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CHAPTER 3

Vernacular Curiosities

Medical Entertainments and Memory

The next day, the war drum of the Fan battle formation sounded like thunder. More than half of its soldiers were women. The Han camp drew up their troops. Shortly thereafter, Butterfly Bush Flower and Iris came out from the Fan camp to the beat of the drums. Holding swords in each hand, they challenged Mountain Arrowhead and Honeysuckle to come out from the Han formation and fight. The four women commanders fought more than twenty rounds. Suddenly, Honeysuckle slashed forth her swords and cut Butterfly Bush Flower’s horse. Rearing up in pain, the horse threw Butterfly Bush Flower to the ground. Just then the two female immortals, Anemarrhena Root and Fritillary Bulb, came galloping in and fought with them in close quarters. Litharge jumped off of his Thorny Tiger to save his sister, and Iris fled back to their camp. Immediately, Fritillary Bulb used her Japan Stephania cane and Anemarrhena Root used her Dandelion weapon to fight with Honeysuckle. Then Anemarrhena Root went to fight with Mountain Arrowhead. They each displayed their unique martial skills. Anemarrhena Root suddenly took out a Gold Star Stone to blind Honeysuckle. Although Honeysuckle quickly dodged, the stone still hit her back and she spit up blood. Defeated, she fled. Luckily, others came to save her and return her to camp. Seeing this, Dendrobium was extremely worried. Privet said to him, “Marshal, ease your worries. In my opinion, your daughter is destined to face several calamities of blood loss, and although this wound is severe, it is not likely to take her life. I will give you a kind of medicine known as Drynaria Root, which is also called ‘Repairs Broken Bones.’ Cut it into pieces and apply them to the wound, and she will recover in a few days.” Cassia Seed overheard this and sent some Spikemoss, also known as “Anti-death Grass” to take with it.

—Annals of Herbs and Trees (Caomu chunqiu yanyi), chapter 17

Annals of Herbs and Trees could very well be unique in all of world literature as the first, if not the only, full-length novel in which all of the characters have the names of pharmaceutical drugs. Not only are the characters all named after medicines, but so are most of their weapons and mounts, many of the locations in the novel, the battle
formations and tactics. Little is known about the author and nothing—save the preface—about his motives for writing such a book. Some believe it was written prior to 1688, while others consider it a work of the Jiaqing period (1796–1820), since the earliest extant volume that can be dated to a particular year seems to be an 1818 edition. There are records of at least eighteen different editions printed prior to 1916, and the Qianlong period (1735–1796) seems to be when interest in the novel began, based on records of four printed editions published in that period. Editions were published in each subsequent reign period, usually one apiece, until the Guangxu (1875–1908), when four more editions were published between 1872 and 1908, and at least another two between 1909 and 1916. The preface claims that it was the Master of Cloudy Leisure (Yunjianzi) the sobriquet of Jiang Hong, who was responsible for “collecting and selecting” the novel, and the Man of Happy Mountain (Leshanren) who did the “editing and compiling,” but nothing is known of either. The title is a bit strange, and somewhat rare. Caomu chunqiu literally means “herbs, trees, spring, autumn,” but chunqiu, is usually rendered “annals” to indicate that such titles tended to record narratives of the state in chronological fashion. Thus, the title of this work could be “Annals of Herbs and Trees” or “Annals of Materia Medica,” since caomu was understood to refer to vegetation generally, or to medical drugs in particular. Most of the medicines in the novel are herbs, plants, and flowers, with an underrepresentation from pharmaceutical literature of stones, animals, and other objects. The yanyi or “historical romance” of the title points clearly to the book’s fictional narrative, and without it, the title sounds more ambiguously like a medical text, botanical work, or almanac. Yanyi signifies that this work is a novel but also suggests that it has been “novelized” or made into fiction from a previous account of true events.

Why this novel was written is not clear. The author’s preface states that he created the Caomu as a work of charity:

As for The Yellow Emperor tasting hundreds of herbs, it was to distinguish the spicy, sweet, weak, or bitter flavor of them; the cold, hot, warm, or cool nature of them; if they nourish [bodies] or enhance flow, or moisten or dry; if they can treat man’s diseases and cure illnesses. How enormous his merit is! Being influenced and moved [by this thought], I gathered many names of medicines and explicate their meanings in the form of fiction [yanyi] to spread it in the world. Although it partly seems a game, the novel contains in it metals, stones, grasses, trees, water, soil, birds, beasts, fish, insects, and the
like. Isn’t it fitting to use these names to substitute those of heaven, earth, vessels and objects?  

It is possible, in the mind of the author at least, for a novel to be both a game and an act of service. The presumed entertainment value of novels serves as a delivery mechanism for this long list of medicine names. But he continues, subverting his previous claim by saying that “some ridicule this collection as depicting too much slaughter. Is it really because I hate medicine so much that I wrote it like this on purpose? I just created the novel by giving free rein to my writing brush!” The preface reads like a confession of writing a guilty pleasure, an illogical entertainment, and the author even calls into question his own charitableness by suggesting that his list of drugs all fighting each other to the death might be construed as his distaste for medicine. Circulating effective remedies was an act of merit, but it is not clear why circulating an extensive list of drugs buried in narrative would be as well. Perhaps the author considered his novel to be an aid to memory that would help doctors or pharmacists. Perhaps repackaging existing knowledge in narrative form was a way of making the difficulty of understanding the properties or of differentiating between drugs less difficult. Perhaps fictional narrative was the most effective vehicle to disseminate pharmaceutical knowledge. Perhaps the author simply could not resist a lengthy display of his own knowledge. Whatever the case, the preface to *Annals of Grasses and Trees* hints at the symbiosis of and pervasive tension between the novel’s entertainment value and usefulness.

**RIDDLES AND GAMES**

Novels and encyclopedias contained many descriptions and explanations of how to play all sorts of games, from drinking games to word games to riddles. Some of these rely on the players having a high degree of botanical knowledge. Knowing something about plants and flowers had been part of reading and writing poetry since the *Book of Songs*, but gaining such knowledge was also a practical endeavor of men and women from their youth. Starting in the Wanli period a number of porcelain objects depicted both children and adults playing a game called “herb competition” or “match my plant” (*doucao* or *doubaicao*), a game dating from at least the Tang. This game is described in *Story of the Stone*, in which the participants (young female actresses) display knowledge of plants.
Figure 3.1. Perhaps the earliest edition of *Annals of Herbs and Trees*. Kangxi era (1661–1722). Columbia University Library.
and literacy through their performance in matching the names of plants and their symbols. One young woman says, “I’ve got some Guanyin willow.” Another responds, “I’ve got some Luohan pine.”10 In this matching pair, both “willow” and “pine” are trees, while both “Guanyin” and “Luohan” are Buddhist figures. One player says, “I’ve got a peony [mudan] from The Peony Pavilion.” Another responds, “I’ve got a pipa [loquat] from The Story of the Lute [Pipa ji, fourteenth century].” This version of the game “match my plant” recalls similar games played over wine. Like those drinking games (jiuling), the plant names are often juxtaposed in encyclopedias with other fragments of verbal literature.11

Verbal games were often integrated into dramatic texts and became part of the dialogue. An aria sung by Student Zhang and Crimson in Story of the Western Wing, for instance, is filled with medical puns and deploys them for their literary and comic effect for readers who were expected to get the joke. The play finds Student Zhang desperately ill from longing for Yingying, and other characters make numerous jokes at his expense. Doctors have been called in, but their medicine does no good. Student Zhang tells the
audience that if only he could swallow a drop of his mistress’s fragrant saliva, he would be cured. Crimson, Yingying’s maid, arrives, telling the audience that Yingying sends young men to their deaths by making them long for her and then sending a prescription that will only make them sicker. Student Zhang admits that he knows his illness comes from lechery and that he has been invaded by a ghostly illness. Crimson offers him the prescription, explaining that each ingredient has its own use:

(Crimson sings:)
Cassia flowers sway their shade in the dead of night
Jealousy soaks the one who “ought to return.”
(Male lead speaks:)
Cassia flowers are warm by nature, “ought-to-return” vivifies the blood—what is the method of their use?
(Crimson sings:)
Facing the rockery, she turned her back and hid in the shade,
So the ingredients of this prescription are the hardest to find.
One or two doses will make people so.
(Male lead speaks:)
What should I shun?
(Crimson sings:)
To be shunned is the “knowing mother” not yet asleep;
To be feared is that “Crimson” might blurt it out.
Once taken,
It will surely “make the gentleman” “completely well.”
(Crimson speaks:)
My mistress wrote this prescription out in her own hand.
(Male lead acts out looking at it. Bursting out with laughter, he arises.)

In this aria the names of six medicines are used in a way that plays on their vernacular names and their properties. In the first line there is a pun on the words yaoying (waving shadows) and yao yinzi (something that is added to medicine to make it more palatable). Cassia flowers (guihua; cinnamomum cassia) are used as both a medicine and a flavoring for medicine. “Ought-to-return” (danggui) of the second line is usually identified as Angelica sinensis, an important drug in regulating the blood and for menstruating women, which is why, according to Li Shizhen, its name indicates the longing of a husband, akin to Student Zhang’s longing for Yingying. Vinegar is used to treat swelling and sores but also to detoxify toxins of fish, meat, vegetables, and insects. “Vinegar” is also a common pejorative applied to young and callow students, as well as a symbol of jealousy. Yin (“to hide”) also means a storage vessel buried in the ground. “Knowing
“Mother” (zhimu) is *Anemarrhena asphodeloides*, a drug used to treat “agitation, fever caused by yin deficiency, and the wasting diseases heat [due to] depletion [relao], corpse transmission and pouring [chuanshizhu], and bone-steaming depletion [guzhenglao].”14 “Crimson” (literally, “the red maiden,” hongniangzi) is red ladybug—a constitutional tonic that makes one feel happy and vigorous. According to Li Shizhen, red ladybug is an effective treatment for the evil qi of confidantes (xinfu xieqi) and yin atrophy, and for bolstering vital essence or semen (jing) and enhancing willpower. When a boy is born whose father took a lot of this drug, the boy will develop into a man with strong sexual desire.15 “Make the gentleman” (shijunzi), according to Li Shizhen, takes its name from a Mr. Gao (official title, shijun) who used the drug to treat infantile diseases of all kinds, though it was also good for deficiency with heat, and for killing worms. “Completely well” (can) pronounced differently is ginseng (shen), which is good for treating the five types of overstrain and seven types of injuries, deficiency with dreams in men and women, and blood loss.16

Given the medical knowledge expected of the reader (or audience member), the aria can be roughly paraphrased as follows:

Cassia flowers added to the medicine for draughts deep in the night,
Angelica root soaked in vinegar,
Taken face-to-face from the storage pit in the rear of the false rocks—
This is the prescription that’s hardest to find.
Don’t take this powerful diuretic before you go to bed;
I guarantee this purgative [will get rid of what’s eating you] and a little bit of ginseng [will stimulate you].17

