities.

As we have seen, in a medical context, the third aspect, *yönten*, refers to a substance's qualities or attributes—specific functional activities produced in the body and the way they harmonize, antagonize, or neutrally engage the characteristics of each *nyepa* pathway. In a ritual context, *yönten* denotes the enlightened qualities imbued in the substances. It refers to the achieved capabilities, blessings, and benefits the substance can now confer, qualities that we examine in more detail in Chapter 5 where we discuss *papta*. *Yönten* can also refer to specific effects of the substance as related to a particular deity, retinue, or ritual cycle.

The *Great Tibetan Medical Dictionary* defines *nü-top-yönten* as:

> [A]n abbreviation for medicinal potency, strength, and quality. Potency as the term describing the benefit or harm from the naturally-occurring qualities of heaviness, and so forth, in the general phenomena [*rang rgyud*] of taste for any given medicine. And within those [characteristics], the state that manifests the ultimate activities of alleviating illness, is called *tu*, the power or force of the taste, potency, and post-digestive taste. Furthermore, the transformation of *tu* into either warming or cooling completes an act [*byed pa phul tu phyin pa*] that thereby abolishes the opposite [characteristics]. This act is called the *top* or strength. All the concurrent phenomena common to both power and strength either suppress those with aversive characteristics or augment those that have the characteristics' affinity. (Jampa Trinlé 2006, 427–28, translation by Tidwell)

In ritual contexts, potency integrates the capacities imbued through means other than the naturally-occurring qualities of taste, technical potency, and post-digestive taste and infuses further layers of capacity, or *nüpa*. Power, *tu*, relates to the degree of this capacity to manifest, and strength, *top*, describes the "coloring" of that capacity toward warming, cooling, pacifying, increasing, magnetizing, or subduing.

Crafting potency: Expelling toxicity, cultivating purity, and designing efficacy

Up to this point, we have discussed the properties of substances as potentialities. Now we move on to consider how processing substances and compounding them into multi-ingredient formulas requires specific understandings of toxicity, purity, and cultivated potency designed for specific effects, or a fostered form of efficacy. Though single substances contribute to Sowa Rigpa's extensive formula library, monotherapies are considered susceptible to undesirable effects, and thus formula design focuses on multi-compound forms. In making any Tibetan medical formula, a physician-*menjor* specialist begins with a base medicinal specimen characterized by its taste, potency, and post-digestive taste, as well as its overall physiologic

effect (often described in terms of its qualities). Ideally, they will have crafted the proper potency profile of the substance through preliminary steps in identification, harvesting, and preparation before formulating it with other substances.

A crucial part of these preparations is the removal and transmutation of toxins, in Tibetan known as *duk*. We therefore start by discussing the concept of *duk* and how medicinal substances are detoxified and prepared to develop beneficial qualities. We then step back to outline various processes and layers through which potency is sculpted in the context of medicinal specimen preparation and formula development, taking as an example the *Four Tantras* instructions for a medicinal flora class in which the whole plant is used. Although specific to this class, the process illuminates all medicinal substance preparations prior to formulation.

Expelling toxicity

The *Four Tantras* detail many minerals, gems, precious substances, flora, and fauna which have significant *duk* that are harmful to the body, and potentially lethal if not properly detoxified (II, 20; III, 89; Yutok Yönten Gönpo 2006, 75–89, 626–30). *Duk* is a multivalent term that can refer to anything that inhibits metabolic function and/or causes harm to the body, from indigestible constituents to chemical or natural poisons and pathogens.[63] Amchis have developed extensive systems for transforming substances to remove and transmute *duk* and thus optimize therapeutic value—allowing medicinal qualities to emerge, so to speak. This is referred to as "taming and purifying" (*'dul sbyong*).

Medicinal substances are prepared through distinct techniques that remove unwanted or harmful qualities while developing beneficial qualities. Substances are detoxified (*dug bton pa*) or tamed—*tülwa*—by eliminating harmful components and purified (*sbyong pa; dag par byed pa*) by retaining and imbuing medicinally potent components and qualities (Yutok Yönten Gönpo 2006, 691–700). Examples of *duk* removal in Chapter 1 include the removal of the dark mineralizations considered undesirable for *chongzhi* and the boiling of the *chongzhi* to remove the soap-like yellowish froth of impurities. In Chapter 2, Van der Valk describes *duk* removal more explicitly in his account of the preparation of the myrobalan fruits: their coarseness (physical *duk* that impedes digestion) needs to be eliminated by grinding, a process that parallels the mental *duk* of ignorance and delusions being eliminated by the pestle and mortar of wisdom and method.

63 For further discussion on the term *duk* see Tidwell 2019, Tidwell and Gyamtso 2021.

Duk is defined as an entity difficult or unsuitable (*mi rung ba*) to metabolize (*'ju ba*) or to which the body has metabolic resistance, in Tibetan referred to as an "incompatible" (*mi 'phrod pa*) and "unmetabolizable" (*ma zhu ba*) substance. The *Four Tantras* defines metabolization as proper separation of nutritional essence and waste product, and their mobilization to respective bodily constituents and excrements (III, 89). Improper metabolism through *duk* interference causes bodily harm. Potencies are "smoothed" (*'jam btsal*), and formulas are developed through processes that heighten certain qualities of a substance's elemental dynamics, creating greater potencies and directed effects. Certain elemental dynamic combinations have affinity (*mthun pa*), heightening their joint activity, whereas others adversely relate by repelling, destroying, or eliminating activity. Affinity and aversity (*mi mthun pa*) relationships are integrally considered in medicine-making.

As we will see in the next section, expelling toxins (taming) and developing desired therapeutic effects (purifying) involve adhering substances to other components, substrates, catalysts, and transformative fluids to make more stable compound forms.

Sculpting potency through processes and layers

The herb class of materia medica in the *Four Tantras* (II, 20)—called *ngomen* (*sngo sman*)—is generally recognized to have rough and cooling potencies (Yutok Yönten Gönpo 2006, 66, 697–98). Herbaceous plant matter tends to be comprised of fibers and substances that produce thick mucosal constituents, which, in turn, have a tendency to block coarse channels of the body and subtle *lūng* pathways, causing fire-accompanying *lūng* in the digestive pathway to expel heat externally and desiccate tissues and fluids, deteriorating the integrity and mass of bodily constituents (Yutok Yönten Gönpo 2006, 697). When used in medicines, they must therefore be prepared properly such that they do not disrupt pathways or harm the digestive fire. One method of preparation is smoothing, whereby the herb is combined with other compatible substances with synergistic potencies, natures, and tastes. Another method involves transforming the herb into a highly concentrated extract called a *khenda*,[64] which is similar to a confection or treacle but comprised of herbal and mineral components.

64 *Khenda* can be added to formulas as a thick, concentrated syrup that has undergone decoction over many days. At other times, *khenda* are dried into glassy solids for storage and then pounded into powder before being added to formulas.

A *khenda* is a type of *menta*—a medicinal chariot that serves as a vehicle for carrying potency. Butter is another kind of *menta*; recall the use of *menmar* as a *menta* for *chülen* (Chapter 2). In addition to conveying the potencies of the substances it contains, a *menta*'s material form has properties of potency in and of itself. This is exemplified by the class of medicine called "pacification medicine," within which *khenda* and butters are classified as two of eight medicine types. As shown in Table 6, each type is characterized by its specific potency attributes as related to its properties as a *menta*. For example, medicinal butters are heavy, nutritious, and warming so they will calm *lūng* disorders. Medicinal ashes are produced through incineration, carrying the property of the fire dynamic, thus treating cold disorders. *Khenda* are stabilizing (*brtan pa*), smoothing (*'jam pa*), and ease digestion (*pho bas 'ju sla ba*), and are therefore known as the primary *menta* with a potency to treat hot conditions. This shows how different kinds of *menta* themselves have specific potencies, even if the actual formulation of a given medicine can accentuate or de-accentuate these properties.

The potency attributes of *khenda* help the medicinal activities of the formula to reach their physiological targets while simultaneously avoiding undesirable effects such as hindering digestion, blocking channel passages, and interfering with *lūng* flow and pathways (Yutok Yönten Gönpo 2006, 698). They also allow for any potency of herbal ingredients to be retained and not diminish (*mi yal*) as can occur more quickly with *menta* such as powders; and not to change (*mi 'gyur*), which can occur if herbs are combined in non-*khenda* forms with other ingredients. Although herbal ingredients tend to be cooling, a *khenda menta* allows this potency of herbal ingredients to be received by the body without overcooling (and damaging) the digestive fire. It is for these reasons that *khenda* are used as a preparation method for medicinal herbs.

Sometimes there are *menta* within *menta*. For example, the first step in making medicinal butter as a *menta* generally involves making a *khenda* as a *menta* for some of the herbal ingredients, so that when they are added to the medicinal butter their properties are smooth and contribute optimally to its overall potency. This targets the rejuvenation, nourishment, and development of the bodily constituents, or *lüzung*, of the recipient and the calming of *lūng*. Chapter 2 describes another distinct layering. Instead of a *khenda*, water provides the initial *menta* to carry the essences extracted from the herbs (in this case, the three myrobalan fruits), followed by milk, then butter. Once finished, the medicinal butter then becomes the *menta* for the final product of the essence extraction or *chülen*. Van der Valk notes how the quantities of the formula's components fluctuate according to availability and the specific intended application. This flexibility in ingredients and compounding profile reflects the overall goal of this particular medicinal butter which is to nourish the body's ability to restore energy, rehabilitate from

Table 6 Eight classes of pacification medicine.

	Medicine Type	Potency Attributes
1	Decoctions/liquids	Primarily for *tripa* and *lūng* disorders
2	Powders	Primarily for *tripa* and *beken* disorders
3	Pills	Primarily for *beken* disorders
4	Pastes	Primarily for *beken* and *lūng* disorders; rebuilding digestive fire, bodily constituents, etc.
5	Butters	Primarily for *lūng* disorders
6	Medicinal ashes	Best for treating cold disorders
7	*Khenda*	Best for treating hot disorders
8	Medicinal beers	Critical for single *lūng* disorders; also combined *lūng* disorders (with *tripa* or *beken*)

weakened states, and heal after long periods of illness. For compounds with more specific and targeted aims, the ingredients, quantities, processing, and directing of the formula are much more precisely specified.

The preparation of herbs follows a set of practices unique to Sowa Rigpa, although they vary regionally in their implementation. In Chapter 1, we approached these practices as a substance's journey through growing, collection and crafting, and consumption, but also noted the phases of *menjor* as outlined in the "Seven Essential Practices for Cultivating Medicinal Quality" from the *Four Tantras* (IV, 12): collection location, timing, removal of toxins, drying environment, storage, refining characteristics, and compounding based on specific properties. Deumar Tendzin Püntsok provided important elaborations on these seven practices, which are still considered the field standards for compounding medicine today (2005, 458–66). His *Crystal Orb and Crystal Rosary* provides the clearest, most elaborate and detailed explanations of materia medica identification, classification, preparation, and compounding of any Tibetan medical commentary text.

There are various methods for cultivating medicinal qualities while harvesting plants, collecting minerals, storing roots, flowers, and fruits, and pre-processing stones. At each step, subtle nuances affect the final potency of the finished formula. For herbs, the initial steps are their harvesting in the proper environment, time, and conditions to maximize their desired therapeutic qualities. Just as Amchi Tsultim removed dirt and impurities from *chongzhi* and boiled off the soap-like yellowish froth (Chapter 1), initial *duk* then needs to be removed from herbal ingredients

by manually removing indigestible parts before the herbs are dried (among other processes). Storage conditions suitable to the herb's potency and qualities further enhance those qualities, as explained in the *Four Tantras*: "Drying and sorting according to its own potency imbues immeasurable qualities" (IV, 12).[65] The contribution of such processes to the shaping of potency cannot be overlooked. As we have seen, the light of the autumn harvest moon is considered a highly potentiating environment in which to place white *chongzhi* and this becomes a central aspect of the final potency of the formulated compound. But even storage locations—for example, dark and cool to accentuate cooling qualities; warm and light to facilitate warming qualities—form critical aspects of the potentiating process.

When ready to begin compounding, one first smooths the specimen by balancing its potencies through processing and combination with other medicinal substances. This is the key step that drives the multi-component formulation approach described in the *Four Tantras* (Yutok Yönten Gönpo 2006, 693, 697–700). The three methods for smoothing (*Four Tantras* IV, 12) combine substances to create a balanced formulation that: (1) complements taste profiles and potency characteristics to address the overall hot or cold nature of the condition to be treated; (2) directs the formula toward a specific target organ, fluid, or pathway imbalance; and (3) minimizes the deleterious effects of aggravating *lūng*, extinguishing the digestive fire, and deteriorating bodily constituents. In this step, the *menta* that will "carry" the properties can be introduced. The *menta* can assist in balancing the ingredients, directing the formula's activities, and minimizing adverse side effects. The final step, called "compounding for suitability" (*'phrod par sbyar ba*), directs the overall formula toward the appropriate taste, potency, or post-digestive taste through further enhancement.

All flora, fauna, mineral, and metal substances should go through similar processes of identification, harvesting, detoxifying, smoothing, and compounding. Geologic materials such as *chongzhi*, however, often require additional steps of specialized rinse-washing and the removal of undesired impurities and oxidates before their detoxification (see Chapter 1). Detoxification can involve the addition of other substances to expel *duk*, to rigorously smooth, to cause caustic reactions, and to dry, heat, and cook the primary substance. Furthermore, specific substances are integrated along the way to direct therapeutic effect. Intermediary steps also break down, open, and transform substances through further conjoinings. Geomedicinal materials are often enclosed in specialized vessels and adhered to substrates when they are cooked, burned, incinerated, or otherwise modified. The

65 Tidwell's translation of Yutok Yönten Gönpo 2006, 697: *skam gsed … rang gi nus ldan yon tan dpag tu med.*

integration with or adherence to *menta* delivers the desired therapeutic activity to the patient. *Menta* may variously contribute to taming toxicities, smoothing functions, or directing formula activity. Formula effectiveness is characterized by the degree to which potency is properly imparted to a patient. Formula components are therefore designed to affect specific physiological pathways without toxicity effects, digestive fire debilitation, or bodily constituent harm.

Detoxifying, smoothing, and directing the formula's potency are acts of purification and potentiation. The degree and type of processing affect the speed, efficiency, and accuracy with which the formula's potency is delivered. For example, processing for a decoction powder aims at swift delivery of a formula's potency, critical for treating hot illnesses that require fast-acting effects. Processing for pills, in contrast, aims to deliver a formula's potency gradually, which is essential for treating cold diseases that are often of a chronic nature and have a slower recovery time. Textual indications detail the ideal processes to be followed in specimen preparation and formulation development, but physician-pharmacists employ steps differently depending on their lineages, experience, and available resources.

Imbuing potency: Ritual, meditative, and alchemical modes of transformation

In addition to medicinal specimen preparation and formulation development, the layering of potency through ritual means is an integral aspect of many Sowa Rigpa practices. This applies to all classes of formulas and applications, since many undergo various forms of blessing or consecration or are otherwise imbued with potency by the ritual practices and (in some cases) enlightened qualities of physicians and other ritualist adepts who interact with them. Ethnographic examples in this book include recitation of the Medicine Buddha mantra (concurrently performing the associated visualization) while making moonlight *chongzhi* (Chapter 1), the *sādhanā* practices and *chülen* methods involved in making *menmar* (Chapter 2), the personal practices and retreats of physicians (Chapter 4), and *mendrup* (accomplishing medicine) rituals (Chapter 5). Ritual means are also used to prepare materia medica prior to their collection by engaging their natural environment in certain ways, such as making *sang* (*bsang*) offerings, as well as during their collection, for example, by reciting specific mantras.

As we have seen, the potency-strength-quality, or *nü-top-yönten,* triad is a key framework for understanding potency in ritual contexts. In addition, insights conveyed to Tidwell by her teachers also point to theories of transmogrification and alchemical transformation as helpful in understanding the potency of certain substances. Transmogrification here refers to the transformation of the appearance,

form, qualities, and activities of an entity, which can include expanding or magnifying its effects, subduing certain qualities, and pacifying or enhancing specific characteristics. Alchemical transformation refers to changing the form or nature of a substance, including the characteristics of its mineral, metal, floral, and faunal components, through intensive processing, exposure to particular conditions—or specific ritual engagements.

These theories help us to understand the potency of a particular subset of medicinal and ritual substances that have been transformed from mundane materials into supramundane "pure" forms through concentrative meditation, prayer, mantra, and various tantric and yogic practices. The materials in question include *mendrup*, *mani rilbu*, *dütsi chömen*, *ringsel (ring bsrel)*, *papta* and various *samaya* substances called *damdzé* (*dam rdzas*), which are discussed at length in Chapter 5. Such substances are seen to confer blessings through their materiality, which has been imbued with the realization of the lineage and master(s) who cultivated and consecrated them. In interaction with the qualities and characteristics of the person imbibing them, these substances are understood to impart, and thus contain, the capacity to heal, eliminate obscurations and imbalances, bring greater realization, awareness, and spiritual capacity, and cultivate enlightened qualities or siddhis. These transmogrified substances thus have the capacity to transmogrify the recipient by literally fermenting or ripening their mindstream. In the case of *papta* substances, they are also "steeds" or chariots that carry the potency of lineage and realization of past masters into new batches of medicinal and ritual substances, even when they are added in minute amounts, as well as into the mindstream of those who imbibe them (Chapter 5).

Thirteenth-century treasure revealer Guru Chöwang details the process of making such sacred substances, using *dütsi chömen* as an example (1979, 305–24). He describes it as a process of turning medicine into ambrosia. *Dü* (*mdud*) refers to the *māra* or demons of ignorance and conceptuality, while *tsi* (*rtsi*) is the antidote of primordial awareness (*rig pa ye shes*). The *Tantra of the Secret Cycle* (*Gsang ba'i 'khor rgyud*) explains: "When the elixir [*rtsi*] of the truth of dharma is applied to *saṃsāra*, which is like a *māra* [*bdud*], it is called nectar [*bdud rtsi*]" (Tenzin Gyatso 2007, 263). Dorjé Dütsi (Skt. Vajrāmṛta) is a focal deity for the *Eight Means of Accomplishment* (*Sgrub pa bka' brgyad*) practice cycle in the Nyingma school, and also became important for a particular set of *mendrup* practices. This signals the connections between *mendrup* practices situated in Medicine Buddha or *Yutok Nyingtik* cycles and tantric Nyingma traditions.

Essence extraction practices are closely connected with *dütsi chömen* practices in that the essence of specific substances are transmuted into consecrated nectars, or *dütsi,* which then become a central part of yogic-contemplative practice. Van der Valk describes Dr. Arya Pasang Yonten preparing his students for the foundational

preliminaries of such practice cycles (Chapter 2). The essences of each element are symbolically extracted from the yogin body, consecrated, and then offered to one's meditation deities, who transform them into ambrosial nectar and bestow blessings to the yogi, in effect rendering the yogi's body immortal, enhancing health and bestowing siddhis, among other benefits.

The paradigm for transforming the mundane into the supramundane, or extracting essences for yogic transmutation, derives from Nyingma tantric theory.[66] The Guhyagarbha Tantric cycle provides the foundation for many of the related Nyingma practices. It is also applicable to many consecrations used in medical contexts, including in *Yutok Nyingtik* practices and those related to its medicine protectors, the Zhanglön Degu (*Zhang blon sde dgu*). Additionally, the cycles of Guhyasamāja, Cakrasaṃvara, Hevajra, Vajrayoginī, and Kālacakra also inform the practices of amchis, depending on their lineage and institutional affiliations. It is important to note that a maker or a recipient of medicine with a specific vow related to these lineages and/or ritual cycles will be able to heighten the medicine's capacity or potency. However, anyone receiving the substance will be able to benefit in both mind and body. Most *mendrup* rituals invoke the Medicine Buddha or Yutok Yönten Gönpo.

Specific deities or practice cycles are seen by amchis and ritual specialists to have particular health benefits. For example, in Qinghai, the deity Black Mañjuśrī is seen as particularly beneficial for head and neck disorders, Vajrapāṇi for liver and gallbladder, and Parṇaśavarī for virulent infectious disease of epidemic proportions. Vajraṇakhī is used for a variety of mental and physical illnesses, as well as the removal of obstacles related to the degenerate age.[67] Pills can be consecrated with these intended target illnesses in mind through rituals invoking these deities. However, generally, the *Yutok Nyingtik* practice cycle and its retinue of medicine protectors are invoked by amchis as the primary consecration ritual for Sowa Rigpa formulas.

As described in the final chapter of the *Explanatory Tantra* (II, 31) and illuminated in ethnographic narratives throughout this book, the personal development of the physician and their spiritual realization through empowerments, initiations, transmissions, teachings, extended practice, blessings, and long-term retreats are also believed to confer a degree of potency and power to medicine, heightening its beneficial capacities.

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66 For descriptions of the transmogrification of the body as it relates to dying, see Tidwell 2024.

67 In the *Four Tantras*, the degenerate age is a period characterized by a proliferation of virulent infectious disease, persistent toxins, environmental destruction, and greed, rage, and delusion. See Tidwell and Gyamtso 2021.

Discussion

In this chapter, we investigated how potency is understood by amchi teachers and *menjor* specialists through their reading of classical texts, their embodied knowledge, and their sensory and phenomenological experiences. We also considered the contextual and interactive relationships involved in medicine compounding processes, as well as the effects produced when medicines are ingested by patients. Amchis see their core texts as timeless, living repositories that extend insights across generations, contexts, and experiences. While this approach might seem ahistorical and unnuanced to Tibetologists and philologists, for most amchis texts are understood as blessings, representing the enlightened transmission of knowledge that enables the alleviation of suffering in the bodies and minds of all beings. This book is more about potency as craft, practice, and process than exhaustive histories and detailed theories. But it is crucial to have some grasp of the core framework informing amchis and *menjor* specialists as they cultivate potency through multiple steps and layers, from specimen identification, harvesting, drying, and storing, to processing, combining, compounding, and consecration.

This chapter has been written from the perspective of amchis who draw on vernaculars in biology, chemistry, and physics in their articulation of the subtle material and energetic interactions they elicit and forge in *menjor* endeavors. The scientific paradigms of Euroamerican medical disciplines provide a resonant corollary for amchis seeking to communicate nuanced explanations of Sowa Rigpa and *menjor* specifically. Amchis are considered the naturalists of the Tibetan cultural world. They engage in systematic inquiry into the physical body, the environment, and the social relations that affect health and illness. This knowledge is gathered and added to through observation, experimentation, and the testing of theories. Specific forms of evidence emerge from sensory investigations, diagnostic processes, and systematic assessments of therapeutic effects. Amchis associated with the medical colleges mentioned represent this knowledge through terms they feel express the complexity of Sowa Rigpa, identifying synergies with understandings from global scientific discourse to facilitate conceptual bridges. In doing so, they simultaneously seek to decolonize and de-hegemonize Euroamerican interpretations of their medical knowledge by demonstrating the vast underlying systems and sophisticated analytical frameworks that are indigenous to their own intellectual tradition and craft. We can see similar moves taking place in Ayurveda (Joshi, Patwardhan, and Valiathan 2023) and "traditional" Chinese medicine (Scheid 2016).

Attempts to understand and explain the effectiveness of any formula reveal both overlaps and divergence in evaluative means between the Euroamerican and Tibetan medical traditions. For Euroamerican pharmacology, efficacy is the intensity of the therapeutic effect for a given intervention, as measured by dose-response curves of

activity versus toxicity for a given drug. In Sowa Rigpa, efficacy is characterized by the degree to which potency is properly imparted to a patient by way of the designed formula so that it acts on specific physiological pathways without toxicity consequences, digestive fire debilitation, or bodily constituent harm. We have seen how formulations can be compounded by taste, post-digestive taste, technical potency and/or compounding methods, and also how potency has its own taxonomy—from material potency to essence potency. We also touched on numerous other ways to categorize and elucidate aspects of potency, as articulated most clearly in the contributions of Deumar Tendzin Püntsok. Our presentation of the potency-strength-quality (or *nü-top-yönten*) triad shows how the *Four Tantras* not only provides a key framework for understanding potency in the *menjor* context but also in ritual practice cycles, due to the way that it nuances material potency and essence potency, and builds upon them through corollary processes of tantric, meditative, and ritual origin.

Shifting our attention from the properties of materials as potentialities to the crafting of potency, we outlined understandings of toxicity, purity, and cultivated potency that are fundamental to the multi-step material processes through which the *menjor* practitioner sculpts potency and designs the overall effects or qualities of a given formula. Prior to collection, materia medica are imbued with capacities through their elemental dynamics and interdependent relations—capacities that can be enhanced through ritual engagement with their natural environment. Medicinal quality is then cultivated through the seven essential practices. Initial steps include the harvesting, preparation, and storage of materia medica in specific ways to maximize their desired therapeutic properties. Substances are then tamed and purified to expel *duk* and enhance properties, including through the three smoothing methods. The final steps of crafting potency culminate in further enhancements to direct and potentiate a given formula of multiple ingredients and the transformations they have undergone.

