Healing with Poisons
Liu, Yan

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PART III

Enhancing the Body
Alluring Stimulant

Since the beginning, the Great Powder has been a medicine hard to manage.

—*Formulas of the Lesser Grade* (Fifth Century)

*The History of the Southern Dynasties* recounts a story in which a physician treated his patient according to an unusual method: Fang Boyu, a general at the Southern Qi (479–502) court, ingested scores of doses of a medicine to vitalize his body but enjoyed no benefit. Instead, he developed chills and had to wear thick clothes in summer. The physician Xu Sibo, upon diagnosis, announced that the general suffered from “dormant heat” (*fure*), which could be released by water. This therapy, the physician insisted, must be given in winter. They waited until the eleventh month of the year, when Xu asked two people to hold the general tight on a stone with his clothes off. They then poured a great amount of cold water on his head, so much that he lost consciousness. Despite pleas from the general’s family to stop the brutal treatment, Xu requested that yet more water be poured on the lifeless patient, who eventually started to move, with warm *qi* rising from his back. Soon he sat up, complaining about intolerable heat in his body and asking for a cold beverage. After drinking some cool water, he was cured. From then on, his body constantly emanated vital heat, and he became plump and strong.

This dramatic tale reveals a singular characteristic of the medicine that the general ingested: it generated massive heat inside the body. If kept latent, such heat would cause problems, manifesting in the chills that the patient suffered.
initially. Once properly released, as triggered by Xu’s harsh therapy of cold stimulation, the heat would erupt and become a source of bodily nourishment. The key to using the medicine was thus to prudently release and manage the heat it induced, maximizing its benefits.

The medicine that had first troubled the general was Five-Stone Powder (Wushi San), which refers to its five major mineral ingredients. This was alternatively called the Great Powder (Dasan) or Cold-Food Powder (Hanshi San), the latter name describing the necessity of consuming cold food to balance the heat it induced. The powder enjoyed remarkable popularity in medieval China, with a fad for the drug persisting from the third century until the late Tang period. With its promise of not just curing sickness but also invigorating the body and illuminating the mind, it was particularly appealing to literati, who consumed it as part of a carefree, idiosyncratic way of living. Alongside numerous accounts that extolled the virtues of the powder, just as many deplored its devastating effects on the body, including causing unbearable pain, noxious ulcers, lunatic impulses, and even death, and offered treatments to mitigate the damage. To be sure, Five-Stone Powder was as popular as it was controversial, which fueled impassioned discussions among physicians and scholars about the value of the medicine, its potential dangers, and above all, the proper way of managing the powerful stimulant.

The abundant depictions of the afflictions caused by Five-Stone Powder in standard histories, medical works, and literary productions from the Era of Division to the Tang dynasty have compelled modern scholars to focus on the debilitating harm the drug caused both individuals and society. Despite its promise to heal, these scholars argued, the “side effects” of the powder were extreme. Portrayed in this negative light, it was nothing but poison; opium was often invoked as a point of comparison. A close reading of discussions of the medicine in medieval China, however, tells a different story. Physicians and scholars enthusiastically endorsed the medicine for its power of both curing illness and enhancing life. They readily recognized the suffering it could cause, but instead of blaming the inherent toxicity of the drug, they pointed to the erroneous ways of channeling the heat it induced out of the body. The powder was, first and foremost, extremely difficult to deploy. Those who used it incorrectly, or ingested it for wrong purposes, were doomed to suffer, if not die. The considerable difficulty involved in employing the drug safely provoked animated debates among physicians and scholars, and may also account for the eventual decline of its appeal toward the end of the Tang dynasty.
A Drug of Remarkable Appeal

The widespread popularity of Five-Stone Powder is often attributed to He Yan, a scholar-official living in the third century. According to A New Account of the Tales of the World (Shishuo xinyu), a fifth-century collection of scholarly anecdotes, He once said, “Ingestion of Five-Stone Powder not only cures sickness but also makes one feel that the spirit is open and bright.” The commentary on the text cites the work of the fifth-century physician Qin Chengzu, who explains that the powder’s formula originated during the Han period but was rarely used. It was He who discovered its marvelous effects, attracting numerous users and inaugurating the craze.

What was the special allure of Five-Stone Powder in medieval China? He Yan lived in the tumultuous period of the early third century, when the Han dynasty collapsed and three aristocratic powers, often referred to as the Three Kingdoms (220–280), divided the country. Raised in the palace of the Kingdom of Wei in the north and later clinging to a powerful general at court, he enjoyed the political fortunes and social prestige of a nobleman. Later sources, however, do not portray him as a man of noble character: obsessed with his physical beauty, he lived an unrestrained and licentious life, and Five-Stone Powder, along this line of thought, was an accomplice to his sexual indulgence.

Yet He’s own words tout the drug’s ability to illuminate the mind, alluding to his intellectual pursuit. In fact, the aristocrat was a leading figure in a philosophical movement called Mysterious Learning (Xuanxue) that arose in the early third century. Together with another thinker Wang Bi (226–249), He revisited Daoist classics and offered fresh interpretations that tied ancient philosophical thinking to political governance. At the heart of their thoughts was the concept of “mystery” or “darkness” (xuan); followers of the Mysterious Learning school traced all phenomena and actions in the cosmos back to this spontaneous and inscrutable nothingness. Significantly, these thinkers tried to apply their ideas to the state-sanctioned Confucian ideology by elucidating the dialectical relationship between nonaction and action, and stressing a way of ruling that followed the spontaneous pattern of nature.