All of the medicines in this aria are related to diseases of love, longing, sex, and jealousy, which is why the Ming commentator Mao Xihe pointed out that Crimson is scolding Student Zhang with teasing language.18 The real meaning of this aria and of Student Zhang’s laughter is that Yingying is suggesting through Crimson that she is medicine for his illness. But if Wang Shifu was trying to incite laughter in his audience or in his reader, he depended on them having a ready knowledge of at least some of the most commonly used pharmaceuticals, their nicknames, and their uses. It is not just that the names of these medicines sound like something else—“knowing mother,” “crimson,” and “make the gentleman”—but the humor of this passage lies in the fact that these medicines, like Yingying herself, cure diseases of depletion caused by excessive longing (and sex or masturbation). Some believe that this sort of clever wordplay is
part of the tradition of the early prosimetric and vernacular narratives known as “transformation texts” (bianwen) of the late Tang and was a common feature of the urban stage in China. Certainly it was not lost on the Ming commentator Xu Shifan (fl. late 16th century), who pointed out, “The secretly concealed six medical names are guihua, danggui, zhimu, hongniang, shi junzi, and shen,” nor on Ming commentator Wang Boliang (ca. 1610) that this aria used the names figuratively; he said, “The six names of medicine all provide metaphorical meaning just like in ancient times when they used poems with names of medicine.”19 This kind of play with medical terms was not uncommon in dramatic literature, though this is a more sophisticated aria than others.20 In this piece, though, the author does not simply rely on the audience to understand the joke; he relies on Student Zhang to understand it. Zhang has just acknowledged that his illness comes from lechery, but Yingying reveals to him through Crimson’s complicated aria that she knows it too.

Poems and literary games that employ medical knowledge appear in other genres of literature in the Ming and Qing, but they tend not to add much significance to the work in which they appear. While some texts, such as The Story of Mr. Sangji (Sang ji sheng zhuan, late Ming), employ the names of medicinals throughout, many works simply have a few flourishes of medical knowledge.21 In Journey to the West (Xiyou ji, 1592) for example, two poems feature puns on herb names. There is nothing consistent about the plants’ medicinal qualities, nor are they relevant to the plot of the novel or to the themes of fighting or warfare. Some commentators were not impressed by these poems, or perhaps by any such poems. Li Zhuowu (1527–1602) writes in a marginal note, “These names of medicines are irritating.”22 Poems of a similar nature are featured in Plum in the Golden Vase,23 in the form of literary games such as those in which virtually every line contains the name of a fruit, flower, drug, coin, song title, or other specialty drawn from the realm of vernacular knowledge. The earliest extant works of this kind date from the Six Dynasties period (222–589) but became increasingly common in both elite and popular literature during the Song dynasty. These seem to have no other purpose in novels than showing off either the author’s talents or those of a character.24 Superficially, Annals of Grasses and Trees does not seem, at least by design, to be much more than an extended version of this kind of word game. Its participation in a tradition of medical entertainments, however, suggests otherwise.
The period in which *Annals of Grasses and Trees* was most popular, the late Qing, saw the performance of plays (*xiqu*) that also personified drugs and had plots designed to allegorize their functions, interactions, and properties. Perhaps even before the publication of that novel, but certainly afterward, a number of such operas also had the title *Caomu chunqiu*. These were read and performed well into the 1930s.

Late-Qing and Republican-era medical manuscripts copy these plays with differing titles, including *An Illustration of Numerous Drugs* (*Yaohuitu*), *An Illustrated Study of Numerous Drugs* (*Yao-hui tukao*), *Numerous Drugs, in Illustrations with a Musical Score* (*Yaohuituqpu*), *Tales of Herbs and Trees* (*Bencao zhuan*), *Records of Materia Medica* (*Bencao ji*), *Annals of Material Medica* (*Bencao chunqiu*), and *Opera on the Natures of Drugs* (*Yaoxing bangziqiang* and *Yaoxing xi*).27 The variety of titles and numerous extant printed and transcribed editions attest to the popularity of these plays. Those that survive all have either eight or ten scenes, but they were written in different regions and as such their content and language vary somewhat. Rural theater plays contributed mostly to public entertainment, but these seem to have been written in response to a perceived need for public education and for this reason have been
termed “pharmaceutical didactic operas.” As the final rhyme in a 1932 manuscript copy of the play *Illustrated Study of Numerous Drugs* states,

> Although all diseases are different, and each has its own cause,  
> A good physician will do his best  
> Everywhere to raise the dead and bring them back to life,  
> He also writes a play to be performed in the streets.

> Tree and leaves, herbs and roots become fantastic figures.  
> Secret recipes assist to help everybody to be in perfect health.  
> If, in the future, the actors have performed this play,  
> There should be no patients any more.

The didactic and charitable impulse here is quite explicit. The lines claim that a doctor wrote the play but that it transmits secret recipes so that everyone who hears the play can treat themselves.

A late Qing manuscript edition of the *Caomu chunqiu* play has an identical table of contents to that of *Illustration of Numerous Drugs*, and the plots are very similar. One difference is that the former has two prefaces. The first records the story of an official, who in 1894 “followed the Eastern campaign of the Xiang army under General Xiong, and met an old priest on the way in Henan in the big temple of Zhangdefuku,” and who gave the official a medical book. The second preface is a sequel to the first. It tells how this official, from 1894 on, taught himself medicine: “Now, [I] gathered comments from all authors on a broad scale, excerpted their essence, corrected their errors, eliminated heterogeneity, supplemented omissions, explained what had not been explained before, and selected what should be the most important. And yet, I preferred not to be too concise in my words. Rather, my presentation should be fun. Hence, I compiled the piece *Caomu chunqiu*.” One version of the *Caomu* play with similar but not identical content dates from the Kangxi period, though it is possible that this record refers to the novel of the same title. Some of the late-Qing versions of these plays copied in medical manuscripts have a style of writing that indicates that they were copied from a printed book. It is difficult to say which was written first, the novel or the play version of *Caomu chunqiu*, but both became popular at the same time, and claimed to have been written for the purposes of charity, education, and entertainment.

There are some interesting differences between these pharmaceutical dramas. Plays with the title *Caomu chunqiu* are much
clearer and more detailed than the *Illustration of Numerous Drugs*. When characters come onstage, for instance, the *Caomu* does not introduce them with traditional designations, such as “girl speaks” (*danbai*) or “clown sings” (*chouchang*), but with abbreviated versions of their actual names. This is of definite advantage for understanding the plot if someone were reading the play, and it is a constant reminder that these are drugs speaking and singing. Both plays give dosages of the drugs to be used in pharmaceutical recipes, but they are more consistently given in the *Caomu*. This suggests that some versions were intended to serve more as practical textbooks, and others more as general guidelines. That these pharmaceutical plays were actually used in medical practice, at least by some, is borne out by a manuscript in the Berlin collection titled “Annals of Herbs and Trees, Rhymed Verses Used by Itinerant Physicians” (*Caomu chunqiu lingyi zhudiao*), which combines the play with the handwritten records of an itinerant healer. Another manuscript shows physical signs of use, with damaged margins and extensive marginal notes. The differences between these plays also suggests that they evolved over time. In the course of their transmission, either as texts or as performances, plots were revised and amended, and changed in accordance to medical theory and contemporary materia medica, just as other medical texts were amended, their errors corrected, heterogeneity eliminated, and omissions provided.

Household notebooks in the Berlin medical manuscript collection, such as the “General Notebook” (*Zongjilu*), which has entries from 1936 to 1951 in Ye County, Shandong, record both pharmaceutical treatments and various sacrifices. Sacrifices were made on many occasions, such as the seventh day after child was born, on children’s birthdays, when a child was ill, when a child was cured from illness, when a child suffered from pain in the eyes, when there was an insect plague, and when a horse was sick. The “General Notebook” records that to make or redeem a vow to a spirit, rather than making a physical offering or animal sacrifice on the altar of the spirit, one should sponsor a dramatic performance. It may have been on such occasions that the plays centering on medical-pharmaceutical issues were performed. Other plays with medical themes, such as the legendary stories of the physician Sun Simiao, *King of Medicine* (*Yao wang*) and *The Story of Medicine and Tea* (*Yaochaji—a case of poisoning and the medicinal tea that saves the day*), may also have been performed
on these occasions, though neither of these plays seems intended to educate.

In the plays whose titles are *Caomu chunqiu* and *Illustration of Numerous Drugs*, the characters and plots are basically identical. If they were meant to educate, their variety of entertaining and at times bawdy plots surely aided in keeping the audience’s attention. The protagonist of the medicine plays is Gan Cao (licorice root), an
old scholar. He has a daughter named Ju Hua (chrysanthemum) who is engaged to Jin Shihu (dendrobium). In scene 1 of most of these plays, titled “Zhizi is glib” (Zhizi douzui), four robbers, Da Ji (boor’s mustard), Yuan Hua (lilac daphne), Gan Sui (euphorbia root), and Hai Zao (seaweed), plan to abduct and rape Ju Hua. When she learns of this, she falls ill with fear. Gan Cao calls on his servant Zhizi (Cape jasmine) to search for a physician, but he is reluctant to go, and argues with Gan Cao. The second scene, “Monk Tuo flirts with a nun” (Tuoseng xi gu), cuts to Mituo (litharge), the priest of the Red Stove Temple, who flirts with the nun Ci Gu (arrowhead). Zhizi, searching for a physician, happens upon them in flagrante delicto. The priest and the nun drug Zhizi with monkshood root (caowu), rendering him unconscious, and they throw him on a heap of sweet wormwood (qinghao). After that, Mituo and Ci Gu return to secular life. When Zhizi regains consciousness in the next scene, “The bewitching snakes emerge” (Yaoshe chuxian), he sees two beautiful women who are really Black-striped snake (wushaoshe) and White-banded snake (baihuashe) in human form. Zhizi makes an obscene offer to them, after which they drag him into their snake hole. Jin Shihu, who happens to be looking for these snakes, arrives in time to rescue Zhizi in scene 4, “Shihu subdues the monsters” (Shihu xiangyao). He enters into a fight with the snakes and kills both of them. Zhizi says he is looking for a physician to treat Ju Hua, and Jin Shihu reveals that she is his fiancé. In scene 5, “Lingxian invades for the sake of peace” (Lingxian pingkou), Jin Shihu asks his friend Wei Lingxian (clematis root) to help him defeat the four robbers who intended to abduct and rape Ju Hua. After a violent fight, they defeat and burn the four robbers to death. Jin Shihu returns to Ju Hua in scene 6, “Seeking refuge with relatives at Gan Mansion” (Ganfu touqin), but the robber Mu (muzei, common scouring rush) plans to break in at night to rape Ju Hua and rob Gan Cao. His plot is foiled, and Jin Shihu and Ju Hua marry. In scene 7, “Hongniang sells medicine” (Hongniang mai yao), the story returns to Zhizi’s search for a physician. He encounters a girl, Hong Niang, selling medicinal drugs, and propositions her. The story returns to Jin Shihu in scene 8, “Calamity of the lost hairpin” (Jinchai yihuo), in which Shihu is traveling to the capital to take the examinations. On his way he stays at an inn run by Mituo and Ci Gu, who plan to kill their guests. Assisted by Zhizi, Shihu kills the former monk and nun. In the next scene, “Fanbie revolts” (Fan Bie zaofan), a foreign king’s son-in-law, Fan Biezi, starts an uprising and
intends to invade China. Jin Shihu, who has passed his exam, and been appointed to the position of military doctor, is ordered to repel the invasion. A large battle ensues. In the course of the fight, Fan Biezi uses the drug sal ammoniac (naosha) to blind thousands of Chinese soldiers. In Act 10, “Gan Cao brings peace to the Country” (Gan Cao heguo), Gan Cao comes to Jin Shihu’s aid. He uses azuritum (kongqing) to cure the eyes of all soldiers. Fan Biezi surrenders, and Jin Shihu returns in triumph.