The final section provided a glimpse into the vast topic of imbuing substances with specific qualities of potency through concentrative meditation and ritual and yogic practices. While the potency of all formulas and classes of medicine is layered through various ritual means, in the case of a particular subset of medicinal substances, this entails the transmogrification of mundane materials into supramundane pure substances. The ideas explored here relate particularly to Chapters 2 and 5, which explore the conferring of blessings through the materiality of substances imbued with the potency of lineage and the realization of the masters who cultivated and consecrated them. These substances confer a specific transformative potential that is also interactive with the qualities and characteristics of the recipient imbibing them. The substance itself is transmogrified enhancing its healing capacity, but so too is the recipient, allowing for a fermentation of awakening and transference of realization.

Amchis receive the foundations for understanding potency through textual knowledge—reading, memorizing, receiving oral transmissions, and learning from the instructional teachings of their masters. However, deep understandings of potency arise from a lifetime of embodied experience, working with the materiality of substances and their energetic qualities, and assessing changes in and the layering of potencies through finely honed perceptual capacities. Amchis' capacity to craft potency is cultivated through the imprinting of their body-minds and senses with material forms, textures, tastes, smells, sounds, and subtle attunements, as well as through meditative and ritual practice. *They* become potent as medicine-makers, just as the substances they produce become potent medicines. In the next chapter, which explores different amchi training environments, we see how the capacity to cultivate potency can be learned through multiple modes of engaging with texts, nurturing teacher-student relationships, transmitting lineage, and cultivating experiential knowledge.

CHAPTER 4

Institutions as (Im)Potent Modes of Education

This chapter explores the changing dynamics of contemporary Tibetan medical education by introducing three recently established Sowa Rigpa schools in Kathmandu, which Jan van der Valk visited in 2019 and 2022. Each presents a unique pathway toward the professionalization and institutionalization of Sowa Rigpa: the first is government-supported, the second emphasizes lineage and tantric transmissions, and the third is strongly shaped by monastic patronage. Building on the pioneering work of Sienna Craig (2005, 2007, 2008, 2012) on the identity politics of amchis organizing and lobbying for government recognition in Nepal, our aim is to gain further insight into the ambivalence, risks, and uncertainties generated by the drive for standardized curricula and certification. We analyze the impact of emerging educational configurations on the transmission of both *menjor* skills and ritual practices traditionally associated with medicine. Inspired by Laurent Pordié and Calum Blaikie's (2014) application of Ingoldian concepts to Sowa Rigpa medicine making, we argue that the learning context of each school is characterized by a different taskscape—a mutually interlocking ensemble of activities (Ingold 1993) in which students must acquire skill in order to qualify as competent practitioners.

Pordié and Blaikie (2014) show how the reconfiguration of amchi taskscapes in contemporary Ladakh is deeply embedded in social, political, and economic processes and dynamic "currents of tradition," a concept borrowed from Volker Scheid (2007). They observe a general shift from enskilment to formal education, leading to a widening gap between rural and urban amchis. Enskilment centers on hands-on training as part of extensive master–disciple relationships, leading to self-sufficient practitioners who have gradually acquired the skills to produce a considerable range of their own medicines, often by hand, using simple tools such as grinding stones. This apprenticeship mode of transmission is very different from formal education, which occurs in colleges that foreground textual and theoretical knowledge. Graduates from these "state-led, market-driven and performance-based

institutional settings" (Pordié and Blaikie 2014, 365) hold a diploma certificate, having passed oral and written examinations. After a clinical internship period they become professional clinicians geared toward working in the public health system, and are expected to purchase ready-made formulas from larger pharmacies.

In something of a contrast to the Sowa Rigpa landscape in Ladakh, Blaikie and Craig (2022) point to the continued prevalence in Kathmandu of what they call the "clinic+pharmacy" cottage industry mode, in which a single amchi acts as a physician–pharmacist overseeing production on a relatively small scale. This chapter raises questions about how amchi taskscapes in Kathmandu might be changing in light of the increasingly evident divide between clinic and pharmacy in the wake of educational institutionalization. It thus complements the fine-grained descriptions of artisanal apprenticeship in Chapter 2.

We start by providing some brief context on the professionalization and institutionalization of Tibetan medical education before introducing key places, organizations, and people involved in efforts to secure national recognition of Sowa Rigpa in Nepal. The main body of the chapter introduces the three schools, their educational programs, and some of their teachers and students. First, we visit the Sowa Rigpa International College (SRIC), which has established a state-certified degree program in affiliation with Lumbini University. We then move on to the Traditional Buddhist Sorig Institute (TBSI),[68] where we meet its founding teacher Amchi Urgian Kalzang, who voices a strong critique of modernized education.[69] Finally, we arrive at the School of Four Medical Sciences of Early Tradition, known locally as the Sorig Bumzhi School (SBS), which offers an example of how classroom and lineage-based education can come together. The chapter concludes with reflections on what institutionalized *menjor* practices might mean for the future of Sowa Rigpa professionals and the making of potent medicines.

Professionalization of Sowa Rigpa education

Professionalism and professionalization are longstanding topics in the sociology of work. Neo-Weberian critiques have defined professionalization as "the process to pursue, develop, and maintain the closure of the occupational group in

68 TBSI is now known as Samye Sowa Rigpa School of Traditional Tibetan Medicine, but the original name is retained here for temporal consistency.

69 Takkinen's (2021) doctoral dissertation devotes entire chapters to SRIC (208–51) and TBSI (252–90). These provide excellent context that we will not recapitulate, as well as astute reflections on several issues that we refer to where relevant.

order to maintain practitioners' own occupational self-interests in terms of their salary, status and power as well as the monopoly protection of the occupational jurisdiction" (Evetts 2013, 782). This often coincides with the solidification of state authority, integration into a capitalist market economy, and—in the case of Tibetan medical education—increased biomedical influence. In their foundational work on the rise of nonorthodox medicine in Britain from the late 1960s onward, Sarah Cant and Ursula Sharma (1999, 77) note how the establishment of professional institutions—including practitioner associations and colleges often spearheaded by charismatic individuals—fomented a shift from apprenticeships and cottage industries to "what might be seen as the rationalization of complementary medicine."

In addition to Craig's aforementioned works and Blaikie's research on the Ladakhi Sowa Rigpa cottage industry (2009, 2013, 2018), these processes have received attention in anthropological studies on Tibetan medicine by Florian Besch, Craig Janes, and Martin Saxer. Besch (2006, 2007) provides valuable insights into the highly localized yet interconnected transitions that have occurred with monetization in the Trans-Himalayan periphery of Spiti (see also Besch and Guérin 2022). Janes (1995) documents a broad shift from more pluralistic healing structures in early modern Tibet to secular and scientific bureaucratic institutions under centralized PRC government control. Saxer (2013, 22–58) further traces the creation of a Tibetan medical industry "from pharmacy to factory" in the PRC between 1995 and 2005, highlighting issues of (in)compatibility and creative adaptation in the wake of GMP implementation (see also Cuomu 2022).

While these contemporary transformations are significant, the institutionalization of professional medicine has longer roots in Tibet (Gyatso 2004). It goes back at least to the establishment of the first officially sanctioned medical houses (*sman grong*) and the title of "official physician" or *lamenpa* in the thirteenth and fourteenth centuries of Mongol–Sakya hegemony (Hofer 2018, McGrath 2023), and culminated during the Ganden Podrang government period (1642–1959) (Van Vleet 2015, 2018). Medical academies installed by the Lhasa government—Chagpori in the late seventeenth century, Mentsikhang in the early twentieth—operated alongside privately tutored lineage physicians, medical houses, monastic training centers, and small academies in a heterogeneous semi-professional sector embedded in a broader therapeutic landscape of tantric practitioners, mediums, and astrologers, among others (Hofer 2018).

The three Kathmandu schools in this chapter reflect this historical heterogeneity. Large Tibetan medical institutions in Lhasa, Xining, and in exile continue to act as exemplars, often setting the agenda, as reflected in India's recognition of Sowa Rigpa in 2010 (Blaikie 2016, Kloos 2016). At the time of writing, national recognition has not been achieved in Nepal, but it is a work in progress in which the first of the three schools discussed here, SRIC, has played a central role (see

Takkinen 2021, 174–207). However, Kathmandu also differs in many ways from Ladakh, Lhasa, and Dharamsala. As Nepal's multiethnic capital, shaped by Hindu caste hierarchies and geopolitical tensions between India and the PRC, it holds a special position as a refuge for Tibetans and Tibetan monastic institutions that were not initially given space to flourish in the Geluk-dominated Dharamsala area where the Fourteenth Dalai Lama took residence more than sixty years ago. This includes the Nyingma-Kagyü and Bön sects that fund the other two medical schools covered here, TBSI and SBS.

Arriving in Kathmandu

The great white stupa of Boudha, situated in the northeastern outskirts of Kathmandu, has long been a crossroads for long distance trade and Buddhist pilgrimage. It is said by Tibetans to fulfill the sincere wishes of anyone who lays eyes on it. Nowadays, the surrounding area boasts the Kathmandu Valley's characteristic melting pot of Newari tantric Buddhists and Hindus, as well as Tamang, Sherpa, and Gurung Buddhists from the uplands who have settled here or come down for the winter. Since the second half of the twentieth century, an influx of Tibetan refugees has led to the construction of dozens of monastic institutions in Boudha, coinciding with rapid urbanization and booming international tourism.[70] Arriving in Boudha in 2019, I (Jan van der Valk) joined the steady clockwise stream of people on the *kora* (*skor ra*), circumambulating the stupa while watching devotees bow and touch the small Licchavi-style stupas and brass statues enshrined in the prayer-wheel-lined wall around the dome. In the multi-storied buildings encircling the stupa alone, three Sowa Rigpa clinics with multilingual signboards (Tibetan, English, Nepali, Chinese) were attracting the attention of passersby.[71]

During my five-week stay in Kathmandu, I found ten active Sowa Rigpa clinics within twenty minutes walking distance of the Boudha stupa and several more near the Swayambhu stupa and in the old heart of the capital. Sowa Rigpa has centuries-old roots in Nepal's Himalayan region as the dominant scholarly medical tradition (e.g., Lama, Ghimire, and Aumeeruddy-Thomas 2001, Millard 2005). However, this profusion of urban clinics catering to an international clientele is a more recent phenomenon. Kunphen proudly introduces itself as "Nepal['s] first Tibetan Medical Center" on its website. Located in Chhetrapati (and now with a branch clinic in Boudha), Kunphen's clinic and medicine factory were

70 On tourism and pilgrimage sites, see, e.g., Dowman 2022, Howard 2016.

71 Van der Valk, fieldnotes, August 20, 2019.

the first to obtain government registration in 1973, facilitated by the founder Dr. Kunsang's successful treatment of the late King Tribhuvan and his excellent reputation and connections. This gave Kunphen a quasi-legal status under the Ministry of Health as a clinic that was neither designated "Tibetan" nor placed under the direct control of ayurvedic or biomedical authorities. Several other amchis followed suit over the years. Kunphen was thus the pioneer of the Sowa Rigpa cottage industry production that prevails in Nepal due in part to the lack of state recognition, regulation, and investment, but also to discourses about the advantages of small-scale artisanal production (Blaikie and Craig 2022, 254–55).

Whenever I entered the dispensary and waiting room of Kunphen's Boudha branch, there would be several patients sitting on benches while two young women in white lab coats counted pills to fulfill the doctor's prescription. While this may seem unremarkable, it points to a key concern of this chapter: the ongoing professionalization of Sowa Rigpa practice and the divisions of labor it brings. Dispensing staff in Kathmandu's Sowa Rigpa clinics are almost exclusively women without formal Sowa Rigpa training. This reflects a broader feminization of medical professions (Riska 2010, 345–48), which generally manifests in the relegation of subordinated occupations such as nursing and midwifery to women, but in this context also in the increasing number of female Sowa Rigpa practitioners and students.[72]

Of the twenty Kathmandu amchis I interviewed in August–September 2019, eleven were active clinicians not making their own medicines of whom four were or had been teaching at SRIC. The other nine were pharmacists, two of them clinician-pharmacists involved in teaching. Seven of the nine adhered to the clinic+pharmacy model; the other two were senior male practitioners who had graduated from Chagpori Tibetan Medical Institute (CTMI) in Darjeeling, India, and specialized in the production of medicines and herbal products, respectively, while only rarely seeing patients. Notably, only one of the five female amchis I interviewed was involved in *menjor*: Dr. Sonam Pelmo, a Bhutanese who had studied at Sarnath's Central Institute of Higher Tibetan Studies (CIHTS) and was supervising several pharmacy workers at the Himalayan Indigenous Medicine section of Boudha's NGO-funded integrative Shechen Monastery clinic (Blaikie and Craig 2022, 260–62), as well as guest teaching at SRIC.

72 On the complexities surrounding the increased representation of female traditional physicians in Asia since the 1980s, see: on Chinese Medicine, Zhan 2009, 145–73; on Ayurveda, Abraham 2020, Cameron 2010; on Sowa Rigpa, Fjeld and Hofer 2011, Hofer 2015, Tashi Tsering 2005.

Besides urban clinics, pharmacies, and herbal product manufacturers, two other types of institutions have come to shape Sowa Rigpa in Nepal: practitioner associations and medical schools. Since its inception in 1998, the Himalayan Amchi Association (HAA) has been one of the main drivers of professionalization. Its mission is "to revitalize Tibetan medicine as a means of providing sustainable, culturally appropriate healthcare in remote, agropastoral communities in Nepal" and "to garner financial support and professional recognition from the Nepali government and international donors, and to conserve natural resources on which *amchi* depend" (Craig 2005, 417). In the broader context of Nepal's checkered political climate, HAA's success in lobbying for state recognition has been limited due to a complex interplay of personal and regional interests, including the dominance of practitioners from the rural districts of Mustang and Dolpo (Craig 2007, 2008, 2012). HAA has relied on strategic essentialisms, representing its members as marginalized citizens and practitioners of ethnomedicine, and speaking to agendas of biodiversity conservation, development, medical pluralism, and the preservation of Indigenous knowledge, thereby reconstructing tradition through a teleology of cultural and ecological decline. But, as Craig (2008, 72) puts it, "*amchi* are never just *amchi*." In the process of making this term legible to the Nepali state, a plethora of internal differences have been condensed into a single professional marker that silences, among other things, the considerable heterogeneity of medical training, experience, and expertise that arise within and across places, religious affiliations, lineages, and economies.

SRIC was established in 2016 along similar lines to HAA, albeit drawing on an expanded set of social actors. When I spoke to its founding director Dr. Tenjing Dharke and board member Tashi Phuntsok on a rainy September morning in 2019, they emerged as the driving force behind government recognition in Nepal at that time.[73] According to his business card, Dr. Dharke was not only director of SRIC but also: chairman of the Sowa Rigpa Association Nepal (SRAN), a register of practitioners that provides certificates to amchi members; vice president of Sorig Khang International Nepal (SKIN), an NGO under the guidance of Dr. Nida Chenagtsang, who was involved in the establishment of SRIC;[74] and head of his

73 Dr. Tenjing Dharke, interview with Van der Valk and Tashi Phuntsok (who assisted with translation), Kathmandu. September 1, 2019.

74 Nida Chenagtsang is a lineage holder of the Rebkong Ngakpa tradition and graduate of Lhasa Tibetan Medical University (1996). Invited by Chögyal Namkhai Norbu (1938–2018) to teach Sowa Rigpa in Italy, he built an international following through various organizations and projects. On frictions arising through the founding of SRIC, which left some lineage practitioners feeling increasingly marginalized, see Craig and Gerke 2016, 110–14; Takkinen 2021, 195–205.

own clinic in Swayambhu—Phende Himalayan Sorig Center—which has several branches. Dr. Dharke hails from Mustang. His root guru Tashi Choesang Bista is the father of the two co-founders of the Lo Kunphen Mentsikhang and School in Mustang, who have played key roles in HAA over the years (see Bista and Bista 2005, Craig 2012). Given HAA's limited success and lack of permanent presence in Kathmandu, Dr. Dharke had taken the lead in (1) successfully establishing a state-certified education program through SRIC in affiliation with Lumbini University and (2) lobbying for government positions for amchi graduates from SRIC similar to those established for Ayurveda graduates.

Backed by a small elite of successful Kathmandu amchis, as well as funding and increased visibility through SKIN, Dr. Dharke's aim was to establish a Sowa Rigpa Council recognized under the Ministry of Health. He explained that gaining recognition required more "evidence" in the form of English-language books on Tibetan medicinal plant surveys, references to classical texts, and practitioner biographies. His goal was to document Sowa Rigpa in Nepal and its scientific nature to convince Brahmin government officials that it is "not some kind of shamanism, like *jhākri*." The Minister of Education had offered to integrate Sowa Rigpa into the Department of Ayurveda and Alternative Medicine, but this was not deemed satisfactory. Dr. Dharke and his entourage wanted Sowa Rigpa to be framed as an independent medical tradition with roots in Nepal. After all, the Medicine Buddha is an emanation of the historical Buddha Siddhartha Gautama, who was born in Lumbinī—in contrast to the arguably more foreign Indian tradition of Ayurveda. Until a Sowa Rigpa Council is established, SRIC's graduates will not receive official licenses to practice. This was one reason for setting up SRAN: issuing a signed "letter of honor" in lieu of a formal certificate would provide protection to those graduates and other amchis working in Nepal (Takkinen 2021, 186–95).

Sowa Rigpa International College (SRIC): An institution with a political agenda

SRIC is located near the Boudhanath stupa, in the relatively green and quiet Jorpati suburban municipality. I visited a few days after speaking with Dr. Dharke. At the entrance to the reception area, the blue-on-white logo caught my eye (fig. 60). It looked familiar, and I later realized why: its color scheme and circular layout with two branches match those of the World Health Organization (WHO) logo, while the shield in the center depicting a European-style book is a recurring theme in university coats of arms. Together with an added globe, this clearly shows SRIC's international aspirations.

Figure 60 The SRIC logo, signaling global aspirations, features prominently at the entrance to the main school building. Kathmandu, September 2019. Photo J. van der Valk (CC-BY-SA 4.0).

Penpa Lhamo, the institute's secretary who doubled as a Tibetan language teacher, enthusiastically gave me a tour of the college. It consisted of two rented buildings, one housing the two classrooms, a library, and a large assembly hall, and the other a women's dormitory. Female students were in the majority; the few young men mostly stayed in the college building. The college enforced strict rules to maintain a disciplined learning environment, with a daily schedule that included five hours of classes. It had previously rented a third building for foreign students, because "they might like some more freedom," Penpa Lhamo explained.[75] But only one foreign student remained: a Finnish mother of three who had just started her fourth year. SRIC remained "international" because all teaching was officially in English, as promoted by SKIN and required by Lumbini University for accreditation. But Dr. Sonam Pelmo, who taught one module a week at SRIC on the *Four Tantras*, later told me that although her curriculum and slides were in English, she was teaching in Tibetan "because the students [have to] understand anyway."[76]

There were three batches of students who were in their fourth, third, and second year of the program, respectively. In total there were forty students and little space for more. The 5.5-year program consisted of 4.5 years of coursework and a one-year internship and led to a Bachelor of Sowa Rigpa Medicine & Surgery awarded by Lumbini Buddhist University, deemed equivalent to the traditional

75 Penpa Lhamo, conversation with Van der Valk, Kathmandu, September 3, 2019.

76 Dr. Sonam Pelmo, interview with Van der Valk, Kathmandu, September 3, 2019. For an outline of the SRIC curriculum, see Takkinen 2021, 323–25.

kachupa degree.[77] In 2018, the college organized a herbal excursion of about a month for third- and fourth-year students. This turned out to be expensive and was not offered annually. The herbs that the students collected were stored in plastic buckets with lids in a small medicine room containing materia medica samples for teaching purposes. There was no on-site clinic nor funds to hire an amchi; I was told that there would not be enough patients for a full-time position.

There was at least one biomedical module per semester, taught by members of Nepal's Medical Council in their spare time. Penpa Lhamo explained that it had been included so as "not to be behind others when working in an international environment." There were also teachers for Buddhism and astrology. The main Sowa Rigpa teacher was Dr. Tenzin Jinpa, a monk and Men-Tsee-Khang (MTK) graduate of 1992 who obtained an advanced *menrampa* (*sman rams pa*) degree in 2009. The college strongly relied on local amchis as guest lecturers. They had been educated at various institutions including MTK in Dharamsala, CIHTS, and CTMI. The secretary presented this as an advantage: "This way, the students are introduced to a variety of perspectives and teaching methods." Each hour-long lecture was followed by a fifteen-minute break; one started at 7 a.m. due to the availability of some guest lecturers who needed to be in their clinics during office hours: "We want to get the best," Penpa Lhamo explained.

Younger institutionally trained amchis working in Kathmandu generally agreed that they had received insufficient training to make their own medicines. MTK-trained doctors who were not selected for pharmacy internships generally relied on pills and products made by others and acknowledged their lack of *menjor* expertise. One of SRIC's guest lecturers, a doctor who saw patients at the nearby MTK Jorpati branch, had explicitly requested not to teach *menjor* subjects. Dr. Tenzin Choezom, a full-time lecturer who occasionally saw patients at Kunphen's Boudha branch clinic, was teaching pacifying medicines (*zhi byed kyi sman*) and pharmacological chapters from the *Subsequent Tantra* when we met after my tour of the college.[78] Born in Lhasa and schooled in Nepal, she had completed the ten-year degree program at CIHTS in Varanasi, then called the Central University for Tibetan Studies (CUTS). The first four years covered Tibetan grammar and literature, Buddhist philosophy, English, Tibetan astrology, medical history, and basic Sanskrit. Only then could she take the Sowa Rigpa entrance exams, finally earning her *kachupa* degree in 2016. Reflecting on her education, she said: "It is like making food in

77 The *kachupa* degree parallels a bachelor's degree in Sowa Rigpa and includes a complete study of the *Four Tantras* and its key commentaries. See Tidwell 2017, 21n8.

78 Dr. Tenzin Choezom, interview with Van der Valk, Kunphen branch clinic, Boudha, September 16, 2019.

a microwave or on a stove; the stove takes more time, but the food is more delicious." She interned at a biomedical hospital for two months and with the renowned Amchi Lobsang Lama at Boudha's Shelkar Clinic for six months. Perhaps due to her academic credentials and ability to speak Tibetan, Nepali, and English, the SRIC principal asked her to join the college almost immediately after her graduation.

When asked how she learned *menjor* at CUTS, Dr. Choezom replied "both in theory and practically." In the mornings they had classes and in the afternoons could go to the pharmacy to observe the workers making medicines. Sometimes they participated. Very occasionally this practical training included specialized detoxification practices, such as mercury processing. She felt confident to make medicines on her own, but not to see patients ("maybe after eight to ten years"). Neither did she have sufficient funds to start her own clinic. Comparing the Tibetan medical institutes in India, Dr. Choezom remarked:

> People say that [us] Varanasi students can explain the *Gyüzhi* [*Four Tantras*] word-by-word and have a thorough grasp of medical history, but that we have less knowledge of practical pulse reading and therapies compared to Chagpori and Men-Tsee-Khang [amchis]. In medicine making, Varanasi [students] should be better. At least those who have freshly graduated will remember.

At SRIC, there was some instruction on dosage forms such as decoctions, pills, and medicinal beer (*sman chang*). But Dr. Choezom acknowledged that there was a lack of practical training, especially on the detoxification of precious metals, which was additionally too expensive. She also identified other constraints, including a lack of time and the limited number of hours per subject, especially when combined with the mediocre language skills of students who do not come from Tibetan schools. She had to read each verse of the *Four Tantras*, break it down, explain its literal meaning, and then contextualize it using a mix of Tibetan, Nepali, and English. This left no time to engage with commentaries. She concluded that "some students only want the certificate, but a few listen very carefully and have enthusiasm." Adding that "society has become very challenging," she commented: "In Nepal, we don't have a good example from the government; people adopt the same mindset, to get everything quickly."

After my tour with the secretary and interview with Dr. Choezom, I spoke to a fourth-year student who was in between classes. She emphasized how demanding the daily program was: lectures all day and then dinner, after which many students continued their memorization until 11 p.m. There was hardly any space for "practicals," she acknowledged, aside from the herbal fieldtrip the previous year. She had barely gained any clinical experience and no significant medicine making training, but observed that "there are now many good pharmacies in Kathmandu and other places." She also noted that when amchis start to practice

Figure 61 The three highest-ranking SRIC students in the 2018 exams, each holding a Certificate of Appreciation. Kathmandu, September 2019. Photo J. van der Valk (all rights reserved).

they have no time to make their own medicines as they have so many patients, especially outside the capital, where there is a real lack of healthcare. If someone wants to learn *menjor*, the student added, they should work privately with an experienced amchi-pharmacist, as they would at the Tibetan medical colleges in India. Ultimately, she believed that the quality of education was mostly dependent on the student. In her experience, many were not really interested in Sowa Rigpa; their focus was on getting a degree and a job. But some were humble, obeyed their teachers, and had sharp minds and great dedication (fig. 61).

