

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 Gonpo 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 *lung* 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 dynamics⁵⁸ 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.

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

⁵⁶ The term *dōn nō* (*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.

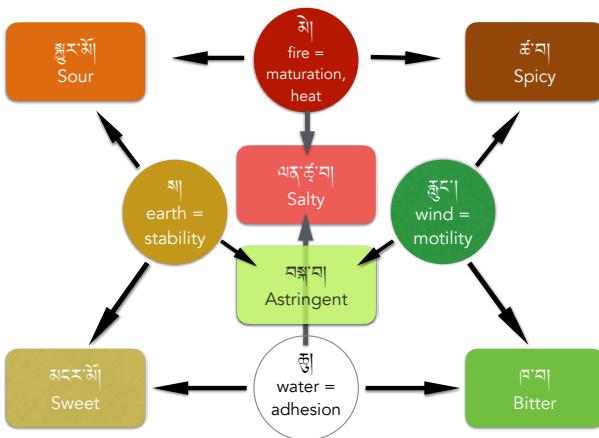


Figure 55 The six tastes as comprised of the five elemental dynamics. Diagram by Tidwell.

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 *lung*. 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 *lung*. 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

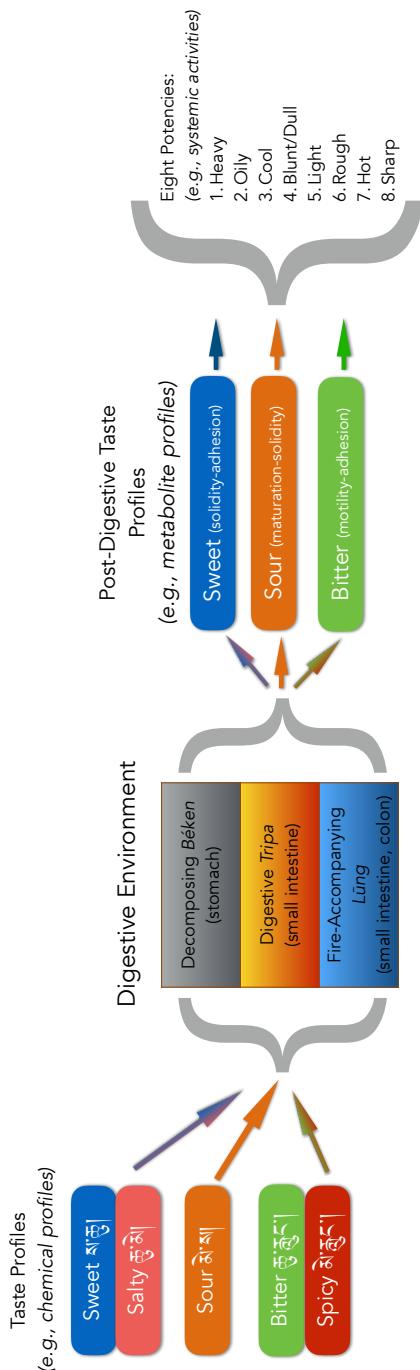


Figure 56 Post-digestive taste profiles produced as reactions of taste profiles to the digestive environment. Diagram by Tidwell.