So much action suggests that the intended audience was not very sophisticated, and that the purpose of such a play was to employ the structure as a comfortable rubric through which to disseminate practical medical knowledge. There are few diseases featured in the play—this was not the same kind of practical knowledge found in encyclopedias and formularies (this disease, this prescription). Rather, the knowledge transmitted depends on learning the hierarchy and interactions of the characters to discern the natures and interactions
of drugs, the sort of information usually found in materia medica. Perhaps this is why the play was copied out in medical manuscripts, given that much of the knowledge it transmitted was foundational for elite medical practice rather than for quick home remedies. These pharmaceutical plays seem aimed at helping the uninitiated to begin the study of medicine, to disseminate knowledge that could be used by laymen to detect the false prescriptions of quacks by understanding drug interactions. It is also possible that the unsophisticated play-goer may have had enough medical knowledge gleaned from word of mouth or life experience that they were able to use that medical knowledge to better understand the play—the interactions between characters, the alternate hierarchies into which their pharmaceutical namesakes place them, the attribution of gender or office to one or another drug, and the humor of base drugs brought into submission by powerful ones.

There are a few different ways in which medical knowledge is woven into the librettos of these plays. The most common and obvious are the drugs with leading roles. For example, when Gan Cao enters the stage for the first time, he introduces himself, “This old man’s family name is Gan; his personal name is Cao. His home is in the province of Shanxi in the district Fu [Fenzhou] in the hamlet of Pinghe.” Fenzhou in Shanxi is the primary place of origin of the drug gancao. The village of Pinghe (“peace and harmony”) is fictitious, but the name points to the mild effects of the drug and the ability of both character and drug to bring peace to the body politic. Gan Cao then begins to sing:

Who is my equal? My nature is sweet and balanced.
I am good at balancing all drugs.
I am also good at bringing them together and at dissolving all sorts of poisons.
My name has been famous for thousands of years.
Simply apply me, and I will warm the center and eliminate cold.
If roasted, I can be of help, too.

Gan Cao subverts the conceit by explicitly describing the natures and interactions of his pharmaceutical namesake, though they are reminiscent of an old man’s tolerant, honest nature. Gan Cao subdues the revolt initiated by Fan at the end of the play, which is an allusion to the drug gancao’s function of dissolving poison like the toxic drug fanmubie (nux vomica), the namesake of the rebel leader Fan Mubie. Gan Cao is awarded the honorary title of guolao, “elder
of the state,” which is one of the vernacular, alternate names of the drug gancao.  

According to the concept of “eighteen oppositions” (shiba fan), a famous list of dangerous drug interactions which Gan Cao also recites, the drug gancao is “opposed” to the four substances daji, yuanhua, gansui, and haizao, the namesakes of the bandits out to rape his daughter. If drugs known to be “mutually opposed” (xiangfan) are consumed together, they will be toxic and evoke severe reactions in the patient. The play invokes this pharmacological conflict by portraying enmity between characters. It also illustrates drug affinities. For instance, the purgative rhubarb (dahuang) is often combined in medical formularies with the two substances hedge thorn (zhishi) and mirabilite (mangxiao), and correspondingly, the character Gan Cao, working with Da Huang, has two assistants named Zhi Shi and Mang Xiao.  

Toxic drugs tend to be cast in villainous roles. A leading role in the play is the monk Mituo (Mituo seng). His name is a homophone of the pharmaceutical drug mituoseng (litharge), which is (mostly) lead monoxide, a toxic residue remaining in a furnace used to refine silver in Ming times and earlier. It was also used to remove putrid flesh. The name includes the character “monk” (seng), leading the drug to be personified as an evil monk. Mituo introduces himself entering the stage: 

Prepared as an ointment, the loitering monk Mituo cures sores and malignant boils. 
With liquor and meat he connects with his friends and is on good terms with all sorts of physicians. 
I am the monk Mituo from the Red Furnace Temple 
In the temple, the old teacher Silver was not willing to keep me any longer because my natural disposition is simply too poisonous. 
Many Mongolian physicians make use of me when they boil their ointments; they resort to me to cure sores and malignant boils. 
Every day I go out to many places to meet my best friends, and all we do is eat meat. 

This statement refers to the preparation of mituoseng, a leftover of the alchemical processes used to refine silver, hence “the old teacher Silver was not willing to keep” it any longer. It is frequently used in Chinese external medicine to cure various types of abscesses and to remove putrid flesh, hence “it goes out to many places” and “eats meat.” Not only is the image of eating rotten meat off-putting, but since monks are not supposed to eat meat, it also implies taboo violation, adding to the overall villainy of the character. When Jin Shihu kills Mituo, he boasts
of having “smashed him and thrown him into an oil cauldron to boil an ointment,” a reference to the processing of mituoseng.

The opera structure allows for the easy insertion of poetry and rhymed instructions that were commonly found in pharmaceutical and recipe texts. In the Caomu chunqiu, characters also frequently quote verses verbatim from medical literature. For example, Mituo, Zhizi, and Ci Gu sing a verse often printed in pharmaceutical texts, the “nineteen fears” (shijiu wei), in which one drug’s toxicity or action is counteracted or reduced by another. Similarly, the Black-striped snake sings to her sister a rhymed list of drugs pregnant women must avoid that is found in many medical texts.

The play is interspersed with brief statements of proverbial medical knowledge, such as “whether it is sore or not, immediately drink a decoction with dandelion [diding]” and “for pacifying a fetus, mugwort leaf [aiye] may be fine, but one must add donkey-hide glue [ejiao] to see a wondrous [effect].” Generally speaking, the author takes pains to work the medical knowledge into the story in a logical way—the libretto is not just a hodgepodge of rhymed instructions sewn together. For example, Mituo’s carnivorous inclination (taboo for a monk) is taken as an opportunity to discuss the medical properties of various kinds of meat:

Today I ate donkey meat; it excites wind and stimulates lust. I ate dog meat. Dog meat is warm; it strengthens the yang and benefits the kidneys. I ate mutton. Mutton is hot. It causes massive sores. I ate pork. Although it nourishes the spleen, it also has the disadvantage of generating phlegm. I ate beef. It supplements spleen depletion and is very beneficial to people. I ate soft turtle meat. It has a turtle shell that nourishes the yin and pushes back heat. I ate chicken meat. It has a chicken gizzard. It is in great demand to rub away amassments.

The plays repeatedly list groups of related substances, but the styles of such listings vary considerably. At times, drugs are mentioned together simply because their names all begin or end with the same character (such as sha, zi, ren, or huang), or because they contain homophones. For example, Mituo sings,

Bat’s dung [yemingsha] is able to cure sparrow eyes [i.e., night blindness].
Climbing Japanese fern [haijinsba] cools heat and opens the passage of water.
To harmonize the stomach and pacify the fetus, resort to amomum seed [suosha].
Figure 3.6. A Republican-era manuscript of *Annals of Herbs and Trees*, showing many writing errors (and calligraphy practice?), but with additional plot points and material added to the play. The scribe identifies himself at the bottom of the first line (Yisheng Tang, *Lu ji*). The scene is labeled as a “chapter” (*hui*), a usage more common in prose fiction and oral literature but which also appears, along with similar terms, in Pu Songling’s songs. Staatsbibliothek zu Berlin—Preußischer Kulturbesitz, East Asia Department Slg. Unschuld 8801.
To dissolve a swelling of the throat, there is borax \textit{pengsha}. 
To eliminate wind dampness, there is silkworm dung \textit{cansha}. 
To ease one’s heart and calm the spirit, use cinnabar \textit{zhusha}.\(^{48}\)

Printed pharmaceutical literature lacks these kinds of groupings, but they are certainly reminiscent of the many medical poems featured in practical medical texts such as the “Song on Natures of Medicines” (Yaoxing ge) that were designed to aid learning. Dai Baoyuan (1828–1888?), a doctor who compiled a set of medical verses, confessed that his reason for doing so was really due to the fact that I was slow and not gifted, and I put myself in the shoes of [other beginners]. I was ashamed that I had not been successful in [Confucian] study. That was the reason why I took up medical studies with my late father. I was then already over thirty, and had lost the sharpness of the youthful mind. . . . Things in [medical] classics were forgotten almost as soon as they were learned, and it was not because I did not concentrate, but because of my age.\(^{49}\)

There was a perceived need for medical mnemonics, for practitioners or for the readers and audiences of plays. The presumption is
that medical knowledge is difficult to learn, which is why it was put in verse, but these medical didactic plays also presume that medical knowledge was not interesting, and so had to place the mnemonics in the context of an opera.

Elsewhere in Illustrated Numerous Drugs and Caomu chunqiu, pharmaceutical substances of a similar nature or action are grouped together. For example, when Zhizi goes out to seek the help of a physician named Huang Qi (astragalus root), he partly speaks, partly sings, “I think that Dr. Huang lives in the village of the Warmth family. So there should be many family members with a warm nature.” He then enumerates the male and female members of the family, all warming drugs, and the illnesses they treat. This speech is clearly a mnemonic device, personifying drugs with a warm nature as members of the same household, all of the “female” drugs being fragrant substances (i.e., having xiang in their names). This grouping relies on the medicine of systematic correspondence, but is also consistent with the taxonomy of practical medical texts that order drugs according to use.

Another approach to grouping substances is based on shared origins. In one scene of the play, Zhizi wants the medicine Hong Niangzi (red ladybug) is selling, but does not want to pay for it:

Female Clown [choudan]: You don’t look like someone who can afford to buy drugs!

Clown [chou]: How I look is none of your business. There’s a saying: The poor consume drugs, the rich pay for them.

Female Clown: If you think you can consume drugs without paying for them, you are wrong!

Clown: I don’t want anything for free. I just happen to have no money!

Female Clown: If you have no money, then why don’t you take drugs you can get for free?