Comparing Tibetan medical education between Nepal and Tibet about a decade before SRIC opened its doors, Craig (2007) was already noting major shifts away from the historically prevalent master–apprentice lineage form of education, in the direction of institutionalization, classroom-based learning, standardized curricula, integration with biomedicine, and specialization. She linked these shifts to three main factors: socio-economic forces, including increasing monetization and rural outmigration (see also Childs et al. 2014); the rise of biomedicine and modern science and development discourses through the state and NGOs; and the related changes in education funding and push to seek government recognition. She also observed that college education can promote "a passive learning environment" (Craig 2007, 136) focused on certificates and jobs instead of religious or ethical rationales for becoming an amchi. Cumulatively, these factors had led to

"a crisis of confidence," where practitioners, patients, the state, and international actors viewed Tibetan medicine "through the lens of biomedical conceptions of the body, health, and disease" or construed Tibetan medical education as either an ethnicized form of vocational training that formalizes Indigenous knowledge or as something that should simulate "urban, elite biomedical education" (Craig 2007, 146–47). Revisiting this argument in her later monograph, Craig (2012) added that the way young practitioners experienced their efficacy and legitimacy hinged not just on confidence but increasingly on their employment prospects and the growing reliance on biomedical technologies.

By 2019, SRIC had surpassed the vocational level by offering an academic bachelor's degree. The Indigenous aspect had also become less marked: the college had attracted a significant number of Nepali students from non-Tibetan backgrounds, as well as some foreigners, and was explicitly marketing itself as international. Yet the mirroring of biomedicine and the modern university model had grown stronger. The resulting "hybrid" curriculum (Craig 2012, 111) is reminiscent of the "mixed" form of Ayurveda (Skt. *miśra āyurveda*) that Anthony Cerulli (2018, 2022) shows emerged through biomedically informed standardization at ayurvedic colleges in late colonial and postcolonial India. What is distinctly different in the case of SRIC—and equally for the other Tibetan medical schools we visit in this chapter—is that serious study of classical literature in its original language remains the unquestioned dominant feature of the student taskscape.

Jaakko Takkinen (2021, 208–51) examines this translocal entanglement of "traditional" Tibetan medical training and "modern" educational modes and forms of legitimation at SRIC. During fieldwork in 2018–2019, he noted that students were experiencing a disconnect between the Tibetan texts they had to memorize and their idea of becoming a capable medical practitioner, since there were relatively few opportunities to train in practical skills, whether Tibetan or biomedical. SRIC was in a difficult position, "trying to find a balance amidst pressures from the local amchi community, transnational sponsors, and institutional integrity" (250). The program needed to appear both sufficiently "traditional" (e.g., by centering memorization of the *Four Tantras* in classical Tibetan) and "modern" (by adding bioscientific modules and having a university-accredited curriculum). Its resulting syncretism was doubly challenging for non-native speakers of Tibetan and/or students not proficient in English (228–33).

SRIC has clearly reconfigured the Sowa Rigpa taskscape in Kathmandu, aligning with a shift from enskilment to education that firmly pushes learning-by-doing—and *menjor* in particular—to the margins. Following Pordié and Blaikie (2014, 361), it seems that these liminal institutional spaces generate hybrid forms of learning in which students "can sometimes end up squeezed from both sides, lacking abilities and lineage, technical skills and social legitimacy."

"Very traditional style": The Traditional Buddhist Sorig Institute (TBSI)

TBSI is situated in the grounds of Riwoché Monastery in Boudha, just a few steps away from Orgyen Menla Clinic. It was conceived by Kyabgön Phakchok Rinpoche (b. 1981), head of the Taklung Kagyü tradition and lineage holder of the *Chokling Tersar* (*Mchog gling gter gsar*) Nyingma revelatory collection, as well as current Vajra Master of Boudha's Ka-Nying Shedrub Ling Monastery. The latter houses the Rangjung Yeshe Institute and was co-founded by Phakchok Rinpoche's grandfather, father, and uncle, all eminent Kagyü and Nyingma lineage holders. Although Phakchok Rinpoche was funding TBSI, partaking in monthly rituals with its students, and awarding course certificates, the institute remained largely autonomous and was operated exclusively by its only teacher, Amchi Urgian Kalzang, when I first visited in 2019. When I returned in September 2022, I was informed that Amchi Urgian had sadly passed away the year before due to COVID-19, sacrificing his own health for that of his patients.

In what follows, we take tours of the medical clinic and institute with Amchi Urgian and hear about the link between his learning and teaching, as well as his views on the current state of Sowa Rigpa education. We then meet one of his senior students, Amchi Jigme Dagpa, who offers further insights into the lineage-based mode of learning that underpins the Sowa Rigpa taskscape at TBSI.

Orgyen Menla Clinic

Approaching the clinic via the main road just north of Boudha, near Ramhiti Chowk, I spotted a blue signpost bearing its name (in English and Tibetan) that read: "Here we treat all kinds of diseases through the way of Buddhist herbal medicine & no side effect." Massage, bloodletting, moxibustion, compresses, herbal baths, and ointments were all listed. When I entered the consultation room at around 10 a.m., some elderly patients were chatting while Amchi Urgian questioned one of them and read their pulse. Four students sat around a desk listening, pulse reading, sometimes asking questions, and dispensing the prescribed medicines. Amchi-la's wife Pema ensured everything ran smoothly while serving tea. A range of packaged products was for sale on a shelf: herbal teas, at least four types of incense, several plant-based oils and extracts in small bottles, a beauty cream, and medicinal butter (fig. 62).

Over-the-counter goods have become ubiquitous in Boudha's clinics, but the exact products on offer and especially their ingredients vary considerably, as is also the case elsewhere (Gerke 2012b). Amchi Urgian proudly stated that one of

Figure 62 Amchi Urgian Kalzang shows research assistant Khandro Lhamo Yangchen products at his medical clinic: hair oil and a dark-colored Three Fruits Medicinal Butter. Kathmandu, September 2019. Photo J. van der Valk (all rights reserved).

his teas for high blood pressure—Trakja Silzer (*khrag ja bsil zer*, "Moonbeam Blood Tea")—is not mentioned in the *Four Tantras* but formulated according to his own experience. It listed seven ingredients, followed by "etc." I asked about the medicinal butter, which looked unusual because it was almost black. He explained that he had added some extra ingredients in decoction form to improve its potency. The medicine shelf, lined with nearly one hundred blue-labeled plastic jars, equally showed hallmarks of artisanship. When I remarked that a large proportion of the formulas were in powder form, Amchi Urgian clarified:

> We should not go against the teachings of the Medicine Buddha. He instructed powder formulas in the powder chapter [of the *Four Tantras*] and pills in the pill chapter for a reason. This is best followed, otherwise it is an offense to the Buddha. Pills are easier to store and to take and are therefore preferred by many clinics in modern times. Pills look good on the outside but inside the materials may have already deteriorated. Powders degenerate faster, but that is okay because you can notice immediately and throw them away if necessary. They also have a different effect.[79]

79 Amchi Urgian Kalzang, interview with Van der Valk, Orgyen Menla Clinic, Kathmandu, September 10, 2019.

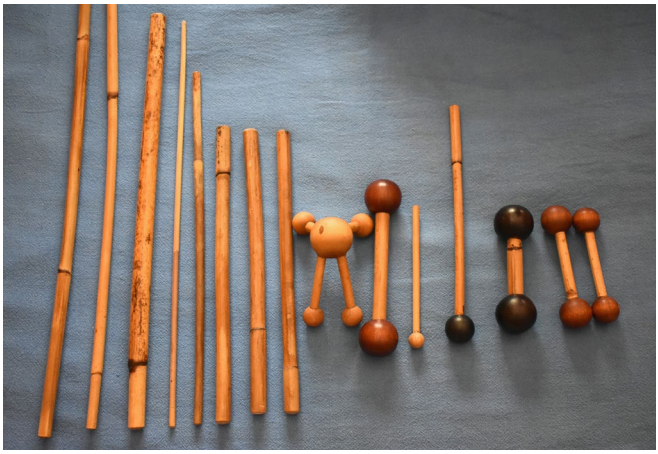

Figure 63
Amchi Urgian Kalzang's set of *yukchö* sticks. Kathmandu, September 2019. Photo J. van der Valk (CC-BY-SA 4.0).

Figure 64
Cauterization instruments crafted by Amchi Urgian Kalzang and his students. Kathmandu, September 2019. Photo J. van der Valk (CC-BY-SA 4.0).

The powder versus pill debate holds a prominent place in discussions among amchis and their patients about authenticity, potency, and efficacy. Noted early on by Besch in Spiti (2006, 147–51), it is analyzed extensively by Blaikie based on fieldwork in Ladakh (2013, 443–44; 2014, 308–13; 2019, 159–62). It ties in with traditional medical and pharmacological sensibilities (e.g., powders are stronger and act faster than pills, additional ingredients can be added to personalize formulas), practical considerations (pills are more labor intensive, machines could negatively affect the medicines), and climatic factors (pills have a longer shelf life in humid areas). But what has driven the debate—and especially the critique of mass-produced pills and, indirectly, of the practitioners who prescribe them—is the ongoing shift from powders to pills spurred by biomedical rationales,

cosmopolitan demands, and the move toward mechanization and large-scale production.

In the therapy room, Amchi Urgian showed us bamboo sticks of different sizes for *yukchö* (*dbyug bcos*; stick therapy), fitted with ball-shaped appendages made from different types of wood (fig. 63). There were also intricately carved gold- and silver-tipped cauterization instruments (fig. 64) that he and his students had made after many trials—an astounding example of their ethos of artisanal dexterity and amchi self-reliance. Amchi Urgian emphasized that he only practiced therapies from the *Four Tantras*, not Ayurveda or Chinese acupuncture. He feared that authorities might (quite rightly) crack down on amchis who were giving acupuncture without Chinese medicine training—or penicillin injections without a biomedical degree. But he also offered a more fundamental rationale: "Why mix things up? This only damages and degrades Sowa Rigpa, which is excellent in its own right."

"Why mix things up?"

Walking from the clinic to the institute, we passed the TBSI logo painted on the wall of one of its buildings: a white skull cup filled with three large myrobalan fruits resting on a blue lotus and backed by a halo of multicolored rays. Amchi Urgian showed us four rooms used for medicine making: a raw materials store with pill-making machines (used for large external orders), another storage room with a fridge to keep high-altitude herbs from spoiling and preserve their cooling potency, a room lined with shelves of materia medica samples for teaching, and a shack made of corrugated iron that sheltered a grinding machine and a large, low brick oven covered with mud (fig. 65). Some bright yellow barberry wood (*skyer pa*) had just been processed into a highly concentrated extract or *khenda* (see Chapter 3) used as an ingredient in eyedrops. Amchi Urgian laughingly said that the fireplace was "very traditional style," but promptly added that it was essential for certain detoxification procedures.

Over lunch, Amchi Urgian explained that he taught his students the way he had learned from his teachers. His main teacher was Demchok Amchi Lobsang Tsering, officially ranked the second-best amchi in Ngari (western Tibet) before he fled across the Changtang highlands to Ladakh, where he studied with a yogi for twelve years. Amchi Urgian stayed with Amchi Lobsang for nine years before his twenties. He also spent two years with Amchi Pema Gyaltsen, who "had only little medicine" but was an expert in venesection and moxibustion, and three years with Venerable Amchi Lama Rigzin in Nee (see Chapter 5), where he received instruction on the *Yutok Nyingtik* cycle. Hailing from a *ngakpa*

Figure 65 The mudbrick oven used for specific processing and extraction procedures at TBSI. Kathmandu, September 2019. Photo J. van der Valk (CC-BY-SA 4.0).

(*sngags pa*) lineage,[80] Amchi Urgian’s main spiritual practice consisted of Dudjom Rinpoche’s (1904–1987) revealed treasure teachings known as *Dudjom Tersar* (*Bdud ’joms gter gsar*).

Students at TBSI were pursuing a ten-year training program that covered the elements foundational to Amchi Urgian’s enskilment as an amchi. After the first five years, which focused mainly on theory and memorization, they would reach the *kachupa* level but not be awarded a formal degree. They would then immediately resume their studies for a *menrampa* degree.[81] The aim was for students to memorize around eighty percent of the *Four Tantras* and all of the allegorical medicine trees (*sdong ’grems*) in a slightly simplified form, similar to the requirements at MTK, CTMI, and CIHTS, as well as the principal schools in Tibetan regions in the PRC. “After years you can forget your memorization, but not these trees; they are the backbone,” Amchi Urgian clarified.

80 A *ngakpa* is a non-monastic tantric specialist, often from a family lineage.

81 The requirements for a *menrampa* degree vary widely across institutions. At MTK in Dharamsala, ten years of clinical practice after the *kachupa* degree are required before the first tier of the *menrampa* examination can be taken. Each tier also covers extensive commentarial literature on which TBSI students do not get examined.

In contrast to the limited practicals offered at SRIC, at TBSI apprenticeship in *menjor* and clinical practice were integral to Amchi Urgian's teaching. The first year consisted almost exclusively of theory and memorization, but from the second year onward all students went on annual one-month herbal identification and collection excursions, learning each plant's exact taste and regional differences. Funded by Phakchok Rinpoche and guided by Amchi Urgian, they visited several places in Nepal (including Dolpo and Mustang), and even Ladakh and Kalimpong in India. Besides high-altitude medicinal plants, they studied and were examined each year on ingredients from lower elevations, called *trokmen* (*khrog sman*), purchased from the market. They also made medicines and attended consultations in the clinic from early on in their studies, and the last two years of the program included a yearlong clinical internship.

Just as dharma and medicine were entangled in Amchi Urgian's own learning, his students at TBSI were being as thoroughly trained in religious ritual as they were in medicine (Takkinen 2021, 283). Amchi Urgian (along with many other contemporary practitioners) presented the *Yutok Nyingtik* tantric cycle as the spiritual heart of Sowa Rigpa. TBSI students had to complete a six-month *Yutok Nyingtik* foundation retreat in their final year, which needed to be replenished yearly through minimum one-week retreats. But they completed the preliminary practices (*sngon 'gro*) within the first three years of their education. They also participated in monthly rituals. On Medicine Buddha Day and Dākinī Day, which fall on the eighth and twenty-fifth days of the Tibetan calendar, respectively, they went to the nearby Ka-Nying Shedrup Ling monastery to join Phakchok Rinpoche and his monks for the ritual ceremonies. The tenth day (*tshe bcu*) ritual was performed in the shrine room of the school.[82]

Amchi Urgian was a staunch traditionalist and critical of what Pordié (2008) refers to as "neo-traditionalism" in contemporary Tibetan medicine, which is marked by syncretism and diversification, biomedical proximity, and deterritorialization, creating a bricolage of "old" and "new" practices. Launching into a harsh critique of larger Sowa Rigpa teaching institutions, Amchi Urgian argued that: "They are pushing out batch after batch of students who have not memorized the *Oral Instruction Tantra*, have barely any clinical experience, no ability to perform *turma* (*thur ma*, minor surgical procedures), venesection, moxa, and so on, who have limited herbal identification skills, and don't know how to make medicines." He was especially critical of what he described as "twenty-ninth day soup" (*nyi shu dgu thug pa*), comparing the curricula of institutions like SRIC to the noodle

82 For a more detailed discussion on these and other aspects of the integration of dharma and medicine in Amchi Urgian's teaching, see Takkinen 2021, 174–283.

soup or *tukpa* (*thug pa*) traditionally consumed on New Year's Eve, which contains an unusually large number of ingredients. "Actually, the better *tukpa* is the simple one you have every day." He acknowledged that modern education, science, and technology have their benefits, but argued that Sowa Rigpa did not need them. Similarly, there was no need to innovate to defend Sowa Rigpa: "How would scientists be more of an authority than the Medicine Buddha himself?" Concluding with a cynical take on "the so-called development of Sowa Rigpa nowadays," he said: "[It] is all external: buildings and certificates. It is all about money, earning fixed posts, fame, and politics. This focus on the superficial is contrary to the dharma. They say Sowa Rigpa is developing, I say it is going down!"

At the heart of Amchi Urgian's aversion to hybridity—to "mixing things up"—were lineage-based notions of purity and transmission. As a Nyingma practitioner whose clinic is named after Padmasambhava's manifestation as a healer, he was evidently serious about the merging of medicine and dharma. Sowa Rigpa undoubtedly has a unique medical mentality (Gyatso 2015) and numerous aspects that could be labeled "of a non-religious and technical medical nature" (Pordié 2007, 94). But it is equally clear that Buddhism can be much more than a historical cultural matrix, supportive paradigm, or soteriological moral framework for some amchis. There was an element of exaggeration in the heat of Amchi Urgian's argument, but it struck a sensitive chord. At his school there were hardly any barriers between the classroom (an outdoor space), clinic, pharmacy, and shrine room. This neatly corresponds to the master–disciple mode of transmission laid out by Pordié and Blaikie (2014), which not only foregrounds *menjor* skills, but also embeds all transmission within a Buddhist matrix of empowerment (*dbang*) and oral transmission (*lung*), with a strong focus on practical instruction or *tri* (*khrid*) enriched by closely guarded pith instructions or *men-ngak*.

"Like a father and his sons": Lineage-based transmission

When I met Jigme Dagpa in 2022, he still remembered his very first day at TBSI: September 19, 2011.[83] He was only fifteen years old at the time. By the time Amchi Urgian passed away in 2021, Amchi Jigme had finished nine years of study and was in his final internship year, making him one of Amchi Urgian's most senior students. Our conversation highlighted how the program at TBSI prepared students to become lineage holders.

83 Amchi Jigme Dagpa, interview with Van der Valk, TBSI, Kathmandu, September 3, 2022.

As we have seen, students started collecting herbs and attending clinic early on. After their first five years, Amchi Jigme explained, they had to start making medicines on their own. Once proficient at this, they began seeing patients independently in the institute clinic on rotation. They also started teaching certain topics to junior students as a crucial part of their training. This meant that he and other senior students were able to transmit Amchi Urgian's teachings to the junior students, while a new teacher from Ladakh, Amchi Tashi Tsering, instructed the *menrampa* students in their seventh and eighth years and provided further guidance on practical aspects of medicine making. In terms of clinical practice, the young age of several of Amchi Urgian's highly trained disciples had caused trust issues among both local and international patients. New patients in particular doubted if these young amchi could really offer effective treatment. Amchi Jigme admitted that this was very painful, but once they had achieved positive results, the problem quickly resolved, at least on an individual level.

Like his teacher, Amchi Jigme felt that the *Yutok Nyingtik* preliminaries and associated monthly and yearly practices carried out at TBSI made it "special" compared to other schools. He recalled that TBSI students were invited to SRIC in 2019 "to do *puja* there" (see fig. 66), because the SRIC students were unable to perform a *Yutok Nyingtik* offering feast themselves at the time.[84] When I asked if such ritual practices had an impact on the potency of medicines, he humbly responded: "Because of dharma, there is a little difference. You cannot see it, but it is different from others. For patients also. Same ingredients, but [there is a] different power and benefit. Some patients even said they feel some blessing when taking our medicines."

By "dharma" Amchi Jigme was primarily referring to the medicine accomplishment or *mendrup* (*sman sgrub*) ritual, which imbues the compounded medicines with additional healing power and requires continuous repetition of Yutok's mantra, day and night (we return to a fuller discussion of *mendrup* rituals in Chapter 5). They used to complete this within one day, but in 2022 had started practicing a seven-day major practice session (*sgrub chen*), and the plan was to conduct a full nine-day ritual from the following year. Some formulas also require extraordinary spiritually charged ingredients such as *dütsi chömen*, which Amchi Urgian would obtain from high lamas. Finally, they also added supplementary ingredients to various medicines, especially for difficult cases such as cancer. Amchi Jigme explained that this knowledge can only be transmitted through

84 Dr. Nida is well-known for his *Yutok Nyingtik* teachings, but they only appear on the SRIC curriculum in the last semester of the final year (see https://sorigcollege.org/curriculum/). When I was there in 2019, the most senior class was in its fourth year.

Figure 66
Amchi Urgian Kalzang's TBSI students lead the performance of the first *Yutok Nyingtik* offering feast held at SRIC: one beats the drum and two bring various *torma*; three other students are playing different types of ritual horn and trumpet off camera. Kathmandu, September 8, 2019. Photo J. van der Valk (all rights reserved).

men-ngak from lineage or *gyüpa* (*rgyud pa*) amchis,[85] requiring an intimate relationship between teacher and student:

> Nowadays in schools, the teacher comes, teaches, and goes. … You cannot get *men-ngak* from the teacher, because there is no relation. The teacher is not that kind to the students, even the students don't have respect. The teacher cannot give everyone *men-ngak*, only those who are very close to him. Nowadays many teachers don't [even] have *men-ngak*, so there is nothing left to give. …

85 Other types of *men-ngak* include bloodletting techniques, herb collection and grinding details, and processing steps such as boiling certain ingredients in milk.

> We studied with him for nine years. Our class was like a father and his sons, and he also learned from a *gyüpa*.

The student taskscape at TBSI is rich and varied. It includes extensive memorization and text-based medical teachings, but also foundational practices for advanced tantric practice as well as monthly and yearly rituals embedded in tantric transmissions. It is experiential and accumulative in that students are exposed to the clinic, wild herbs, market ingredients, and medicine making early on, while gradually being pushed to work independently. As senior students also become teachers, they further hone their skills while starting to share the responsibility of transmission. In this sense, each TBSI student is trained to be a lineage holder. Artisanal expertise plays a central role in this enskilment process, not only in terms of *menjor* techniques, but equally with regard to ritual crafts such as making *torma* and playing ritual instruments—and even the metalworking skills required to craft therapeutic instruments. As Amchi Jigme stated, it is the deep personal relationship between teacher and student that lies at the heart of *gyüpa* education, an intimacy that allows for long-term and often more rural and artisanal modes of skilled practice.

The Sorig Bumzhi School (SBS): Ancient medicine, modern education?

SBS sits somewhere between the international setup of SRIC and the localized master–disciple training of TBSI. Housed in a new Tibetan-style building not far from Swayambhu stupa, the school is adjacent to Triten Norbutse Monastery, with which it is associated, and funded through the Yungdrung Bon Monastic Centre Society in Himachal Pradesh, India. SBS has not been directly involved in efforts to obtain Nepalese government recognition of Sowa Rigpa nor has it established a university affiliation. It was founded by the eminent monk and medical scholar Dr. Tsultrim Sangye (1940–2011), also known as Amchi Gegé, and is a branch of the Sorig Bumzhi medical school in Dhorpatan (Baglung District), which he founded in 1990 (see Millard 2005). Amchi Gegé served as SBS's first principal. Similar to Amchi Urgian's "Traditional Buddhist" School, SBS has an explicitly religious foundation as a Bönpo school that uses the *Bumzhi* or *Four Collections* as its root text rather than the *Gyüzhi* or *Four Tantras*. For Bön adherents, the *Bumzhi* was taught by Tönpa Shenrap Miwo, the legendary founder of Bön, and served as the blueprint for the *Four Tantras*.

When I visited in 2019, Amchi Sherab Jamma, who saw patients at the SBS clinic, told me that many of the twenty-five enrolled students were on an extensive

Figure 67 A hand-painted picture of the trees of health and disease at SBS, labeled for didactic purposes and dated April 1, 2018; the inscription reads "drawn by Tashi Timo." Kathmandu, September 2019. Photo J. van der Valk (CC-BY-SA 4.0).

three-month fieldtrip to the mountainous area around Dhorpatan, where they go on annual plant treks and assist in free medical camps.[86] Sonam, a senior student acting as the secretary, showed me around. SBS runs a nine-year program, similar to TBSI. Sonam had completed the five-year *kachupa* course and was working toward his *menrampa* degree. We walked down a central corridor painted a light hospital green and lined with signposted doors leading to a check-up room, dispensary, massage room, raw material storerooms, an office, and classrooms. The walls of the massage room were lined with laminated medicine tree drawings made by students (fig. 67), a recurring feature in all three schools.

In one of the classrooms, freshly collected and processed root sections of *ligadur* (*li ga dur*; *Bergenia* spp.) from Baglung were drying on the floor. The raw material storerooms contained a series of neatly stored single ingredients in plastic buckets with lids and metal containers, which they found preserved the plants better. Several small batches of common medicinal powder formulas that had just been compounded lay in stainless steel bowls with paper labels.

86 Amchi Sherab Jamma, interview with Van der Valk, SBS, September 12, 2019. On Sowa Rigpa medical camps in India and Nepal see Craig, Gerke, and Sheldon 2020, Kloos 2019.