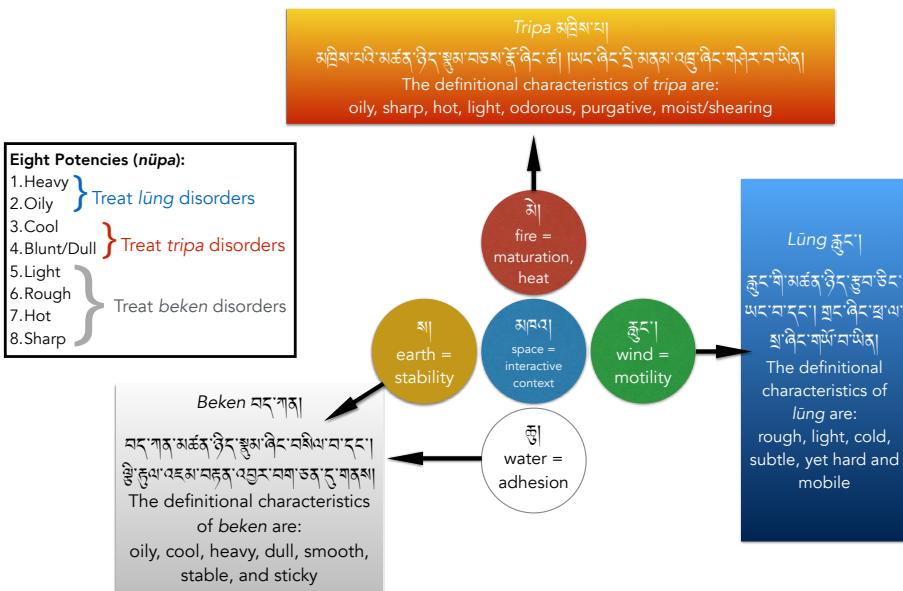


Figure 57 How *nyepa* relate to the elemental dynamics and the potencies that treat *nyepa* characteristics. Diagram by Tidwell (with quotes from II, 5; II, 20).

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., *lungen*-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*.

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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 <i>nyepa</i> characteristics with 17 treatment qualities						
lung Characteristics	कुरा Rough	यदा Light	शरा Cold	श्वशा Subtle yet hard	गर्जा Motile	
Qualities to Treat <i>Lung</i> Disorders	द्रवा Smooth	भूँ Heavy	वृ Warm	ज्वला Oily	षट्का Stable	
त्रिपा Characteristics	ज्वला Oil-accom- panying heat	क्षी Sharp	का Hot	यदा Light	द्रवश्वा Strongly odorous	वृ Pur- gative, Cleans- ing
Qualities to Treat <i>Tripa</i> Disorders	शरा Cold	कुरा Dull	यसीया Cool	प्लेवा Pliable	श्वा Weak	ज्वला Dry
बेकन Characteristics	ज्वला Oily	यसीया Cool	भूँ Heavy	कुरा Dull	द्रवा Smooth	षट्का Stable
Qualities to Treat <i>Beken</i> Disorders	क्षी Parched	का Hot	यदा Light	क्षी Sharp	कुरा Rough	गर्जा 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 བྱྱାନ୍ତ୍ରିକତା	E.g., <i>kyurura</i> (Indian gooseberry, <i>Phyllanthus emblica</i>) has a sour taste profile; <i>pipiling</i> (long pepper, <i>Piper longum</i>) has a hot taste profile.
By post-digestive taste profile ପ୍ରେରଣାନ୍ତ୍ରିକତା	E.g., despite its predominantly sweet taste profile, <i>chongzhi</i> 's balanced post-digestive taste allows it to alleviate both cold- and hot-natured conditions depending on its processing, compounding, and sculpting, so <i>chongzhi</i> -based formulas are often compounded by post-digestive taste profile.

Table 3 *Continued*

Potency Class	Definitions and/or Examples
By technical potency characteristics କୁଣ୍ଡାଳିତତା	E.g., <i>chongzhi</i> 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 ମୁଖ୍ୟମଣ୍ଡଳିତତା	E.g., preparing medicine in the form of a <i>khenda</i> , “smoothes” the properties of the individual ingredients such that they are digestible and do not block channels or inhibit/aggravate <i>lung</i> activities.
Potency taxonomies	
Potency କୁଣ୍ଡାଳି	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 <i>lung</i> disorder.
General Material potency ମୁଖ୍ୟମଣ୍ଡଳିତତା (aka, potency of taste ର୍ତ୍ତିକୁଣ୍ଡାଳି)	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 ଇଡିଟିକୁଣ୍ଡାଳି (aka, potency of identity, potency of a substance's intrinsic nature)	Specific physiological effects that the substance is recognized to produce when ingested.
Strength ଶକ୍ତି	The relative warming or cooling capacity of the substance due to the dominant dynamic combination driving its physiologic activity.
Power ଶକ୍ତି	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 Tenzin 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 Tenzin Püntsok’s taxonomy of potency.