The rise of Mysterious Learning in the third century coincided with a changing political and social landscape. With the collapse of the Han dynasty, the orthodox status of Confucian ideology was substantially weakened, allowing for the revival and reinvention of other types of philosophical thinking that had hitherto remained marginal. In the following three centuries, except
for a brief moment of unification during the Western Jin dynasty (266–316), the political division that persisted between the north and the south resulted in constant wars, social turmoil, and the loss of countless lives. It is not surprising that in this volatile environment, the Daoist ideas of nothingness and nonaction offered solace for those inclined to make sense of harsh realities. Such aspirations were, however, limited. Despite He’s attempt to apply his philosophy to state policy, his execution as the result of a brutal court rivalry in the mid-third century only testified to how futile his efforts were in a time of chaos and uncertainty.7

Such power struggles became the norm in the succeeding centuries, increasingly forcing the followers of Mysterious Learning to turn away from state affairs and embrace a spontaneous, carefree way of living that centered on the cultivation of the self. A group of third-century literati whose behavior was perceived to be idiosyncratic if not utterly bizarre was the Seven Worthies of the Bamboo Grove (Zhulin Qixian). These scholars, essayists, and poets shunned politics, defied social norms, and followed their impulses, aligning themselves with the spontaneous rhythms of nature. They became famous for their unconventional conduct: wild drinking, loud singing, mocking funeral rituals, and walking around naked. It was a time of high individualistic energy.8

It is in this context that we can better understand the social character of Five-Stone Powder. In an often-cited lecture delivered in the early twentieth century, writer and social critic Lu Xun situated the consumption of the drug in the intellectual milieu of the Era of Division and suggested that many types of strange behavior associated with social elites at the time were the direct effects of the powder they regularly ingested as part of their uninhibited life. They walked around naked to release the immense heat generated by taking it, wore loose clothes and wooden sandals so as not to rub the ulcers induced by the powder, and often had erratic emotions—short temper, easy agitation, and even madness, all signs of the drug’s untoward influence on the mind. Although Lu Xun may have exaggerated its effects as part of his condemnation of the episode, his remarks point to the important social life of the drug that accounted for its extraordinary popularity.9

The linking of Five-Stone Powder to eccentric behavior—an image depicted by some later commentators, who blamed libertines for cultural decadence and moral failing—emphasized that the drug was consumed for self-indulgent
pleasure. The negative portrayal of He Yan by these scholars and physicians was as much a critique of a flawed individual as a reproof of the cultural trend that he embodied. Yet upon a closer look at the sources, we find that most discussions about the drug centered on its medicinal uses. The third-century scholar Ji Han, for example, wrote a rhapsodic poem extolling its virtues, which he claimed had cured his infant son of an acute case of vomiting and diarrhea. After other formulas failed, the father gave the powder to his child and it “saved him from the severe trouble and restored his spirit afresh.” The famous calligrapher Wang Xizhi (303–361) also ingested the powder to treat his chronic ailments. Its effect on his body, though, was more ambiguous. In a series of letters that he wrote to his relatives and friends, he described his experiences of taking the drug: sometimes it markedly improved his condition, and other times the heat released by the powder caused him pain and distress. These letters also reveal that not just the celebrated calligrapher but also his family members and acquaintances took it to combat illnesses. Sharing their experiences in epistolary exchanges, they tried to work out the best methods for using the powerful drug to alleviate their suffering.

Besides curing sickness, there was more to the appeal of Five-Stone Powder, namely, invigorating the body and prolonging life. Wang, for example, reported that a certain Five-Color Stone Paste Powder offered by his friend made his body feel so light that he moved as though flying. The aforementioned physician Qin Chengzu hailed the drug as “the best of medicinal preparations and the leader of all formulas.” Although the powder couldn’t utterly transform one’s body, he claimed, it was second to none for the enhancement of life. His contemporary Huiyi, a Buddhist monk from the north, expressed this view more explicitly: “Five-Stone Powder is among the superior drugs. It can prolong life and harmonize one’s inner nature. How could it be that it only cures sickness?” Notably, a number of Buddhist monks during the Era of Division ingested the powder or wrote about its proper use, possibly attracted by its promise of purifying the mind and nourishing life.

The enticing benefits that Five-Stone Powder offered, however, were coupled with its ever-present danger. The third-century scholar and medical compiler Huangfu Mi (215–282) enumerated people during his days who suffered the ill effects of the powder: Wang Liangfu from the east developed ulcers on his back, Xin Changxu from the west was tormented by festers along his spine, six relatives of Zhao Gonglie from the southwest died, and Huangfu’s own cousin
was afflicted by the shrinking of his tongue into the throat. The tragedies resulting from the use of the powder were widespread.  

Besides inflicting physical pain, Five-Stone Powder could also devastate the mind. In 409, Emperor Daowu of the Northern Wei dynasty (reigned 386–409) was ill and began to take the powder. He soon became distressed and flustered, alternating between extremes of anger and joy. Sometimes he talked to himself incessantly; sometimes he stopped eating for days. Annoyed by their peccadilloes, he began killing his officials on a whim. The drug eventually ended his life: one of his sons, wishing to protect his mother from this erratic behavior, took the initiative of murdering his paranoid father. Three centuries later, a similar fate befell An Lushan (703–757), the rebellious general who ravaged the Tang empire: he suffered mental instability and physical agonies from ingesting the powder, leading to his premature death.

