

# Epistemic Genres as a Conceptual Tool in the History of Chinese Medicine

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## Abstract

This article summarizes the collaboration between two historians of medicine on Sino-European medical exchanges. Gianna Pomata researches the history of medicine in early modern Europe and Marta Hanson researches the history of medicine in early modern China. The following covers the concept of epistemic genres that Pomata first developed out of her research on the history of the genres *historia*, *observationes*, recipes, medical cases, and the commentary in Europe. She connected these genres variously to empiricism, erudition, scientific observation, norm-making, and recording practice. The paper then evaluates how Pomata and Hanson used epistemic genres as a method for doing cross-cultural research on 17th–18th-century Sino-European medical exchanges. Pomata then wrote a comparative history of the medical case in Europe and China. The article concludes with how Hanson applied the distinction of epistemic genres to analyze the history of Chinese medicine from a new perspective.

**Keywords:** Case; Commentary; Comparative medical history; Cross-cultural medical history; Epistemic genre; Recipe

## 1 Introduction

What differentiates literary types of narrative genres from epistemic ones? Surprisingly, no one had asked this question until Gianna Pomata began publishing on the issue in the early 2000s. She wrote about it from the perspective of a medical historian engaged with both literary studies and the history of science. She was most concerned with how to differentiate the types of genres aligned with scientific practices such as “the treatise, the lecture, the commentary, the encyclopedia, the textbook; but also, less obviously, the aphorism, the dialogue, the essay, the medical recipe, the case history.”<sup>1</sup>

First, she asked how literary scholars have understood genres as the most fundamental narrative forms within which people both formulate their thoughts and read about other’s thoughts. She pointed out as well that genre categories are significantly both emic (i.e., what contemporary readers and writers used to differentiate literary practices) and etic (i.e., what later literary scholars and historians use to describe and analyze various literary practices of the past and present) (Note 1).


Then, she addressed what makes some genres literary, others didactic, and still others epistemic. Related to this concern, she proposed “epistemic genre” as a new general term for the types of genres that authors self-consciously used for new knowledge.<sup>2</sup> Epistemic genres thus were those genres that were “deliberately cognitive in purpose.”<sup>1</sup> Through her inquiries she helped clarify “epistemic genres” as an analytical concept that could be used, as she originally had also articulated, as “tools for the cultural history of knowledge.”<sup>1</sup> Using the concept of epistemic genres as a conceptual tool for doing both the history of knowledge and cross-cultural history of medicine has been productive in our collaborative research. I have found it just as illuminating to reexamine the two-millennium history of the Chinese medical archive itself.

## 2 Epistemic genres and the medical case

### 2.1 Distinguishing epistemic genres

For 10 years (2009–2019), Gianna Pomata and I had the great fortune to work in the same Department of the History of Medicine at Johns Hopkins University. Before coming to Johns Hopkins, she had published a monograph on the relationship between the law and medicine in early modern Italy in *Contracting a Cure: Patients, Healers, and the Law in Early Modern Bologna* (1994),<sup>3</sup> which gave her a foundation in seeing narrative similarities between legal and medical cases. She had also started her collaboration with historian of science Lorraine Daston on the various interpretations and representations of Nature in their co-edited book on *The Faces of Nature in Enlightenment Europe* (2003).<sup>4</sup> Related to this collaboration, she published a series of essays on the history of scientific observation and related genres in the early 2010s, which will be introduced shortly. Another important collaborator was historian of medicine Nancy

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Siraisi. Pomata also co-edited *Historia: Empiricism and Erudition in Early Modern Europe* (2005)<sup>5</sup> with Siraisi, which focused on the history of *historia* (generally meaning inquiry, which can be indifferently on natural or human phenomena) as an epistemic genre.

In early modern Europe, *historia* covered the domains of both natural history and civil history, thus straddling the western present-day distinction between the natural and social sciences. The genre called *historia* in early modern Europe, they argued, was a type of epistemic genre in that it contained a descriptive method that connected the study of nature as well as culture with that of the epistemic values of empiricism and erudition.

## 2.2 History of medical cases in China

During the same decade, some historians and literary scholars also used a comparable analytical method. They focused on the Chinese emic term *yi'an* (医案 medical case records) as a distinct genre with a unique history in Chinese medicine. I had published a short essay on 16th-century medical publishing that mentioned medical cases as a new genre among others.<sup>6</sup> It was Christopher Cullen, however, who wrote the first historical analysis of the origins and development of medical case records over the long duration of Chinese history.<sup>7</sup> Although Cullen had previously published an article using medical cases as integrated into the narrative of the famous 16th-century novel *The Plum in the Golden Vase*,<sup>8</sup> he explicitly cited as his predecessors, historians of China who worked with medical texts—Charlotte Furth,<sup>9</sup> Francesca Bray,<sup>10</sup> and Joanna Grant.<sup>11</sup> These scholars had been working specifically with Chinese medical case records to access issues not only about how medicine was practiced but also how such sources provided a lens into gendered understandings as well as experiences of illness and treatment. For example, Cullen identified the 1531 edition of *Shi Shan Yi An* (《石山医案》 *Medical Cases of Shi Shan*) of Wang Shishan (aka Wang Ji, 汪机) published by his disciple Cheng Zeng (程曾) as the first collection of the medical cases of a single physician that used *yi'an* to designate the genre. Joanna Grant ended up writing about how Wang Ji considered male and female gender within his individual cases and how he used case records as evidence to situate his views within broader debates about therapeutic strategies. He thereby augmented his authority in the medical marketplace.<sup>12</sup> As if to tighten the connection between the individual physician and his medical cases, Cheng Zeng included a portrait of his teacher Wang Ji (Fig. 1).