Compounding starts in the storage room, where the ingredients are weighed and large materials are crushed with an iron mortar and pestle. The ingredients are then moved to a separate room upstairs, which has two grinding machines that can grind 1 kilogram of materials in twenty minutes, proceeding through several rounds with decreasing mesh sizes.

Back in the reception area, I received a copy of the *Bumzhi* in two volumes (first published under Amchi Gegé in Dhorpatan in 1998) and the brand-new first issue of a magazine named *Chebu Trishé* (*Dpyad bu khri shes*). This annual magazine, published by SBS, "aims to provide a platform for young students to share their knowledge of ancient Tibetan herbal medicine and other related material." The preface stresses that SBS

> also organizes special classes for students to learn about western medicine from qualified doctors and biologists. Students are provided with the opportunity to participate in conferences and seminars related to Tibetan herbal medicine and western medicine. The Sorig School, alongside teaching traditional Tibetan medicine, also provides modern education to the students.

The contents of the first few laminated pages of the magazine are revealing as to the sources of SBS's legitimacy: (1) a photograph of a scroll painting or *tangka* depicting the assembly of thirty-three deities surrounding Tönpa Shenrap as the Medicine Buddha, (2) a photograph of Ven. Khenpo Tenpa Yundrung Rinpoche (abbot of Triten Norbutse), (3) a signed and stamped letter in Nepali from Hon. Upendra Yadav (Deputy Prime Minister and Minister of Health and Population), (4) a letter from the Dhorpatan municipal government (also in Nepali), (5) a message from Norziling Tibetan Settlement office (under the exile Central Tibetan Administration), (6) and words of auspiciousness and praise from the Dharamsala-based Central Council of Tibetan Medicine (CCTM). Although SBS was not offering a state-sanctioned university degree program, it clearly valued obtaining at least nominal support from both Nepali and exile Tibetan governments. This was further attested to by the framed certificates hanging on the school's walls of Amchi Gegé's CCTM registration as a Tibetan Medical Practitioner in 2006, and his receipt of the Indigenous Healing Knowledge 2009 Lifetime Achievement Award from the Nepal Tourism Board and the Spa & Wellness Association of Nepal. Notwithstanding the clear importance of external recognition, the SBS diploma confirms that ultimate authority rests in Menri Trizin Rinpoche, the spiritual head of Yungdrung Bön, together with the heads of the Bön academic and medical institutions. This is also reflected in the ritual accomplishment of the medicine made at the school, which is effected through a Bön version of the Medicine Buddha practice text. I was unable to confirm the extent to which religious healing techniques involving astrology, divination, and

ransom rituals were being taught and used at SBS, but I expect that they were considerably less prevalent than they were at Amchi Gegé's medical school and clinic in Dhorpatan when Collin Millard carried out fieldwork there in 1996 (see Millard 2005). Nonetheless, beneath the surface of NGO funding and walls covered with certificates and awards, learning Sowa Rigpa at SBS appeared to be strongly based on rigorous study alongside extensive practical medical and ritual work within an established lineage. Although there were formal classrooms, the clinic and the pharmacy were nearby, and SBS's rural connections not only supplied herbs but also important opportunities for students to gain practical experience. The educational taskscape at SBS offered significant space for *menjor*, but the extensive institutional backing of the school by the Bön establishment in exile had also facilitated a shift to larger and more mechanized modes of production.

Discussion

This rough sketch of the state of Sowa Rigpa education in Kathmandu through three very different institutions foregrounds a number of issues that emerged in previous chapters: the importance of material expertise in the craft of medicine making (Chapter 1), the key role of the teacher–student relationship in learning processes (Chapter 2), and the continued centrality of classical textual mastery in Sowa Rigpa theorization (Chapter 3). It also speaks to another thread woven into the fabric of this monograph: the Tibeto-Himalayan nexus of medicine and ritual. Institutional modes of Sowa Rigpa education that still honor lineage-based transmission tend to be backed by institutions invested in cultivating religious and ritual forms of legitimacy and healing potency. As highlighted in the introduction, this confluence of power has a long history. Contemporary schools like TBSI and SBS that operate through monastic patronage bear some similarities to early modern Tibetan Buddhist monastic medical colleges (*gso rig grwa tshang*) (see Van Vleet 2015). At the same time, this chapter shows how becoming a practitioner and learning to make medicine (or not!) is today shaped by a complex interplay of ongoing professionalization, government recognition, transnational influences, contested biomedical dominance, and commercial incentives for mass-produced health products. In more thoroughly modernized university-based educational settings such as SRIC, the taskscape of students training to be full-time clinical professionals constitutes a break with the self-sufficient cottage producers that remain prominent across the Kathmandu Valley. After a decade of training at TBSI or SBS, graduates should be able to make their own medicines (if they can amass the necessary funds), whereas SRIC students would only be able to do so if they undertook a private internship with a senior amchi-pharmacist.

In Nepal, there would seem to be irreconcilable differences between an institutionally trained amchi elite who carry the title of "Dr." and push for government recognition on the one hand, and traditionalist amchis who espouse the ideals of lineage, spiritual cultivation, and artisanship on the other. But at a deeper level, their discourses are interconnected. Tibetan medical transmission patterns have always been in flux, with a variety of institutions as crucial components of this dynamic picture. Pordié and Blaikie (2014) make the fruitful suggestion of thinking about these different modes of education as partially overlapping streams marked by both continuity and rupture, rather than as mutually exclusive. Secularized educational structures can undoubtedly fundamentally change how practitioners-in-becoming perceive the world and their place within it. But ideologically and pedagogically more traditionalist institutions such as TBSI are equally the product of transnational forces. This is evidenced by Phakchok Rinpoche's global network and the funds he raises (see Takkinen 2021, 260–63).

It is important to keep in mind that we have only presented snapshots of the three schools. TBSI, SBS, and especially SRIC are very young institutions, implying that there is a lot of room for change, transformation, and growth. Much will depend on individual directors, teachers, and students. How each school's graduates will fare in these uncertain times both nationally and abroad remains to be seen. We might be witnessing "a renaissance of Tibetan medical education and practice" (Craig 2007, 149), emerging from shifting social ecologies but still ultimately grounded in praxis-based frameworks of legitimacy (see Craig 2012). Or it might even be the dawn of a radical new movement that reflects the fundamentally cosmopolitan nature of Sowa Rigpa. We concur with Cerulli (2022, 27–30) that Asian medical traditions are intrinsically plural by virtue of their multiple textual codifications, interpretations, and practical applications. As Van der Valk (2025) points out in his analysis of globalized Sowa Rigpa during the COVID-19 pandemic, this epistemological pluralism is not fully captured by east/west or tradition/modernity binaries. Notions of "pure" or "mixed" traditions can also be misleading. We need to acknowledge the "interplay of multiple modernities and cosmopolitanisms" (Cerulli 2022, 28) and think beyond endlessly politicized ideals of purity. Yet, hybridity was the sworn enemy of Amchi Urgian, an eminent lineage practitioner with extensive textual and practical expertise but no modern scientific education. From his integrated Tibetan medico-ritual perspective, biomedical knowledge was eroding the integrity and alterity of Sowa Rigpa as he knew it, challenging the sufficiency of its coherence and rigor. Would he have been a better Sowa Rigpa teacher or practitioner had he studied physiology and anatomy at a university? Or do the universalist assumptions lurking behind this question prove the point that integrating biomedical knowledge into Sowa Rigpa destroys its viability as a truly alternative scientific practice?

Instead of attempting to answer these tantalizing questions and falling back into binaries, we would like to end with a simpler suggestion. Beyond the controversies of scientific alterity and the cultural politics of authenticity, Amchi Urgian's frustrations may well have been fueled by the inability of rigidly applied modern education models to honor two cornerstones in his crafting of potency: the centrality of artisanal craft-based teaching and learning; and the interpenetration of medicine and religion in healing practices. Modes of education are crucial to the way potency is understood and the ability of practitioners to manipulate its various dimensions. The shift away from practical enskilment in medicine making lies at the core of the widening gap in Kathmandu between the taskscapes of *gyüpa* amchis and cottage industry physician-pharmacists on the one hand, and a new generation of clinical professionals with the title of "Dr." on the other. What is really at stake when medicines become ready-made monetized commodities prescribed by licensed physicians? It is well beyond the scope of this book to fully answer this key question, which also still plagues biomedicine. But what should be clear from this chapter is that potency lies at the heart of this issue in Sowa Rigpa.

CHAPTER 5

Continuity Substances, Lineage, and Ritual Empowerment

This chapter discusses a group of complex consecrated compounds known as *papta* or *papgyün*, two alternative abbreviations of the term *papta gyünden* (*phab gta' rgyun ldan*),[87] loosely translated as "continuous pledge of a fermenting agent." *Papta* have multiple meanings and applications that span medical, ritual, and religious realms and provide an important interface between them. They are situated among an array of especially powerful substances including *jinten* (*byin rten*), "receptacles of blessings"; *damdzé*, "commitment substances";[88] *dütsi rilbu* or *mani rilbu*, "nectar pills"; *dütsi chömen*, "nectar dharma medicine"; and *men-drup*, "accomplished medicine." Our aim is to position *papta* within this corpus of revered substances and examine their specific potencies, uses, and dynamics. In our Ladakhi fieldsites, we observed amchis adding minute amounts of *papta* to batches of medicine to enhance their potency, ensure the continuity of blessings or *jinlap*, and compensate for missing ingredients or errors during their preparation. We also documented *papta*'s role during and after elaborate rituals known as *mendrup*. *Mendrup* have multiple purposes and often take place at the intersection

87 On variant spellings see the next section.

88 Gentry (2017, 8–9) describes *damdzé* as the "most common Tibetan term for potent material sacra," and probably originated as a translation of the Sanskrit *samaya-dravya* of Indian Buddhist scriptures. Depending on the context, *samaya-dravya* can be translated as "prescribed substance," "oath substance," "commitment substance," or "bond substance." In Tibet, *damdzé* came to be seen "as extensions or materializations of awakened buddhas and bodhisattvas" and to possess transformative properties beyond ritual consecration (9).

of Buddhism and Sowa Rigpa, although Sowa Rigpa is not necessarily involved.[89] When amchis do engage in *mendrup* events, these rituals have the potential not only to transform complex medicinal compounds into potent elixirs, but also to spiritually purify the practitioners involved, enhance their technical abilities, and grant them "supernormal powers" (Garrett 2009, 224).

The materials consecrated or "accomplished" during these rituals are also called *mendrup*. After such rituals, small *mendrup* pills, powder, or granules are distributed among the participating monastics, lay community members, and amchis, who either store them away or employ them as *papta* to consecrate other medicines. *Mendrup* rituals usually take place in the shrine rooms of Tibetan pharmacies (Garrett 2009) or in monasteries frequented by amchis (Blaikie 2014). Our *mendrup* ethnographies were documented at an amchi association in the upper Indus valley village of Nee in the Changthang-Rong region of Ladakh in 2007 (Blaikie) and 2018 (Gerke and Van der Valk), with follow-up interviews in 2022 (Blaikie, Van der Valk) and 2023 and 2024 (Blaikie, Gerke). We also interviewed physicians in Ladakh and Darjeeling connected to these *mendrup* events.

Our analysis builds upon studies of *mendrup* rituals by Anna Sehnalova (2015, 2017, 2018, 2019a, 2019b) and Cathy Cantwell (2015, 2017, 2020), as well as work on powerful pills in tantric Buddhism by James Gentry (2017). Sehnalova examines the use of *papta* in Bönpo *mendrup* rituals, while Cantwell considers its role in Nyingma ritual contexts. We first review their analyses of *papta* as continuity substances or fermenting agents before considering Gentry's perspective. We then complement this scholarship by exploring the forms, flows, uses, and effects of these potent substances in contemporary Ladakh.

Relying on ethnographic material collected over the last eighteen years, we examine how *papta* take on various material forms, properties, and meanings as they move through time and space. In particular, we trace patterns of confluence and diffusion as *papta* are produced, combined, added to other preparations, and circulated both within and beyond medico-spiritual lineages. Following the flow of several *papta* substances into and out of Nee, we discuss the transformations they undergo as they pass through various pharmacy activities, ritual practices, and social realms. This allows us to explore the types of potency that are generated or modulated through these processes (see Chapter 3), as well as the transformative effects *papta* exert as they travel.

89 Old Nyingma revelations, such as *The Eight Instructions, Assembly of the Sugatas* (*Bka' brgyad bde gshegs 'dus pa*) by Nyangrel Nyima Özer (fl. twelfth century), have no apparent linkage with Sowa Rigpa (Cathy Cantwell, email to Gerke, March 5, 2024).

Papta of various origins are sometimes combined during *mendrup* rituals, drawing different lineages together.[90] We argue that regular *mendrup* rituals connect people to one another in numerous ways. They are times of confluence, convergence, and *communitas* that allow for interaction, exchange, and shared ritual practice. In between these events, *papta* substances circulate among practitioners and lay people alike. Through these processes of diffusion and dispersal the substances radiate outwards, beyond the individuals and lineages with which they are primarily associated.

Our main argument is that *papta* possess two distinct but connected sets of properties, relating to continuity and perpetuation on the one hand, and to transformation and catalyzation on the other. As continuity substances, *papta* serve as unbroken material expressions of medico-spiritual lineages and possess stable, never-diminishing *jinlap* properties. This aspect is enhanced through the role *papta* play as commitment substances, which materially represent the *samaya* vows (*dam tshig*) that bind lineage members together. Understood in the larger Buddhist context, commitment substances seamlessly connect material properties and spiritual promises. *Papta* also catalyze transformations within and between medical, ritual, religious, and social realms. They adopt a broad array of forms and acquire altered properties due to their catalytic mode of activity and tendency to diffuse widely, which enable transfers of potency, power, and authority across these fields. *Papta* substances and the ritual practices surrounding them also have important transformative effects upon the individuals involved. By engaging in related rituals and imbibing these blessed substances, participants purify their body-mind of obscurations and reach toward awakening.

In short, *papta* simultaneously enact lineage continuity, enhance the potencies of the medicines to which they are added, and transform those involved in the *mendrup* rituals associated with them. These observations open up broader questions about how such substances could be theorized and which frameworks best account for their material, spiritual, and relational complexities. We take this up in the discussion, testing the limits of the Ingoldian theoretical approaches and concepts drawn upon in this book, notably concerning meshworks, the notion of substances-in-becoming, and the relationship between material and immaterial properties.

90 This contrasts with Bönpo *mendrup* rituals, in which *papta* are specific to each ritual and cannot be combined (Anna Sehnalova, email to Gerke, November 4, 2024).

Plural meanings of *papta*

Our Ladakhi interlocutors variously translated *papta* into English as "fermenting agent," "continuity catalyst, or yeast," or "mother essence," while Gentry refers to a "*samaya*, lineage or treasure substance" (Gentry 2017, 276). The word *gyün* (*rgyun*) indicates a continuum, an unceasing flow, or the continuity of a particular practice, pointing to the way that *papta,* or *papgyün*, imbue medicines with lineage power. Since *papta* is also considered a "horse" (*rta*) or a vehicle that carries or transfers potency, it is sometimes spelled *phabs rta* (Gentry 2017, 299n15).[91] But one can also find the spelling *phab gta'* (Cantwell 2017, 193).[92] Gentry (2017, 276, 313) translates *gta'* (or *gta' ma*) as "collateral" referring to a pledge—an intriguing aspect that we explore further below.

Each of these terms reflects an important property of *papta*, but none fully expresses what they are, what they do, or what we might be able to learn from them about relationships between materiality, potency, and agency in Tibetan medico-religious practice. We start untangling these various properties and meanings by considering how they have been addressed in the scarce related literature. Following Gentry (2017), much of our discussion highlights *papta*'s properties as a catalyst (*phabs*) and "horse" or vehicle, but first we consider their connection to notions of fermentation.

Papta as fermenting agents in *mendrup* rituals

In *mendrup* literature*, papta* is variously translated as "continuum yeast," "medicinal and ritual yeast ingredient" (Sehnalova 2018, 265), or "fermenting agent" (Cantwell, 2015, 63; 2017, 193; Sehnalova 2018, 31). This aspect is explored in Sehnalova's (2018) ethnography of a Bönpo *mendrup* in Nepal, in which *papta* is "the most important ingredient" (265). It is first mixed with water, then added to the *mendrup* mixture, which is then kept in warm and damp conditions for several days, not unlike the process of making *chang* (barley beer):[93]

91 The term "horse" in Tibetan medical texts refers to substances that carry the potency of other substances to their target in the body. Refer to *menta* in Chapter 3 (114–17) for further discussion.

92 For a more detailed overview of *papta* terminology, see Sehnalova 2018, 269.

93 "Beer essence" (*chang tsi*) is listed as a synonym of *phab* and *phabs* in Das' *Tibetan-English Dictionary* (cited in Sehnalova 2018, 265n876).

> I was often explained the effects of the Mendrup *papta* in a yogurt and *chang* simile: Neither yogurt nor *chang* would "be what they are," [and] would not have the characteristic properties they are known for, without their fermenting agents. Similarly, Mendrup medicine is a powder of ingredients, but without the *papta* it does not acquire its main characteristic properties and effects. (Sehnalova 2018, 265–66)

The yogurt simile makes sense insofar as the addition of a starter is crucial to the transformation process that results in a new batch of yogurt, and the starter becomes indistinguishable from the yogurt it ferments: "By sight, touch, smell and taste, the *phabs gta'* does not differ from the compounded *sman sgrub* mixture" (Sehnalova 2019b, 20). The properties and potencies of *papta* are thus continually carried forward through the addition of remnants of the previous batches of *mendrup* to subsequent iterations. Furthermore, yeast-like properties of material growth and expansion emerge from the mixing of liquid and dry substances during *mendrup* rituals, which cause the *mendrup* substance to expand in size. This evokes the auspicious abundance of blessings bestowed during the ritual and through imbibing the consecrated *mendrup.* However, as underscored by several of our Ladakhi interlocutors, comparisons between the properties of *papta* and those of yeasts during the making of *chang* or yogurt need careful qualification, as *papta* differ considerably from ordinary yeasts both materially and symbolically. Even a tiny piece of *papta* or *mendrup* has great value and power, whereas a small piece of yogurt starter has little value in itself. Moreover, there is no religious, ritual, or lineage connection in a yogurt or *chang* yeast, whereas *papta* carry an enormous symbolic charge (a point to which we will return).

During our fieldwork, we mostly saw *papta* substances in the form of *mendrup* granules (fig. 68) or occasionally pressed into molds to be stored in the form of a deity such as Dorjé Purpa (*rdo rje phur pa*) or Vajrakīlaya (fig. 69). We also came across some rare and highly valued forms of nectar dharma medicine, known as *dütsi chömen*, which had been prepared by senior masters in the past. These were circulated in small amounts and kept as valued *papta* "starters," with the potential to consecrate new batches of *mendrup* compound. In 2022, Sonam Dorje, who participated in many *mendrup* rituals in Ladakh, offered Van der Valk some *dütsi chömen* that was made and empowered by Dudjom Rinpoche in Nepal in 1978 and presented to Sonam Dorje's father, Amchi Tsering Paljor, in Ladakh a few years later (figs. 70–71). Sonam Dorje called it "mother of *papta*" and explained that it could be used in future *mendrup* rituals to potentiate many kilograms of new *mendrup.*[94]

94 Sonam Dorje, interview with Van der Valk, Leh, August 5, 2022. Translated by Rigzin Chodon.

Figure 68 *Mendrup* granules from the 1992 *mendrup* that were distributed in Nee in 2018. Nee, August 2022. Photo J. van der Valk (CC-BY-SA 4.0).

Figure 69 "Mother of *papta*" molded into the form of Vajrakīlaya and held by Amchi Nawang Tangyas in a gesture of respect. Leh, September 2018. Photo courtesy of T. K. Shor (all rights reserved).

Papta can have a range of effects in social as well as material realms. Since they carry the potency of lineage, *papta* substances can bring people together but also mark their separation, especially if they become enmeshed in debates over ownership. The holding and passing on of *papta* substances can therefore have political and economic significance. Sehnalova (2018) offers an example in her discussion of a "secret" oral history of a Bönpo *papta* that can be traced back to a *terma* revelation in the tenth or eleventh centuries. The one surviving vessel containing the *papta* was kept at Menri monastery in Central Tibet, where it accumulated the power of blessings of each successive Menri abbot, whose relics were sometimes added to the *papta* (20). Later, it was moved to Kongpo by a former Menri abbot against the institution's wishes and was carried from there into exile, first to the newly established Menri monastery in India but then to another Bönpo monastery in Nepal (32–33). The vessel containing the *papta* is considered essential for enabling further *mendrup* rituals. Whoever holds this *terma* vessel therefore also "owns" the economic, spiritual, and political aspects of the *mendrup*, conferring certain forms of authority and power while also potentially generating competition or conflict between institutions.

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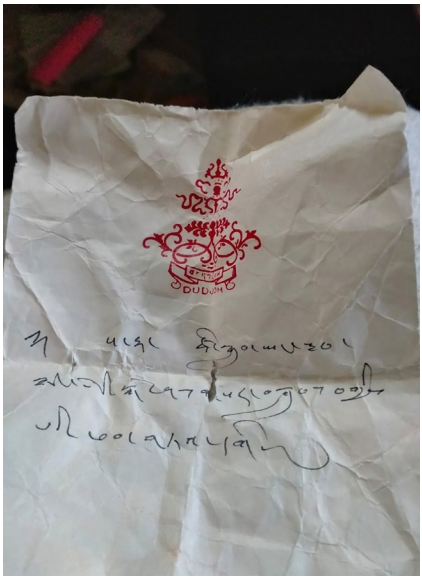

Figures 70–71 A sample of the *dütsi chömen* made by Dudjom Rinpoche in Nepal in 1978 (fig. 70), originally wrapped in paper bearing Dudjom's seal and handwriting (fig. 71) and labeled: "The freshly accomplished *papta*, prepared through the exceedingly profound long-life heart essence ritual in the earth horse year [1978], is meritorious" (*sa rta tshe sgrubs yang zab snying po sgo nas gsar bsgrubs bgyis pa'i phab gta' dge*). Leh, August 2022. Photos J. van der Valk (CC-BY-SA 4.0).

When Cantwell observed a Dudjom-related *mendrup* ritual in Bhutan, she noted several substances that were added to the *mendrup* mixture, "especially pills from relevant deity practices of great lamas in one's own lineage" (Cantwell 2015, 64). The main *papta* was made of consecrated pills called "commitment substance dharma medicine" (*dam rdzas chos sman*) to which "relics from the great lineage lamas of the past" were added (64). The Dudjom tradition is mainly based on the works of Dudjom Jigdral Yeshe Dorje Rinpoche (1904–1987), but the substances involved are traced back to mass ceremonies of the Nyingma master Terdak Lingpa (1646–1714) at Mindroling (east of Lhasa). This unbroken continuity is crucial to their value:

> [*Papta*] are mixed in with the other medicinal powders, and many sacksful of pills might be prepared and consecrated during the ritual meditations throughout the Major Practice Session, finally to be distributed among participants at the end. But a small amount of concentrated pills will be retained by the lama for use in future batches, so that the sacred "fermenting agent" never runs out. The Jangsa Head Lama [Lama Kunzang Dorjee] told me that Dudjom

> Rinpoche used to tell his students that, while there were many different specific lines through which the *phab gta'* had been passed, all Nyingmapa lamas are connected since some component of everyone's dharma pills ultimately stems back to Terdak Lingpa's mass ceremonies. (Cantwell 2020, 98)

In the Nee *mendrup* we experienced in Ladakh, one of the *papta* came from Dudjom Rinpoche and thus connected the participants through the blessings of particular Nyingma lineage masters. It is difficult to retrospectively trace individual *papta* back to their original ritual cycle, or to know which powerful tantric substances (for example, the "five fleshes" or the "five elixirs") were initially included. However, as Cantwell rightly emphasizes, the crucial point is that those conducting these rituals today feel connected to the blessings of earlier masters through receiving *mendrup* substances containing "original" *papta* produced or maintained by previous lineage holders. Dudjom Rinpoche himself acknowledged the difficulty in practice of using substances like the "five fleshes" and "five elixirs," but noted that they were complete in the dharma medicine (*chos sman*) accomplished by the great masters of the past, and that *papta* transmitted through an unbroken lineage embodies the power of these original medicines (*Dudjom Rinpoche Collected Works*, Vol. Tha, 309, cited in Cantwell 2020, 195n33). In other words, the potency of these tantric substances resides in the *papta* of the great masters whether they are physically present or not.

To sum up, *papta* are important material carriers of unbroken lineage continuity, both perpetuating and accumulating blessings through successive ritual cycles. Through their catalytic properties, they can transform the many other compounds to which they are added, bringing this same stream of continuity into each new batch. These properties are manifested in the materials of various *mendrup* or dharma medicine formulas, each containing traces of many previous *mendrup* cycles. When conducted by highly accomplished practitioners under the correct conditions, these cycles can produce particularly valuable batches of *dütsi chömen*. These are carefully preserved and hold the potential to become *papta* as they can, in turn, be added to various newly-made *mendrup* compounds.