No better example illustrates the danger of Five-Stone Powder than the story of Huangfu, who left a vivid account of his own experience of the powerful drug. At the age of thirty-five, he contracted a wind-induced malady, which caused half of his body to become paralyzed. He then started ingesting the powder, only to find that instead of curing his incapacitating condition, it aggravated it: he had trouble swallowing food, sudden fever and chills, and insomnia, and became easily frightened and confused. To end the unbearable pains, he once tried to kill himself using a knife, only to be saved by his watchful family. Upon pondering, he forced himself to eat cold food and drink cool water, and survived the dramatic episode. But the miserable scholar never recovered from the lingering effects of having used Five-Stone Powder, effects that persisted for the rest of his life. It is perhaps not surprising that he offered a lengthy discussion of it based on his own experience of having misused this potent stimulant.

The many accounts of the deleterious effects of Five-Stone Powder from the third to the eighth century have led some modern scholars to condemn the drug outright. One estimated that hundreds of thousands of people suffered or died from taking the powder during this period, making it the most deadly substance in premodern China. Although its toxicity cannot be denied, this appraisal is probably an exaggeration. In particular, we need to pay attention to its rhetorical use, which served specific social and political functions. For instance, Huangfu, like many of his contemporaries, favored a hermetic life and tried to eschew public service. Yet as an erudite scholar, he soon drew attention from Emperor Wu of the Western Jin dynasty, who
summoned him several times to serve at court. To dodge the request without causing trouble, Huangfu submitted an elaborate response in which he highlighted his implacable suffering not just from the original wind illness that had tormented him for nineteen years but also from the Five-Stone Powder that had intensified his pain over the past seven years. With such a debilitated body, he lamented, it was impossible for him to serve. The emperor eventually gave up on the recluse. Although it is unlikely that Huangfu completely fabricated his illness, given the amount of detail he provided, he nonetheless used it skillfully to avoid political engagement.²²

In other cases, entirely fabricated malingering is more evident. The History of the Jin recounts an episode in which the scholar-official He Xun (260–319), when called upon by a rebel leader, claimed that he had contracted an illness that had impaired his limbs, paralyzing him. He then ingested Five-Stone Powder, presumably to treat the illness, but the result was worse: he disheveled his hair and exposed his body in public, clear signs of insanity. The hyperbolic performance appears to have been a strategic move for He to escape the undesirable service: an unruly body triggered by the drug could no longer function in its expected political space.²³

In addition, ingesting Five-Stone Powder—as private treatment or public performance—was an act in defiance of social norms. Excessive drinking, too, was a quintessential characteristic of the unorthodox behavior of many social elites during the Era of Division. The combination of alcohol and Five-Stone Powder was common and became emblematic of the eccentric and carefree spirit of the time. Ruan Ji (210–263), one of the Seven Worthies of the Bamboo Grove, was particularly famous for his uninhibited drinking. Contrary to the Confucian rule of avoiding drinking and eating meat during mourning, at his mother’s funeral he steamed a fat boar and shamelessly drank alcohol. Liu Ling (221–300), another member of the group, even composed an essay on the virtues of alcohol. In a well-known story, after immoderate drinking, he was found completely naked in his room. When the visitors reproached him for his erratic behavior, he retorted, “I take heaven and earth as my house, and the rooms of that house as my clothes and pants. Why do you people enter my pants?”²⁴

There is no direct evidence that these social iconoclasts ingested Five-Stone Powder, but scholars have made the tantalizing suggestion that since drinking warm alcohol was part of the practice of channeling the power of the drug, it is possible that the two activities were linked.²⁵ The fourth-century writer Ge
Hong observed that vulgar people during his time often ate and drank immoderately during funerals, using the excuse of needing to enhance the effects of the powder. For him, this was truly a deplorable state of affairs. Altogether, Five-Stone Powder opened up a social space that allowed for non-conformist behavior driven by varied motives.

Minerals and Heat

Determining the composition of Five-Stone Powder is a complex issue, as multiple formulas were associated with the name. The term “Five-Stone” already appeared in Han sources. The Divine Farmer’s Classic places many mineral drugs in the top group that are useful for strengthening the body and prolonging life. Among these we find five types of clay, each described as being of a different color: green-blue, red, yellow, white, and black. With regular ingestion, they can “replenish marrow, enhance qi, make one plump and strong, prevent hunger, lighten the body, and extend life.” The text further explains that these five minerals, with their respective colors, replenish the five viscera correspondingly. These five colors also perfectly match those defined in the five-phase system, a conceptual scheme that correlated the body with time, space, and the cosmic rhythms. There is no mention of Five-Stone Powder in this text, but the symbolism of the five colors offers an important clue to understanding the composition of the drug.