In this portrait, Wang looks directly ahead, sits formally with a hat on, shows a serious expression, and keeps his hands tucked inside his sleeves. His pose resembles the ancestor portraits made during same the period. As such it visually communicates Wang's ancestral-like kinship vis-à-vis his student Cheng Zeng. Above the portrait is a rare example of an entirely different genre, the “self-eulogy” (*zizan* 自赞), that poetically describes the character of the man portrayed.

Within the same edited volume by Elisabeth Hsu on *Innovation in Chinese Medicine* within which Cullen had published his foundational essay on the Chinese history of case narratives, Bridie Andrews contributed an essay on the modernization of the medical case from the older



Figure 1 Image from the 1531 edition of *Shi Shan Yi An* (《石山医案》 *Medical Cases of Shi Shan*) in the rare book library of the China Academy of Chinese Medical Sciences

records to new histories in 20th-century China.<sup>13</sup> Anthropologists of Chinese medicine, Judith Farquhar<sup>14</sup> and Volker Scheid,<sup>15</sup> had also made particularly good use of both the genres of medical cases and formulas or recipes in their ethnographically rich books based on fieldwork during the 1980s and 1990s in Chinese medical schools, clinics, and hospitals, as both genres were by then often combined together.

## 2.3 Thinking in and with cases

Influenced by this scholarship both using Chinese medical case records and analysing the history of their changing form and contents, Charlotte Furth, Judith Zeitlin, and Ping-chen Hsiung also drew inspiration from John Forrester's highly influential 1996 article “If p, then what? Thinking in Cases.” In this article, he argued that reasoning with cases (namely, thinking from the particular case to a general rule) should be considered a seventh “style of reasoning” added to Ian Hacking's original six (Note 2).<sup>16</sup> They organized a workshop focused on how the Chinese term for “cases” (an 案) could also be considered a specific genre term. They also analysed how it was used for thinking through things not just in medicine but also law, religion, and philosophy. Their edited volume was aptly titled *Thinking with Cases: Specialist Knowledge in Chinese Cultural History*.<sup>17</sup>

They broadly argued that the case genre in China not only structured a style of reasoning (for instance, as evidence in arguments) but also was inflected by culturally

specific assumptions (for instance, in different disciplines or at different times that encouraged more individual details or conversely valued conciseness). Judith Zeitlin's contribution, for example, demonstrated that the case genre was flexible enough for the 16-century literatus physician, Sun Yikui (孙一奎 ca. 1522–1619), to integrate a high literary style into his often entertaining medical stories as means to burnish his reputation and establish his medical authority among the lay elite.<sup>18</sup>

### 3 Observation and the medical case in Europe

#### 3.1 Scientific observation in early modern Europe

Meanwhile just when Cullen, Furth, Bray, and Grant were publishing about gender and medicine in China using medical cases, Pomata was engaged with gender in the history of European medicine. She published, for example, a translation of one of the earliest European medical texts attributed to a woman, Oliva Sabuco (1562–c. 1646), and titled *The True Medicine* (published in 1587), which also dealt with the historically complex issue of female authorship during this period.<sup>19</sup>

During the early 2010s, Pomata returned to her concern with the history of epistemic genres in three separate publications. First, she wrote an article about the early modern European genre called *observationes* (collections of case-histories).<sup>2</sup> She argued that this genre first appeared in the second half of the 16th century as a new narrative form. Court as well as town physicians could develop it to advertise their clinical successes over their academic credentials and thereby construct their professional identity.

Then, Pomata contributed a chapter to the edited volume on *Histories of Scientific Observation* that further connected this new genre of *observationes* to the rise in value placed on first-person observation (*autopsia*) as distinct from second-person observation from other physicians (*historia*), in early modern Europe from 1500 to 1650 (Note 3).<sup>20</sup>

For example, the front page of this *Observationes Medicinæ* suggests to readers that the contents contain some of the physician's own observations of language problems resulting from brain injuries (Fig. 2). A case anthology more than a case collection, von Grafenberg excerpted cases from ancient to modern authors and included his own first-hand observations.

Pomata argued that doctors developed reliance on firsthand observation against book knowledge was new and it developed simultaneously in medical case collections and in anatomical research. For the first time, physicians described cases that they had personally seen, as was the case in Schenk von Grafenberg's 1584 *Observationes Medicinæ* (*Medical Observations*). Concurrently, observation developed as a new epistemic category.

