
Learning about Precious Goods: Transmission of Mercantile Knowledge from the Southern Song to Early Ming Period

CHEN Kaijun

Department of East Asian Studies, Brown University

The current paper studies the transmission and transformation of mercantile knowledge about precious goods (*baohuo* 寶貨) in the middle period of China, from the Southern Song dynasty (1127–1279) to the early period of the Ming dynasty (1368–1644), by scrutinizing the appropriation and modification of texts among three handbooks dealing with these good, namely, (A) *Baibao zongzhen ji* 百寶總珍集 (Compendium of Numerous Treasures and Rarities) compiled by an anonymous author in the Southern Song dynasty, (B) “Baohuo bianyi” 寶貨辨疑 (Assessment of Precious Goods) collected in an everyday encyclopedia of the Yuan dynasty (1271–1368), and (C) “Zhenqi lun” 珍奇論 (On Precious Objects) in the *Gegu yaolun* 格古要論 (Essential Criteria of Antiques) compiled by Cao Zhao 曹昭 (fl. 14th c.). By comparing the entries on jade, gold/silver and pearls in the three texts, the paper points out that later appropriation of early mercantile experience was a result of the pursuit of profit, while the differences among them reveal changes in consumer preferences and in the transmission and transformation of specialist knowledge throughout the ages.

Keywords: Precious goods, *Baibao zongzhen ji*, *Gegu yaolun*, mercantile handbooks, history of consumption

This article investigates the transmission and transformation of mercantile knowledge about precious goods (*baohuo* 寶貨) in the middle period of China, from the Southern Song to Early Ming dynasty, by scrutinizing the appropriation and modification of texts among three handbooks dealing with these goods.¹ In a departure from previous scholarship on merchants' handbooks, this investigation focuses on the specialized knowledge about the commodities themselves and therefore examines how a commercial pursuit of profit affects the ways in which information about artifacts is transmitted.² The paper contributes to recent studies on merchant cultures and knowledge in Chinese history, to complement the previous focus on scholar-officials.³ In analyzing "mercantile knowledge" I draw inspiration from James A. Secord's recent approach to knowledge transfer in the field of the history of science.⁴ Instead of conceiving knowledge as a kind of pre-existing entity that is codified and conveyed through publications, his model contends that knowledge itself *is* communication and that the communicative process is transmitted and

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- 1 There is extensive scholarly literature on merchants' manuals in English, Japanese, and Chinese, dating from Late Ming to Early Republican era, and early studies provide informative appraisals of such manuals. See Endymion Wilkinson, "Chinese Merchant Manuals and Route Books," in *Chinese History: A New Manual* (Cambridge, MA: Harvard University Asia Center, 2012), 8–34.
 - 2 In the past two decades, scholars have delineated an ethics of mid-level merchants in the context of late imperial Confucian society. They have also investigated the professional education gained by merchants in terms of character building. See Richard John Lufrano, *Honorable Merchants: Commerce and Self-Cultivation in Late Imperial China* (Honolulu: University of Hawai'i Press, 1997); Chiu Peng-sheng 邱澎生, "From Everyday Encyclopedia to Merchant's Handbook: the Construction of Commercial Knowledge in Ming Qing" 由日用類書到商業手冊：明清中國商業知識的建構 (paper presented at the conference of the International Symposium on Financial Change and Entrepreneurial Culture in Modern China 近代中國的財經變遷與企業文化研討會, Institute of Modern History, Academia Sinica, Taipei, December 17, 2004).
 - 3 The discourse and behaviors for exhibiting good taste in early modern societies have been thoroughly studied as strategies in converting financial, social, and cultural capital. See Pierre Bourdieu, *Distinction: A Social Critique of the Judgement of Taste* (Cambridge, MA: Harvard University Press, 1984); Craig Clunas, *Superfluous Things: Material Culture and Social Status in Early Modern China* (Honolulu: University of Hawai'i Press, 2004). This article does not focus on how the gentry and the *nouveau riche* negotiated their social status through consumer choices — here "taste" refers to the spectrum of economic preferences that merchants tried to categorize and make profit from.
 - 4 James A. Secord, "Knowledge in Transit," *Isis* 95.4 (2004): 654–72. See also Gillian Beer and Herminio Martins, "Introduction," *History of the Human Sciences* 3.2 (1990): 163–75.

mediated through writing. The generation of knowledge is always bound up with the selection of information and the practice of appropriation.