The grouping of five minerals also appears in a Han commentary on the ancient classic Rites of Zhou, which delineates the imagined bureaucracy of the Zhou dynasty (see chapter 1). In a section that describes the royal medical administration, the text specifies that physicians who specialize in treating lesions deploy five potent drugs. The Han scholar Zheng Xuan (127–200) identified these as the following five minerals of distinct colors: chalcanthite (shidan, green-blue), cinnabar (dansha, red), realgar (xionghuang, yellow), arsenolite (yushi, white), and magnetite (cishi, black). He further elucidated that after firing these minerals for three days and three nights, the resulting soot could be collected and applied to the lesion, which would remove any putrefied flesh. This topical use of the minerals, though telling in its own right, was probably different from the ingestion of Five-Stone Powder.

More discussions related to something called “Five-Stone” emerge in physicians’ documents from the Han period. In the twenty-five medical cases of the physician Chunyu Yi (fl. ca. 180–154 BCE) that are preserved in
**Historical Records**, we find the following episode. Chunyu encountered a medical officer from the east who prepared and ingested “Five-Stone” to treat his illness caused by internal heat. The physician considered it a grievous mistake, because the powerful minerals would trigger the circulation of malignant qi in the body, which would in due course coagulate and lead to the formation of abscesses. Just as Chunyu predicted, the patient died from an eruption of ulcers. Erroneous use of “Five-Stone,” the case warns, could result in a calamitous outcome. Although the case doesn’t reveal the ingredients of “Five-Stone,” its potent nature and the symptoms it induced resemble those of Five-Stone Powder seen in later sources. The episode also reveals Chunyu’s knowledge of mineral drugs. Elsewhere in the text, he provides a list of medical works that he received from his master and carefully studied to advance his healing skills. One of them is titled *Spirit of Stones* (Shishen), a lost book that probably discusses the medical use of minerals. Such knowledge of mineral drugs in early China likely informed the creation of Five-Stone Powder.

Archeological finds provide further material evidence for the early use of minerals. Five types of mineral were discovered in the tomb of Zhao Mo (reigned 137–122 BCE), the second ruler of the Nanyue kingdom (204–111 BCE) in the far south: amethyst, sulfur, realgar, ochre, and turquoise. Except for the last one, all the substances are found in *The Divine Farmer’s Classic*, indicating their medical value for royal consumption. The combination of minerals, though, is unique in that it does not follow the color pattern of the five-phase system, reflecting a local variance of the set principle.

These various accounts of “Five-Stone” in early sources indicate the widespread use of mineral drugs for healing. Although they share certain features with the namesake powder that became immensely popular later, they are probably not the same. The earliest reference for the composition of Five-Stone Powder appears in the Han medical text *Essential Synopsis of the Golden Cabinet* (Jingui yaolüe), in which we find two formulas that could be the precursors of the popular drug. The first is called Amethyst Cold-Food Powder (Zishi Hanshi San), which is recommended to treat “cold damage” disorders. This complex formula, which employs five minerals, seven herbs, and one animal-derived substance, aims to use the heating power of the medicine to strengthen the viscera so as to dispel malignant influences that have penetrated the body.

The second formula, called Mr. Hou’s Black Powder (Houshi Heisan), contains fourteen ingredients that overlap considerably with those in the first one. A marked difference is that it uses only one mineral, kalinite (*fanshi*),
and many more herbs (twelve in total), which is why it is alternatively called “Herbal Cold-Food Formula.” The powder offers to treat limb paralysis induced by “great wind,” and overwhelming cold in the heart that results in deficiency. The text further instructs that one should ingest it with warm alcohol and only eat cold food afterward, so as to retain the drug in the abdomen and facilitate its power. These guidelines are similar to the procedures for handling Five-Stone Powder.35

Huangfu Mi, in his commentary on the origin of Five-Stone Powder, identifies the above two formulas as the likely precursors of the drug.36 Based on this information, the historian Yu Jiaxi, in his pioneering study of the history of the powder, has argued that He Yan combined the two prescriptions and created a powerful tonic that he consumed to recover from exhaustion caused by sexual indulgence.37 This is a possible scenario, yet we need to be aware that just like the advent of varied compositions for “Five-Stone” during the Han period, multiple formulas for Five-Stone Powder circulated in the following centuries.38 Attributing the creation of the powder to He Yan, as I have suggested before, has much to do with his eccentric behavior that was denounced by later scholars. At least one other origin story is given: according to The History of the Jin, Jin Shao, a talented physician who excelled in materia medica and the study of medical classics, invented the formula of Five-Stone Powder; scholar-officials at the time all ingested it and enjoyed extraordinary effects. This brief account, in contrast to that of He Yan, focuses on the marvelous power of the medicine to heal.39

This is a point that merits our attention. Already in Essential Synopsis of the Golden Cabinet, the two formulas that anticipated Five-Stone Powder are deployed to combat specific disorders of “cold damage” and “great wind,” respectively, which induce fever and paralyze the body. Because of the cold nature of these conditions, the text recommends the heating medicines—the majority of the ingredients in these formulas have warming properties—to dissipate the cold and restore the vitality of the body. Compared to some later physicians and scholars who lauded the powder for its exceptional life-extending virtue, the perceived value of these formulas in the Han medical text was quite restricted.