She followed up this chapter on *observationes* as an epistemic genre with an article on the genealogy of observation as a philosophical concept.<sup>21</sup> This article exemplified the method in conceptual history of tracing a concept through time to determine its periodization. Namely, she traced when the terms for first-person observation first emerged, waxed, and waned, and re-emerged. She also examined what their use and changing

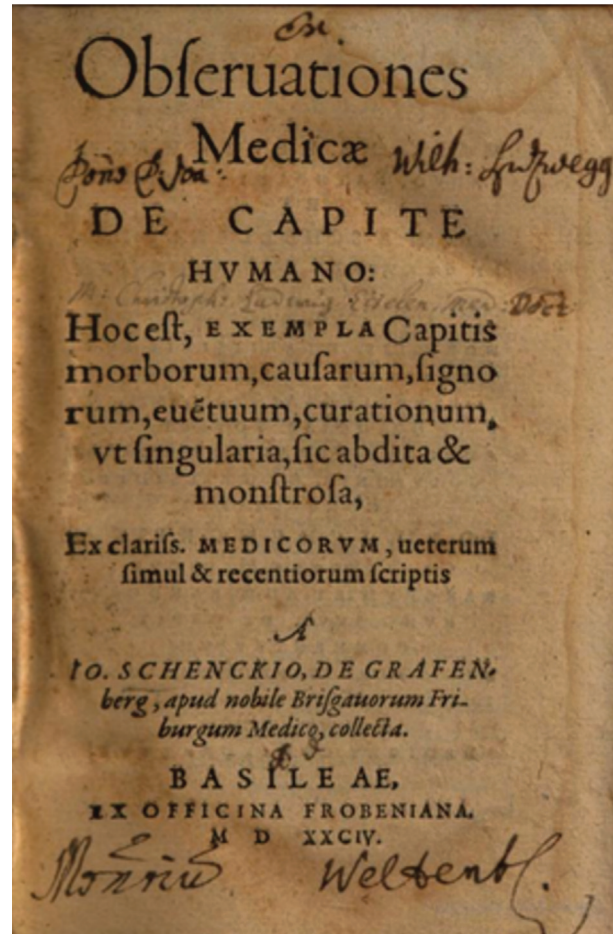


Figure 2 *Observationes Medicinæ de Capite Humano* (*Medical Observations on the Human Head*, Basel, 1584), Johannes Schenk von Grafenberg (1530–1598), Wikimedia Commons, Public Domain

meanings revealed about the ways of thinking and doing things of the people who used them. She thus traced concepts for observation from the ancient Greek *tērēsis* (i.e., observation or observance) in the medical works of the Empirics and Sceptics of Hellenistic antiquity to the absence of any comparable concepts during the Middle Ages. She then charted the recovery of the ancient *teresis* starting from 14th-century medical texts up to the new use of *observatio* (the Latin rendering of *tērēsis*, emphasizing observation) as an entry in early modern philosophical dictionaries.

#### 3.2 History of epistemic genres in Europe

This early work on the history of *observationes* as an epistemic genre, its connection to increased value placed on first-person observation, and its conceptual links to the origin, rise, fall, and recovery of the ancient Greek term *teresis*, directly contributed to Pomata's later publications on the case and recipe. She argued that these two epistemic genres (case and recipe) were integral to new developments in early modern European medicine. The literary scholar André Jolles had identified nine elemental "Simple Forms" (legend, saga, myth, riddle, proverb, case, the memorabilia, fairy tale, and joke) underlying the developments in literature.<sup>22</sup> Inspired by Jolles, Pomata sought to identify the most basic epistemic genres—for example, the recipe, the case, and the commentary—that constituted scientific practices.

### 3.3 The recipe and the case

Her first article along this intellectual trajectory focused on the recipe, commentary, and the case as basic epistemic genres that informed authors on what as well as how to write in a range of scientific practices. She demonstrated that the two more ancient and so fundamental genres—the recipe and the commentary—were brought together only in the second half of the 16th century in the new hybrid genre of collections of medical case narratives (i.e., the *observationes* of her earlier scholarship).<sup>1</sup>

The first published case collection that represents this new hybrid genre, for example, was the *Centuriae Curationum* (*Hundreds of Cures*, 1551–1566), which the Portuguese Jewish physician Amatus Lusitanus (1511–1568) published in seven installments over 15 years. In the Middle Ages doctors could refer to medical cases preserved in *consilia* (medical case collections), but this genre was not yet based on what doctors had seen themselves and focused on the disease more than the individual patient's case of it. Whereas descriptions in *consilia* of individual symptoms were minimal, references to authority of previous commentaries were considerable. Furthermore, doctors did not previously publish their own *curationes* (i.e., cures, treatments), though Pomata has found evidence in mid-sixteenth century Europe of medical training including a new habit for students to keep records of cases (Note 4).<sup>1</sup> Lusitanus, however, published his own cases and kept them very short—how he had cured a viper bite or treated gastro-intestinal pain, for instance. He typographically separated them as well from newly italicized commentary. Most case collections afterwards followed this format.

### 3.4 The case and the commentary

We thus see again how using epistemic genre as a historical method allows the historian to discern important transformations in the cultural history of knowledge that might have otherwise gone unnoticed. Pomata focused on the connections between the recipe and the case as distinct genres in her 2013 article. In her 2014 article, however, she examined what she considered to be the less-obvious association as well as related tension between the case and commentary.<sup>23</sup>

Commentary is a genre that is normally high-status, formalized, often philosophical, and directed to authoritative readings of an already established canon. The case, however, is on the other side of the genre-spectrum in its low-status, informality, non-theoretical nature, and closeness to practice. The case is more closely aligned with the rule; namely, reading from case to case is a means to guide actions in future cases and thereby to find general rules for practice in medicine as in law or business. In other words, whereas the commentary focuses on philology (i.e., the correct interpretation of an authoritative text), the case develops out of personal practice.<sup>23</sup>