Clown: Drugs you can get for free? Which ones are they?

Female Clown: Listen to me. (Sings:)

You could take “the yellow in man” [renzhonghuang, a drug prepared from feces]. It is good to dissolve heat poison.

You could take “the white in man” [renzhongbai,
a drug prepared in urine. It is capable of curing noma.\textsuperscript{50}

There is also sparrow droppings [baidingxiang], which can break up accumulations of poison.

There is also rat droppings [liangtoujian]. It relieves head-wind.

Then there is boys’ urine [tongzibian], which nourishes one’s yin and brings down fire;
as well as flying squirrel droppings [wulingzhi], which regulates the blood and stops pain.

There is also hare droppings [wangyuesha]. It pushes back cataracts and clears the eyes.

Finally, there are maggots in feces [fenzhongchong]. If the intestines are blocked, they can penetrate the blockage.

	extbf{Clown}: Are you saying you want me to eat shit and drink piss?

	extbf{Female Clown}: If you won’t eat shit or drink piss, why should I give you other drugs for free\textsuperscript{51}

This aria is similar to Crimson’s (and this Hong Niangzi might be referencing that Hongniang) in Story of the Western Wing, in which a prescription suggests that Student Zhang is suffering from a condition brought on by lust. But the medicine plays are not consistent in their pedagogical strategy. These plays employ the names of drugs as homophones or puns simply for the sake of wordplay, similar to the verses in Journey to the West and Plum in the Golden Vase.

Drugs grouped into prescriptions further illustrate the didactic impulse of these plays. For instance, when Wei Lingxian falls ill, he says, “Today cold evil has directed itself against my stomach, with the result of vomiting and pain. In my heart I experience turmoil; my intestines have diarrhea.”\textsuperscript{52} His two wives, Zi Shiying (amethyst) and Bai Shiyng (quartz), suggest the following:

Master is ill today; he must get some medications to cure his vomiting, disperse the cold, strengthen the spleen, and eliminate wind, and then he will be fine. (Singing:)

Take some beefsteak leaves [zisuye] to disperse the cold and bring down qi.
Take some esholtzia herb [xiangru’er] to discard summer heat and wind.

Take some Sichuan magnolia bark [chuanhoupu] to regulate the pain and dissolve the swelling.

Take some hyacinth bean [baibiandou] to benefit the spleen and harmonize the center.

... Zi Shiying says: “Ah! Now, I too have developed a chill on my body. I assume I have been affected by something adverse—wind and cold. But I am not willing to spend money to purchase medication. What should I do? I have it!” (Singing:)

“I will consume some radish [luobo’er]; this will remove any distension.

I will drink a bowl of onion and ginger soup [congjiang tang]; this will disperse wind and cold.”

This scene teaches the audience how to treat a very common illness using the most basic, cheapest drugs and household food. The didactic impulse or charitable impulse to spread knowledge is clearer here than in the clever displays of knowledge found in the poems randomly interspersed in Ming novels, but these prescriptions are not common in the plays. What is common in these plays, however, is a great deal of information about aphrodisiacs, which is in keeping with tendencies found in practical medical texts. Mituo, for instance, recites such a recipe for men to enhance their potency:

Seven grains of clove [dingxiang] and eight grains of pepper [jiao], Manchurian wild ginger [xixin], dragon bones [longgu], and cuttlebone [haipiaoxiao], as well as a little calcined alum [kufan] mixed with honey, will let a girl of eighteen years sway her hips.

Providing the audience with such a prescription might seem to contradict or subvert the charitable impulse of these plays, but medical manuscripts, materia medica, and medical recipe books contain so much information about sexual dysfunction and aphrodisiacs that there must have been great demand for such information. The authors of these plays were at least sparing audience members from having to purchase such drugs from medicine peddlers, quacks, or charlatans. Moreover, Mituo’s interest in aphrodisiacs serves the story in that it enhances his lechery and, as a presumably celibate monk, his villainy. These medical plays were popular in that they were printed and copied repeatedly, and were performed in different regions of the empire, but they were also popular in that they reflected the contents of popular, practical medical texts. They
gave the audience what they wanted, and helped them to remember it, too.

Anthropomorphism is the most unique mnemonic device sustained throughout the play. Pharmaceutical drugs become people, and not only do they interrelate in a way that reflects the natures of drug interactions, but the characters are described in ways that reflect notable features of the drugs. In addition to the self introductions that included their primary functions and place of origin, a character’s appearance, armor, horse, weapons, and fighting style could reflect the drug’s characteristics. Cape Jasmine describes the foreign villain (fanzei):

(Sings:) When he was born, his complexion was that of green copper and he was able to cure festering eyes.
As an adult, he had red lotus hair and he was able to supplement involuntary seminal emission.
On his head he wore a white cockscomb and was able to administer a white girdle.
He wore pig-hoof armor and was effective in the management of anal fistula.
He availed himself of a horse the color of orange peel and converted phlegm and ended cough.56

This character’s description explicates the effects of the drugs copper rust (tongqing / tonglü), red lotus (honglian), white cockscomb (jiguan), pig trotters (zhuti), and orange peel (juhong), as well as their appearance. In this play, the evil monk, the irascible servant, and the cheeky medicine peddler all have similarly striking features that elaborate on the appearance and functions of the drugs for which they are named.

None of these medical plays is known to have existed prior to the Qing dynasty.57 Still, personifying drug names and associating drugs with social roles have a long history in Chinese literature. Possibly beginning with the Han dynasty, drugs were categorized as “ruler” (jun), “ministers” (chen), or “assistants” (zuoshi), to show their role in a recipe that was believed to function like a social body: with one ruler at the top, several ministers below the ruler, and even more assistants at the bottom of the hierarchy. In subsequent dynasties, literati wrote poems in which the names of drugs were used to imply certain emotions.58 When composing medical plays, authors had a variety of models upon which to draw, such as Story of the Western Wing, Journey to the West, and The Story of Mr. Sangji. However, the primary
aim of conveying pharmaceutical and medical knowledge to audiences by means of a folk opera appears to have been a completely new development in the Qing. The plays must have been the work of highly educated authors with a thorough knowledge of contemporary medicine, since they reflect contemporary concerns and discuss drugs that are not included in earlier works such as *Systematic Materia Medica*. These plays may have had an underlying purpose—to educate—but they did not lose sight of the crucial role entertainment played in the pedagogical project. A purely didactic play featuring the names of 550 drugs would likely have been as tedious then as it seems now, but the crafting of comic scenes, variety of word games, breaking of taboos, sexual innuendo, and regular use of low or vernacular speech were clearly employed to make these medical plays entertaining.

There is no way to know if these librettos were intended for performance. It may well be that the subtle allusions to certain pharmacological functions, as well as the passages with sexual themes, simply appealed to men of higher education and were written for their private reading pleasure. What we can be certain of is that these plays were written by authors with a great deal of medical knowledge, some literary and linguistic sophistication, and a charitable impulse to increase or standardize medical knowledge among those who could read—and perhaps those who could not. We also know from extant manuscripts and printed editions that they were used, annotated, supplemented, and commented upon.

*ANNALS OF GRASSES AND TREES: A NOVEL*

If the medical-didactic plays came first, the novel version of *Caomu chunqiu*, did not learn much from them. If the novel was first, the plays did not seem to garner much attention from subsequent literary critics. If the plays were meant to teach, or at least to entertain, the reason for the existence of the novel that shares their title is less clear. The sex, bawdy innuendo, taboo violation, witty repartee, and demons that entertain the reader or audience in medical plays are almost completely absent in the novel *Caomu chunqiu yanyi*. Its plot is completely different from that of the plays, and although almost all of the same characters reappear, they are often cast in different roles. The plot of the novel essentially has two parts. It opens with an introductory chapter in which Liu Jinu (wormwood) sits on the throne during the (fabricated) Zhongxuan years of the Han
dynasty (there is no discoverable dynastic period in the plays). He is a benevolent king, and the people are happy. The “old man of the country,” Gan Cao, along with two prime ministers, has helped to establish this long-lasting era of peace. The main characters are then introduced. The regional commander of Chang’an, Jin Shihu, has a large, loving family with two sons, Jin Yingzi (Cherokee rose) and Jin Lingzi (chinaberry), and a daughter, Jin Yinhua (honeysuckle). Jin Shihu, his sons, and his uncles are all skilled in martial arts. Jin Shihu was good friends from childhood with Huang Lian (Chinese goldthread), now the regional commander of the military in Yazhou, with three sons, Huang Qi (radix astragali), Huang Qin (scutellaria), and Huang Dan (lead oxide /minium). They, too, are well versed in the arts of warfare. The first chapter then moves to Buddha Cave on Mount Wudang, where Immortal Weiling (Chinese clematis) has four apprentices, but only one of them, Jue Mingzi (cassia seed), is unable to learn the secrets of the Dao.59 Weiling predicts that the Kingdom of Hujiao (pepper), which is ruled by King Badou Dahuang (croton seeds and rhubarb), will invade the Han Empire, and he sends Mingzi down the mountain to assist Han.60 Three years later, when Mingzi has quelled the invasion and restored peace, he may return to the mountain. Huang Lian visits Jin Shihu in the capital, and the two old friends agree to wed Jin Yinhua to Huang Qi. Yinhua had just recovered from an illness, and plans to travel to Temple Hai Jinsha (Japanese climbing fern) in Xuanzhou to redeem the vow she made to Guanyin when ill. Jin Shihu sends Jin Lingzi to escort and protect her. The first part of the novel (chapters 2 through 5) sees Lingzi and Yingzi set upon by bandits, but each is rescued by an immortal who brings them back to their abode and instructs them in medical and martial arts. They are told that they will see each other, and their parents, again in one year. Jin Shihu hears of his missing children and goes to wipe out the bandits. Shihu is joined by his brother-in-law, the regional commander of Xuanzhou, Mu Tong (mutong stem). With their combined troops, they defeat the bandits, and their leader, Tianzhu Huang (tabasheer), flees.