Further scrutiny of these two formulas reveals a puzzle: none of the minerals therein possesses du as defined by the materia medica literature, and the only du-possessing herbs are aconite, dysosma, and platycodon, which were regularly used in classical Chinese pharmacy. How, then, do we explain the
Many accounts of the powder’s unmistakable capacity to cause harm? A variant of Mr. Hou’s Black Powder gives a clue. Preserved in the eighth-century Arcane Essentials from the Imperial Library, the prescription made a minor, but significant, modification of the original—it added two more minerals: stalactite (zhongru) and arsenolite (yushi), the latter referring to arsenic ore.

The danger of arsenolite was recognized early on in Chinese medicine. Tao Hongjing solemnly warned in the fifth century, “Ingested for long, it causes convulsion of tendons.” He further advised, “Refine it by fire for one hundred days, and ingest the amount of one tip of the jade-knife [0.2 g]. If taken without prior refinement, it kills people and the hundred beasts.” Because of its violent power, the formula in Arcane Essentials specifies that one must wrap the mineral with mud and fire it for half a day before adding it to the medicine. Without a doubt, arsenolite was a dangerous substance.

It is possible that after the creation of the precursor formulas for Five-Stone Powder in the Han dynasty, arsenolite was added at certain point during the Era of Division, which substantially enhanced the drug’s force. An inadvertent substitution may have also happened: in early Chinese sources, the character for kalinite (fan), which is a mineral without du, is sometimes written interchangeably with the character for arsenolite (yu), implying that arsenic might have been used more frequently in Chinese history than we originally thought. Some of the symptoms triggered by Five-Stone Powder in fact resemble those of arsenic poisoning: abdominal pain, digestive troubles, pain in the limbs, deterioration of vision, skin eruptions, convulsions, and mental disorders, among others. Moreover, arsenic could also induce tonic effects: it could improve one’s complexion and revitalize the body (at least temporarily), and, above all, act as a potent aphrodisiac. This echoes certain portrayals of the drug’s devotees—we are reminded of He Yan’s notoriety for sexual indulgence. In medical sources, the potential of a drug for use as an aphrodisiac is often expressed in terms of its capacity for strengthening the Kidneys, which are associated with sexual power. For example, according to the seventh-century On the Origins and Symptoms of All Illnesses, the regular consumption of the powder could induce a condition called “strengthen the center” (qiangzhong), manifesting as prolonged erections and the leakage of semen, which would cause all kinds of trouble as one aged. Temporary pleasures sow the seeds of lasting agonies.

Many stories about Five-Stone Powder describe the immense heat the body emanated upon ingesting it, the proper discharge of which was crucial to
healing. Withholding the heat inside the body, by contrast, caused troubles. Therefore, the proper care of the body upon taking the drug to “disperse the powder” (jiesan) distinguished cure from malady, although the line between them was very thin. Pei Xiu (224–271), a statesman of the Western Jin dynasty, was killed after taking the powder by having so much cold water poured onto his body that it extinguished his vital heat.46 The fifth-century general Fang Boyu, in the story that opens this chapter, also endured the pouring of a vast amount of cold water onto his body, yet the outcome could not be more different: Fang recovered and remained vigorous. Assuredly, to “disperse the powder” was a delicate matter.

How could Five-Stone Powder generate massive heat? This is an intricate issue given the complex composition of its ingredients. A typical formula of the drug contains a subset of the following minerals: amethyst, quartz, red clay, stalactite, limonite, sulfur, and kalinite or arsenolite. The materia medica literature defines the majority of these minerals as drugs with warming properties.47 For example, Tao Hongjing, in his Collected Annotations, states that arsenolite, a mineral of great heat, could prevent water from freezing. Such a substance, properly prepared, could dissolve frigid and congealed stagnation in the body. Naturally, warming drugs counter cold maladies.48

Yet the administration of warming minerals is no easy task, as elucidated by the fifth-century Formulas of the Lesser Grade (Xiaopin fang).49 In a section devoted to Five-Stone Powder, the author Chen Yanzhi contrasts the power of herbs with that of minerals as follows: upon ingestion, herbs quickly manifest (fa) a force that is easy to subdue while minerals slowly manifest a force that is hard to subdue. Hence while one can promptly benefit from the effects of herbs, one must be more patient with minerals. Chen further explains:

Regarding the nature of minerals, their essential qi correlates with the five phases and replenishes the five viscera; their dregs are the same as dust and soil. But sick people suffer depleted blood and qi, hence are not able to potentiate the minerals. These minerals then deposit and turn into hard stagnation. If the essential qi of these minerals is not manifested, they are as cold as ice. Sick people ingest minerals hoping these substances will immediately produce heat upon entering the abdomen. If they don’t feel the heat, they ingest even more. Without seeing the effect of minerals right away, they claim that they fail to obtain the force of the drug. When the drug manifests its power later, they don’t consider it to be the effect of minerals, and hesitate to take actions
to manage these minerals. They then treat the condition as something else, which often causes harm.\textsuperscript{50}

This is a rare passage in medical sources in medieval China that ponders the relationship between the materiality of drugs and their effects on the body. The unique nature of minerals, in Chen’s eyes, is that “their material is cold yet their nature is warming.”\textsuperscript{51} Having entered the body, they can release their intrinsic heat, which manifests as the circulation of their essential qi, strengthening the viscera. Importantly, this process depends on the state of the body: a sick person is too weak to potentiate the essential qi of minerals, and the accumulation of cold minerals inside the body will ultimately cause troubles. The use of herbs in the powder and drinking warm alcohol might have helped stimulate the latent stones. Time also matters; one has to wait patiently to allow the minerals to manifest their power, and when the effects begin to appear, take shrewd action to channel the heat out of the body. Those who misjudge the initial dormancy of the drug and hastily ingest more doses are doomed to suffer. Fang Boyu, in our opening story, is one such impatient zealot who took an excessive amount of Five-Stone Powder. The worsened situation was only reversed by a dramatic method that managed to release the “dormant heat.”