And yet by following the separate histories of commentary and of cases as distinct genres, Pomata was able to extend further André Jolles's original insight that evidence of case-based knowledge writing tended to be inversely related to the absence or authority of normative canons. She thus argued that when there is

no normative canon (i.e., in the *Hippocratic Corpus* of the Greek classical period), or there exists skepticism toward a normative canon (mid-16th-century Europe), then case-based knowledge thrives but when there are no challenges to a normative canon then it wanes (medieval period). Thus, when medical doctrine became standardized and even dogmatic in both medieval Arabic and medieval Latin medicine, the originally epistemic genre of the case could morph into a literary form when its entertainment value as medical anecdote in a story became more valued than its earlier cognitive functions.<sup>23</sup>

Derived from using the distinction of epistemic genres as a method in historical research, Pomata was then able to use these insights to argue that not only was the *observationes* a new medical genre in the late European Renaissance (mid-16th century) but also that it newly subordinated the commentary to the case narrative. Even more importantly, she demonstrated that this reversal of cases as primary vis-à-vis commentary found in the new *observationes* genre occurred precisely when, as one would now expect, “the traditional medical canon was no longer unassailable and the search for a new canon was well under way.”<sup>23</sup> Thinking historically with epistemic genres can indeed be a powerful means for refining periodization within the constantly moving pendulum of time between continuity and change.

## 4 Cross-cultural history of medicine

Because of all these previous scholarships—namely, 1) on the case as an important genre to think within Chinese history and 2) Gianna's own work on the history of epistemic genres—the recipe, case, and commentary—in European medical history—we found common ground intellectually when we were both faculty members in the history of medicine department at Johns Hopkins (2009–2019). Both of us liked learning languages as well so initially we thought we would exchange language lessons. I would study Latin and she Chinese. I bought a primer on Latin grammar for myself and a book on basic Chinese characters for Gianna. I taught a calligraphy session on the basic principles of writing Chinese characters. We playfully gave our first informal meetings a grand name, the Academia Latino-Sinica. I affectionately referred to our meetings as the Sino-Latin Academy of Two.

While doing research during the fall of 2012 in the Bibliothèque de Genève (Public Library of Geneva) on what would become her 2013 “Recipe and the Case” article, Gianna found a text we could work on together. This was the *Specimen Medicinae Sinicae* (*A Sample of Chinese Medicine*, 1682), the first important translation into Latin of Chinese medical texts for European readers. Gianna suggested we start by reading together the recipe section of this text. She recommended this entry point not only because the Latin was simpler but also because she was then researching the history of the recipe as an epistemic genre. In this text we had, in fact, the first case of Chinese recipes translated into Latin for a broader public readership. Later for the *History of Science Society Newsletter*, we had the opportunity to discuss this initial beginning to our collaboration with fellow historian of medicine (and of recipes), Elaine Leong.<sup>24</sup>

#### 4.1 The recipe as a commensurate epistemic genre

Our first publication was about the Sino-European medical exchange as manifested in the *Regula* (recipe) section of the *Specimen*.<sup>25</sup> Pomata noted in her 2013 article that earlier scholarship had established the recipe as a good medium for global trade and exchange of knowledge across Eurasia.<sup>1</sup> For example, how foreign medicines traveled along the Silk Road to medieval China,<sup>26</sup> how medical knowledge went between China and the Arab world in the late medieval period,<sup>27</sup> the role of Islamic pharmacy in exchanges between the Mamluk and Mongol Realms,<sup>28</sup> and the story of how European recipes for the panacea Theriac traveled to early modern China.<sup>29</sup>

What we sought to do differed in that we applied the method of a “distant reading of an epistemic genre” (Note 5) to determine that the Chinese, Arabic, and Latinate cultures all had specific terms to differentiate standardized recipe-formulas (derived usually from a canonical text) from individually tailored recipe-prescriptions (embedded in a specific clinical context). In Chinese, for example, *fang* (方)—when it refers to standardized formulas—was contrasted with *ji* (剂) indicating individual prescriptions or individual dosages of formulas. As for Latin and Arabic terms, standardized formulas were conveyed in the Latin *antidotaria* and the Arabic *aqrabadhin* but individualized recipes were differentiated from these in the Latin *experimenta* and the Arabic *myarrabat*. In short, these three cultures recognized the same key distinction between the standard or the general and the individual or the specific case.

Furthermore, the standardized recipe (Chinese *fang* and Latin *regula*) functioned as a commensurate epistemic genre with a shared modular textual structure (Fig. 3). This shared modularity—title, list of drugs, instructions—facilitated noteworthy exchange of medical knowledge between China and the Latinate West in the late 17th century. Both cultures also valued experience-based knowledge, of which recipes were exemplary.

We could then ask how does the recipe genre as a cross-culturally recognized textual form successfully transmit, or not, medical knowledge and practices from one language to another? Measurements translated easily from one language to another, for example, as did the medicinals that had reached Europe via global drug markets and so had already been identified with Latin names, such as *Zingiber* for fresh ginger (Sheng Jiang 生姜), *Radix Chinica* for China root (Chi Fu Ling 赤茯苓 or red *Poria cocos*), and *Cinnamomum* for Chinese cassia (Gui Zhi 桂枝).

In short, we concluded our case study in cross-cultural history of medicine by arguing that scholars should go beyond the model of competing civilizations and conceptual incommensurability to consider the commonalities as well in the conceptual and textual tools that people from different cultures use to make sense of their experiences and transmit knowledge from one language to another.