The second part of Caomu chunqiu yanyi makes up the bulk of the story. Chapters 6 through 32 follow the invasion of Han by Badou Dahuang and his army. The many characters from the first part of the novel are the primary heroes, particularly Jin Shihu, Huang Lian, and their children (Liangzi and Yingzi join the fight with new
powers), although the novel introduces over two hundred more characters, all of whom have the names of drugs. The great majority of characters are mentioned only once or twice, and many are the disciples of some more important figure. Disciples are to their masters as supplementing drugs are to a core drug. Each side has numerous victories and defeats, and each comes up with increasingly complex battle formations and increasingly severe weapons. Each side begins to draw on the talents of various immortals and demons that are loyal to their side, and employ their magic to inflict great losses on the enemy. Hujiao is joined by two other foreign kingdoms, but all are eventually defeated by a heavenly army of immortals called down by Weiling Xian and deployed in the unbreakable “heavenly web” (tianluo; luffa) formation; a deus ex machina that goes without explanation. Li Shizhen explains that when the fruit of tianluo (aka tiansigua) gets old, its fibers are exposed. These resemble the Channels and the Collaterals, which makes tianluo good for dredging them and for dispersing invading pathogenic wind, detoxifying toxin, eliminating swelling, dissolving phlegm, relieving pain, and killing worms. Hence, the name is useful in describing a weblike formation designed to purge invaders. 61

The plot is thin, with little character development. Nor does it contain much in the way of direct speech, let alone banter. The complexity of Caomu chunqiu yanyi lies almost entirely in the descriptions and interactions of the many drugs introduced. The novel format allows for certain groupings that would be difficult in a play. For instance, Jin Shihu and his children all have names that are from the categories of herbs or woods, even though they share the common surname Jin (“gold”), and the novel takes pains in the first chapter to describe how Jin Shihu named each of his children, Jin Lingzi, Jin Yingzi, and Jin Yinhua. The author was drawing on materials more contemporary or popular than Systematic Materia Medica to make this grouping. 62

The utility of these taxonomies is limited, though, because the drugs have nothing in common—their flavors, natures, origins, and treatments all differ markedly, they do not occur in prescriptions together very often, and it is only their names that have some overlap. The immortal Weiling, for instance, who in the novel is the originator of Daoism, has four disciples—Jue Mingzi (cassia sophera), Tian Xianzi (henbane seeds), Yi Zhizi (alpinia oxyphylla), and Yu Zhizi (akebia fruit)—the names of which, aside from being medicinal drugs, sound like higher states that have been honed through spiritual devotion.
(“clear decision,” “immortal,” “growing wisdom,” and “anticipation,” respectively). Classification based on these sorts of homophonic puns might suggest that the author was appealing to a readership with a bit more literary sophistication than the audience of the bawdy medical plays.

Some characters fight alongside others to indicate that those drugs are often used together in prescriptions, but providing the reader with useful recipes is clearly not a primary concern of the author. One common grouping, and perhaps the most significant for aiding memorization, is that of a character with its weapon and mount. For instance, Mituo is one of the primary villains in the novel. He is a powerful warrior and sorcerer and is put in charge of the invading army. He is cast as a villain, as he is in the plays, because it was a common role for strange monks in novels, who seemed particularly evil when transgressing their oaths of poverty, vegetarianism, abstinence, or nonviolence. The drug *mituoseng* is not particularly toxic or dangerous, though its uses enhance the monk’s evil image because it “eats” necrotic flesh and treats diseases of the nether regions—dysentery, hemorrhoids and anal fistula, sores and itching of the genitals, and bone infection due to having intercourse with a blood relation in the first month of pregnancy. In battle formation, Mituo rides a tiger cihu (litharge) carrying a halberd huzhang (knotweed) in his hand. He is associated with the tiger and the huzhang because the drug *mituoseng* was said to come from the Hu region. But the drugs homophonous with Mituo, his tiger, and his weapon do not have much in common in terms of geographical provenance, effects, natures, or treatments, or as ingredients in the same prescription. *Mituoseng* also does not occur with or have much in common with his sister drug, pale butterfly bush (mimenghua), his master pumice stone (haishi), or king (*badou dahuang*). The rebus seems to mark a particular kind of allegorical thinking—it is blatantly literalistic, draws on homophones to signal basic information about a drug, and brings that knowledge to life.

The wordplay in the _Caomu_ novel relies on information that is more like materia medica literature—giving natures, origins, or alternate names of a drug—than popular recipe books that pair drugs according to a taxonomic aim of practical remedy. For instance, the king of the invading country has the mandate of heaven in his own country, and is a good ruler. The drugs from which he takes his name, *badou* (croton) and *dahuang* (rhubarb), are two of the most
common drugs in Chinese medicine. *Badou* is toxic and a strong purgative, and it was used to treat stagnation in the viscera and bowels, as well as to facilitate urination, eliminate malignant flesh, and purge vicious agents such as invading ghosts or worms. *Dahuang* is non-toxic and is sometimes referred to by the name “military general” because “the drug pushes away the old and brings in the new, like a military general putting down a riot and bringing peace.”66 Most of the prescriptions in which it is the primary ingredient are for treating accumulation and stagnation. “Attack” (*gong*) is one of the standard verbs used to describe the action of drugs that purge and break up stagnation, and it is likely for this reason that the author cast these useful drugs as benevolent invaders. One early Ming account criticizes doctors for thinking that it was always necessary to “attack and lead away” (*gongli*) stagnations of blood when treating traumatic injuries. It describes how, to treat the injuries of soldiers defending a besieged city, doctors used rhubarb (*dahuang*), switching to croton seed (*badou*) when they ran out.67 Presumably these two drugs were thought to be pharmacological “doubles,” thus justifying the only such pairing of names in the novel. However, many of the most useful drugs in the physician’s arsenal were not cast in starring roles. Ginseng (*renshen*), to cite just one example, is a minor character in the invading army. Obviously (as we have seen with *hongniangzi*, *mituoseng*, and *weilingxian*), some drugs lend themselves to anthropomorphism simply because their names sound like those of a young woman, a monk, and an immortal, respectively. Other primary characters, such as *badou dahuang* and *huangqi*, were commonly used drugs in prescriptions, though just as often major characters, such as Fupen Zi and Mu Lan, are drawn from drugs that occur infrequently in pharmacopeia.68 The *Caomu yanyi* employs vernacular knowledge of pharmaceutical drugs drawn from works of materia medica but rewrites it, not according to utility but according to literary logic. In this regard, it is like a “literati” novel in the respect that it relies on the reader having enough familiarity with the textual tradition to make sense of its rubric. But the texts it draws on were themselves compendia of all kinds of information, much of it popular and practical, and much of it reliant upon linguistic correlation, figurative language, and literary devices.

It is possible that the author of the *Caomu* novel had little practical medical knowledge or that he was just arranging the contents of some pharmaceutical text into taxonomic categories according to the
demands of conventional military romance plots. He may have been criticizing the same sort of doctor lampooned by the author of *Journey to the West*, or perhaps he was even satirizing those who aped Sun Wukong in reality. In chapter 69 of *Journey to the West*, Wukong (“Monkey”) plays the doctor to the ruler of the scarlet-purple kingdom. He palpates the king’s pulses and prepares a prescription for the king’s illness. Wukong first asks for three pounds of each of the 808 different kinds of medicines to disguise the ingredients and quantities

Figure 3.8. Mituo Seng frowning, riding a tiger and wielding a sword that creates a medical rebus. University of Tokyo Library.
of his marvelous prescription recipe (shenmiao zhi fang), evoking the language of generational doctors rather than medically trained ones. Wukong tells Bajie, “Bring me an ounce of dahuang and grind that into powder.” Sha Monk speaks up, “Dahuang is bitter in flavor; its disposition is cold and nontoxic. Its nature is sinking and not rising, and its function concerns movement and not fortification. It can take away various kinds of pent-up feelings and unclog congestion; it can conquer chaos and bring about peace. Hence its name is ‘General;’ for it is a laxative. I fear, however, that prolonged illness has weakened the person and perhaps you shouldn’t use it.” Smiling, Wukong says, “Worthy Brother, you don’t realize that this medicine will loosen phlegm and facilitate respiration; it will also sweep out the chill and heat congealed in one’s stomach. Don’t mind me. You go also and fetch me an ounce of badou. Shell it and strip away the membranes. Pound away the oil, and then grind it to powder.” Bajie speaks up, saying, “The flavor of badou is slightly acrid; its nature is hot and toxic. Able to pare down the hard and the accumulated, it will therefore sweep out the submerged chills of one’s internal cavities. Able to bore through clots and impediments, it will therefore facilitate the paths of water and grain. This is a warrior who can break down doors and passes, and it should be used lightly.” Monkey responds, repeating the sentiment, “Worthy Brother, you too don’t realize that this medicine can break up congestion and drain the intestines. It can also take care of swellings at the heart and edema in the abdomen. Prepare it quickly, for I still must use an auxiliary flavor to lend the medicines further assistance.” To this passage one commentator adds, “Bajie and Sha monk both have read some materia medica literature.” Another commentator finds Monkey’s prescription esoteric: “I fear that the ten famous Ming physicians also have not heard of this [prescription].” Monkey also puts soot from the bottom of a frying pan into the prescription. “The proper name for this kind of soot is Hundred-Grass Frost [baicao shuang],” he says, “and you have no idea that it can soothe a hundred aliments.” This soot, not unlike mituoseng (the ash residue left from refining silver), is good medicine, but the idea of feeding it to a king is a carnivalesque image that might elicit laughter in the reader. The humorous nature of this prescription is pushed further when Monkey requires half a flask of urine from their horse. Laughing, Sha Monk responds, “Elder Brother, this is no joking matter! Horse urine is both pungent and stinky. How could you
put that into the medicine? I have seen pills made from vinegar, aged rice soups, clarified honey, or pure water, but never from horse urine. That stuff is so foul and pungent, the moment a person with a weakened stomach smells it he will vomit. If you feed him further with badou and dahuang, he’ll be throwing up above and purging down below. You think that’s funny?” It is doubly disconcerting that Bajie, who is himself the novel’s clown, is worried that Monkey’s medicine is a bad joke. Perhaps most interestingly, a chapter-end comment reads, “These days, there is no short supply of this sort of ‘badou dahuang doctor.’ As for those who use dahuang, badou, pot soot, and horse urine to make a secret prescription, they know nothing . . . ” There is no doubt that this scene is meant to be comical. Bajie has a difficult time getting the urine from the horse, and Monkey says he also needs as an adjuvant “the fart of an old crow flying in the air, the piss of a carp in swift flowing streams, the elixir ashes in Lao Tzu’s brazier,” and other similarly difficult-to-obtain ingredients. If these are unavailable, Monkey says, they can take the medicine with sourceless water, but in the end he substitutes dragon spittle. The humor of this passage is multivalent—all readers can understand that the king is going to be given strong and disgusting medicines, but for those readers who understand the natures of these medicines, and their practical effects, the scene is even more ribald, while showing how Monkey apes common practitioners.

Bajie and Sha Monk laugh when Monkey explains the name of his secret prescription to the king: “This is called the Elixir of Black Gold.” Smiling, Bajie and Sha Monk say to themselves, “There’s soot mixed in it, it has to be black gold!” One commentator had never heard of this medicine, saying that it had a strange name, but this only reveals his own highbrow background (or general ignorance), since “black gold” was the name of various prescriptions common among hereditary doctors. In fact, it was mentioned in the Systematic Materia Medica repeatedly, and Xu Dachun recommends it in Medical Cases of Huixi, so it was not exclusively the purview of nonelite healers.