The three handbooks under study date from three periods — the Southern Song, Yuan and early Ming — and create a new space in which we can examine this process of knowledge-making in transformation. I will explain why certain goods were listed in specific orders in the inventories, and what sensory and evaluative quality is highlighted in the transcription of experience into words. By analyzing the rewritten entries about a few apparently identical goods, I aim to understand the later appropriation and modification of early mercantile experience, as it was mediated through texts.⁵

1. Introduction of Three Primary Sources

All three texts — *Baibao zongzhen ji* 百寶總珍集 (Compendium of Numerous Treasures and Rarities, or literally, Comprehensive Collection of One Hundred Treasures), “Baohuo bianyi” 寶貨辨疑 (Assessment of Precious Goods), and “Zhenqi lun” 珍奇論 (On Precious Objects) — focus on *baobao*, which is often translated as “treasure” or “precious goods.” As previous studies of consumer culture have pointed out, the value and prestige of those items perceived as *baobao* depends, to a large extent, on the context of cultural reception.⁶ Whether a product is sold as a precious item or not changes over time and across regions.⁷ Different social groups prioritize antique, exotic, rare, or expensive artifacts according to their own beliefs. My analysis of the rhetoric being used and the way these fragmentary texts being ordered reveals that the profit-driven agenda stood out among various contingent agendas.⁸

5 It is hard to make any socio-historical claims about the texts’ readership and purposes simply by making inferences from the handbooks’ content. For an exceptionally successful endeavor on this approach to book culture studies, see Cynthia J. Brokaw and Kai-Wing Chow 周啟榮, eds., *Printing and Book Culture in Late Imperial China* (Berkeley: University of California Press, 2005).

6 Shelagh Vainker, “Luxuries or Not? Consumption of Silk and Porcelain in Eighteenth-Century China,” in *Luxury in the Eighteenth Century: Debates, Desires and Delectable Goods*, eds. Maxine Berg and Elizabeth Eger (Basingstoke: Palgrave Macmillan, 2003), 207–18.

7 Anne Gerritsen and Stephen McDowall, “Material Culture and the Other: European Encounters with Chinese Porcelain, ca. 1650–1800,” *Journal of World History* 23.1 (2012): 87–113.

8 Regarding the discursive analysis of technical writings, see Randy Allen Harris, ed., *Landmark Essays on Rhetoric of Science: Case Studies* (Mahwah, NJ: Hermagoras Press, 1997); Frederic L. Holmes, “Argument and Narrative in Scientific Writing,” in *The Literary Structure of Scientific Argument: Historical Studies*, ed. Peter Dear (Philadelphia: University of Pennsylvania Press, 1991), 164–81.

The origin of the category *bao* can be found in segments in the enumerative treatments of valuable goods between the tenth and eighth centuries BCE.⁹ During the early medieval period, numerous passages related to *bao* were collected from ancient dictionaries, Confucian canons, dynastic histories, hagiographies, local gazetteers, inscribed encomiums, etc. by encyclopedists and can be found under the sections (*bu* 部) entitled “Baoqi” 寶器, “Baoyu” 寶玉 and “Zhenbao” 珍寶 in the Tang and Song encyclopedias *Chuxue ji* 初學記 (Notes for Young Beginners, 728), *Yiwen leiju* 藝文類聚 (Anthology of Literary Excerpts Arranged by Categories, 624), and *Taiping yulan* 太平御覽 (Read by the Emperor in the Taiping Era, 976–984) respectively. These texts about precious artifacts often reveal the symbolic significance they were imbued with, such as imperial sovereignty, control over borderlands, or simply as a stand-in for currency. Although such fragmentary references to *bao* highlight the compilers’ efforts to produce useful knowledge about precious goods, these early treatment of *bao* differs from merchants’ handbooks in two major aspects.