To further understand Five-Stone Powder’s heating power, we must contemplate a word that frequently appears in the writings about it: fa. The primary meaning of the word, according to a first-century dictionary, is “to shoot an arrow.”\textsuperscript{52} In the context of Five-Stone Powder, the word implies the activation of the drug and the subsequent release of its heat. If the heat remains “unshot,” problems arise. A typical symptom is the extreme coldness of the body resulting from the accumulation of the inactive drug. Fa hence points to its potentiation, which is tied to bodily sensation. Yet fa could also carry a negative sense, especially in the discussion of the drug’s adverse effects. In Sun Simiao’s Essential Formulas, for instance, the Tang physician somberly points out the untoward manifestations of the power of the drug as a result of its mismanagement, causing pain in the head and the formation of ulcers on the back. Although the medicine’s force is certainly released, Sun considers the effects damaging due to the misguided discharge of heat. He then recommends the proper ways of managing the powder and various methods to palliate the injuries it induces. Mishandling the drug’s power could yield more punishing a result than not initiating that power at all.\textsuperscript{53}
Debates on Five-Stone Powder

The immense heat produced by Five-Stone Powder, the intricate interplay between its mineral and herbal ingredients, and the dynamic process of the powder’s action on the body all point to the extraordinary difficulty of handling the potent drug. As a result, many physicians and scholars from the third through the eighth century took pains to discuss its proper use and various remedies to assuage its harm, evidenced by the emergence of a large number of writings dedicated to this topic throughout the period. The Sui and Tang bibliographical records, for example, include two dozen titles that offer either theoretical discussion of how the powder works or formulas that treat the injuries it could engender. Written by a diverse group of people, including scholar-officials, hereditary healers, and Buddhist monks, these treatises encompass a wide array of views and methods that kindled animated debate on the proper understanding and use of the drug.54

At the core of these discussions was not whether the drug should be taken or not but how it should be taken. No one rejected it outright. But even those who enthusiastically endorsed the powder offered sober warnings. The fifth-century physician Qin Chengzu, for instance, after extolling the drug’s superior healing powers, admonished that “water can carry the boat yet can also capsize it; the powder can protect life yet can also end it.” He further commented that ignorant people in his day could not grasp its subtlety, leading to countless disasters.55 His contemporary, the monk Huiyi, made the point even more clearly: “If one obtains its proper management, the drug can cure sickness and nourish life; if one loses the way of controlling it, the drug can kill. Should we not be cautious? The harm is due to the mistake of the user, not the manifestation of the drug.”56 Proper administration was key to obtaining its benefits.

Already in the third century, when the fad of consuming the powder had just taken off, different opinions on how to manage the drug arose. Huangfu Mi was one of the earliest to advocate the cooling method. Soon after taking the powder in three doses, he advises, users should use cold water to wash their hands and feet. This will stimulate the drug’s qi and result in a slight numbing sensation. Then, they should take off their clothes and use cold water to bathe, further activating the drug. Subsequently, when the body is felt to be cooling, their heart will become open and bright, resulting in the cure of all illnesses. The alternative name of the drug, Cold-Food Powder,
encapsulates this cooling approach. Furthermore, Huangfu counsels in detail how the method might be adjusted for patients of different ages and constitutions, and for different maladies. For example, young and old people should take reduced doses, and a person whose body is already replete, in a state of healthy fullness, should avoid it altogether.57

However, Huangfu’s contemporary Cao Xi, an aristocrat of the Wei kingdom, held a different view. In his Formulas That Disperse Cold-Food Powder (Jie Hanshi San fang), Cao champions a warming method of managing the drug. That is, one should wear more clothes upon ingesting the powder and actively walk to provoke sweating, which will carry the heat out of the body. Those with weak constitutions, he further warns, should not use cold water to release the potential of the powder, because exposing the body to sudden coldness will inevitably lead to “cold damage” disorders. Cao also uses his own experience of taking the drug for more than forty years to support his method.58 Later medical writers during the Era of Division often juxtaposed the contrasting views of Huangfu and Cao to highlight the intricacy of managing the powder. Some sided with Huangfu, as the idea of using cooling methods to dissipate bodily heat made intuitive sense, while others contended that one should not be constrained to one particular rule but remain flexible according to the specific condition for which the drug was deployed.59 Tao Hongjing upheld the latter view:

In the past, there were people who ingested Cold-Food Powder. Upon inspecting the ancient method, they poured two hundred jugs of cold water onto their body, and immediately dropped to the ground, lifeless. There were also those who followed the method of sweating. They set up fire at the four corners of a narrow room, and died straight away. To tend the body in accord with the current situation, isn’t it based on the individual? To look to past examples, isn’t it even worse than “waiting at the stump”?60

The two types of action that Tao depicts correspond to the cooling and warming methods that Huangfu Mi and Cao Xi advocated, respectively. By criticizing the rigid application of these established procedures, Tao underscores the importance of adjusting the way of managing the drug for individual bodies and specific circumstances.