Papta as catalyst and vehicle

Two key properties of *papta* that emerge from the literature are those of "catalyst" and "horse" as a metaphor for a vehicle. At first sight these seem like opposing concepts, one concerning transformation and the other perpetuation, but they actually work together in interrelated ways due to the properties and potencies ascribed to *papta*, notably those associated with commitment and material "collateral." These concepts and their relationship are outlined in Gentry's elaborate

textual and historical discussion of the powerful pills made by the Tibetan physician and tantric master Sokdokpa Lodrö Gyeltsen (1552–1624):[95]

> As Sokdokpa mentions elsewhere, the previous "catalyst" (*phabs*), which he also at times calls a "vehicle," constitutes all the primary ingredients of the pill concoction. Being a "catalyst," a term that also denotes the starter yeast used to brew beer or ferment curd, it operates as the active agent ultimately responsible for the power of Sokdokpa's pills. Yet, at the same time, it is also a "vehicle;" that is, it serves as the medium for the accrual of the blessings and power of the buddhas and past masters invoked through the visualizations, *mantras*, and other sensory media that figure in Sokdokpa's accomplishment rite. (Gentry 2017, 313)

For Sokdokpa, *papta* compensate for unavailable original and powerful substances of Indian tantric (and often mythical) origin.[96] This resonates with Dudjom Rinpoche's aforementioned comment on how *papta* act as substitutes for precious substances such as the "five fleshes." Sokdokpa describes *papta* as materials that had been "interred within Tibetan soil for the interim and retrieved later as a Treasure substance 'catalyst continuum' (*phabs rgyun*)" (Gentry 2017, 319). In other words, they were hidden to reappear as treasures (*gter*) capable of filling in for the absent original *samaya* substances once the required accomplishment rites had rendered them actively potent, "based on only the previously derived material collateral (*gta'*) and catalyst (*phabs*)" substances (276).

This notion of material collateral signifies the enduring promise of earlier masters to benefit sentient beings, passed on to future generations through *papta*. New generations can thus evoke the previous masters' compassion and pass on their blessings in new substantial and substantiated forms:

> Collateral (*gta' = gta' ma*) … is a general term used to denote an item of value that is temporarily forfeited to a lender as security in order to ensure the future repayment of a loan. This term signals, most generally, that Sokdokpa construes the power of flesh pills to be contingent upon a relationship of reciprocity with the past masters and buddhas whose flesh and other bodily fragments and fluids make up the pills' ingredients. Modeled upon a relationship of money lending, it would appear that the bodily fragments of past buddhas and masters function

95 Gentry mentions the use of *papta* or *papgyün* repeatedly (2017, 276, 299, 311–13, 318–19, 325–27).

96 According to Sehnalova, Bönpo *papta* supposedly contain all the powerful tantric substances mentioned in the *mendrup* recipe, including the "five fleshes" and "five elixirs" (email to Gerke, November 4, 2024).

> as "collateral" for the enduring promise of these figures. By this I mean their pact, rooted in boundless altruism, to beneficially intercede on the behalf of beings "until *saṃsāra* is void." (Gentry 2017, 313)

In short, *papta*'s properties as both horse and catalyst emerge within a collateral relationship of reciprocity between previous masters and future individuals, all of which contribute to—and perpetuate—the potency of the *papta*. Similar notions also emerged during our fieldwork. For example, the director of Chagpori Tibetan Medical Institute in Darjeeling, Dr. Teinlay Palsang Trogawa, explained to Gerke in 2018:

> I think the *papta* is more of a blessing of the previous masters, which is passed on to the future generations. We are not as fortunate to see all the former masters, but at least we can keep some form of blessings of those former masters. … Kyabche Chatral Rinpoche[97] said not to look for his reincarnation anymore. Then in that way, it is a great loss for the people, but we have to respect the teacher's wishes. He also left *papta* and *dütsi chömen* … The blessing always stays, it never diminishes.

Within this continuum of undiminishing blessings, the nexus of potency expands.

Alongside the numerous substances involved, Sokdokpa attributed the final effects of a *papta*-containing pill to the ritualists and their practices, as well as to the karma (*las*) of those receiving it (Gentry 2017, 311). The qualities and motivations of those making and consecrating the pills are thus crucial, as are the intentions of the recipient. We heard similar statements concerning the importance of faith and pure motivation in gaining benefit from *mendrup* substances at the Nee *mendrup*. Our Ladakhi interlocutors also told us that *papta*-enriched *mendrup* substances play an important role in making up for missing ingredients during the preparation of medicines and can atone for inadequacies in medical practice. Furthermore, the daily prayer recitations during the *mendrup* ritual include elements of self-purification that enable the amchis to overcome their own faults and obscurations, make more potent medicines, and thus better benefit their patients. Their understandings thus resonate in many ways with those of Sokdokpa, for whom potency and power emerged from the combination of his own altruism with "the good karma of consumer recipients, the lineage of Treasure revealers, and the material catalyst continuum—the 'vehicle' of the pill's main ingredients—which together account for the power of the pill to bring positive effects to those who encounter it" (Gentry 2017, 311).

97 Dzogchen master Chatral Sangye Dorje Rinpoche (1913–2015).

Jinten and *papta*

Tibetan traditions utilize many types of powerful substances, generally referred to as "receptacles of blessing" or *jinten* (*jin* means "blessings," also "power"; *ten* means "to support"). *Jinten* can consist of a single powerful substance, such as a relic (*ring bsrel*), but the term also refers to complex pill compounds (*byin rten ril bu*) associated with particular lineages and recorded in catalogs of *jinten* (*byin rten dkar chag*) (Gerke 2019b). *Jinten* are also used to fill spaces within large statues and votive structures (Martin 1994) and are sometimes preserved in the form of small statuettes to ensure material stability over time (see fig. 3 in Gerke 2019b).

Small quantities of *jinten* substances can be added as *papta* during the compounding of new batches of medicine. All *papta* contain some form of *jinten* and *papta* substances are sometimes called *jinten*, as they physically embody undiminished blessings. Crucially, what defines *papta* is its use in the consecration and transformation of other compounds: *jinten* become *papta* the moment they are added to other compounds in the process of consecration.

To give an example from India, precious pills made at the Men-Tsee-Khang (MTK) in Dharamsala include consecrated substances from the Fourteenth Dalai Lama in the form of *dütsi chömen*, which is a type of *jinten*. The *dütsi chömen* is made at the MTK pharmacy and consecrated at the Dalai Lama's temple before being added as a *papta* to the precious pills produced back at MTK (see Gerke 2019b). This *dütsi chömen* is a prime contemporary example of an institutionally made medical formula merged with the blessings of the Geluk school. It is made following a specific recipe containing more than one hundred ingredients, including several standard medicinal formulas.[98] When someone consumes precious pills to which the *dütsi chömen* has been added as a *papta*, they are simultaneously ingesting a complex medicinal compound and the spiritual blessings of the Dalai Lama, specifically the perceived potency related to this lineage as manifested in its *jinten*. In turn, affiliated private pharmacies use these precious pills as a *papta,* consecrating their medicines by crushing one precious pill into their own version of the same precious pill during production.[99] Such collaborations between Sowa Rigpa physicians and high-ranking Buddhist figures are tied to religious identity and patronage. Some patients who follow different schools, lamas, and lineages avoid MTK precious pills precisely because of the sectarian implications of the *jinten* they contain, particularly from historical figures.

98 Dr. Choelothar, conversation with Gerke, Chontra, April 21, 2017.

99 On the use of the Precious Old Turquoise 25 (Rin chen g.yu rnying nyer nga) pill as a *papta*, for example, see Gerke 2018a.

Tracing patterns of confluence and diffusion

One aspect of *papta* compounds that we particularly want to highlight in this chapter is their dynamics of confluence and diffusion. When *papta* substances are used to potentize *mendrup* or other nectar dharma medicines, various combinations of lamas and disciples come together in a ritual space to compound numerous blessed and special ingredients. These may include tantric substances, blessed pills, and *jinten* that the lamas received from their teachers, who received them in turn from their teachers and so on, stretching far back in time and often to historical Tibet. As we have seen, the head lama of Jangsa Gompa in Kalimpong located the mass ceremonies of Terdak Lingpa as the original practice session during which *papta* were made in the form of dharma pills (Cantwell 2020, 98). Thus, while the dharma pill's actual components might change over time, for example by accumulating various other *jinten*, their use as a *papta* retains those original blessings from batch to batch, uniting all Nyingmapa practitioners in a strong sense of connection to that original practice session.

This illustrates how *papta* serve both as a vehicle for the accumulation and conveyance of blessings, and as a catalyst for the transformation of substances, properties, and practitioners. They carry blessings across time and through various material forms, binding people together in commitment to the masters of their lineage and ritual community. At the same time, they enable the consecration of the other compounds to which they are added, as well as allowing for the transformation of the individuals involved. We now turn to our Nee ethnographies to trace these dynamics in greater detail. We follow the use of *papta* during and after *mendrup* rituals and in the making of *mendrup dütsi chömen,* revealing the confluence of substances and lineages through these processes.

Mendrup ritual cycles at Nee

Amchi Urgyen Chosphel (d. 1982) (fig. 72) and Amchi Tsering Paljor (1931–2007) (fig. 74) from Kairy village near Nee were two of the most famous Ladakhi amchis of the twentieth century. They were among the few (and last) in Ladakh to have studied Sowa Rigpa under renowned masters in Tibet. Both went on to teach numerous students from Ladakh's Changthang region, creating a strong extended lineage group. In the mid-1960s, Urgyen Chosphel started holding annual *mendrup* ceremonies, inviting many amchis from Changthang, other areas of Ladakh, and beyond. Every autumn, this group would gather to spend a week collectively empowering their medicines and ritually purifying themselves. The consecration and distribution of *mendrup dütsi chömen* was central to this annual event, which continues to this day.

Figure 72 Amchi Urgyen Chosphel, date unknown. Photo courtesy of Amchi Nawang Tangyas (all rights reserved).

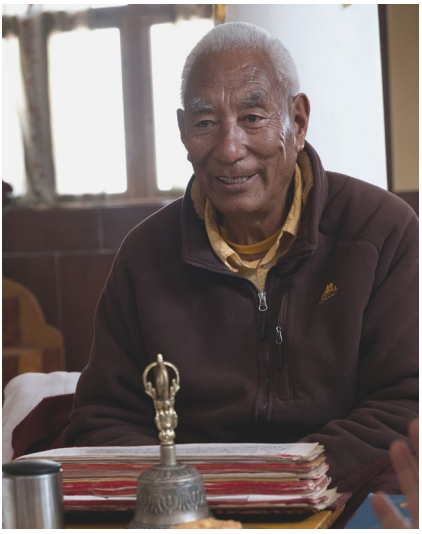

Figure 73 Amchi Lama Rigzin, son of Amchi Urgyen Chosphel. Nee, August 2022. Photo courtesy of T. K. Shor (all rights reserved).

Figure 74 Amchi Tsering Paljor (back center) with Dudjom Rinpoche (left) and Dudjom Rinpoche's daughter, Tsering Penzom (front). Leh, 1975. Photo courtesy of Amchi Nawang Tangyas (all rights reserved).

Following Urgyen Chosphel's death in 1982, his son Amchi Lama Rigzin (fig. 73) took over responsibility for the annual *mendrup*. In 1991, he formally registered the group with the state government as the Tserig Chhimet Ghatsal Society, also known as Ogyan Sorig Tsogspa or Nee Amchi Association. Since then, this association has been managed by Lama Rigzin's disciple, Amchi Nawang Tsering, who developed it into a popular Sowa Rigpa pharmacy and clinic, alongside organizing many aspects of the annual *mendrup*.

Tsering Paljor was a renowned physician and ritualist. He studied Sowa Rigpa with Urgyen Chosphel for fourteen years and also trained with Lamenpa Khyenrap Norbu (1883–1962) in Lhasa for a few months, as well as becoming a disciple of Dudjom Rinpoche (fig. 74). He played an important role in introducing the *mendrup* tradition to Ladakh in 1965 and helped to organize *mendrup* events over many years. According to his son—Sonam Dorje—Tsering Paljor prepared various *dütsi* "twenty to thirty times," mostly in relation to his training under Dudjom Rinpoche, with whom he made *mendrup dütsi chömen* in Nepal in 1978.[100] Tsering Paljor first organized a *mendrup* around 1962 in Rewalsar (Himachal Pradesh) and held another in 1965 at Takpa House in Kairy (Ladakh).[101] In 1967, the Sixteenth Gyalwa Karmapa Rangjung Rigpe Dorje (1924–1981) visited Ladakh (Tsering, Tsering, and Russell 1984, 15). He stayed for three days with Tsering Paljor and brought many blessed substances with him, some of which he bestowed upon his host.[102]

In 1992, Lama Rigzin and Tsering Paljor invited the renowned Sampel Norbu Trogawa Rinpoche (1932–2005) to Nee and organized a special *mendrup* in his honor. Trogawa Rinpoche was a Nyingma lama and eminent amchi trained in Lhasa, who founded the Chagpori Tibetan Medical Institute in Darjeeling in 1992, following his flight from occupied Tibet in the late 1950s. The *mendrup* was held at Nee old gompa (fig. 75) and Trogawa Rinpoche bestowed the *Yutok Nyingtik* initiation upon all those present. This was the beginning of an interaction that lasted twelve years until his passing (Gerke 2018b) and involved the making, consecration, and circulation of several powerful substances.

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100 Sonam Dorje, interview with Van der Valk, Leh, August 5, 2022. Translated by Rigzin Chodon. Dudjom Rinpoche's journals contain no entry of this event, as they end in 1972 (Cathy Cantwell, email to Gerke, March 5, 2024).

101 Sonam Dorje, interview with Van der Valk, Leh, August 8, 2022. Translated by Rigzin Chodon.

102 Sonam Dorje, interview with Van der Valk, Leh, August 5, 2022. Translated by Rigzin Chodon.

Figure 75 The old Nee gompa (bottom left) where Trogawa Rinpoche presided over the *mendrup* ritual and made *dütsi chömen* in 1992, and Amchi Lama Rigzin's newly built monastery (top) where the 2018 *mendrup* event took place. Nee, August 2018. Photo J. van der Valk (CC-BY-SA 4.0).

Confluence of lineages and *papta* in Nee, 1992

Four different *papta* were added to the *dütsi chömen* prepared at Nee in 1992, bringing together various substances and lineage blessings. These *papta* had their principal origins in Lhasa, eastern Tibet, Sikkim, Darjeeling, and Ladakh. Each consisted of numerous ingredients, as well as the accumulated blessings of previous respected Nyingma and Kagyü masters.

Urgyen Chosphel contributed one *papta* to the *mendrup dütsi chömen,* which he had personally brought back from Tibet. It carried the lineage of the fifth Drukpa Kagyü Lama Staktsang Rinpoche, who was long based at Ladakh's Hemis monastery.[103] In his unpublished journal of 1935, Dudjom Rinpoche notes that "Ladakhi Taktsang Rinpoche" (*La dwags stag tshang rin po che*) visited Dudjom in

103 This reincarnation or *tülku* (*sprul sku*) lineage originated (retrospectively) with Taktsang Repa (1574–1651), who was born in Tibet but spent much of his later life in Ladakh, where he restored Hemis Monastery and established others (Gardner 2009). The sixth Staktsang Rinpoche turned 82 in 2022 (Reach Ladakh Bulletin 2022).

Lhasa and received the *Meteoric Iron Razor* Vajrakīlaya empowerment from him.[104] Tsering Paljor added the *papta* that was given to him by Dudjom Rinpoche to the *mendrup dütsi chömen*. He also included a "Karmapa *papta*"—one of the consecrated substances that the Karmapa gave to him in Kairy in 1967.

Trogawa Rinpoche contributed his own *papta,* which came from the lineage of his root guru, Dzongsar Khyentse Chökyi Lodrö (1893–1959), a well-known *rimé* (*ris med*, non-sectarian) lama who received transmissions from numerous masters of all Tibetan Buddhist schools prior to his passing in Sikkim in 1959. Chökyi Lodrö was considered the activity emanation[105] of Jamyang Khyentse Wangpo (1820–1892) from eastern Tibet, who together with Jamgön Kongtrul (1813–1899) inspired the *rimé* movement. Jamyang Khyentse Wangpo is said to have received transmissions from over 150 teachers from all schools of Tibetan Buddhism (Orgyen Topgyal Rinpoche 2005), and some of his *papta* was passed on to Trogawa Rinpoche.[106] It is most likely that it was a portion of this special *papta* that Trogawa Rinpoche added to the *mendrup dütsi chömen* in 1992.

Each of these four *papta* physically embody long and renowned lineages tracing back to historical Tibet. The Karmapa *papta* and that of Staktsang Rinpoche were strongly connected to the Karma Kagyü and Drukpa Kagyü schools, while the other two were primarily linked to Nyingma and Sakya traditions.[107] According to Amchi Nawang Tangyas, the *papta* from Dudjom Rinpoche and Trogawa Rinpoche contained relics of the Fifth Dalai Lama and other Geluk and Nyingma masters.[108] This approach to preparing *mendrup dütsi chömen* thus collected, combined, and transmitted teachings and blessings from different lineages rather than following sectarian divisions. This appears to have been accepted and followed by teachers and students alike.

The origins, components, and pathways of the *papta* that came together at Nee in 1992 are astounding. Each *papta* contained a vast number of individual ingredients, including *ringsel* relics and other precious *jinten* materials assembled by successive generations of masters, as well as possibly having other, even older, *papta* blended within it. Each had been through many phases of accomplishment

104 Cathy Cantwell, email to Gerke, March 5, 2024.

105 Jamyang Khyentse Chökyi Lodrö was one of several *tülku* of Jamyang Khyentse Wangpo, each of whom embodied aspects of the master's body, speech, mind, qualities, or activities.

106 Dr. Teinlay Palsang Trogawa, interview with Gerke, Darjeeling, December 23, 2018.

107 The Sakya schools are represented through the transmissions received by Jamyang Khyentse Wangpo.

108 Amchi Nawang Tangyas, conversation with Blaikie, Leh, May 27, 2022.

and other ritual processes. All of this (and more) merged together and became part of this single batch of *mendrup dütsi chömen* at Nee.

At this moment of confluence, the four *papta* brought amchis from shared lineages closer together and drew in others from different traditions. They also pulled together monastics and ritual specialists who otherwise had little connection to Sowa Rigpa, as well as lay community members, numerous raw materials, and all the mundane components necessary for the event to take place: an appropriate venue, the money needed to buy materials and support the ritual and its participants, and so on. Only by drawing all these diverse elements together could the *papta* be combined and the *mendrup dütsi chömen* be prepared and ritually accomplished. The *papta* thus acted as catalysts for these ritual and social interactions as well as for the transformation of medico-ritual substances. They served as important links between past and future and between different groupings at a single point in time. The four individual *papta* were transformed into a new *papta* substance—*mendrup dütsi chömen*—in the process. Further convergences and transformations then continued during subsequent *mendrup* rituals held at Nee.

Further convergences: The Nee *mendrup* of 1997 and 2004

In 1997, Amchi Tsering Paljor and Chatral Sangye Dorje Rinpoche, the famous Tibetan Dzogchen master and disciple of Dudjom Rinpoche, prepared a *papta* during a Vajrakīlaya *mendrup* ritual at Pharping in Nepal. Some of the resulting *mendrup* compound was pressed into statuette form for long-term storage. Tsering Paljor's nephew, Amchi Nawang Tangyas, was given several of these for safekeeping prior to his uncle's death (fig. 76), which he showed to Gerke and Van der Valk in 2018 and Blaikie in 2022. He explained that this hard, molded *papta* is precious and should only be used if the granular form (fig. 77)—of which large amounts were made and distributed—is no longer available.[109] In such an eventuality, some powder could be grated from one of the statuettes and used in place of the standard granular material. He added that these *papta* contain secret *samaya* substances and relics from the traditions of Sangye Lingpa and Dudjom Lingpa.

During our visits, Nawang Tangyas repeatedly emphasized that these *papta* are incredibly precious and powerful and must be treated with the utmost respect, as they are continuously watched over by countless invisible protectors. He further explained that to even think about *papta* as a substance is to overlook the

109 Amchi Nawang Tangyas, conversation with Gerke and Van der Valk, Leh, September 3, 2018.

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Figures 76–77 The *mendrup dütsi chömen* made by Chatral Rinpoche in 1997, pressed into the form of four Vajrakīlayas and one small Guru Rinpoche (fig. 76), and in granular form (fig. 77). Both forms can be used as *papta*. Leh, September 2018. Photos courtesy of T.K. Shor (all rights reserved).

supramundane properties that properly characterize it: "For ordinary people it will be a *papta*, but for a Vajrayāna practitioner, looking at a *papta* will be like looking at your own pure perception."[110] For tantric adepts, the coarse substances comprising *papta* have been transformed into ambrosial nectar, whose properties manifest beyond the material plane, like a rainbow or a *dharmakāya*.[111]

At the Nee *mendrup* of 1997, some of the Vajrakīlaya *papta* from Pharping was mixed into the *mendrup dütsi chömen*, adding one more *papta* to the four brought together five years earlier. Then in 2002, Trogawa Rinpoche returned to Nee to preside over the making of *tsotel*[112] through the special *menjor* process known as Great Mercury Refinement (*ngul chu btso bkru chen mo*) (see Gerke 2021, 122–27). A year before his demise, on his final visit to Nee in 2004, he led another special *mendrup* ritual where some of the *tsotel* made two years earlier was added to the *mendrup dütsi chömen*, showing the wide range of substances that can be employed as *papta*. Containing at least six different *papta* compounds and having undergone multiple rounds of ritual consecration, this 2004 batch of *dütsi chömen* is considered especially powerful and precious and has been carefully preserved and judiciously used at Nee ever since. But as we will see, it has also

110 Amchi Nawang Tangyas, conversation with Gerke, Leh, August 28, 2024.

111 The *dharmakāya* is the "truth body" of a Buddha, representing the ultimate, formless nature of reality and enlightened mind in Mahāyāna Buddhism.

112 *Tsotel* is a processed organometallic mercury sulfide complex in ash powder form and is used in the making of various precious pills. It can also be added to *mendrup dütsi chömen* or other pills as an especially powerful *papta* substance.

traveled onward from Nee in various ways, undergoing and enabling subsequent transformations on these journeys.

Papta in medicines: Diffusion and transformation

Participant numbers vary, but each year between ten and thirty amchis attend the Nee *mendrup* (figs. 78, 79).[113] Each leaves with small bags of *mendrup dütsi chömen*, which they take home and use in their pharmacies in Changthang and other parts of Ladakh, adding tiny amounts to all of their own medicines. They also sometimes offer it as gifts to other amchis across the Himalayas or store it for future use. This material diffusion across time and space distributes *jinlap* blessings widely, as well as offering amchis a way to overcome difficulties in medicine making.

In Nee, small amounts of *mendrup dütsi chömen* are mixed as a *papta* into all the medicines made at the Ogyan Sorig Tsogspa pharmacy, run by Amchi Nawang Tsering. These are given to many patients across Changthang, for whom the *tsogspa* is a vital healthcare resource, as well as to visiting patients. Blaikie (2013, 2014) followed several *mendrup* participants from other villages back to their homes to document how they used *mendrup dütsi chömen* as *papta.* For example, in 2009 he observed Amchi Tashi Kundey (fig. 80) from Katphoo adding the *papta* during the compounding of Dali 16 (*da li bcu drug*; Rhododendron 16) (fig. 81) and several other formulas.

Adding *papta* to medicines activates several levels of *nüpa*: the potencies of blessings (*jinlap kyi nüpa*), meditative stabilization (*ting-ngédzin gyi nüpa*), and mantras (*ngak kyi nüpa*) (see Chapters 1–3). But it can also "fix" faults in the material potency (*dzé kyi nüpa*) of the medicines due to pharmacy errors or to missing or relatively low-quality medicinal substances, ensuring that the medicines are efficacious and beneficial. This especially matters to rural amchis, who often lack the resources to obtain all the ingredients needed to make complete formulas (Blaikie 2013, 2014, 2018).

Although *mendrup dütsi chömen* is usually added to medicines in only tiny amounts, it is a key ingredient in Dashel Dütsima (*zla shel bdud rtsi ma*; "Crystal Moon Ambrosia"), the only formula that, according to the textual sources,[114]

113 Based on ongoing fieldwork in Nee, we are able to confirm that the dynamics discussed in this section are current at the time of writing and therefore use the present tense. This is a conscious exception to our avoidance of the present tense in the rest of the book.

114 There are various text versions of this formula. In Nee they followed Trogawa Rinpoche's recipe, which also contains *tsotel*.

Figure 78 Amchi participants of the 2018 *mendrup*. Nee, September 2018. Photo courtesy of T. K. Shor (all rights reserved).

Figure 79 The Nee group of amchis after the *mendrup* in 2007. Nee, September 2007. Photo C. Blaikie (all rights reserved).