#### 4.2 Genre-mixing of the recipe and the case in 17th-century China

Later the same year, historian of China, He Bian, published an article directly influenced by the 2007 *Thinking with Cases* book, Gianna’s 2014 article on

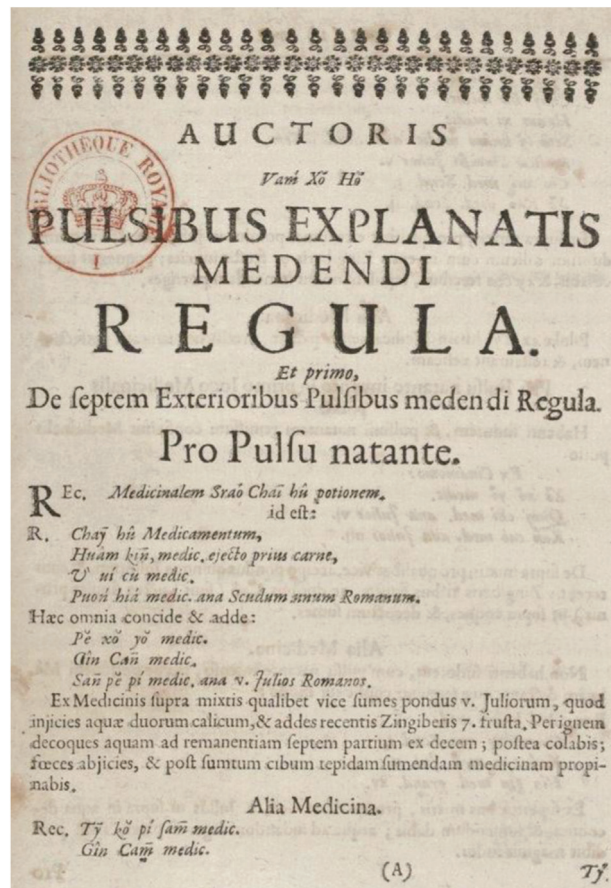


Figure 3 First Page of “Medendi Regula” (Method of Healing), as printed in *Specimen Medicinæ Sinicæ* (*A Sample of Chinese Medicine*), Francofurti: Sumptibus Joannis Petri Zubrodt, 1682. Bayerische Staatsbibliothek (State Library of Bavaria, Germany)

medical case narratives,<sup>30</sup> and our 2017 article on the recipe as a commensurate medium for cross-cultural exchange of knowledge. Through a close reading of a multi-authored text titled the *Xian Xing Zhai Yi Xue Guang Bi Ji* (《先醒斋医学广笔记》 *Extensive Notes on Medicine from Xian Xing Studio*), Bian explored how two originally separate genres in Chinese medicine—the *fang* (案 recipe) and the *an* (方 case)—came to be combined in this text. No one before had noted that this text was multi-authored: it combined detailed recipes collected by a retired official named Ding Yuanjian (丁元荐 1560–1625) and also case records of one of the physicians, Miao Xiyong (缪希雍 1546–1627), who had treated Ding for a minor stroke and other illnesses.

Mr. Ding had first published in 1620 under his studio name a formulary of effective medical recipes, many of which doctor Miao had prescribed for him, with some case histories. Miao then expanded upon Ding’s original formulary with his own case narratives. Bian argues that not only physicians but also their elite patients were interested in producing cases and circulating recipes. They did this not just for the public good but also so that they could make them at home themselves.

The resulting recipe-case hybrid text thus represented the interest of patient Ding and his cohort in learning how to make prescriptions themselves at home. And it included the physician Miao’s adaptation to his patients’ demands by demonstrating his medical virtuosity through how he

prescribed recipes within his case narratives. By the 18th century, similar recipe-case collections would become common. But still in the early seventeenth century, Bian argues that, the *Extensive Notes on Medicine from Xian Xing Studio* represents the phenomenon when both patients and doctors were experimenting with not just formulas but textual forms.

### 4.3 Using the medical case as an epistemic genre in comparative history of medicine

Thus, by the end of 2017, historians had published over a decade of groundbreaking scholarship on the history of epistemic genres. This was true especially for the recipe and medical case, in both China as well as in Europe. This scholarship formed a solid foundation from which comparisons could now be made. Pomata accomplished it in a chapter she wrote for an edited volume titled *A Historical Approach to Casuistry*. Casuistry derives from the Latin noun *casus* (case, or occurrence). It refers to case-based reasoning (namely, when a general rule is applied to specific situations or people's reasoning from case to case). This type of thinking was particularly important in religion and moral theology but also in jurisprudence, ethics, and medicine.

Pomata contributed the article "The medical Case Narrative in Pre-Modern Europe and China: Comparative History of an Epistemic Genre."<sup>31</sup> She started from the knowledge that has a culturally specific emic term (i.e., historical actors' category) for a distinct genre-meaning medical cases in both cultures. The term was *observationes medicinales* (medical observations) in early modern Europe and the phrase was *yi' an* in early modern China. Then she could ask an important comparative question: "in Europe as in China, what kind of medical practice formed the backdrop for the emergence of the case narrative?"<sup>31</sup>

The comparative method also allowed Pomata to discern interesting similarities in the history of the recipe and the case as epistemic genres in China and Europe. The recipe as a distinct genre, and the formularies that collected recipes, had remarkable continuity from antiquity to the early modern period in China and in Europe. Case narratives, however, followed a very different trajectory in both cultures. The case narrative originated in both Greek (ca. 410–350 BCE) and Chinese antiquity (ca. 216–150 BCE), but they became latent more-or-less for centuries, appearing only sporadically within other types of genres. Then independently in the mid-16 century, the medical cases became recognized as a distinct genre in China and also in Europe. The medical case narrative was no longer an appendix, anecdote, or example embedded within another type of genre such as a medical treatise, biography, or formulary, but rather their collection had become a genre in its own right.