Among these various opinions, one is particularly striking, as it offers a novel interpretation of the interplay between the minerals and the herbs in the
powder. In his *Formulas for Dispersing the Powder by Duo Treatment* (Jiesan duizhi fang), the Buddhist monk Daohong (fl. fourth or fifth century) lists a number of matched pairs of minerals and herbs: stalactite and atractylodes, sulfur and saposhnikovia, quartz and aconite, amethyst and ginseng, red clay and platycodon. Each pair targets a specific organ and triggers unique sensations, manifesting the power of Five-Stone Powder. For instance, stalactite and atractylodes target the Lungs, which connect to the head and the chest. When atractylodes stimulates the power of stalactite, the chest feels stifled with shortness of breath; when stalactite stimulates the power of atractylodes, headache arises, with pain in the eyes. When this happens, Daohong advises, one must quickly take a decoction of scallion and pickled beans to alleviate the disturbance. The dynamic interaction between the minerals and the herbs in the powder gives rise to distinct bodily signs that call for further swift intervention to prevent the cure from becoming its own serious problem.\(^61\)

Yet this novel explanation of the drug’s action was challenged by other medical writers. Chen Yanzhi, in his *Formulas of the Lesser Grade* (fifth century), launches a spirited critique of Daohong’s unconventional interpretation despite its popularity at the time. He asserts that the idea of “duo treatment,” as proposed by the monk, appears in none of the writings on the powder he has checked. He further muses that if one follows Daohong’s theory, it is hard to explain the combination of trichosanthes (*gualou*) and dried ginger in the powder, as the two herbs are in a relationship of “mutual hatred” (*xiangwu*, see chapter 2), as defined in the materia medica literature. He then recommends that one should follow Huangfu Mi’s method but remove trichosanthes from the formula to avoid antagonistic effects. Since Chen’s work pays keen attention to integrating materia medica knowledge into the use of formulas, it is not surprising that his critique of Daohong’s unconventional idea is guided by established pharmacological writings.\(^62\)

The debate on Five-Stone Powder continued in the Tang period, but with the focus shifted to the type of illness that the drug was supposed to treat. Sun Simiao discusses the matter extensively. In his *Supplement to Formulas*, we find one formula called Life-Restoring Five-Stone Powder (*Wushi Gengsheng San*), which resembles the prescriptions of Five-Stone Powder in the preceding centuries, but with a notable change—it replaces arsenolite with sulfur (*shi liuhuang*). The substitution has been interpreted as Sun’s effort to improve the formula by curbing its toxicity.\(^63\) This may not be the case though.
After all, according to medical writings at the time, sulfur was as potent as arsenolite, and the ingestion of this mineral was not benign, as a number of high-profile cases during the Tang dynasty attested to its danger. The modified formula seems to have less to do with reducing toxicity than with the specific conditions it treats.

Sun’s formula contains fifteen ingredients: five minerals, nine herbs, and one animal product. This composition is likely derived from the two precursor formulas for Five-Stone Powder in Essential Synopsis of the Golden Cabinet, as their ingredients overlap substantially. Yet Sun prescribes it for a different purpose. That is, he considers the powder particularly effective in curing “the five exhaustions and seven injuries of men, and those who are bedridden due to depletion and weakness.” The drug, the physician stresses, is only for intractable conditions that cannot be cured by other means. Hence the name, Life-Restoring Five-Stone Powder, revealing its power to make one live again. Such a powerful drug should not be used at random. Sun alerts the reader:

Once the illness is developed, one must be diligent in applying tonic medicines. Hence, I establish the formulas of supplementing and nourishing the body. These formulas all concern the sort of drugs like Five-Stone, Three-Stone, and Great Cold-Food Pill/Powder. Only in the situations of fully developed depletion and exhaustion, bedriddenness caused by paralysis, or proximity to death with no one to resort to should one use these drugs. They can truly revive dead people. Normal people without sickness should not rashly handle them. One should be extremely cautious about not violating this rule.

Sun’s vigilance about Five-Stone Powder and similar drugs, to wit, that they be saved only for recalcitrant, life-threatening conditions, contrasts sharply with the habitual ingestion of the powder for enhancing life and illuminating the mind by the many enthusiasts I have previously discussed. These accounts of Sun solve a puzzle that has baffled modern scholars. In his earlier work, Essential Formulas, he openly condemns Five-Stone Powder, declaring that he would rather take the deadly poison of gelsemium (yege) than ingest the dangerous drug. He also exhorts that whenever one encounters the formula for the powder, one should burn it immediately. This harsh criticism seems to contradict the inclusion of the same formula in his later work. It is
possible that Sun changed his attitude over time, but if we pay attention to the context of his denouncement, another interpretation comes up.

Sun’s discussion of Five-Stone Powder in *Essential Formulas* appears in a section where he enumerates methods of countering mineral poisons. At the beginning of the section, curiously, Sun announces that, “if people don’t ingest minerals, various things [in the body] won’t do well.” Specifically, he believes that certain minerals, especially stalactite, possess great power to nourish life. He even cites his own experience as testimony: When he was thirty-eight or thirty-nine, he once ingested five or six liang (200–240 g) of stalactite. Since then, he had deeply experienced the benefits of the mineral. Hence Sun did not oppose the use of minerals altogether; he instead assigned different minerals for distinct uses. In treating obdurate illnesses, Five-Stone Powder was a viable choice; in the case of nourishing life, stalactite would serve the purpose.