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Figures 80–81 Amchi Tashi Kundey makes Dali 16 with Nee *mendrup dütsi chömen* (the red-colored powder on the right) added as a *papta*. Katphoo, Ladakh, 2009. Photos C. Blaikie (all rights reserved).

requires large amounts of *dütsi chömen*. As Nawang Tsering explained: "Dashel Dütsima means it has extra amounts of *dütsi chömen*, not just a small *papta* amount but a real amount according to the formula." Each time he makes Dashel Dütsima, he adds ten to eleven pills from the previous batch as a *papta* to continue the *jinlap*.[115] When making Dashel Dütsima in 2017, he also added some of the *tsotel*, first prepared with Trogawa Rinpoche at Nee in 1994, as an additional *papta*.

Dashel Dütsima is highly sought after across Ladakh and beyond. The high demand for this rare medicine has created tension between wealthy outsiders and the Ogyan Sorig Tsogspa's main mission to serve the local community. Nawang Tsering explained: "Sometimes people demand rare kinds of medicine in large quantities, but we are trying to distribute them to many people, not only to one person. Other amchis are not making Dashel Dütsima because they cannot prepare the *mendrup*, so they take it from here and add it to their medicines in small quantities."[116] Amchis outside the immediate Nee group also add this medicine

115 Amchi Nawang Tsering, interview with Gerke and Van der Valk, Nee, September 22, 2018.

116 Amchi Nawang Tsering, conversation with Blaikie, Nee, October 26, 2007.

to their own formulas as a *papta,* further spreading its blessings and benefits into other areas and lineages.

It is not only Dashel Dütsima that travels well beyond the Changthang region; other medicines containing *dütsi chömen* also diffuse much further afield in several ways. Lama Rigzin takes many sacks of medicine away with him each year (fig. 82), which he uses to treat patients in the Manali area where he lives during winter, as well as on his numerous trips to Taiwan, Australia, and elsewhere where he sees international clients. The money he raises through these trips not only sustains his livelihood but also funded the construction of the new monastery in Nee (fig. 75) as well as parts of the annual *mendrup*, thus perpetuating the cycle. One of his disciples, Amchi Padma Tsetar, runs a successful cottage industry pharmacy in Leh, ensuring that medicines containing the Nee *mendrup papta* are used by many private amchis as well as in government-funded health centers right across Ladakh (Blaikie 2013, 2019).

In addition to their distribution among amchis, small bags of *dütsi chömen* are also given to all the lay people in the region who sponsor and/or attend the annual *mendrup* ritual. This is often shared and consumed within families, but also kept in safe places in case of emergencies. Here it serves as a powerful healing and protective substance in its own right, as well as a material symbol of their status as benefactors/donors (*sbyin bdag*). It thus mediates relationships between amchis, monastics, and lay people and supports the *mendrup* financially and socially, while also facilitating the accumulation of merit for all involved. In these and other ways, the *papta* diffuses out from Nee, retaining the form of *dütsi chömen* in some cases and in others becoming part of a myriad of other medicinal formulas. Each of these trajectories involves further connective, mediating, or catalytic activities across medical, ritual, and social fields.

It is important to note that not all Ladakhi amchis use *papta.* Amchi Tsultim Gyatso whom we met in Chapter 1, for example, is a Gelukpa monk and devout Buddhist practitioner who trained at MTK and does not have any additional family lineage training. He always recites mantras while making his medicines but never adds any *papta,* relying more on the potencies of substances or *dzé kyi nüpa* and mantras or *ngak kyi nüpa.* Amchi Ngawang Gluck in Choglamsar also reported never using *papta,* as did the Tibetan female Amchi Karma Choden, although she distributes *maṇi* pills consecrated at the Dalai Lama's temple in Dharamsala to her patients to achieve similar effects.[117] It thus appears that the amchis who use *papta* are often linked to particular family lineages or have strong connections to Nyingma and Drukpa Kagyü traditions, while those lacking such backgrounds

117 On *mani* pill traditions see Gentry 2023a, 2023b.

Figure 82 Amchi Lama Rigzin leaving Nee with his medicines. Nee, September 2007. Photo C. Blaikie (all rights reserved).

tend not to add *papta* to their medicines. The practice of using *papta* in contemporary Sowa Rigpa is thus fairly widespread but also limited to amchis who share particular spiritual commitments and lineages.

Continuity and precarity

Amchi Nawang Tsering keeps some of the *dütsi chömen* prepared in 1992 and 2004 separately packed and stored because they have higher concentrations of *papta* than other batches. They are essential for making more *mendrup dütsi chömen* in the future when the right conditions arise, and therefore need to be carefully preserved.[118] The production of *mendrup dütsi chömen* at Nee thus reflects a continuous tension between continuity and precarity. No new batches were prepared when we were present at the *mendrup* events of 2007 and 2018, and when we last visited in 2024 the amchis were still relying on the preserved stocks from 1992 and 2004. No opportunity to make new *dütsi chömen* had arisen in almost

118 Amchi Nawang Tsering, interview with Van der Valk, Nee, August 9, 2022.

thirty years.[119] Nawang Tsering regularly commented on the dwindling stocks and expressed concern as to when and how they might be able to make it again.

Organizing a special *mendrup* has always been difficult, since it involves attracting monastics and ritual specialists with the correct knowledge and authority, gathering the required raw materials, mobilizing sufficient financial resources, and so on. It has become even harder recently since many associated amchis, monastics, and rinpoches are now deceased. Trogawa Rinpoche passed away in 2005 and Tsering Paljor in 2007, while Lama Rigzin grows increasingly frail. The younger generation appears to lack the connections and abilities required to bring similarly advanced practitioners to the region. Thus, we see how the webs of long-established patronage and social relations that enable continuity through *papta* practices are highly contingent and, in this case, increasingly precarious.[120]

Rarity and precarity influence the way *papta* substances are valued and treated. The *dütsi chömen* produced at Nee has always had high value among those amchis connected to the *mendrup* cycle, but as the remaining stocks dwindle its value rises further. Nawang Tsering explained: "Years back, at the end of the *mendrup* we would distribute fifty grams of *mendrup* to each participant, then we reduced it to thirty grams, then twenty, and so on. Now we have stopped distributing it to everyone and only give a small bag to the participants who make a big contribution or are deeply involved in the ritual."[121] Demand is also driven up by people lacking close links to the Nee *mendrup* but who want large quantities of the rare medicines produced there, as shown above.

Decisions over how much can be distributed to whom will only grow more difficult until more can be made, but the path to producing a new batch is beset with obstacles. While the mundane aspects such as raising money and sourcing substances appear surmountable, greater challenges lie in attracting the high lamas and lineage holders able to preside over a *mendrup*. In their absence, Lama Rigzin has led the rituals over recent years. Unless existing lineage relations can be revitalized by the younger generation or new connections can be made to other experts with the ability and willingness to engage in such activities, the threat of rupture will only continue to grow. Having said that, only a small amount of

119 Sehnalova (2018, 96) mentions that a set of *mendrup* compounds at the Bönpo monastery in Nepal was meant to last for about twenty years. Historically in Tibet, each Menri abbot had to perform the *mendrup* once in his lifetime, translating into approximately one ritual every sixty years (Anna Sehnalova, email to Gerke, November 4, 2024).

120 This parallels the loss of such patronage relationships in the making of *tsotel* as described by Gerke (2021, 127–30).

121 Amchi Nawang Tsering, conversation with Blaikie, Nee, May 29, 2024.

dütsi chömen needs to be preserved in order to retain its ability to consecrate and potentize future batches. As long as some of this material remains in safe hands, any rupture can always be repaired and the unbroken stream of continuity resumed once the right conditions arise.

Discussion

This chapter set out to situate *papta* within Tibetan and Himalayan medico-ritual practice by examining its key properties and exploring its social, spatial, and temporal dynamics. The existing literature highlights some important characteristics of *papta* and *mendrup*, as well as their complex histories and varying textual descriptions. Tibetan authors from various traditions have long theorized and debated about these substances, as Gentry's work (2017, 2023a, 2023b) clearly shows. Overlooking this diversity risks erroneously presenting *papta* as singular, stable entities locked in a temporal vacuum. Our ethnographies showed how contemporary amchis in Ladakh perceive, use, and circulate consecrated substances, resonating in part with the reviewed literature while diverging in others. Pulling these various strands together here allows us to draw some conclusions about *papta* while also evaluating the extent to which Ingoldian frameworks can aid our understanding of potency and its crafting in Sowa Rigpa.

Approaching *papta* as emergent entities that combine numerous substances, potencies, and blessings, as well as ideals, values, and meanings, allows us to better understand their properties, movements, and effects. While a portion of any batch of *papta* will be retained in its original form to become part of the next iteration, the rest may take on numerous forms as it is blended into other formulas. This ability to endure, multiply, diffuse, and become part of other compounds while retaining its essential qualities is, as far as we know, unique to *papta*. This leads us to conclude that *papta* can simultaneously exist as enduring carriers of unbroken lineage continuity and as things-in-becoming. This aligns with Ingold's (2007b, 2010) emphasis on processes of change, interaction, and material agency, and his eschewal of the notion of finished products or stable forms.

We have shown how *papta* can take many forms. These include distinct substances maintained within specific lineages and preparations that incorporate *papta* from several lineages, as we saw at Nee. When other powerful and blessed substances are mixed into such compounds, these compounds can become even more potent. This was illustrated by the addition of *tsotel* to the *mendrup dütsi chömen* under the direction of Trogawa Rinpoche. We also showed how substances to which *papta* are added can become *papta* themselves. The Nee *dütsi chömen* became a *papta* when it was used to consecrate new batches of *dütsi chömen* and

other Sowa Rigpa medicines, all of which diffused in various forms and directions. This continual role in consecrating and transforming other compounds is what distinguishes *papta* from other *jinten* substances.

The addition of *papta* transforms medicines at the gross level of material potency, as well as through other registers of potency such as those of blessings, mantras, and meditative stabilization. By combining and essentializing the potencies generated through successive rituals, *papta* can transmit these potencies without the need for further ritual or meditative actions. This gives *papta* the capacity to correct mistakes in the material constitution of medicines and faults in pharmacy practice, thus further enhancing their potency. This aspect of *papta* also lends itself well to Ingoldian analysis, as their properties and effects emerge within ongoing flows or meshworks of materials in movement, rather than retaining singular, stable forms. However, by bringing us into the terrain of ritualized intentions, spiritual lineages, and the "lasting" potency of vow-bound substances, *papta* also extend beyond the reach of Ingoldian frameworks in several ways.

Papta act as catalysts by transforming the substances and practitioners they come into contact with, and as vehicles by carrying and transmitting the accumulated blessings, vows, and potencies of past masters across time, space, and compounds. *Papta* thus serve as a potent material substrate upon which blessings accumulate *and* simultaneously transfer those blessings and potencies to other entities. The idea that blessings "never diminish" points to a kind of durability grounded in spiritual commitments, ritual efficacy, and karmic intention. This is quite different from the durability that Ingold describes, which is grounded in the continued aliveness of materials through transformation.

Two recent publications propose ways to overcome the limitations of Ingold's animist relational model, which foregrounds the materiality and agency of all life in an eco-phenomenological and holistic, yet rather secular and apolitical manner. Surbhi and Van der Valk (2025) introduce the concept of "ritualized meshworks," which extends the Ingoldian framework to enable mantras, sacred landscapes, and more-than-human entities to be analyzed alongside physical properties and artisanal processes. This resonates strongly with our understanding of *papta*. We also find more general resonance with the "hylomorphic animism" favored by Kochan (2024), which provides conceptual space for norms, values, social practices, and cosmological entities to encode meanings into a thing differentially. This in turn shapes the effects that the thing subsequently exerts on other things within its sphere of influence. Taken together, these approaches enable us to better comprehend the complex synergies of potencies that emerge from interactions across material and immaterial planes in specific sociocultural settings and historical moments.

Such perspectives also help to explain how the production, possession, circulation, and application of *papta* activates connections within and between

generations of amchis and tantric practitioners. In their role as continuity or lineage substances, *papta* connect the current generation to past masters both materially and spiritually, thus embodying streams of continuous transmission. When amchis participate in *mendrup* rituals, they reenact their spiritual vows and *samaya* bonds while also purifying themselves, admitting their faults, and enhancing their technical abilities. These bonds are significant and endure through the collateral relationships of reciprocity between previous masters and future recipients that *papta* represent and materialize, binding them in a shared promise to benefit sentient beings.

Our research further suggests that *papta*'s movements through time and space follow repeating yet variable patterns of convergence, transformation, and diffusion. Repeated *mendrup* rituals often provide the focal points around which these patterns unfold within distinct lineages, but such events can also bring about interactions between different lineage groups. The confluence of various *papta* in the *mendrup dütsi chömen* prepared at Nee brought the accumulated *jinlap* of each lineage into this substance and, by drawing several lineages together, paved the way for further interactions, collective rituals, and medicine-making events. The *dütsi chömen* prepared during these special *mendrup* diffused widely, circulating not only among Ladakhi monks and nuns, amchis and patients, but also via members of other lineages residing far from Ladakh. *Papta* not only reaffirm existing bonds but also enable new connections and transfers of potency, authority, and memory within and across medical, ritual, and social fields.

Papta provide a medium for transformative interactions between skilled practitioners, diverse substances, and more-than-human entities such as protector deities within ritualized meshworks. They materially express partially overlapping forms of connection and exchange that crisscross the Tibetan cultural area and span long periods of time. *Papta* also confer authority to those using them. This contributes to the social status and medical power of *papta* and potentially increases demand for the medicines that contain them, as illustrated by the example of Dashel Dütsima. While this increased demand—and thus diffusion—may have positive effects under ordinary conditions, it relies on the ability of amchis to continue producing and consecrating such powerful substances. This appears to be more difficult to achieve in present-day Ladakh than in former decades. Even though only a tiny amount of *papta* needs to be retained to facilitate future consecration, a sense of precarity prevails and increases the value ascribed to the remaining stocks.

The precarious state of the Nee *mendrup* leads us to wonder about the changing position of Buddhism and ritual in contemporary Ladakh, and about evolving relationships between Sowa Rigpa, modern science, and the state in an era of increasing investment, regulation, and development in India (Blaikie 2019, 2025). In Nepal, Bhutan, and Tibetan regions in the PRC, annual *mendrup* rituals receive

widespread monastic and popular support and do not seem to be endangered. The remote rural location of Nee and its distance from large population centers is one contributing factor to the uncertain future of the *mendrup* ritual there, as is the relatively poor economic condition of the amchi association, which makes it difficult to offer appropriate accommodation and facilities to visiting masters,[122] but further research is required to better understand this ongoing precarity.

Trying to adequately account for the fluidity of *papta* on the one hand, and the enduring potency of blessing and consecration on the other, takes us beyond the limits of the theoretical approaches introduced in this book. Statements such as "blessings never diminish" resonate on some level with the observation that substances-in-becoming "carry on or *perdure*" (Ingold 2013b, 31). But what exactly is it that perdures when substances are defined precisely by the encoding of both material and immaterial properties within them? Furthermore, is spiritual potency actually eternal in ordinary settings set about with doubt, limitations, and precarity? Our findings suggest that *papta* are not always as permanent or non-diminishing as it might seem. *Papta's* potency may fade if exposed to "unclean" things or environments,[123] or if the spiritual commitments on which its continued transmission, diffusion, and dispersal depend are not renewed. Even supramundane manifestations of *nüpa*, which operate on the material plane while extending far beyond it, remain relational, contingent, and emergent within unfolding meshworks.

These observations raise deeper questions: How far can an Ingoldian approach help us understand the perduring yet impermanent properties of *papta*? Are we reaching the limits of idealized views of spiritual potency? While accepting that Ingoldian theory struggles to fully account for intangible, distributed, and socially encoded aspects of potency, our insistence on a more inclusive materialist ontology may have unearthed something that is perhaps more grounded—something that resists both the scientific insistence on the tangible and observable and the Buddhist philosophical penchant for the primacy of mind and its liberation from the mundane cycles of birth, old age, sickness, and death.

122 Amchi Nawang Tsering, conversation with Blaikie, Nee, May 29, 2024.

123 Here, "unclean" refers to all kinds of material and spiritual impurities or pollution known as *drip* (*grib*).

Conclusions

Crafting Potency

This book has explored how potency is understood and crafted in Sowa Rigpa, shedding light on the largely unwritten artisanal epistemologies of amchi-pharmacists. We have shown that *menjor* involves far more than the assemblage of raw materials, that its theory and practice are mutually constitutive, and that potency is intricately crafted through a complex array of techniques. *Nüpa*, the Tibetan umbrella term for what we broadly approach as potency, emerges from our analysis as efficacy-in-becoming—a fluid capacity sculpted through craft, ritual, and environment rather than a fixed property of stable substances.

Our exploration of potency began with the seemingly simple substance limestone (Chapter 1), demonstrating how its properties can be transformed in various ways depending on how it is collected, processed, compounded, and ritually sculpted. Having traversed the more intricate layers of potency cultivation involved in the making and consecration of rejuvenating medicinal butter (Chapter 2), we then engaged with the foundational texts and theoretical concepts that provide the core framework for the *menjor* practices and processes encountered across the book (Chapter 3). Next, we explored the shifting taskscapes of contemporary Sowa Rigpa educational institutions in Kathmandu (Chapter 4), before reflecting upon the material and spiritual complexities of continuity compounds known as *papta* (Chapter 5). Along the way, we attended to the intertwining of text-based knowledge, lineage transmission, practical experience, acquired skill, and ritual activity. These all contribute to amchis' embodied expertise, enabling them to nurture and direct the properties of substances and, by doing so, craft efficacious medicines. Throughout, we have foregrounded emergent processes that fuse knowing practice with material qualities to generate specific forms of potency—processes that we argue can be best studied and described by working hands-on with substances alongside experienced practitioners.

As one of the great Asian "scholarly medical traditions" (Bates 1995) Sowa Rigpa is characterized by a long history, a large corpus of classical and modern texts (mostly written in Tibetan and still untranslated), a tremendous diversity of materia medica across Himalayan and Inner Asian landscapes, and subtle configurations of family, lineage, and institutionally-based transmission. Duly acknowledging this vastness and heterogeneity, we make no claim to comprehensiveness, nor do we offer a step-by-step guide to crafting Sowa Rigpa medicines. We have instead sought to anchor the reader in local trajectories and experiences of *menjor* practice by ethnographically introducing Sowa Rigpa artisans working in contemporary India and Nepal or teaching in Europe, and using this as the basis for deeper reflection.

Our primary focus has been on a small number of everyday practices and ordinary raw materials. Exotic substances, complex procedures, and esoteric techniques are undoubtedly important and have considerable significance for the amchis with whom we worked, as shown in Chapter 5. However, seemingly mundane tasks such as grinding, sieving, boiling, and so forth constitute the bulk of *menjor* work, at least for the largely self-sufficient physician-pharmacists encountered in the book. This physically demanding, time-intensive, and often underpaid and undervalued labor firmly positions these practitioners in an artisanal lifeworld. At the same time, we observed that many of them live with a constant tension between their traditional artisanal ethos and the need to meet contemporary demands for increased scale, breadth, and rapidity in production.

Taken together, the specific examples that we have drawn upon highlight how Sowa Rigpa manifests itself locally and dynamically across diverse settings, responding to particular confluences of historical processes and institutional pressures, fluid meshworks of materials, and changing amchi taskscapes. They also encourage reflection on the dialectic between peripheries and centers of Sowa Rigpa. Regionally-inflected practices in Ladakh and Kathmandu continue to be shaped by interactions with centers of authority, such as major state-backed institutions in India—the National Institute of Sowa Rigpa in Leh, the Men-Tsee-Khang in Dharamsala, or the Central Institute of Higher Tibetan Studies in Varanasi—as well as Tibetan medical institutions in Lhasa and Xining in the PRC. Processes of industrialization, standardization, and regulation have a different momentum in each place, creating unique challenges and opportunities for practitioners. While our findings should therefore not be taken as representative of the entire Himalayas let alone the Tibetan Plateau, there are a number of cross-cutting themes that are relevant to larger debates both within and beyond the study of Sowa Rigpa. In what follows, we discuss artisanal knowledge and literacy, writing and anthropology as forms of craft, as well as the histories and future trajectories of Sowa Rigpa, and *menjor* in particular.

Forms of literacy

Writing about craft is to take on a form of knowledge rooted in particular human capacities that is intractably difficult to articulate in words and texts.
Pamela Smith, From Lived Experience to the Written Word *(2022, 17)*

Throughout this book, we have distanced ourselves from the knowledge-practice dichotomy, instead considering the different forms of knowledge and learning—both textual and experiential—that are integral to *menjor* and, by extension, the crafting of potency. This leads us to consider how various forms of literacy and their entanglements connect the diverse practices presented across the chapters. Inspired by Pamela Smith (2004, 2022), we have focused primarily on artisanal literacy, which encompasses tacit, embodied knowledge and engagement with tools and materials when compounding medicines. Yet, we have also encountered textual and scientific literacies through which practitioners interact with both Tibetan works and biomedical sciences to articulate "traditional" knowing practice.

In Chapter 1, Amchi Tsultim Gyatso explained that his *chongzhi* purification procedure had been carried out by generations of expert amchis who gained experience through practice. When we asked about the textual sources underpinning this accumulated experience, he replied that "the text *is* experience." In many of our encounters with amchis, we similarly observed that while written indications are often upheld as the ideal—and in the case of the *Four Tantras*, revered as a sacred and unquestionable authority—amchis navigate them with discernment, frequently relying on their teacher's notes, oral instructions, and pragmatic adaptations to address the inevitable imperfections and daily-life limitations of their craft. This echoes Judith Farquhar's (1994) findings on the use of texts in Chinese medicine, which she approaches as "living documents" that are continuously and creatively recontextualized, living inherently in practice. It also reflects Tawni Tidwell's (2017, 216–77) insights into how memorizing and reciting the *Four Tantras* encodes and re-enacts embodied experience. Inspired by Tim Ingold as well as Smith, we tinkered with crafty descriptions to bridge the often-reified gaps between textual information and embodied practice, expressing the non-verbal literacies involved in the processing of substances and the making of medicines by hand.

Amchis' multiple literacies are reflected in their vernacular, understood here as a shared disciplinary language that binds practitioners to a common frame of understanding. The shared identity of Sowa Rigpa practitioners is rooted in a common knowledge base of textual literacy through the *Four Tantras*—which they study and memorize to different extents—facilitating access to a specific technical language and associated conceptual framework, as detailed in Chapter 3. While the amchi-pharmacists encountered in this book all share this language,

their personal vernaculars extend beyond textual transmission to include experiential vocabularies learned through lineage-based apprenticeships, and material languages that emerge through the making of medicines. The term "guild" might serve as a useful analogy for describing their shared yet restricted systems of expertise, although this historically loaded concept only partially maps on to contemporary Sowa Rigpa and must be used with caution.

Thinking through these multiple forms of literacy leads to the observation that *menjor* is grounded in theory, that theory is grounded in practice, and that each illuminates the other. Foundational compendia such as the *Four Tantras* and the *Four Collections* act as unifying threads across regional and institutional differences; indeed, memorization of these texts is what distinguishes amchis from other types of healers. Guild-like lineage structures allow for the transmission of central tenets *and* the lived theory of amchi artisans, which accommodates adaptations emerging from specific environments and bodies of experience and expertise. A parallel can be drawn here to Volker Scheid's (2007) concept of "currents of tradition," which defines tradition as an affinity to a core body of texts that provides continuity by serving as a touchstone of authority and legitimacy, while also allowing for flexibility, innovation, and multiplicity. We suggest that juxtaposing these notions of currents and guilds expands the anthropological vocabulary for studying *menjor* as craft, opening space to recognize tradition as dynamic and organized through communities of practice (Wenger 1998). It is these communities that sustain and transmit *menjor* knowledge within Sowa Rigpa. They are not passive repositories of static tradition; rather, they are social formations in flux, within which skilled practices are not only reproduced through situated apprenticeships and other shared activities, such as collective rituals, but are also refined and adapted to contemporary conditions. Artisanship involves more than technical skill; it is also relational and ethical work that involves attunement to materials, social dynamics, moral considerations, religious obligations, and cosmological forces. This is evident in the medicinal butter making and consecration workshop in Chapter 2, which transformed both the participants and the substances they were interacting with, and in Chapter 5 where annual *mendrup* rituals support artisanal *menjor* practices and co-create lineage continuity through *papta* substances.

Sowa Rigpa lineages can be thought of as pedagogical ecologies that cultivate shared ways of seeing, sensing, and crafting potency—an enskilment of the senses that Cristina Grasseni (2007) argues is forged only through prolonged, embodied apprenticeship. Shared vernaculars are thus important mediums of disciplinary cohesion that help amchis to maintain and pass on diverse skill sets and closely guarded experiential knowledge within localized communities of practice, while also being able to communicate with one another across regional and institutional heterogeneities.