“Black gold pills” (wujin wan) was a name and a concoction similar to “elixir surpassing [the value of] gold” (shengjin dan) and “black spirit pills” (heishen wan). All of them were core formulas that could be modified in their effects by ingesting them with different liquids. These “black gold” medicines, along with the likes of “the prescription offering Guanyin’s all-encompassing help” (Guanyin puji fang)
and “pills prepared with old ink” (gumo wan), treated a wide variety of ailments (in one medical manuscript, twenty-nine, forty, and seventy-one ailments, respectively), and were extremely common formula in the Qing. The “black gold” formulas had at their core the drugs dahuang and badou. One medical manuscript from the Republican period states in its introduction, “Black gold powder [wujin san] cures all ailments, just as the wind bends the grasses. Other names [of this prescription] are ‘pine smoke elixir’ [songyan dan] and ‘black spirit pills’ [heishen wan]. It cures thousands of illnesses, just as the sun melts the frost.”

Black gold pills (wan), powder (san), paste (gao), and elixir (dan) were commonly employed to cure gynecological issues. A prescription named “black gold powder” was first recorded in the Song work A Spring of Recipes in the Magic Park (Lingyuan fangquan) and was followed by references in the Southern Song prescription collection “Complete Collection of Effective Prescriptions for Women” (Furen daquan liangfang, 1237), Formulas for Universal Benefit (Puji fang, 1390), and other works. Over the centuries, numerous formulas, each with different ingredients, became known under the names “black gold powder,” “black gold pills,” and “black gold elixir.” The three designations of this formula result from the use of pitch (mo), a vernacular name for which is the “black gold” of these prescriptions.

Monkey’s prescription reflects a historical reality, namely that the advent of the imperial pharmacy (huimin yaoju) in the Song required doctors who had previously relied on simple medicines with one or two ingredients to employ formulas with numerous substances whose composition followed theories of systematic correspondences. From this conflict between empirical and theory-based recipes arose a new type of prescription eventually consisting of a nuclear formula that could be adapted to the requirements of a given patient’s disease by omitting or adding individual constituents in accordance with his pathological condition. Monkey is preparing simple, trusted medicine at the core, namely badou and dahuang, and adding to it many exotic, unobtainable ingredients.

Badou features prominently, and usually with gynecological implications, in a few short stories of the late Ming and early Qing. Perhaps the most notorious is the alternately macabre and ribald comedy “The Female Chen Ping Saved Her Life with Seven Ruses” (Nü Chenping jisheng qichu, 1654), the fifth story in Li Yu’s Silent Operas. In it, Geng the Second’s Wife, Geng Erniang seeks to protect herself
from being attacked by bandits who have overrun her village during the Ming-Qing transition. One bandit in particular tries to force himself on her. Erniang uses a rag soaked in her menstrual discharge to pretend that her period is not yet over to ward him off. On the second night, she applies badou around her forbidden area, so that its “jade skin became swollen, haloed with a purple hue. The deep slit rose to a shallow fold. There was no entrance door, because two halves became one. Though it still had a seam, it was very difficult to pry open. It looked like a steamed bun laid out for five nights, or rather, a mussel soaked in water for ten days.” Erniang, an illiterate peasant woman, is compared to the resourceful Han tactician Chen Ping, who was famous for his stratagems, duplicity, and ruthlessness, hence the term “female Chen Ping.” Badou here is medicine to repel men, and the description of its effects is both gruesome and coarsely comical.

The Geng Erniang story has a parallel in Journey to the West. It is funny, raunchy, and seems to critique the authority of kings, physicians, or both. This is particularly the case considering that Wukong diagnoses the heartsick king as having a “cessation of the menses” and then prescribes for him a common recipe to treat gynecological disorders. To understand this aspect of the carnivalesque comedy, or to realize that it was a mistake in the incorporation of medical materials into the novel, readers would have had to be quite familiar with medicine, at least enough to know that the medicine Monkey is preparing is consistent with his diagnosis. Casting badou and dahuang as the invading king in Caomu yanyi likely does not reflect a negative attitude toward those drugs’ properties of purgation. It also does not seem to be the case that the author is critiquing badou dahuang physicians, since the invading drugs were all part of elite medicine too. If anything, the author is just as guilty of their overuse. Nor is the author of the Chunqiu yanyi making a clear distinction between domestic and foreign drugs. Some that are foreign in origin do seem to have been cast on the side of the invading country, but the author is not consistent in that regard. He does not regularly refer to the invaders as coming from the Black Pepper (Hujiao) kingdom. Most often they are said simply to be “Fan,” which could mean that the author was drawing on the medical plays or on some other source that discusses the foreign rebellion as coming from Fan, and being led by Fan Biezi, or it could simply mean “fan” in the generic sense of the term—“foreign.”

The Caomu chunqiu yanyi is thus not a cohesive or consistent allegory. There is no medical lens that adds meaning to the overall point of the novel.
Good, domestic heroes and immortals best evil, invading ones, but such situations do not correlate to the drug interactions. The overall story, the battle between Han and Fan, is not enhanced by the strange fact that all of the characters involved—and their weapons, mounts, formations, and many places—all have the names of medicines. If the author of the preface is to be believed, though, the benefit of this novel (other than simply naming medicines, which seems like a useless project given the availability of pharmaceutical literature at the time), was in the various groupings of medicine names that might facilitate memorization. While obviously sharing many of the categorical groups that we can find in similarly titled plays, the *Caomu yanyi* does take advantage of the novel form to group some medicines according to linguistic, homophonic, and symbolic relationships. The only other justification that the author gives for writing such a novel—that the *Caomu Chunqiu yanyi* was a useful method to disseminate medical information—is borne out in reality given its multiple printings and its fame as a literary display of knowledge.

Despite the claims of the author, the novel does not seem to be terribly useful, especially compared to the play versions of these stories. So, if it is not useful, what is its entertainment value? One answer to this question was that it drew on the narratives and metaphors found in pharmaceutical literature. For instance, Liu Jinu is cast as the Han Emperor, likely because, as the *Systematic Materia Medica* recalls:

> Li Yanshou in his work *History of Southern Dynasties* [Nan Shi, 420–589] recorded: Liu Yu, with the nickname Jinu, Emperor Gaozu of the Song, was once leading his troops to conquer rebels in Dixin prefecture before he was crowned. He saw a big snake and shot at it with his bow and arrow. The next day, returning there, he heard a sound of husking. He saw a group of young lads husking herbs under a brush. When Liu asked them what they were doing, the youths replied, “Our master was shot by Liu Jinu and we are preparing drugs for him.” Knowing that the lads were preparing drugs for the wounded serpent, he realized these were not ordinary people. So, Liu asked again, “Why not kill Liu Jinu since he wounded your master?” The boys answered, “No, Liu will be a king and cannot be killed.” Liu shouted at them, and the boys disappeared. So, Liu took back the drug and used it to treat those suffering from battle wounds. It was very effective. Later the drug was called Liujinucao [herb of Liu Jinu].

*Badou,* as Monkey reminds us, is a warrior who can break down doors and passes, a statement echoing that of Zhang Yuansu, who is quoted in the *Systematic Materia Medica* as saying, “Badou
is a warrior that fights fiercely and bravely.”89 The same text calls dahuang “the general who pushes out the old to make way for the new.”90 The metaphors and stories found in pharmaceutical literature are the guiding logic for casting Liu Jinu and Badou Dahuang as leaders, since they are all drugs placed in a metaphorical military hierarchy, and all were used to treat injuries sustained by soldiers. The entertainment value in this regard is to highlight or develop the literary aspects already extant in materia medica literature. There are wars and alliances between drugs metaphorically scattered about and hidden in the classificatory structures of pharmaceutical literature. In other words, the Caomu chunqiu yanyi is not a medical allegory, it is a hodgepodge of collected medical metaphors, based on their descriptions, origins, and actions. The Caomu Chunqiu yanyi is pharmaceutical literature as entertainment; it highlights the literariness latent in materia medica literature and at the same time strips materia medica literature of its usefulness.

The Systematic Materia Medica, with the exception of some early chapters devoted to particular diseases and their remedies (baibing zhuzhi yao), gives a historical survey of each drug, along with firsthand accounts of its uses. Entries typically begin with an explanation of names (shiming) that discusses the drug category, followed by definitions and variant names as found in a wide variety of texts. Li often refers to the early dictionary Explaining the Graphs and Analyzing the Characters (Shuowen jiezi) in this section and gives his own opinion as to which name is most fitting, and which are not. Collected notes on origins, harvesting, and production (jijie) follow, with lengthy quotations from previous medical, historical, and literary works. Li provides his comments on each throughout. A section that expresses doubts and corrects errors (bianyi or zhengwu) follows, as do sections for adapting and preserving the medicine (xiuzhi), the smell and toxicity of the drug (qiwei), and indications and curing efficacy of the drug (zhuzhi). The last two sections of each entry for a drug consist of Li Shizhen’s and his predecessors’ experience with the medicine (faming), and prescriptions (fufang), including methods of preparation, quantities, and evaluations of effectiveness. In the narrative of one drug army invading the kingdom of another there no explicit discussion of any given drug’s properties, and when alternate names, drug affinities, origins, properties, or uses are mentioned, they are done so obliquely (though not necessarily subtly) through the historical romance paradigm.
If its compass and utility were far inferior to materia medica literature, at least the *Caomu yanyi* shared a similar general project: to classify and reclassify the potent natural world.\textsuperscript{91} The *Systematic Materia Medica*, according to some, was innovative in its reclassification of the entire materia medica according to a new logic that was to a greater or lesser extent motivated by the “investigation of things” (*gewu zhi xue*).\textsuperscript{92} The *Caomu yanyi*, clearly not beholden to the *Systematic Materia Medica*, reclassified materia medica according to a literary logic—that of linguistic correspondence and metaphors drawn from stories of derring-do. In this regard it could be said that the *Caomu yanyi*, rather than being a materia medica stripped of its usefulness, was rather an attempt to reveal the literary logic that tied these drugs together in a web of relationships. Some were still reading and writing about this novel in 1926, such as Liu Dabai (1880–1932), who, for instance, suggested that the eighteenth-century comic novel *Which Source?* (*He dian*), a collage of standard sayings and clichés, was descended from “reductionist” literary ancestors, in which only a single aspect of reality, or single register of the language is used, such as *Annals of Herbs and Trees*, *History of Roaches* (*Zhang shi*, late Qing), and poems composed entirely of names of things from a certain category, such as stars (*xingming shì*) or medicines (*yaoming shì*).\textsuperscript{93} Others in this genre would include *Story of Various Fruits* (*Baiguo zhuan*, late Qing), in which all characters have the names of fruits (which is apparently a late imitation of the *Caomu chunqiu*), and *The Story of Beheading Ghosts* (*Zhangui zhuan*, 1688), in which the world is described as being inhabited only by various kinds of ghosts. In some cases this limitation seems to have been chosen as a means of attracting special attention to a given area of literary virtuosity, but often the one-sidedness is clearly a device for satire and caricature.\textsuperscript{94} Based on the number of late Qing and early modern editions, *Annals* was popular among readers, but it was also notorious for its peculiarity, and often mentioned in essays on literature. The twentieth-century writers Lu Xun and Mao Dun both mentioned it, although both recognized it only as a curiosity.\textsuperscript{95}

The *Caomu yanyi* does not feature any explicit prescriptions, as do the medicine plays, and very few characters receive medical treatment.\textsuperscript{96} Since the novel warranted so many editions and at least one imitation, it must have been the delight in uncovering these drug names that made the conceit worthy of preservation.\textsuperscript{97}
Why, in light of so much Western medicine being transmitted to China, and of the decline of traditional literati novels, was *Caomu yanyi* reprinted so many times in the first decades of the twentieth century? The preface to a 1923 edition recommends the novel despite its many demons and spirits, and its violence. It claims that the novel is worth notice for its “amusing” (*huaji*) use of medicines, and is nonetheless helpful and interesting (*zhuqi*). The modern preface places the value of the *Caomu yanyi* on its timely reminder of the threat of foreigners and its notable military strategies. Du Ji, the author of the modern preface, writes,

Thus, this book, the *Caomu chunqiu*, although it uses strange names, and features spirits and mad demons, yet its principles and results are deep indeed. Precisely because it is a book that startles [the reader] and reveals the fearful and unreasonable that it will enlighten the reader. For instance, take the simple narration and detailed language of the book. Its worth is deepened because it alleviates the melancholy of even those who peruse it.