Pomata then asks what kind of medical practice in mid-16th-century China and Europe found textual expression in this new epistemic genre? Pomata argues that both the *observationes* and the *yi an* emerged when physicians focused more on the individual patient than the disease they suffered from. The medical traditions from both cultures, she argued, "have been marked by a fundamental tension between two concepts of disease—disease as ontological entity and disease as individual illness."<sup>32</sup> In Chinese

medicine, another historian phrased this tension between a disease concept and a person as the existence between categorizing and individualizing notions of disease.<sup>33</sup> Thus, the medical case as a distinct genre that focused on the specificity of individual experiences of illness marked a period, as Pomata had previously argued, when normative canons were being questioned. Furthermore, here she argued that the new popularity of medical-case writing occurred when "the pendulum swung from the ontological view of disease toward a notion of illness understood as an individual configuration of modular factors."<sup>33</sup>

The significance of Pomata's comparative approach to the history of the medical case as an epistemic genre, however, was not just this new periodization. More broadly, she also revised how to understand the epistemic value and social significance of casuistry or case-based thinking. Jolles, Forrester, and others had argued that the primary epistemic value of the case was inductive, which is used toward making typologies, generalities, and abstractions. Conversely, Pomata argued that the case was also an important counterweight to generalist thinking in their attention to the particular, the exceptional, and the singular. As a means of individualization then, the case was an essential cognitive tool not just in the history of medicine in Europe and in China but also for other scientific disciplines generally. Pomata argued that the individuating case is connected as well "to the representation of individuality in literature and art."<sup>33</sup>

### 4.4 Using epistemic genres as method in cross-cultural medical history

Meanwhile Gianna and I continued our collaboration in cross-cultural history of medicine. Instead of the synchronic approach to Sino-European medical exchange we took with our first article, which focused on just the recipe chapter in one Latin text (*Specimen Medicinae Sinicae*, 1682), we decided to take a diachronic approach to compare translation choices made in three texts from the early 14th century to the early 18th century concerned with Chinese sphygmology.<sup>34</sup> These texts were in Persian (The *Treasure book* of Rashīd al-Dīn, 1313), Latin (*Specimen Medicinae Sinicae*, 1682), and French ("Secrets du Pouls," *Description de la Chine*, 1735). All three translations focused on the same lineage of rhymed pulse texts called *Mai Jue* (《脉诀》 *Pulse Rhymes*) that had become more popular than the original *Mai Jing* (《脉经》 *Pulse Classic*) as they were versified, well-illustrated, and in other ways made more easily usable.

By comparing these three translations across five centuries, we realized that the translators had to have a knowledge of how to read ("savoir lire") the genre conventions structuring the original text. In other words, they could rely upon commensurate distinctions of verse and prose, original text versus commentary on it, and the interplay between text and illustration to help them navigate the original Chinese source. In fact, we suggested that a precondition of the very possibility of translation may well be commensurable textual forms. From this vantage point, we could then easily see that each translator made different translation decisions related not just to individual words and images but, especially important, to distinct textual forms.

The Persian version, for example, was the only one of the three texts to translate the oral quality of the verse in the Chinese original by using transliteration. Neither the Latin nor the French version, by contrast, transliterated the originally versified text. The Latin version collapsed the distinction of original text and commentary in favor of a continuous translation. However, the French version honored the text-commentary distinction but selectively translated the Chinese commentary when it served the translator to clarify unusual concepts in the original text. As for the Chinese illustrations, both the Persian and Latin versions chose to include several images to accompany the textual translation. The French version, however, did not include any of the original illustrations but rather created a new image to summarize for readers the novel Chinese concept Wu Xing (五行 five elements).

Finally, only the French translator used a separate “Notes” section that had both commentarial and epistemic functions. He used the “Notes,” for example, to reflect critically both on the translated text and on the translation process itself. Neither the Persian nor the Latin versions shared this textual means for meta-reflection. As a result, we do not have comparable access to how their translators thought as they translated beyond the choices that they made in the final translations that have been preserved over time.

What we can say is that they all found Chinese pulse medicine worth translating—first in the early 14th-century Ilkhan court in Persia (modern-day Iran) and then in late 17th- and early 18th-century Europe—but they made significantly different translation choices. These differences were because of historical and cultural variations in value placed on verse or a preference for prose, distinguishing original text from commentary or combining both, and deciding to translate images or to create new ones.

## 5 Conclusions

Inspired by our two co-authored publications in cross-cultural medical history, and especially Pomata’s work on the history of epistemic genres, I decided that it would be productive to apply her concept of epistemic genres as a conceptual tool to the rich Chinese medical archive. I had the opportunity to do this when I joined a research project on the history of handbooks. I then agreed to contribute an article on the shared theme of “learning medicine by the book” but in the history of Chinese medicine. The resulting article focused on metaphor and genre distinctions in medical book titles from the 4th to 14th centuries in China. These metaphors signaled to readers not only what books contained but also how publishers and editors conveyed to readers their books’ qualities of conciseness, portability, and possibility to master the subject by reading the book.<sup>35</sup>

Book titles do considerable work. They contain thematic (topic-related) and rhematic (genre-related) titling strategies. I first focused on the rhematic strategies to determine the earliest distinctions among epistemic genres made in health-related excavated texts as well as bibliographic references in received texts in late antiquity (3rd c. BCE–3rd c. CE). From this foundation, I could then differentiate thematic- and metaphoric-titling strategies from the genre-distinguishing rhematic ones.