Potency Class	Definitions and/or Examples
Classes of potency derived from the elemental dynamics—<i>རྒྱྱନ୍-ନ୍ୱି-କୁଣ୍-ଧା</i>—as primary compounding approaches	
By taste profile རྩ୍-କୁଣ୍-ଧା	E.g., <i>kyurura</i> (Indian gooseberry, <i>Phyllanthus emblica</i>) has a sour taste profile; <i>piping</i> (long pepper, <i>Piper longum</i>) has a hot taste profile.
By post-digestive taste profile ཤ୍ରୁଦ୍ଧ-କୁଣ୍-ଧା	E.g., despite its predominantly sweet taste profile, <i>chongzhi</i> ’s balanced post-digestive taste allows it to alleviate both cold- and hot-natured conditions depending on its processing, compounding, and ritual sculpting, so <i>chongzhi</i> -based formulas are often compounded by post-digestive taste profile.
By technical potency characteristics କୁଣ୍-ଧା-କ୍ଷେତ୍ର	E.g., <i>chongzhi</i> 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—<i>ର୍ତ୍ତି-କୁଣ୍-ଧା</i>—as shaping, sculpting, and directing approaches	
Potency of strength ଶକ୍ତି-କୁଣ୍-ଧା	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 ର୍ତ୍ତି-କୁଣ୍-ଧା-ଅନୁରାଶୀ-କୁଣ୍-ଧା	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 द्विद्वित्तुरुपापि	E.g., the concentrated potency of nutmeg (<i>Myristica fragrans</i>) is attributed to its aromatic properties.
Potency of antidotal quality शक्तिरुपर्वत्तिरुपापि	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 <i>lung</i> disorder.
Potency of type रूपरूपरुपरुपापि	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 रूपरूपरुपरुपापि	E.g., the liver-shaped botanical called hepatica (<i>Anemone americana</i>) is recognized for its liver benefits.
Potency of interdependence हेतुरूपरुपरुपापि	E.g., <i>chongzhi</i> collected from a sacred mountain or <i>papta</i> substances that transmit the realization of past masters.
Potency of prayer द्वारा द्वित्तुरुपापि; potency of meditative concentration द्विद्वित्तुरुपरुपापि; potency of mantra द्वित्तुरुपापि; and potency of blessing द्विद्वित्तुरुपरुपापि	E.g., <i>mendrup</i> and <i>dütsi chömen</i> 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

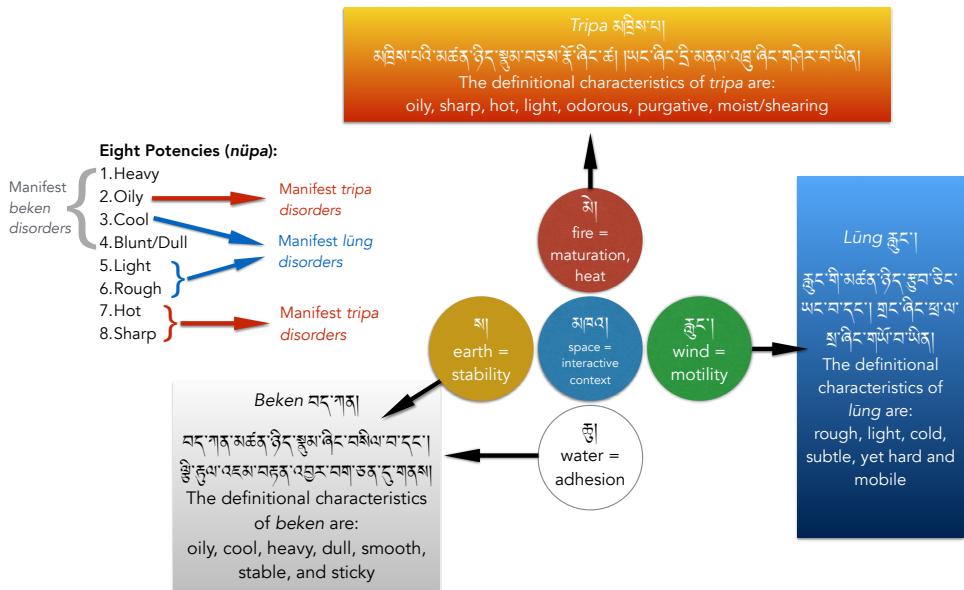


Figure 58 How excesses in potencies can manifest *nyepa* disorders. Diagram by Tidwell (with quotes from II, 8; II, 9).