This latter practice indicated a significant change that had occurred between the Era of Division and the early Tang period: stalactite replaced Five-Stone Powder as a prime tonic for life cultivation. Stalactite’s benign nature may account for this change—it was defined as a drug without *du* in the materia medica literature, but this didn’t mean that one could consume it capriciously. Sun warns that if the mineral is harvested from the wrong sites, it can kill more effectively than the feathers of the *zhèn* bird. Moreover, the use of the mineral also hinges on constitution and age. People who are already “plump and replete with fair flesh,” Sun admonishes, should avoid the drug entirely. Only those over thirty can ingest it. The older one is, the more frequently one can consume the substance: one dose every three years for those over fifty; one dose every two years for those over sixty; one dose every year for those over seventy. Therefore, Sun not only identifies disparate uses for different minerals but also underscores the proper use of them in specific circumstances.

**Conclusion**

The tale of Five-Stone Powder, one of the most popular and controversial drugs in Chinese history, illustrates the extraordinary difficulty of handling a potent medicine. In earlier studies, scholars have tended to portray it in a negative light—its toxic ingredients, its violent insult to the body, and the numerous recorded injuries and even deaths it induced all make the powder
appear to be a destructive poison. These scholars have often compared the powder with opium, the notorious drug that decisively shaped recent Chinese history, as a way to expose the social ills caused by these substances. Yet several critical features distinguish the two. First, they trigger different effects on the body. Whereas opium is a sedating narcotic that induces drowsiness and lethargy, Five-Stone Powder was a potent stimulant that energized the body and excited the mind. Second, although opium is well-known for being addictive, no evidence suggests that Five-Stone Powder possessed the same potential. None of its ingredients are physically addictive, and no sources disclose cases of users ingesting the drug habitually. This doesn’t, however, negate its social addictiveness, that is, a persistent desire to follow the fashion of consuming the powder as a way of acquiring or maintaining social status. Third, in comparison with the wide circulation of opium through all strata of society in the nineteenth century, the consumption of Five-Stone Powder was restricted to the group of social elites. This is not surprising given the complexity of the formula and its usage, which demanded significant time and resources.

Above all, the most pronounced distinction between the two drugs is the different ways they were understood socially. Unlike the opprobrium heaped on opium as a vicious poison that ruined individual lives and tore apart the social fabric, the perception of Five-Stone Powder was never entirely condemnatory. In fact, the majority of physicians and scholars in medieval China valued the powder though they were fully aware of its dangers. This prompted vibrant debates, which centered on two issues. First, from its emergence in the Han period, Five-Stone Powder had been deployed to treat specific illnesses. Later physicians, such as Sun Simiao, narrowed the drug’s use to only treating intractable conditions and saving patients who were on the verge of death. In this context, his famous denunciation of the powder was less about its inherent toxicity than its use for the wrong purpose: one should not take it habitually to cultivate life. To his dismay, many enthusiasts, lured by inflated promises, took it indiscriminately. This haphazard consumption of the powder as an all-purpose magic tonic rather than a precision medicine led to numerous tragedies.

Second, discussions of Five-Stone Powder stress the difficulty of using the drug, especially the delicate procedures for stimulating its power and channeling the heat it generated safely out of the body. What was unique about the powder was that ingesting it was merely the beginning; afterward patients
needed to closely monitor their sensations and then undertake a series of carefully planned measures to release the drug’s heat to benefit the body. If the heat was confined within the body, great harm could arise. However, interpreting these injuries as “side effects” of the powder, as suggested by earlier scholars, misses the point. In modern biomedicine, side effects are perceived as the inevitable adverse outcome of a pharmaceutical product; the assumption is that any drug therapy induces both the intended primary (positive) effects and the unintended side (negative) effects, so great effort has been made to minimize the latter so as to reduce the toxicity of medicines. Tellingly, there is no concept of side effects in classical Chinese medicine. A clear distinction between the two opposing effects—an intended effect as distinguished from unintended effects—does not hold in many traditional healing cultures, because the outcome of therapy is often interpreted as dynamic, systemic, and processual. In such systems, healing takes place in multiple stages, each of which is manifested by distinct bodily signs and each of which in turn requires careful management by the physician or patient. In the use of Five-Stone Powder, physicians regarded the injuries caused by the potent drug as the untoward result not of “side effects” but of mismanagement. If one handled it and its effects correctly, harm would be avoidable. This was no easy task, as attested to by the painful experiences of Huangfu Mi and many others. The extreme difficulty of using the drug might explain its ultimate disappearance from Chinese society.

The popularity of Five-Stone Powder as long as it lasted lay in its promise of revitalizing the body and illuminating the mind. There was yet another set of drugs in medieval China that aimed for an even higher goal, nothing less than the transformation of the body and the attainment of immortality. Often called elixirs, these numinous medicines were also made of potent minerals but resulted from complex alchemical preparations. The final chapter investigates these marvelous substances in detail, focusing on alchemists’ various interpretations of du as well as how they incorporated the bodily experience into the understanding of these powerful materials.