Furthermore, I could show that in contrast to the European preference for hand metaphors in several genre terms for “handy” books—enchiridions, manuals, and handbooks—finger and palm metaphors were preferred over the hands in new medical genres. Some medical titles in the 13th century signaled, for example, their guidebook (Zhi Nan 指南) quality or potential for mastery (Zhi Zhang 指掌) of the contents within by using pointing-the-finger metaphors. These new genre terms for medical texts were inextricably related to the private publishing boom from the 13th century on that made more texts more widely available in a broader range of epistemic genres as well as textual forms.

Applying this new methodological approach to epistemic genres as a conceptual tool and also to new genre designations in the cultural history of knowledge in human history also opens up new possibilities for future scholars to explore, periodize, analyze, and reinterpret over 2000 years of the history of Chinese medicine.

## Notes

Note 1: These analytic concepts originally came from the linguistic distinction between phonemes (a unit of sound that distinguishes one word from another in a language, such as the final d and t in “mad” and “mat”) and phonetics (branch of linguistics that studies how humans produce and perceive sounds or the physical properties of speech in the case of sign language).

On the emic/etic distinction, see Headland T, Harris M, eds, *Emics and Etics: The Insider/Outsider Debate* New York: Sage; 1990.

Note 2: Forrester J. If p, then what? Thinking in cases. *History of the Human Sciences* 1996;9(3):1-25. See p. 2 for Hacking’s six styles of reasoning: “postulation and deduction; experimental exploration; hypothetical construction of models by analogy; ordering of variety by comparison and taxonomy; statistical analysis of regularities of populations; historical derivation of genetic development.”

Note 3: For the *autopsia-historia* distinction, see ref 21. Pomata G. *The Medical Case Narrative*; 2014. p. 10.

Note 4: For evidence of the new habit of keeping records of cases in Ferrara and Padua, Italy and Paris, France, see ref. 2, Pomata G, *Sharing Cases*, 2010, p. 210.

Note 5: Pomata explained and carried this method out in *The Medical Case Narrative*. 2014. see ref. 23.

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## Ethical approval

This study does not contain any studies with human or animal subjects performed by the author.

## Author contributions

Marta Hanson wrote and reviewed the manuscript.

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Marta Hanson is an Editorial Board member of *Chinese Medicine and Culture*. The article was subject to the journal's standard procedures, with peer review handled independently of this Editorial Board member and their research groups.