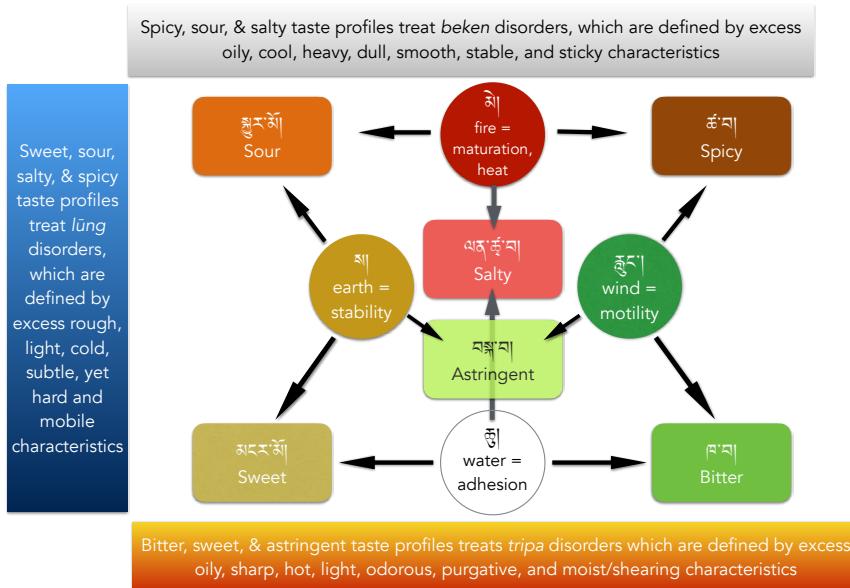


Figure 59 How tastes treat *nyepa* disorders. Diagram by Tidwell.

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 *lung* 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 *ten-drel 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 Tenzin 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.

	भू Earth-dominant medicinal substances	तु Water-dominant medicinal substances	अ Fire-dominant medicinal substances	वृ Wind-dominant medicinal substances	क्षम्यत्वा Space-dominant medicinal substances
Experi- ence	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 <i>nyepa</i> triad, i.e., <i>düpa</i> , disorders)
Activity/ Effect on Nyepa	Pacifies <i>lūng</i>	Pacifies <i>tripa</i>	Pacifies <i>beken</i>	Pacifies <i>beken-tripa</i>	Pacifies <i>düpa</i> (<i>nyepa</i> 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
Tempera- ture	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 metabolism 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 Gonpo 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 *lung* pathways, causing fire-accompanying *lung* in the digestive pathway to expel heat externally and desiccate tissues and fluids, deteriorating the integrity and mass of bodily constituents (Yutok Yönten Gonpo 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 Gönpö 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 <i>tripa</i> and <i>lung</i> disorders
2 Powders	Primarily for <i>tripa</i> and <i>beken</i> disorders
3 Pills	Primarily for <i>beken</i> disorders
4 Pastes	Primarily for <i>beken</i> and <i>lung</i> disorders; rebuilding digestive fire, bodily constituents, etc.
5 Butters	Primarily for <i>lung</i> disorders
6 Medicinal ashes	Best for treating cold disorders
7 <i>Khenda</i>	Best for treating hot disorders
8 Medicinal beers	Critical for single <i>lung</i> disorders; also combined <i>lung</i> disorders (with <i>tripa</i> or <i>beken</i>)

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 *lung*, 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 Parṇaśavari 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.

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 Tenzin 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.