It may seem odd to deemphasize the medicine in a novel that is so conspicuously titled (in this edition) *Searching for Hidden Pharmaceuticals: Annals of Grasses and Trees* (*Yaowu suoyin caomu chunqiu*, 1923), clearly indicating its function as a teaching text or medical word-search. Yet, the value in reading the *Caomu yanyi*, at least to some, lay in the ability of its method to shock the reader into enlightenment—or at least alleviate his melancholy.

**NOVELS AS RECIPE BOOKS**

In premodern novels, when characters discuss diseases or when a doctor makes a pronouncement, often included is the name of a prescription (without details on the recipe for it) or a discussion of the primary drugs to be used to cure the patient. But some popular and well-esteemed works of narrative fiction did transmit practical medical prescriptions. Two early novels (possibly the earliest) to include full medical prescriptions in their texts, complete with weights of ingredients and preparations, were *Sequel to Plum in the Golden Vase* and *Marriage Destinies to Awaken the World*. Both of these two novels seem to have had a didactic intent. The authors defend their use of the vernacular, saying that they were following the precedent of the great Ming novels, or that they used “plain” (*fuqian*) and “unrefined” (*li*)
language so that peasants and women would be able to understand.\textsuperscript{103} Although these claims were not uncommon apologies for writing in the vernacular, the degree to which these novels borrow from daily-use encyclopedias and similar helpful sources is extensive.\textsuperscript{104} The impulse to bring knowledge to readers may have been inspired by \textit{Plum in the Golden Vase}, to which both novels are heavily indebted.

In chapter 49 of \textit{Marriage Destinies}, the Chao family celebrates the birth of Chao Liang’s son with a banquet, at which a Daoist guest thanks the Chao family with a prescription for smallpox (\textit{douzhen}). His prescription gives the exact amount of each ingredient and the steps for making the medicine. In chapter 57, Madame Jiang sends a servant to fetch a pill (\textit{lanji wan}) from her father, and the narration inserts a detailed formula for the prescription, ostensibly because it is a “marvelous prescription” (\textit{shenfang}). Unlike the prescription in chapter 49, this one is set off from the text, as if it were a poem or some other quoted text. It likely was drawn from another source, since there are many pills with this name in contemporary medical literature.\textsuperscript{105} It is also consistent with the impulse to propagate good prescriptions for merit, but why bury one in the text and make another so pronounced?

\textit{Marriage Destinies} presents two other prescriptions that are set off from the rest of the narrative, both aphrodisiacs.\textsuperscript{106} Prescriptions, it might be needless to say, are a jarring break from the narrative in the same way that novels written as vehicles for poetry often do not transition well between prose and verse. Like publishing poetry, transmitting these prescriptions was important, though perhaps not important enough to justify writing an entire novel. There are not many prescriptions in these two novels: \textit{Sequel to Plum in the Golden Vase} gives two prescriptions in full, for stomachache and for cold (\textit{hanzheng}), quoted in chapter 17.\textsuperscript{107} Many other prescriptions are named but not detailed. In chapter two of \textit{Marriage Destinies}, for instance, Grand Physician Yang is described as “a notorious charlatan. He was the type of doctor who would prescribe the ‘Decoction of Four Ingredients’ [\textit{siwutang}, a medicine for blood disorders] for toothache and the ‘Powder of Three Yellows’ [\textit{sanhuangsan}, a laxative] for diarrhea.” Yang usually prescribes “the ten [ingredient] completely and greatly supplementing decoction [\textit{shiquan dabutang}],”\textsuperscript{108} a common recipe in early modern China, regardless of the ailment, sometimes with healing effects, other times with fatal results. Clearly, readers were expected to be familiar with these prescriptions, since the comedy would be lost if they were not. But it seems just as clear that the
prescriptions that are detailed in these novels, while they account for a tiny portion of those texts, must have been there because the author assumed his readers were not familiar with them and should be.

It is difficult to say if any of these medical recipes were original. Some were available in daily-use encyclopedias such as *Seeking No Help from Others for Myriad Things* (Jianqin Chongwenge huizuan shimin wanyong zhengzong bu qiu ren quanbian), which is even mentioned in chapter 2 of *Marriage Destinies* as a book that Chao Yuan’s
household owns. The prescription for stomachache in *Sequel to Plum in the Golden Vase*, “decoction for reversed cold of limbs” (*sini tang*), is reprinted in many daily-use encyclopedias of the time and likely borrowed from such a source.\(^{109}\) Aphrodisiacs are often included in late-Ming daily-use encyclopedias, in which sexual cultivation (*fengyue*) was an essential category.\(^{110}\) Almost all such books also discuss the prevention and treatment of smallpox and related illnesses, and many devote a chapter to it. It is possible that these novelists were trying to enter into dialogue with encyclopedias and to correct or supplement what they found there. The inclusion of these particular prescriptions in the novel text suggests that the author had firsthand experience with them and knew them to be particularly useful, efficacious, and in need of propagation.

The Qing dynasty saw an increased interest in local charity work of all kinds, and some harnessed the charitable impulse to justify becoming a professional physician.\(^{111}\) Some notable literary men pushed the well-documented defense of medicine as a charitable (or humane, benevolent, or *ren*) practice further.\(^{112}\) Chen Hongmou (1696–1771), a well-known Qing scholar-official, wrote that even more than practicing medicine, “if kind-hearted gentlemen could share what they know [about efficacious herbal formulas] and post it wherever people gather together, then they will have accumulated more merit than giving away herbal medicines.”\(^{113}\) Printing effective prescriptions in novels may have been the penance authors needed to pay for writing them in the first place.

Some of the medical manuscripts in the Berlin collection include passages from novels copied by doctors who seem to have copied them simply for their own enjoyment.\(^{114}\) Other medical practitioners, though, read novels differently—making careful notes on the prescriptions they copied from novels such as *Flowers in the Mirror*, *Biography of Jigong* (*Jigong zhuan*, 1744), and *Record of Wiping Out Bandits* (*Dangkou zhi*, 1831).\(^{115}\) *Wiping Out Bandits* by Yu Wanchun was published shortly after *Flowers in the Mirror*, with at least twenty-two Qing editions, most of them in the Tongzhi (1861–1875) and Guangxu periods.\(^{116}\) *Flowers in the Mirror* was similarly popular in those periods, when nineteen of at least thirty-five Qing editions were published.\(^{117}\) Although *Biography of Jigong* was published in 1744, there were at least twenty editions in the late Qing and Republican period in Shanghai alone, with particular interest in the Guangxu period.\(^{118}\) All three manuscripts that copy the medical
information from these novels attest to their popularity, though none of them shows any interest in the novels themselves.

The practical prescriptions contained in novels do not bear any relationship to the narrative either. They are dropped into the novel, seemingly without any literary value other than heightening the realism of a quotidien scene. Setting prescriptions off from the narrative would have made practical bits of information easier to find and use. A variety of records attest to various people using the prescriptions from *Flowers in the Mirror*. There was plentiful and real medical information in that novel, according to readers. A late Qing account remarks, “[*Flowers in the Mirror*] is filled with medical prescriptions, and they have never failed to have effect for those who employ them. Mr. Shen of Zhejiang has collected them in a book called *Tried and True Prescriptions* [*Jingyan fang*].” The recipe for a salve to treat burns taken from chapter 26 of *Flowers in the Mirror* differs slightly from the prescription found in *Systematic Materia Medica* (which in turn quotes *The Materia Medica of Food* [*Shiwu bencao*]). The *Systematic Materia Medica* recommends grinding okra (kuicai) and applying it directly to burns or scalds. The prescription in the novel says to mix fresh flowers from the okra known as qiukui or jizhuakui with sesame oil, and if they are not in bloom, to substitute rhubarb (dahuang). The Wu Taichong preface to a Shunzhi (1644–1662) edition of the *Systematic Materia Medica* (originally published in 1596) laments that it “has already been in circulation for a long time, and yet most doctors do not use it for guidance, let alone the rest of the population.” Presumably the *Systematic Materia Medica* and some other medical works were simply too large or expensive or contained too much information to sift through if someone was looking for prescriptions for particular problems. Or, if it had fallen out of use, it was perhaps because there were more people who had taken the practice of medicine into their own hands, and found the *Systematic Materia Medica* too difficult to use because of its organizational scheme, which starts with medicinal drugs and then explains what they are good for, rather than starting, as novels did, with symptom sets, then naming the illness and listing prescriptions to cure it.

Different materia medica books were written for different reasons, but their main use was to deepen practitioners’ understanding of drugs and their usefulness. The *Systematic Materia Medica* is enormous, comprised of over two million characters, and the length alone must have been daunting for anyone seeking to look up specific
information. Moreover, the *Systematic Materia Medica* was just one of roughly ten thousand extant medical books written before 1911, a quantity of literature that would have been overwhelming to a filial son who wanted to find a good prescription for an ailing parent, or for a local doctor who did not have extensive education. These were likely the people who found prescriptions in novels. In any case, whoever these users of novels were, it was partly because novels shared their content and, to some extent, format with daily-use encyclopedias and guidebooks to daily life that they could be so construed. The pharmaceutical knowledge they contained was more like the practical, middlebrow, and vernacular medical texts that collected good prescriptions, more like formularies that listed diseases and recipes, than they were like elite medical texts that discussed whole-body imbalances and debated warm or cold pathogenic influences.