Amchis from various backgrounds acknowledge that substances have innate capacities that can be purified, concentrated, strengthened, and modulated, while also consciously infusing their medicines with other sources of power. This multiplicity of potency implies a certain openness, a rich potential that allows for both continuity and creativity in practice. The three *nyepa*, five elements, six tastes, three post-digestive tastes, eight potencies, and seventeen qualities provide a clear conceptual framework for *menjor* activities (Chapter 3), but applying this framework in practice allows for considerable plasticity in the making of formulas, mediated by the cultivated palate of expert practitioners. Substances share properties, tastes, and qualities, but these are not perceived, interpreted, or employed identically by amchis. Proportions within a formula can vary significantly, processing techniques can differ, and while some ingredients are considered key to making the formula efficacious, others may be substituted or omitted entirely. While amchis try their best to follow written formulas precisely, sometimes the substances at hand are inferior in quality, too expensive, or simply unavailable, or production processes need to be adapted to new conditions. Across their works, Smith and Ingold remind us that craftwork is never self-explanatory or perfect; it is relational and contingent upon particular configurations of materials, environments, and skills. These observations resonate strongly with Sowa Rigpa *menjor* craft, as exemplified in the variously shaped *chongzhi* cakes made in different *menjor* settings (Chapter 1), adaptations of medicinal butter formulas (Chapter 2), great variabilities in the delivery of *menjor* education (Chapter 4), and some amchis' reliance on the spiritual potency of *papta* to fix incomplete formulas (Chapter 5).

In short, becoming a *menjor* artisan involves embodied knowledge and enskilment that is deeply reliant on hands-on practice. Texts provide the framework, but true expertise arises through touch, intuition, and direct engagement with materials across the full spectrum of potencies. The artisan's intimate relationship with substances and potencies both draws on and deepens tacit ways of knowing that, to borrow from Smith (2022, 17), are often "intractably difficult to articulate in words and texts."

Imperfect crafts

Producing this project monograph as a team made us realize that the writing process is, like *menjor*, a craft-like endeavor and therefore contingent, imperfect, and never truly "finished." Our medium is the English language, but our individual ways of speaking and writing differ beyond tonality and incorporate a range of disciplinary vernaculars. In our choice of vocabulary, we have approximated Tibetan technical terms and concepts in different ways, employing "literal" translations in

some parts of the book and more interpretive glosses in others, as well as drawing carefully on natural science lexicons to articulate the perspectives of the practitioners introduced in Chapter 3. We have also employed conceptual vocabularies from various academic disciplines as interpretive lenses. We have tried to remain attuned to the politics of language and translation, and to how Tibetan ideas and practices have been interpreted and represented beyond the Tibetophone world through word choices made largely by non-Tibetan scholars. Our monograph therefore consciously presents different translations and conceptual vocabularies based on engagements with different amchis in the field, clinic, classroom, and *menjor* sites, as well as our own disciplinary standpoints.

Like writing, anthropological research has long been presented as a craft that takes "practice, practice, and more practice" (Bernard 2018, 1; see also Epstein 1967). The craft of ethnography is, in many ways, a rather technical endeavor relying on a varied toolbox that only really comes into play in the field. As ethnographers of craft, we strove to learn something of the skilled practices of the artisan by consciously becoming researcher-apprentices, immersing ourselves in embodied learning processes as we engaged directly in key *menjor* tasks such as sorting, grinding, and boiling raw materials. While we do not suggest that apprenticeship can or should replace classical anthropological methods such as interviews, or even participant observation, we found that engaging directly in manual work alongside experts breaks down barriers between observer and observed, subject and object, resulting in a highly productive merging of perspectives. This approach of learning by doing is often messy, partial, inferred, and challenging to fully capture in writing, but also fosters immersive participation and empathy, cultivating correspondence while facilitating a shift from beliefs *about* something to relating *with* it (see Ingold 2006, 2013).

Adopting apprenticeship as a core anthropological method has clarified for each of us how *menjor* is, in essence, a generative process of crafting potency. In this process, the medicine maker acts as a potentiating agent, a weaver of potent threads, and a sculptor of material and immaterial potentialities. In addition to the production of potent medicines and the accumulation of expertise, the proficient maker is also said to simultaneously cultivate genuine compassion and wisdom, *bodhicitta*. Just as the amchi gains certain qualities through training and subsequent practice while traveling the path of the bodhisattva, the anthropologist-apprentice is equally changed on some level by their intimate engagement with processes of making, both material and ritual. Through correspondence, this way of experiencing *menjor* fundamentally shaped and transformed us as individuals, even though we were only participating for relatively short periods of time.

Our four-author, multi-sited, and apprentice-driven methodology exemplifies the book's mode of co-creation, enacting the claim that knowledge—like

potency—can be forged across linguistic, disciplinary, and sensory boundaries through embodied practice. At the same time, knowledge is inevitably partial, relational, and contingent, limited not only by the circumscribed body of ethnographic and textual materials that we work with, but also by our frames of reference and the analytical tools that we have chosen to use. In this book we have approached *menjor* as a craft, taking inspiration from the works of Smith and Ingold. While this enabled many valuable insights, in what follows we reflect on what can also be learned from the lacunae in this approach.

Methodological limitations

Adopting a certain analytical lens—or utilizing a particular tool—always comes with inherent limitations. While a hammer is ideal for many tasks, you cannot build an entire house with one. It is therefore not surprising that Ingold's ontology of dwelling (Knudsen 1998) does not work as a theory of everything. Indeed, any attempt to use it as such would miss the point and run counter to Ingold's intent. Nevertheless, his approach does provide a refreshingly monist alternative to Cartesian nature/culture and body/mind dualisms, particularly given that there is no Tibetan or Buddhist equivalent to "Western" conceptions of nature as a material backdrop for human civilization (see, e.g., Edelglass 2021, Fjeld and Lindskog 2017). More specifically, Ingold's notion of meshworks was useful for foregrounding emergent material entanglements, while the idea of taskscapes offered a way to capture the ensemble of activities considered essential for an amchi to be able to gather and weave together properties, substances, and other dynamic threads into potent medicines. While productive in these and other respects, we identified three main limitations in taking an Ingoldian approach to analyzing the crafting of potency in Sowa Rigpa, each of which is instructive in its own right.

First, a strong focus on emergent fields of practice tends to give less attention to texts. As emphasized by Are Knudsen (1998, 6): "Ingold's work can be read as a critique of the language-centered epistemology … which has dominated anthropology for half a century." Similarly, this book responds to the privileging of text as the source of knowledge in Tibetan and Himalayan studies (a point to which we return). In particular, we found that Ingold's notion of "guided rediscovery" offered a valuable vantage point on the interplay of texts and experience, knowledge and practice, especially in terms of "reading" recipes. However, much would be lost by ignoring philological and historical intricacies of interpretation and the many intertextualities in Tibetan scholastic commentarial traditions, even if they lie beyond the scope of this book.

Second, although Ingold has written about the re-animation of modern thought (Ingold 2006) and the role of imagination as an embodied way of knowing in both

scientific inquiry and religious sensibility (Ingold 2013c), his more Eurocentric reflections struggle to fully capture the incredibly rich, more-than-human life-worlds and ritual practices of Himalayan Vajrayāna Buddhists. Although Mridul Surbhi and Jan van der Valk (2025) suggest "ritualized meshworks" as a corrective, this richness is exemplified in much more detail through the *papta* compounds examined in Chapter 5. *Papta* are layered with the potencies of materials and rituals, and with spiritual intentionality, blessings, and the realization of living and deceased masters. They provide a medium for transformative interactions across lineages and ontological domains—as well as across space and time.

Third, Ingold's phenomenological approach to craft emphasizes processes of making as experiential, first-person interactions between makers, materials, and environments. While this approach has proved very useful for describing and understanding individual practices as they occur, it falls short when it comes to shared, collective, and institutional aspects of Sowa Rigpa. Its inability to account for the broader social, economic, and political dimensions of artisanal practice might be seen as a flaw in Ingold's work (see Kochan 2024), but at the same time it allows for a refreshing shift of focus away from essential yet endlessly rehearsed arguments concerning tradition and modernity, structure vs. agency, and knowledge/power. By bringing in the notion of communities of practice and considering the guild-like dynamics of amchi lineages, we have provided a partial corrective to the individualist bias and ahistoricity of Ingoldian approaches.

Smith's arguments emerge from her focus on early modern European contexts, where the spiritual dimensions of artisanal work were often intertwined with emerging notions of natural philosophy and "proto-science." In her work, artisans appear as forebearers of modern science, albeit with their own craft literacies. There are always significant risks in applying European models to vastly different cultural and historical settings. Early modern Europe is, of course, not readily comparable with the contemporary Himalayas; dynamic relationships between science, religion, technology, and medicine differ markedly across these two contexts. This does not preclude the application of some of Smith's conceptual tools to Sowa Rigpa, such as "artisanal epistemologies" and "artisanal literacies," but it does mean that we need to carefully consider how artisanship in Sowa Rigpa can help us to rethink and perhaps expand upon these concepts.

In *The Body of the Artisan* (2004), Smith calls for a history of vernacular science that prioritizes localized, practice-based ways of knowing, rooted in craft and nontextual, experiential labor. She highlights the persistent division in "Western" cultures between "those who work with their minds—scholars—and those who work with their hands—artisans" (7), arguing that we should not underestimate the frequently unwritten contribution of the latter to the scientific advances often attributed solely to the former. Her artisanal epistemological approach sharpened

our focus on the intricate interplay between artisans, their tools, and the materials they work with, as well as on their positioning in relation to scientific and religious paradigms. It also allowed us to recognize that formulas can be incomplete and substances unavailable, and to confirm that texts can be archaic, secretive, or missing altogether. This in turn brings to the fore the often-downplayed importance of experimentation as part of what it means to be a skilled amchi. However, our findings on amchis' artisanship and their multiple literacies call for a broader conception of vernacular science that leaves space for the blending of manual craft with both textual heritage and spiritual lineage.

Our examples show that primarily tacit craftwork often re-enters a textual orbit through teacher's notes, technical glosses, formularies, and so on. To fully appreciate such a specific text–practice dialectic demands a suitably focused ethnographic lens. Where Smith traces artisanal materials through early modern European circuits, Himalayan amchis are embedded in Vajrayāna Buddhist cosmology and soteriology. Their craftwork operates on different ontological planes, often simultaneously involving material, ritual, and spiritual commitment-related praxis. Smith's conceptualization of vernacular science falters when applied strictly to Sowa Rigpa because amchis move back and forth between memorized passages from the *Four Tantras*, sensory-focused apprenticeship, manual labor (e.g., harvesting, grinding, mixing) and ritual practice (e.g., mantras, prayers, meditative visualization). Tacit knowledge is central to amchi artisanship but continuously (re)connects to textual and oral lineages. Rather than rendering our application of Smith's framework invalid, these discordances invite us to expand her concept of "vernacular science" to encompass Sowa Rigpa's multimodal literacies, ritual intentionalities, and pharmaceutical terrains. There is a complex interplay of textual, experiential, lineage, and institutional registers at all status levels, rather than a sharp dividing line between vernacular and elite ways of knowing and acting, including when it comes to the crafting of potency through *menjor* practice.

Within a "Sowa Rigpa sensibility" (Adams, Schrempf, and Craig 2011), medicine, science, and religion hold distinct meanings while also remaining deeply intertwined. Sowa Rigpa has not undergone a historical period comparable to the "Age of Enlightenment" that swept across Europe from the late seventeenth century onward, though scholars such as Janet Gyatso (2015) have located distinct historical moments when empiricism gained ground on more strictly religious and scholastic orientations in medical thought, writing, and practice. Our fieldwork shows that ritual and religion continue to play key roles in *menjor* practice. This is particularly evident in lineage allegiances and their related blessed substances. At the same time, we observed very pragmatic, materialist approaches to substances and environmental conditions. In this sense, it would not be wrong to refer to

menjor experts as experiential naturalists or pragmatic pharmacists, with epistemological orientations akin to Gyatso's (2015) "scientific sensibilities."

Knowledge and substances on the move: Historical and textual considerations

It is widely known that the *Four Tantras* has syncretic origins and synthesized several currents of medical tradition: Tibetan, Indian, Buddhist, Chinese, Islamic, and others (Schaeffer, Kapstein, and Tuttle 2013, Yang Ga 2010). We also know that medical ideas, substances, knowledge, and therapeutic techniques such as moxibustion traveled throughout Eurasia and across the Himalayas over many centuries (McGrath 2021, Smith 2019, Yoeli-Tlalim 2013, 2021). In Chapter 3, we highlighted the ingenuity of polymath scholar-physicians such as Deumar Geshé Tendzin Püntsok, who in the early eighteenth century eloquently wrote about types of potency not previously elaborated. His works offer a glimpse into the historical richness of making, thinking, and writing about medicines. A lot remains to be done to uncover the dynamic histories of Sowa Rigpa pharmacology through textual sources.[124]

While the history of craft in Sowa Rigpa is equally beyond the scope of this book, we have presented ethnographic examples of how textual knowledge, raw materials, and artisanal know-how converge in contemporary Himalayan amchi practice. This has allowed us to demonstrate how amchis adapt their shared knowledge to local circumstances, for example, shifting the month of processing *chongzhi* in moonlight in regions affected by the monsoon and modifying the shape of the *chongzhi* cakes to adapt to the humidity (Chapter 1). We have also shown how consecrated substances move through religious communities and beyond in the form of *papta*, carrying blessings from past masters and ceremonies across centuries and converging repeatedly at annual rituals, before diffusing in the form of the numerous other medicines to which these potent more-than-substances have been added (Chapter 5).

The production of medicinal butter described in Chapter 2 also exemplifies how different modes of practice and material flows intersect. Some of its key ingredients—especially the three myrobalan fruits—have been traded extensively from India into Tibet, along the silk routes, and through seaports over many centuries. Ronit Yoeli-Tlalim (2021, 63–84) describes how myrobalans were

124 For existing studies see, for example, Czaja 2013, 2015, 2017, 2019a, 2019b, Gerke 2021, Simioli, 2013, 2016, 2025.

historically traded for all kinds of reasons: they were valued for dyeing, tanning, ink production, and even as a barter currency, as well as for medicinal purposes. While substances, formulas, and processing techniques often traveled widely and quickly, however, more complex theories explaining their use "traveled slowly or not at all" (3). The consequential lack of shared theoretical frameworks gave rise to localized, retrospective explanations, often merging different medical epistemologies. Yet, in our study of contemporary Sowa Rigpa institutional education in Kathmandu (Chapter 4), we noticed a remarkable partial inversion of Yoeli-Tlalim's findings. Textual knowledge about substances, formulas, and broad theoretical frameworks—especially of the three *nyepa*—nowadays circulate widely through institutional curricula and in globally accessible online teaching spaces. In contrast, the artisanal epistemologies and intricate craft knowledge needed to prepare and potentize medicines remains largely confined to experiential and lineage-based *menjor* training, which is now being marginalized through processes of institutionalization.

We saw some of this transcultural mélange in Dr. Arya Pasang Yonten's rejuvenating *menmar* workshop in Switzerland, which drew on the lineage of his Tibetan teachers as well as decades of institutional study and teaching in Dharamsala, Ladakh, and later across Europe and beyond. This workshop also brought together multiple historically and textually quite distinct ways of conceiving potency. As noted in Chapter 2, the *Four Tantras*' medicinal butter chapter (IV, 7) focuses on preparation techniques and ingredients and their effects on the three *nyepa*. It has strong textual similarities to the pre-thirteenth-century Tibetan works *Moon King* (*Zla ba'i rgyal po*) and the *Minor Tantra* (*Rgyud chung*) (Yang Ga 2010, 249). In contrast, the *chülen* material in the *Four Tantras* (III, 90), where we find *menmar* presented as a rejuvenating essence extraction, heavily depends on the Indian *Aṣṭāṅgahṛdayasaṃhitā* (Yang Ga 2010, 238).[125] Moreover, treating butter as a spiritually nourishing "nectar" introduces ideas of potency from Vajrayāna Buddhist traditions; these ideas and associated tantric practices became more prominent in *chülen* rejuvenation practices in central Tibet during the seventeenth century. In the contemporary art of making medicinal butter, all these different modes of potency—*nyepa*-pacifying, rejuvenating, and spiritually nourishing—come together.

While textual "origin" questions are perhaps of little consequence for contemporary practice (McGrath 2017a, b), they illustrate how ideas of potency are multivalent and evolve over time. *Menmar* clearly incorporates Indian ayurvedic

125 The *Aṣṭāṅgahṛdayasaṃhitā* was translated from Sanskrit into Tibetan in the eleventh century and served as a key source for the *Four Tantras*.

and Buddhist rejuvenation ideas of potency with local Tibetan materia medica butter mixtures, as well as tantric Nyingma ideas about the potency of essences and nectars. Moreover, like the myrobalan fruits, many of the other *menmar* ingredients—nutmeg, long pepper, cardamom, pomegranate, Chinese angelica—attest to extensive histories of long-distance trade, still to be researched for Sowa Rigpa contexts. Our point here is to acknowledge multiplicity, indicating how understandings of *nüpa* developed from different traditions over a very long time, revealing entangled histories of potency, which could make for exciting future research.

Future trajectories

The tension between artisanal epistemologies and institutionalized Sowa Rigpa has been a key thread running through this book. We have seen how the curricular priorities and pedagogical approaches of modern educational institutions in India and Nepal tend to deemphasize *menjor* training, while simultaneously expanding opportunities for public health engagement and career development for young amchis (Chapter 4; see also Blaikie 2019, 2025, Blaikie and Craig 2022, Pordié and Blaikie 2014, Takkinen 2021). Rather than simplistically framing institutions as "bad" and small-scale lineage practices as "good," however, we recognize that institutions provide stability, resources, and legitimacy for practitioners, as well as platforms for advanced treatments in hospital settings. We further note that larger Sowa Rigpa institutions and factories have access to the resources and expertise required to engage in complicated pharmacological processes, such as those involved in preparing metal ashes and precious pills. This enables continued production of complex treatments that are impractical to make in smaller, artisanal settings with limited resources.

Contemporary Sowa Rigpa encompasses various ways of indexing status, hierarchy, and power, often still rooted in lineage and individual proficiency but increasingly shaped by processes of institutionalization and professionalization familiar across Asian medical traditions (Abraham 2020; Cameron 2019; Chudakova 2021). As seen in Chapter 2, Dr. Pasang gained prominence through a combination of institutional qualifications, teaching posts, and internationally-oriented initiatives. Faculty at the Tibetan and Tibetan-exile institutions discussed in Chapter 3 hold considerable authority and influence in their respective milieux, while Chapter 4 shows the greater bureaucratic and political weight granted to university certificates issued in Kathmandu than to the more traditional oral examinations that signify proficiency in less formalized settings. Sowa Rigpa's recent official recognition by the Indian government emphasizes institutional qualifications as

the main signifier of practitioner status, putting those without formal accreditation at a disadvantage even when they have extensive experience and popular acclaim. Nevertheless, deep connections to lineage-based knowledge and a commitment to artisanal forms of *menjor* practice remain evident across a broad range of institutional and non-institutional settings. Revered *menjor* experts pass on their knowledge in colleges and universities across the Tibetan cultural area and contribute to medicine making at larger scales. We saw this in Kathmandu, where the government-supported, university-affiliated Sowa Rigpa International College heavily relied on local amchis as teachers, and the "traditionalist" *menjor* specialist Amchi Urgian Kalzang used pill-making machines to fulfill bulk orders (Chapter 4). There is no sharp dividing line between "traditional" and "modern" modes of *menjor* training and practice, and this book shows that such binaries offer little to those seeking to understand recent and future trajectories.

Our findings do, however, raise concerns about the long-term sustainability of small-scale *menjor* practices in Nepal and India. As discussed in Chapter 1, amchi entrepreneurs often employ skilled laborers trained in *menjor* techniques who lack theoretical knowledge of Sowa Rigpa. This is partly to ensure they do not threaten the livelihood of the pharmacy owner by setting up independent businesses. Many young medical college graduates told us about their struggles to establish independent clinics with their own pharmacies due to limitations in institutional *menjor* training, the monopolies of larger pharmacies, and financial constraints. Institutions can also withhold particular *menjor* knowledge from students to prevent private entrepreneurial endeavors after graduation, while some formulas also depend on specific lineage transmissions. Building a patient base for a successful private (and typically urban) clinic requires significant time and effort, leaving little capacity for sourcing raw materials or producing medicines. Additionally, amchis in some educational settings face challenges accessing personal internships. The master-disciple model demands long-term commitment and effort, even self-sacrifice, which students used to modern classroom pedagogy are perhaps less inclined to endure.

In Nepal, Blaikie and Craig (2022) highlight the precarious yet adaptive nature of Sowa Rigpa producers amidst industrialization—a theme we explored through the lens of educational taskscapes in three Kathmandu Sowa Rigpa schools (Chapter 4). Sienna Craig (2007, 149) questions whether Nepal might witness a renaissance in high-quality Tibetan medical education, boosting the skills and confidence of newly graduating practitioners. However, it remains to be seen how the next generation will navigate the decline of apprenticeship-trained expert amchi-pharmacists. Despite challenges, including lack of government recognition, some amchis may continue to produce medicines in a less regulated environment, preserving spaces for artisanal *menjor* as in Ladakh (Blaikie 2022, 311). These

trajectories demand in-depth research if we are to understand the role of amchis in evolving healthcare systems and pharmaceutical industries across Asia.

In India, *menjor* education and practice are increasingly being steered toward an ayurvedic model of standardized curricula, reformulated medicinal products, centralized regulatory regimes, and market-oriented mass production. This is due to the Ministry of AYUSH's deep historical connection with the large network of ayurvedic institutions across India, and the relatively minor role that other medical traditions have been able to secure for themselves. Under new AYUSH rules, tremendous shifts are taking place in the kinds of abilities that amchis are expected to develop, with institutional training emphasizing academic credentials as part of master's and doctoral degrees. To ensure career promotion, students are required to write academic articles that have little to do with memorizing the *Four Tantras*, seeing patients, or making medicines. As this book goes to press, new research and writing skills modules are being introduced in India's Sowa Rigpa colleges (a development that occurred much earlier in the PRC).

It is not yet clear how amchis will integrate these new developments into their Sowa Rigpa practice over the next decades and how this will in turn shape their approaches to *menjor*.[126] However, since minority medical traditions in India and Nepal are increasingly encouraged to follow ayurvedic trajectories, Sowa Rigpa research is likely to shift toward the integrative medicine paradigm. Relying on biomedically-derived concepts of bodies, diseases, symptoms, and therapeutic effects, this paradigm privileges ethnopharmacological approaches to assessing the healing potential of medicinal plants (e.g., Kudlu 2022, Madhavan and Soman 2022), and use of the chemical active ingredient model to investigate and explain the effects of medicinal substances (and to a lesser extent formulas).[127] Critical questions persist: Will artisanship and manual, sensory expertise retain a role in this emerging research paradigm, and how will the multifaceted layers of potency explored in this book be accounted for?

AYUSH-influenced developments within Sowa Rigpa education and research may accelerate the standardization of practices, but our findings from Kathmandu suggest that some relatively new educational institutions still honor and draw upon lineage. Nurturing religious alliances as forms of legitimacy, they offer more space for *menjor* and the cultivation of ritually empowered practitioners, as well

126 In Tibetan regions in the PRC, *menjor* education has its own specialized tracks and often involves years of specialization and internships after graduation with a *kachupa* degree.

127 On synergy-by-design approaches to Sowa Rigpa pharmacology, see Tidwell and Nettles 2019; on network pharmacology approaches, see Zhao et al. 2018.

as what are deemed more potent medicines. In India, it is also possible that we will see the emergence of alternative models that blend lineage-based transmission with institutional pedagogy in surprising ways. For the time being, however, amchis studying in Indian college contexts must adapt to distinctly modern, AYUSH-influenced and biomedically-inflected modes of instruction, which markedly deemphasize *menjor* training. Such approaches to training may correspond well to the new, stable, and well-paid employment opportunities opening up for amchis in the public healthcare system (Blaikie 2019, 2025), but they leave limited space for students or graduates to learn or practice *menjor*.

A further set of challenges is also emergent in the tension between traditional artisanship and industrial standardization. The Sowa Rigpa pharmaceutical industry has grown so extensively that its impact extends even to those who do not actively engage with it or who deliberately seek to remain outside its scope (Kloos et al. 2020, 10). What does this mean for amchi-artisans? The flexibility and creativity integral to *menjor* artisanship defies the ideals of standardization and universality that are increasingly central to the industry. Where does the type of Sowa Rigpa artisanship discussed in this book fit into regulatory regimes such as Good Manufacturing Practices (GMP)?[128] While existing scholarship has started to explore the interface between traditional craft and industrial standardization (e.g., Craig 2011a, Cuomu 2022, Saxer 2013, Schwabl 2025, Van der Valk 2017), it remains an important area for further exploration. Regulatory regimes often ignore key ritual aspects of *menjor* and introduce material changes that affect medicine-making at a fundamental level. Machine grinding and manual grinding have different effects on the properties of substances, and powders, pills, and capsules embody distinct material and energetic qualities. This sensitivity to material processes, deeply embedded in *menjor* practice, is often sidelined in industrial approaches, eroding some of the contextual nuance that small-scale amchi-artisans have long relied upon to treat particular disease manifestations and individual patients-in-environments. This is not to suggest that using machines to make medicine requires no skill. To the contrary, in his work on the manufacture of Tibetan formulas in Switzerland, Van der Valk (2017, 126–58) shows that even on an industrial scale the pharmaceutical assembly line demands specific skillful interactions between workers, ingredients, and machinery.