## References

- [1] Pomata G. The recipe and the case: epistemic genres and the dynamics of cognitive practices. In: Greyerz K, Flubacher S, Senn P, editors. *Wissenschaftsgeschichte und Geschichte des Wissens im Dialog – Connecting Science and Knowledge*. Göttingen: Vandenhoeck & Ruprecht; 2013. p. 131–154.
- [2] Pomata G. Sharing cases: the *observationes* in early modern medicine. *Early Sci Med* 2010;15(3):193–236.
- [3] Pomata G. Contracting a Cure: Patients, Healers, and the Law in Early Modern Bologna. Baltimore: Johns Hopkins University Press; 1994.
- [4] Daston L, Pomata G, editors. *The Faces of Nature in Enlightenment Europe. Series on Concepts & Symbols of the Eighteenth Century in Europe*. Berlin: BWV-Berliner Wissenschafts-Ferlag; 2003.
- [5] Pomata G, Siraisi N, editors. *Historia: Empiricism and Erudition in Early Modern Europe. Transformations: Studies in the History of Science and Technology*. Cambridge, Mass: MIT Press; 2005. See Also Pomata G. *Observatio ovvero Historia: note su empirismo e storia in età moderna*. *Quaderni storici* 1996; 91:173–198.
- [6] Hanson M. Merchants of medicine: Huizhou mercantile consciousness, morality, and medical patronage in seventeenth-century China. In: Hashimoto K, Jami C, Skar L, editors. *East Asian Science: Tradition and Beyond. Papers from the Seventh International Conference on the History of Science in East Asia*, Kyoto, August 1993. Osaka: Kansai University Press; 1995. p. 207–214.
- [7] Cullen C. *Yi'an* 医案 (case statements): the origins of a genre of Chinese medical literature. In: Elisabeth Hsu, editor. *Innovation in Chinese Medicine*. Cambridge: Cambridge University Press; 2001. p. 297–323.
- [8] Cullen C. Patients and healers in late imperial China: evidence from the *Jin Ping Mei*. *Hist Sci* 1993;31(2):99–150.
- [9] Furth C. A flourishing Yin: gender in China's medical history. Berkeley: University of California Press; 1999. p. 960–1665.
- [10] Bray F. A deathly disorder: understanding women's health in late imperial China. In: Bates D, editor. *Knowledge and the Scholarly Medical Traditions*. Cambridge: Cambridge University Press; 1995. p. 235–250. And Bray F. *Technology and Gender: Fabrics of Power in Late Imperial China*. Berkeley: University of California Press; 1997.
- [11] Grant JA. Wang Ji's Shi Shan Yi'an: Aspects of Gender and Culture in Ming Dynasty Medical Histories [dissertation]. London: University of London; 1997.
- [12] Grant JA. *Chinese Physician: Wang Ji and the Stone Mountain Medical Case Histories*. Needham Research Institute Series. London: Routledge Press; 2014.
- [13] Andrews BJ. From case records to case histories: the modernization of a Chinese medical genre, 1912–49. In: Elisabeth Hsu, editor. *Innovation in Chinese Medicine*. Cambridge: Cambridge University Press; 2001. p. 324–36.
- [14] Farquhar J. *Knowing practice: the clinical encounter of Chinese medicine*. Studies in Ethnographic Imagination. Boulder: Westview Press; 1994.
- [15] Scheid V. *Chinese medicine in contemporary China: plurality and synthesis*. Science and Cultural Theory. Chapel Hill: Duke University Press; 2002.
- [16] Forrester J. If p, then what? Thinking in cases. *History of the Human Sciences* 1996;9(3):1–25.
- [17] Furth C, Zeitlin JT, Hsiung PC, editors. *Thinking with Cases: Specialist Knowledge in Chinese Cultural History*. Honolulu: University of Hawaii Press; 2007.
- [18] Zeitlin J. The literary fashioning of medical authority: a study of Sun Yikui's case histories. In: Furth C, Zeitlin JT, Hsiung PC, editors. *Thinking with Cases: Specialist Knowledge in Chinese Cultural History*. Honolulu: University of Hawaii Press; 2007. p. 169–202.
- [19] Pomata G. Translator and editor. *The true medicine: Oliva Sabuco de Nantes Barrera. The other voice in early modern Europe: the Toronto series, 4*. Toronto: The University of Toronto Press, 2010. *The True Medicine* was one part of a larger treatise called *True Philosophy of Human Nature*.
- [20] Pomata G. Observation rising: birth of an epistemic genre, 1500–1650. In: Daston L, Lunbeck E editors. *Histories of Scientific Observation*. Chicago: University of Chicago Press; 2011. p. 45–80.
- [21] Pomata G. A word of the empirics: the ancient concept of observation and its recovery in early modern medicine. *Ann Sci* 2011;68(1):1–25.
- [22] Jolles A. *Einfache Formen. Legende, Sage, Mythe, Rätsel, Spruch, Kasus, Memorabile, Märchen, Witz*. Tübingen: Niemeyer; 1968; first edition, Halle; 1930.
- [23] Pomata G. The medical case narrative: distant reading of an epistemic genre. *Lit Med* 2014;32(1):1–23.
- [24] Leong E, Pomata G, Hanson M. Swapping recipes (on how to study recipes) a conversation. *Questions & answers*. *Hist Sci Soc Newslett* 2020.
- [25] Pomata G, Hanson M. Medicinal formulas and experiential knowledge in the 17<sup>th</sup>-century epistemic exchange between China and Europe. *Isis: J Hist Sci Soc* 2017;108(1):1–25.
- [26] Ming C. The transmission of foreign medicine via the Silk Roads in medieval China: a case study of *Haiyao Bencao*. *Asian Med* 2007;3:241–264.
- [27] Buell PD. How did persian and other western medical knowledge move east, and Chinese west? A look at the role of Rashid-al-Din and others. *Asian Med* 2007;3:279–295.
- [28] Chipman L. Islamic pharmacy in the mamluk and mongol realms: theory and practice. *Asian Med* 2007;3:265–278.
- [29] Nappi C. Bolatu's pharmacy: theriac in early modern China. *Early Sci Med* 2009;14:737–764.
- [30] Bian H. Documenting medications: patients' demand, physicians' virtuosity, and genre-mixing of prescription-cases (*Fang-an*) in seventeenth-century China. *Early Sci Med* 2017;22:103–123.
- [31] Pomata G. The medical case narrative in pre-modern Europe and China: comparative history of an epistemic genre. In: Ginzburg, C., Biasiori, L., editors. *A Historical Approach to Casuistry: Norms and Exceptions in a Comparative Perspective*. London: Bloomsbury Academic; 2019. p. 15–43.
- [32] Temkin O. *The Scientific Approach to Disease: Specific Entity and Individual Sickness. The Double Face of Janus and Other Essays in the History of Medicine*. Baltimore: Johns Hopkins University Press; 1977. p. 441–55.
- [33] Unschuld PU. The limits of individualism and the advantages of modular therapy. Concepts of illness in Chinese medicine. *Asian Med* 2006;2(1):14–37.
- [34] Hanson M, Pomata G. Travels of a Chinese pulse treatise: the Latin and French translations of the *Tuzhu maijue bianzhen* 图注脉诀辨真 (1650s–1730s). In: Cook, H., editor. *Translation at Work: Chinese Medicine in the First Global Age*. *Clio Medica*, Vol. 100. Leiden: Brill; 2020. p. 23–57.
- [35] Hanson M. From under the elbow to pointing to the palm: Chinese metaphors for learning medicine by the book 4<sup>th</sup>–14<sup>th</sup> centuries. In: Creager A, Leong E, Grote M, editors. *Learning by the Book: Manuals and Gandbooks in the History of Knowledge*. *British Journal for the History of Science: Theme*. Cambridge: Cambridge University Press; 2020. p. 75–92.

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