The belief in the practical applicability of *Flowers in the Mirror* was widely held throughout the Republican period, with some even referring to it as a “scientific novel” on the basis of the prescriptions given out by the protagonist, Tang Ao. Yet, despite the fact that Tang Ao is presented in the novel as being interested in the collection of a variety of kinds of knowledge and specimens, among which materia medica figures prominently, much of his materia medica knowledge does not seem to be exactly canonical. In one scene, he eats “walk-on-air plant” (*niekong cao*) that allows him to jump to superhuman heights, and during that leap, he finds and eats “jade paste” (*yujiang*), which turns him into an immortal. But this did not seem to confuse readers about which prescriptions were useful, or about the fundamental utility or purpose of the novel. In chapter 27, Tang Ao’s sidekick, Duojiu Gong, uses “man and horse, safe and sound powder” (*renma pingan san*) to cure Tang Ao’s dysentery (*liji*). Xu Xiangling’s marginal commentary says, “This prescription is truly effective, not simply idle theorizing.” He claims that this is a tried-and-true prescription from the mid-Qing, saying that the earliest reference to it is Xu Dachun’s *Standard Criteria of the Orchid Dais* (Lantai guifan, 1764), and that it is also called “elixir worth a thousand gold” (*qianjin dan*). Xu Dachun does indeed discuss this recipe, and clearly indicates that it is a “secret prescription” (*mifang*). Xu Xiangling, familiar with this passage, must have believed that Li Ruzhen, like Li Shizhen, was popularizing secret prescriptions for charity and to combat quacks. But Xu’s comment about the prescription being effective (*youxiao*) and
not just idle theorizing (zhishang tanbing) is also interesting because he does not consider that the prescription might be fictional, only that such medical recipes may be based on theory and not experience. The majority of prescriptions in *Flowers in the Mirror* do not seem to exist in previous printed literature, leading many to believe that they were the invention of Li Ruzhen himself—drawn from his experience (yanfang mifang). This is at least the case for those prescriptions that were put into practice. Whether or not Li Ruzhen authored the prescriptions in his novel, it was their perceived originality that made them important. That they were thought to be secret prescriptions (and therefore potent) made available through the widest possible method of dissemination, the novel, seems to have been proof enough that they were helpful. These may have been folk prescriptions, but, unlike many culled from that tradition, the prescriptions found in *Flowers in the Mirror* were deemed trustworthy because they had modest claims and treated everyday ailments.

Just as some in the mid- and late Qing claimed that novels such as *Warning Lights at the Crossroads* (Qilu deng, mid-eighteenth century) were fictionalized household instruction manuals (jiaxun), so they also believed certain novels to be instructive compendia of medical knowledge. *Flowers in the Mirror* explicitly claimed this role. Tang Ao expresses his goal of making effective medical prescriptions available to wide audiences. Duo Jiugong helps to heal Tang Ao’s dysentery, and Tang Ao says to him, “Since [your prescription] is so efficacious, why don’t you publish it and make it accessible to the public? In that way, everyone would be able to avoid this malady and they can extend their lives. Isn’t that a great benefit?” Jiugong refused at first: “Our family depends for its livelihood on secret medical prescriptions. If I publish them, everyone will have the access to the prescriptions. In that case, who will still buy medicine from me? I know that it is meritorious to make secret prescriptions known to the public, but aren’t I just adding to our troubles if I do that?” In the conversation that follows, Tang Ao elucidates the benefits of making all hereditary secret prescriptions known to the public and eventually manages to persuade Duo Jiugong to publish his prescriptions. Duo says, “I will surely publish all of the secret prescriptions I’ve inherited from my ancestors, and give them out. In this way I will benefit the world yiwei jishi zhi dao].” This is the very prescription the medical manuscript (likely written in the early Republican period) copies into its margins.
Xu Xiangling said about the three prescriptions in chapter 29—“protecting pregnancy no worries powder” (baochan wuyou san) “iron fan powder” (tieshan san), and “seven li powder” (qili san)—“these three prescriptions were all hand-picked by [Li Ruzhen], and put out into the world for the public. It was his desire that this book would transmit them, echoing and validating the claim of the chapter title ‘transmitting wonderful prescriptions / an old man helps the world.’” Xu Xiangling mentions only three prescriptions in chapter 27, but there are five. The other two are very simple prescriptions, juice from onions, wine, malt, shrimp, and urine, so perhaps they were not remarkable for that reason. But this omission suggests that Xu does not particularly agree with Tang Ao, who says, “The world is filled with wondrous prescriptions, but from antiquity these are rarely transmitted, and become lost. Perhaps it is because the ingredients are not particularly precious that people ignore them, and so many become buried. Now, knowing medicines that are of little value, [I] am able to cure disease . . . if you take the value of the drug in order to determine its worth, that is truly harming the common people in the extreme!” In chapter 55, Tang Ao laments, “People nowadays have forsaken the old ways and esteem only luxury. Among the transmitted prescriptions that contain expensive and precious drugs, the common people see them regardless of their efficacy, and there are none that do not look like silver bullets [gods]. If the transmitted prescription does not contain valuable and precious drugs, even if it is effective, people look at it and ignore it, saying that buying it is of no use.” Yet some readers thought these prescriptions of particular use, and Flowers in the Mirror intentionally charitable because its prescriptions were comprised of widely available and cheap medicines. If readers of Flowers in the Mirror trusted these prescriptions, they were at odds with the Qing dynasty doctor Zhao Xuemin in Listing the Elegant Practice (Chuanya), who claimed that mendicant doctors always use terms like “honest,” “cheap,” and “ordinary” (lian, jian, and bian) to describe their prescriptions. Since many mendicant doctors were recorded by the likes of Xu Dachun as being quacks, readers could just have easily associated cheap medicines with medical charlatans. Li Ruzhen must have been responding to this ambivalence when he cast characters as humane mendicants and proponents of simple, inexpensive (and unprofitable) drugs.

Some of the medical manuscripts in the Berlin collection similarly encourage readers to distribute one or another medical recipe to gain
merit. In some cases, a message is attached to these “retributive recipes” informing users that they “must not be kept secret” (just as in others there are directions to keep it secret). Once a person has obtained such a prescription, he is obliged to pass it on and make it known to as many other people as possible. Disseminating such a retributive recipe results in reward, and keeping the formula for one’s own use invites disaster. In manuscripts that contain lists of
Figure 3.11. Medical manuscript quoting *Flowers in the Mirror* prescription for dysentery (*liji*). Staatsbibliothek zu Berlin—Preußischer Kulturbesitz, East Asia Department Slg. Unschuld 8315
prescriptions, authors frequently identify one as needing printing and distribution. Some manuscripts also contain a “secret merit text” (yingongshu), which discloses single-ingredient prescriptions recommended for treating often-seen ailments. Retributive recipes banked credit that would later be spent by asking a spirit for help with another medical cause, such as an illness or a birth. Some manuscripts record prescriptions that were given out by a pharmacy. Tang Ao’s predilection for simple, cheap medicines led some of his readers to think of his novel as just such a book of merit.

Some readers wanted to see the authors doing this work themselves, and so cast them as characters in a similar plot to disseminate medical knowledge to the masses. For instance, there are some stories (chuanqi) that feature the miraculous healing powers of The Story of the Stone’s author, Cao Xueqin. In one story, “A Tried and True Prescription Saves the Villagers” (Minjian yanfang qiu xianglin), the reader is told that Cao “understood the ways of medicine, he knew efficacious prescriptions, and every day he gathered effective prescriptions from among the people in order to propagate them and thereby cure commoners of illnesses. Stories concerning his medical prowess spread far and wide.” Cao cures three cases of “yellow sickness” (jaundice, huangbing) by getting patients to eat live mudfish (loach). The first, a young scholar named Liu Xianglian, courageously perseveres in coming every day for three months and swallowing whole, large mudfish to cure his illness—this after Cao saved him from his attempt to drown himself in the lake. The narrative tells us that his faithfulness in following Cao’s prescription and their subsequent mutual respect led Cao to cast Liu in The Story of the Stone. Cao modifies his prescription in elaborate ways for an old woman and a pregnant woman, demonstrating that he has real medical knowledge, and effects cures in all three cases.

Similarly, Cao cures patients with simple medicines after many preceding doctors have failed to do so. Specifically, he often employs Chinese celery, the qin (yeqin, shuiqin) of his name. In one story he cures a poor, elderly man of liver disease with it, and in another, cures a young woman of consumption (lao). These stories, like the tale of eating loaches, emphasize the local origins, simplicity, and cheapness of the drugs, but also the ingenuity of Cao in thinking to use them, both tailoring the medicine to the disease and to the person who cannot otherwise afford medicine. Cao, like the typical good doctor in literati fiction, always turns down payment: “All of the medicine I
use I have collected with my own hands. I don’t need a penny. I see patients and practice medicine in order to help the sick and relieve suffering, not so I can profit. It is proper for village and farm [i.e., ordinary] doctors to have this medical virtue.”

Cao finds celery so effective for his poor patients that he buys a small tract of land and cultivates the celery that grew wild in the Western Hills. He calls this plot Celery Garden (qinpu). That Cao had cured the young woman’s consumption spread throughout the white banner, and many came from far and wide seeking his treatment. These people did not call Cao by his given name, Zhan, nor did they use his courtesy name, Mengruan; they called him only Master Celery Garden (Qinpu Xiansheng), which pleased him. Thereupon he took Qinpu as his nickname. Another story similarly remarks that this is why he is known today as Cao Xueqin. Cao, like Tang Ao, is made into a charitable doctor, though, according to the novels that feature them, both are poor. It is somewhat curious that Cao is chosen for this role, since the medicines in his novel are either very complex or clearly fictional, as in the case of Xue Baochai’s “cold fragrance pills.”

Authors, commentators, and critics of the late Ming through Qing periods continually emphasized the didactic value of traditional fiction. *Marriage Destinies to Awaken the World* and *Sequel to Plum in the Golden Vase* both focus on retribution; so it seems sensible that prescriptions might be included as an example of the sort of merit characters and readers need to accrue. If there is a relationship between the story and the prescriptions that they transmit, it might have to do with charity, and with helping others even if they seem foreign or alien. The mundane medicines Li Ruzhen and Cao Xueqin supposedly employed reflected the practical sensibility of literati medical practitioners who also read novels. To apply these fictional prescriptions and propagate them as effective cures, acts of merit, and ultimately evidence that *Flowers in the Mirror* was a “scientific” novel was to be completely unfazed by the fact that the story in which the prescriptions are found is brazen fantasy, even if that fantasy is satire. The authors of *caomu* literature took advantage of literary devices and formulaic plots to convey relationships between drugs, but the authors of novels such as *Marriage Destinies* and *Flowers in the Mirror*, at least to those who used their prescriptions, seem to have believed that they used narrative as a delivery mechanism for medicine, like a sweet coating or delectable adjuvant. For
them, reading fiction was reading everything but fiction. If becoming obsessed with fiction caused depletion and harm, ignoring the fictionality of fiction altogether and blithely appropriating bits and pieces of it for real, practical use was cost-effective, meritorious, and healing.