Thus far, industrialization seems to have created ambivalent spaces in which small-scale artisanal and industrial modes of practice are coexisting and coevolving.

128 Contemporary regulatory regimes include, for example, good collection, manufacturing, and laboratory practices, intellectual property rights legislation, and national pharmacopeias and drug licensing laws (see Pordié and Gaudillière 2014).

This might offer opportunities for innovation within both. However, it also necessitates a heightened awareness of the material and ritual coherence of Sowa Rigpa, as well as how the growing use of machinery affects the status of amchis and the way they are perceived by one another and by the wider community. Experienced amchi-pharmacists producing medicines in large quantities, using machines and assistants, are often highly respected in Sowa Rigpa communities, as long as they maintain high standards of quality and ethical conduct (see Blaikie and Craig 2022). At the same time, amchis lacking access to machinery may attract praise for their commitment to artisanal methods and notions of "good medicine" and even be fetishized as upholders of authentically "pure" tradition, while simultaneously being dismissed as "backward."

Broader concerns regarding the sustainability of small-scale *menjor* are clearly manifested in the declining number of amchis making medicine in India and Nepal, and in our observation that many established pharmacists had no apprentices (e.g., Amchi Nawang Tsering, Amchi Tsultim Gyatso, Dr. Penpa Tsering). Even so, we do not predict "the end of artisanal Sowa Rigpa medicines," or the "dying out of ancient traditions" in these regions. Several of the institutions described in Chapter 4 continue to train students in artisanal *menjor* skills and small-scale production remains central to the way most amchis practice in contemporary Kathmandu (Blaikie and Craig 2022). Micro-scale producers also survive in the PRC despite the dominance of large factories (Hofer 2018; Kloos et al. 2020), and many Ladakhi amchis continue to produce medicines artisanally despite the regulatory implications of Sowa Rigpa's official recognition in India. Comparative examples from other Asian medical traditions also suggest a range of possible trajectories. For example, in his work on ayurvedic education and healing in Kerala, South India, historian Anthony Cerulli (2018, 2022) points to the persistence of the traditional *gurukulla* system, in which students live with and learn under the guidance of their teacher (*guru*) in a communal setting. Even after decades of streamlining and standardizing ayurvedic degrees and the widespread scaling-up of medicine production, this system has not vanished. To the contrary, Cerulli documents new models of *gurukulla* hands-on-training for post-graduates from ayurvedic institutes and shows that there are still many small, clinic-cum-pharmacy style setups and local producers in Kerala (see also Kudlu 2016), despite the long-term influence of AYUSH regulations and the presence of several large pharmacies dominating the landscape. While integration into state structures, industrialization, and new regulatory regimes might be pushing Sowa Rigpa further toward standardization and mass production in India and Nepal, there may still be room for a patchwork of modes that continues to create space (and demand) for artisanally-produced medicines and lineage-based skills and practices.

Making potency tangible

By moving beyond the profusion of texts and formularies, *Crafting Potency* has opened up new ways of engaging with the relationships between materials, knowledge, and artisanship in Sowa Rigpa. It appears with the same publisher as the interdisciplinary volume *Among Tibetan Materialities: Materials and Material Cultures of Tibet and the Himalayas* edited by Emma Martin, Trine Brox, and Diana Lange (2025). Both publications urge researchers to recognize the limits of the textual approach that continues to dominate Tibetan and Buddhist studies, and to recognize materials and the ways in which people engage with them as valid sources of knowledge. They also share an emphasis on the ordinary in terms of both materials and people, reflecting the recent push within Tibetan studies to look beyond extraordinary events, individuals, and "key" representatives of Buddhism (see, e.g., Gill and Hofer 2023). The open access platform that Heidelberg Asian Studies Publishing has provided for both books facilitates the diffusion of materials, artisanship, and nontextual literacies within academia and beyond without the inequities created by high-priced publications and paywalls.

Menjor is a living tradition that thrives in communities of practice. Understanding any living tradition requires embodied ways of knowing, but this is especially the case for medicine, which is all about bodily processes, lived experience, and material therapeutics. Sowa Rigpa is usually presented as the *knowledge* of healing (*gso ba*). It is clearly a *science* (*rig pa*) in its own right, and for centuries its history has been written by eminent translators, scholar-physicians, monastic authorities, and polymaths. *Crafting Potency* is much more concerned with skilled practice than it is with book learning uncoupled from the experiential. We have consistently argued that small-scale medicine making is fundamentally concerned with the crafting of potency. Since medicines are Sowa Rigpa's main therapeutic arsenal, this craft is the amchi's true heart practice. The amchis who deeply embrace this craft are often exquisite artisans, even though they might not identify as such or come across as particularly scholarly or extraordinary in other respects. As soon as we started getting our hands dirty by working alongside amchis as apprentices, we were deeply humbled both by their intricate skills and their long hours of hard labor. This is partly why we chose to call attention to more peripheral people and places across the Himalayas, such as Amchi Nawang Tsering and his village of Nee close to the Changtang plateau (Chapters 1, 5). Even though Amchi Nawang has no official certificates (he passed the traditional amchi exam), nor access to electric machinery, his medicines are in high demand across Ladakh. His smooth, milky white *chongzhi*-coated Drupril pills (fig. 83) were recognized as supreme by the widely renowned senior Tibetan cottage industry producer Dr. Penpa Tsering when we showed him a sample in Dharamsala.

Figure 83
Amchi Nawang Tsering's *chongzhi*-coated Drupril pills. Nee, Ladakh, August 2022. Photo J. van der Valk (CC-BY-SA 4.0).

Menjor practice in Sowa Rigpa is endlessly creative in its specificity, and this creativity is mirrored in the multivalent potency of the resulting medicines. Potency in this sense is a total phenomenon, encompassing all dimensions of lived reality: body, speech, and mind, as well as the surrounding landscape and even spiritual and astrological influences. This resonates with the *Four Tantras*' assertion that "everything can be a medicine" (I, 3), which implies that all things possess inherent potency, if you know how to harness it. This idea is further reinforced by the encompassing vernacular term *choga*, which suggests that every act of medicine-making is technique, often imbued with spiritual practice, potentially ritualizing even the most mundane tasks.

The interconnected material meshworks, amchi taskscapes, epistemologies, and relationships that are interwoven in the crafting of potency are incredibly rich and almost mind-boggling in their scope. Yet, in practice, the acts of grinding, sieving, and shaping powders and pills remain deceptively simple, involving manual labor and everyday materials. There is an apparent contradiction here between the vastness of potency—encompassing sculpted layers of both material and immaterial qualities, self-cultivation, and ritual consecration—and the ordinariness of the processes involved. However, by grounding the living tradition of Sowa Rigpa in daily-life practices, we hope that this book has made *nüpa* both tangible and approachable, connecting the extraordinary with the ordinary. Potency, in the end, is simultaneously about knowing and doing what works. It is efficacy-in-becoming.

Appendix

List of Individuals

Note: This list only includes amchis and other figures who are mentioned in several places across the book. Amchis are listed by name, not by their titles (Amchi, Dr.). The phonetic transcription of Tibetan and Ladakhi names reflects the following order of priority: spellings that individuals themselves use; common local spellings; spellings commonly used in the secondary literature; and the "THL Simplified Phonetic Transcription of Standard Tibetan" (Germano and Tournadre 2010) scheme. The transliteration of names follows the "THL Extended Wylie Transliteration Scheme" (Chandler et al. 2004).

Phonetic Transcription	Wylie Transliteration	Description
Amchi Gegé	*am chi dge dge*	See Tsultrim Sangye.
Arya Pasang Yonten (aka Dr. Pasang)	*arya pa sangs yon tan*	b. 1955. Internationally recognized senior amchi and scholar born in Tibet, who trained and later taught at MTK in Dharamsala. He lectured in Ladakh (1989–1991) before moving to Europe, where he co-founded the New Yuthok Institute in Milan and the Tibetan Medicine Education Center in Neuchâtel, Switzerland.
Chatral Sangye Dorje Rinpoche, (aka Kyabche Chatral Rinpoche)	*bya bral sangs rgyas rdo rje rin po che / skyabs rje bya bral rin po che*	1913–2015. Yogi, Dzogchen and Nyingma master, closely associated with the *Dudjom Tersar* lineage.
Deumar Geshé Tendzin Püntsok	*de'u dmar dge bshes bstan 'dzin phun tshogs*	b. 1672. Tibetan polymath; his *Crystal Orb and Crystal Rosary* offers the most significant elaboration on potency among the prominent commentaries on the *Four Tantras*.
Dudjom Rinpoche (Dudjom Jigdral Yeshe Dorje Rinpoche)	*bdud 'joms 'jigs bral ye shes rdo rje*	1904–1987. Born in Pemako, southeastern Tibet. Nyingma and Dzogchen master, yogi, and treasure revealer (*gter ston*), from an important *tülku* lineage.
Gawé Dorjé	*dga' ba'i rdo rje*	A leading contemporary *menjor* scholar and author of one of the most authoritative materia medica textbooks.
Jamyang Tashi of Tsona, Lamenpa	*bla sman pa mtsho sna 'jam dbyangs bkra shis*	1918–1986. Studied at Lhasa Mentsikhang; later head of the MTK pharmacy in Dharamsala, and the Fourteenth Dalai Lama's personal physician; *menjor* teacher of many senior MTK amchis such as Arya Pasang Yonten and Tsultim Gyatso.
Jigme Dagpa	*'jigs med grags pa*	Contemporary amchi; one of the most senior disciples of Urgian Kalzang in Kathmandu.
Lama Rigzin	*bla ma rig 'dzin*	Contemporary amchi, current head lama of Nee monastery, and one of the three key amchi in the Nee *mendrup*; son of Urgyen Chosphel.

Phonetic Transcription	Wylie Transliteration	Description
Nawang Tangyas	*ngag dbang bstan rgyas*	Contemporary amchi from Kairy, Ladakh; nephew of Tsering Paljor.
Nawang Tsering	*ngag dbang tshe ring*	Contemporary amchi in Nee, Ladakh; disciple of Lama Rigzin; operates the pharmacy of the Nee Amchi Association (Ogyan Sorig Tsogspa).
Padma Tsetar	*pad+ma tshe thar*	Contemporary amchi in Leh, Ladakh, who established his own pharmacy; disciple of Lama Rigzin.
Penpa Tsering, Lamenpa (aka Dr. Penpa Tsering)	*spen pa tshe ring*	One of the Fourteenth Dalai Lama's personal physicians and a contemporary senior private amchi entrepreneur in the Dharamsala region, who trained at MTK and supplies Sowa Rigpa formulas worldwide.
Phakchok Rinpoche, Kyabgön	*skyabs dgon 'phags mchog rin po che*	b. 1981. Vajra Master of Ka-Nying Shedrub Ling, founder and patron of TBSI in Kathmandu; head of Taklung Kagyü lineage and Riwoché Monastery and lineage holder of Nyingma Chokling Tersar.
Sanggyé Gyatso, Desi	*sde srid sangs rgyas rgya mtsho*	1653–1705. Regent of the Fifth Dalai Lama, eminent scholar, and author of several Tibetan medical commentaries.
Tashi Kundey	*bkra shis kun bde*	Contemporary amchi from Katphoo village, Ladakh.
Terdak Lingpa	*gter bdag gling pa*	1646–1714. Nyingma master, treasure revealer, and founder of Mindroling Monastery; also known as Gyurme Dorje (*'gyur med rdo rje*).
Trogawa Rinpoche (Sampel Norbu Trogawa Rinpoche)	*khro dga' bo rin po che / bsam 'phel nor bu khro dga' bo rin po che*	1932–2005. Buddhist Nyingma master and Tibetan physician, trained in Lhasa; founded the CTMI in Darjeeling in 1992.
Tsering Paljor	*tshe ring dpal 'byor*	1931–2007. One of the most famous twentieth-century Ladakhi amchis and one of the three key amchis in the Nee *mendrup*; from Kairy, Ladakh; also known as Kairy amchi (*rgya re am chi*).

Phonetic Transcription	Wylie Transliteration	Description
Tsultim Gyatso	*tshul khrims rgya mtsho*	Contemporary MTK-trained amchi, running the private clinic and pharmacy Chirde Sorig Khang in Leh.
Tsultrim Sangye	*tshul khrims sangs rgyas*	1940–2011. Founder and former principal of the Sorig Bumzhi School in Kathmandu; also known as Amchi Gegé.
Urgian Kalzang	*o rgyan bskal bzang*	d. 2021. Amchi and founding teacher of TBSI in Kathmandu, who also ran the Orgyen Menla Clinic.
Urgyen Chosphel	*o rgyan chos 'phel*	d. 1982. One of the most famous twentieth-century Ladakhi amchis and a key amchi in the Nee *mendrup*; from Kairy, Ladakh.
Yutok (Sarma) Yönten Gönpo, Yutok Yönten Gönpo	*g.yu thog gsar ma yon tan mgon po / g.yu thog yon tan mgon po*	Yutok the Younger, twelfth-century composer of the *Four Tantras*, often considered the "father of Tibetan medicine."

Glossary of Recurring Tibetan Terms and Key Texts

Note: Phonetic transcriptions follow the "THL Simplified Phonetic Transcription of Standard Tibetan" (Germano and Tournadre 2010); transliterations follow the "THL Extended Wylie Transliteration Scheme" (Chandler et al. 2004).

Phonetic Transcription	Wylie Transliteration	English Translation or Definition
arura	*a ru ra*	chebulic myrobalan, *Terminalia chebula*
barura	*ba ru ra*	beleric myrobalan, *Terminalia bellirica*
beken	*bad kan*	one of the three psychophysiological default systems or *nyepa, beken* is responsible for fluid-nutrient cycling, filtration, joint lubrication, and body structural integrity; sometimes translated as "phlegm" humor or *kapha doṣa*, but not identical to Greek humoral or ayurvedic usages
Bumzhi	*'Bum bzhi*	*The Four Collections*; the canonical root text for Bön Sowa Rigpa practitioners
buram	*bu ram*	jaggery
choga	*cho ga*	procedures, particularly of a medico-ritual type and often involving substances; commonly translated as "ritual," but can be understood as technique
chongzhi	*cong zhi*	various specific forms of the minerals calcium carbonate (calcite, dolomite, aragonite), calcium sulfate (gypsum), and related variations; in our examples, often procured from the sedimentary rock limestone
chongzhi daö	*cong zhi zla 'od*	moonlight *chongzhi*; name for both the special processing technique involving the exposure of limestone to full moon light, and the end product of this process
chülen	*bcud len*	essence extraction; name of practices that extract the essence from substances either pharmacologically or meditatively, and for rejuvenating substances sculpted through such practices
damdzé	*dam rdzas*	oath substance or commitment substance

Phonetic Transcription	Wylie Transliteration	English Translation or Definition
dangma	*dwangs ma*	nutritional essence
dongga	*dong nga*	elongated fruit pods of *Cassia fistula*
drangtsi	*sbrang rtsi*	honey
Dresum Menmar	*'bras gsum sman mar*	Three (Myrobalan) Fruits Medicinal Butter; name of a medicinal butter formula
Dudjom Tersar	*Bdud 'joms gter gsar*	revealed treasure teaching cycle associated with Dudjom Lingpa (1835–1904) and Dudjom Jigdral Yeshe Dorje Rinpoche (1904–1987)
duk	*dug*	toxin, poison (chemical/natural), pathogen, indigestible constituent, dirt, unwanted or harmful qualities; a multivalent term that in a *menjor* context can refer to anything that inhibits metabolic function and/or causes harm to the body
dukdön	*dug 'don*	detoxify; eliminate harmful components
dütsi	*bdud rtsi*	nectar, ambrosia
dütsi chömen	*bdud rtsi chos sman*	nectar dharma medicine
dzé ki nüpa	*rdzas kyi nus pa*	material potency; a capacity that arises from the materio-energetic properties of a substance's five functional activities (elemental dynamics, tastes, post-digestive tastes, potencies, and qualities); also known as potency of taste (*ro yi nus pa*)
dzo	*mdzo*	a male yak-cow hybrid
dzomo	*mdzo mo*	a female yak-cow hybrid
genla	*rgan lags*	honorific term of address for a teacher
gyüpa	*rgyud pa*	(family) lineage practitioner
Gyüzhi	*Rgyud bzhi*	*Four Tantras*; Sowa Rigpa's canonical root text
honglen	*hong len*	rhizome of *Picrorhiza kurroa*
jinlap	*byin rlabs*	blessing or consecration
jinlap kyi nüpa	*byin rlabs kyi nus pa*	potency of blessing

Phonetic Transcription	Wylie Transliteration	English Translation or Definition
jinten	*byin rten*	receptacle of blessings; refers to all kinds of blessed substances
jungwa nga	*'byung ba lnga*	the five elemental dynamics; interactive properties exhibited by matter and energy; often referred to simply as earth, water, fire, wind, and space, but defined by their respective properties of solidity/stability, cohesion/fluidity, maturation/heat, motility/movement, and interactive space, which together shape phenomenal behavior
kachupa / menpa kachupa	*dka' bcu pa / sman pa dka' bcu pa*	foundational Sowa Rigpa degree title; requirements vary across institutions, but nowadays usually requires five years of institutional education (often including a yearlong internship); known in English as Bachelor of Tibetan/Sowa Rigpa Medicine and Surgery
khenda	*khaNDa*	highly concentrated extract; used in the preparation of some substances and as a medicinal dosage form. At times it is decocted into the form of a thick syrup or treacle; otherwise, it is dried into glassy solids for storage and then pounded into a powder for usage in medicines.
kyurura	*skyu ru ra*	emblic myrobalan, *Phyllanthus emblica*
laklen	*lag len*	practice, practical experience; a method of knowledge transmission in Sowa Rigpa
lamenpa	*bla sman pa*	honorary title for personal physicians of lamas and rinpoches, most notably of the Dalai Lama
lūng	*rlung*	one of the three psychophysiological default systems or *nyepa*; *lūng* is responsible for functions of motility and signaling; sometimes translated as "wind" humor or *vāta doṣa*, but not identical to Greek humoral or ayurvedic usages
lüzung dün	*lus zungs bdun*	the seven bodily constituents: nutritional essence, blood, muscle, fat, bone, bone marrow, reproductive essences
medrö	*me drod*	metabolic heat, digestive fire

Phonetic Transcription	Wylie Transliteration	English Translation or Definition
men	*sman*	medicine
mendrup	*sman sgrub*	accomplishment of medicine; can refer to both a medicinal compound consecration ritual, and to a medicinal compound accomplished at such a ritual
menjor	*sman sbyor*	medicine making or compounding; Sowa Rigpa pharmacology and the practices of pharmacy
menmar	*sman mar*	medicinal butter
men-ngak	*man ngag*	pith instruction, oral transmission; a method of knowledge transmission in Sowa Rigpa often restricted within certain lineages
menpa	*sman pa*	physician; a synonym for amchi that is increasingly used outside the Himalayas
menrampa	*sman rams pa*	advanced Sowa Rigpa degree title; nowadays usually awarded after ten plus years of study and practice after obtaining a *kachupa* degree, but curricula and levels vary
menta	*sman rta*	a substance (e.g., butter, honey) or formula preparation type (e.g., medicinal butter) that serves as a vehicle for carrying potency
ngak kyi nüpa	*sngags kyi nus pa*	potency of mantra
ngowö nüpa	*ngo bo'i nus pa*	essence potency, potency of identity, potency of a substance's intrinsic nature; the specific physiological effects that a substance is recognized to produce when ingested
nyepa	*nyes pa*	psychophysiological default system; the three *nyepa* (*nyes pa gsum*) link bodily constituents, organs, fluids, and energetic signaling dynamics to provide systemic functions such as motility, thermoregulation, and body structural integrity; sometimes translated as "the three humors" but not identical to the Greek humors; see also *beken, lūng, tripa*
nü-top-yönten	*nus stobs yon tan gsum*	potency-strength-quality triad; a key framework for understanding potency in *menjor* and ritual contexts

Phonetic Transcription	Wylie Transliteration	English Translation or Definition
nüpa	*nus pa*	potency
nüpa gyé	*nus pa brgyad*	the eight (technical) potencies; eight specific characteristics of substances (heavy, oily, cool, dull/blunt, light, rough, hot, and sharp) and correlating physiological activities that substances produce in the body
papta / papgyün	*phabs rta / phabs gta' / phabs rgyun*	complex consecrated compounds variously translated as "fermenting agent," "continuity catalyst, or yeast," "samaya, lineage or treasure substance," or "mother essence"
rilbu	*ril bu*	pill, traditionally rolled
Rinchen Terdzö	*Rin chen gter mdzod*	*Treasury of Rediscovered Teachings*; monumental collection of Tibetan Buddhist texts compiled by Jamgön Kongtrul Lodrö Thayé in the nineteenth century
ringsel	*ring bsrel*	relic
terma	*gter ma*	revealed treasure (i.e., teachings)
ting-ngédzin gyi nüpa	*ting nge 'dzin gyi nus pa*	potency of meditative stabilization
tongwé gyü	*mthong ba'i rgyud*	engaged observation or "seeing transmission"; a method of knowledge transmission in Sowa Rigpa
top	*stobs*	strength; the overall warming or cooling capacities of a substance
torma	*gtor ma*	offering cake
tri	*khrid*	guiding explanations or practical instruction; a method of knowledge transmission in Sowa Rigpa
tripa	*mkhris pa*	one of the three psychophysiological default systems or *nyepa*; *tripa* is responsible for metabolic heat, blood production, and thermoregulation; sometimes translated as "bile" humor or *pitta doṣa*, but not identical to Greek humoral or ayurvedic usages

Phonetic Transcription	Wylie Transliteration	English Translation or Definition
trültel	*'phrul thal*	magical ash; a special type of *chongzhi* processing that is particularly suitable for *chülen*
tsotel	*btso thal*	a processed organometallic mercury sulfide complex in ash powder form
tu	*mthu*	power; in the *menjor* context, it is the core capacity of the essence potency of a substance, the quintessence of its characteristic capacity
tülku	*sprul sku*	reincarnate lama
tülwa	*btul ba*	tamed; past tense of the verb *dülwa* (*'dul ba*), to tame
yönten	*yon tan*	in the context of *menjor*, seventeen qualities or attributes resulting from a substance's taste and potencies that determine the specific functional activities that substances produce in the body and the way they harmonize, antagonize, or neutrally engage the characteristics of each *nyepa* pathway; more broadly, *yönten* refer to virtues, attainments, and capabilities.
yukchö	*dbyug bcos*	stick therapy; a yogic external therapy consisting of tapping the patient's body with the head of specific types of wooden sticks
Yutok Nyingtik	*G.yu thog snying thig*	*Yutok Heart Essence*; a core spiritual practice for many amchis from the collection known as the *Treasury of Rediscovered Teachings*, or *Rinchen Terdzö* (*Rin chen gter mdzod*)

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Crafting Potency explores the intricate interweaving of knowledge, practice, and materials through which potency (*nüpa*) is sculpted in Sowa Rigpa, more widely known as Tibetan medicine. Informed by extensive fieldwork with Sowa Rigpa practitioners or "amchis" from the Himalayan regions of Ladakh and Dharamsala (India), and Kathmandu (Nepal), as well as selected Tibetan medical texts, it analyzes how potency is understood and manipulated in the making of multi-ingredient medicines. The four authors bring together their varying areas of academic and practical expertise to ask: How is potency theorized in texts and cultivated through embodied practice? How is it directed, enhanced, and layered to realize the therapeutic potential of substances? How do amchis learn medicine compounding (*menjor*), and what changes when craft knowledge and skill are increasingly passed on in institutional settings rather than through lineages and apprenticeships? Drawing inspiration from Tim Ingold's ecologically attuned phenomenology and Pamela Smith's "artisanal epistemologies," the authors unpack potency as efficacy-in-becoming—a fluid capacity sculpted and layered through artisanship, ritual, and environment, rather than a fixed property of stable substances. This approach locates materials and practitioners firmly within their social, ecological, technical, and spiritual lifeworlds, and foregrounds the everyday skilled practice and experiential knowledge of amchi-artisans during a period of significant societal transformation. Offering a practice-based perspective on artisanship, materiality, and the making of medicine, *Crafting Potency* tests new methodological approaches and analytical foci for anthropology and the history of science.