First, early encyclopedias are inventories of words, which are intended to facilitate further textual production. They are not a descriptive list of things, like the texts in my case, which intend to empirically direct our attention to existing artifacts. Second, unlike early encyclopedias, the texts I have studied pay sustained attention to the commercial value of artifacts and the potential profit they could generate if sold. Based on both textually transmitted and hands-on knowledge, the compilers of mercantile handbooks provide information about regional provenance, quality traits, proof of authenticity and, sometimes, which clientele to target: they educate the readers in what I call a “dealer’s culture.” Thus, the merchant-dealers proffer a new way of knowing about precious goods.¹⁰

The three texts analyzed in this article show that the commercially

9 Such accounts can be found in the *Shanhaijing* 山海經 and the “Yu gong” 禹貢 (Tribute of Yu) chapter in the *Shangshu* 尚書 (The Book of Documents). See Richard Strassberg, ed. and trans., *A Chinese Bestiary: Strange Creatures from the Guideways Through Mountains and Seas* (Berkeley: University of California Press, 2002); Edward L. Shaughnessy, “Shang shu,” in *Early Chinese Texts: A Bibliographical Guide*, ed. Michael Loewe (Berkeley: Society for the Study of Early China and Institute of East Asian Studies, University of California, 1993), 376–89.

10 For discussion on how commerce led to intensive sensory observation and formed new channels of information, see Pamela H. Smith and Paula Findlen, “Introduction: Commerce and the Representation of Nature in Art and Science,” in *Merchants and Marvels: Commerce, Science, and Art in Early Modern Europe*, eds. Pamela H. Smith and Paula Findlen (New York: Routledge, 2002), 1–25.

utilitarian agenda, in general, differed from both the catalogues of antique and ritual wares, and later connoisseurship manuals. The first text, *Baibao zongzhen ji* 百寶總珍集, hereafter cited as Text A, dates from the Southern Song period.¹¹ A description of this book in the *Siku quanshu zongmu tiyao* 四庫全書總目提要 (Annotated Catalogue of the Siku Quanshu) suggests that it was produced by an anonymous merchant:

Judging from what is recorded in the book, [it] should be compiled by merchants in the market of Lin'an during the Southern Song dynasty. The categories, including gold, beads, jade, rocks, and utensils, are all provided with their provenance and price as well as traits to look for to differentiate authentic items from fakes. Each kind is prefaced by a heptasyllabic quatrain to make it easy to remember. The language is rather vulgar. The first entry is about a certain [imperial] jade seal, which ought not to be a tradable artifact. It is most inappropriate.

考其書中所記，乃南宋臨安市賈所編也。所載金珠玉石以及器用等類，具詳出產價值，及真偽形狀。每種前載七言絕句一首，取便記誦，詞皆猥鄙。首載玉璽一條，非可估易之物，尤為不倫。¹²

The book consists of 98 entries on precious goods and two concluding pieces of advice about commercial transactions. The entries on ancient bronze (*gutong* 古銅), “imperial calligraphy” (*yushu* 御書), ancient books (*gushu* 古書), and famous paintings (*minghua* 名畫) in Text A contain less information than an average category of goods in the book. These categories are the main concern of elite writings on culturally prestigious artifacts, such as *Kao gu tu* 考古圖 (Illustrated Investigations of Antiquity, 1092) and the earliest connoisseurship manual *Dongtian qinglu ji* 洞天清祿集 (Collected Pure Favors of the Cavern Heavens, around 1242). It is evident that the anonymous author of the *Baibao zongzhen ji* (Text A) lacked specialist knowledge about antiques and cultural artifacts; nor did he celebrate any intrinsic value of the “antique virtue” (*gu* 古) or “cultivated purity” (*qing* 清), which are the standard subjects of connoisseurship manuals like the *Yanxian qingshang jian* 燕閒清賞箋 (Discourse

11 *Baibao zongzhen ji* 百寶總珍集, rpt. in *Siku quanshu cunmu congshu* 四庫全書存目叢書, zibu 子部 (Tainan: Zhuangyan wenhua shiye, 1996), 78:786–812; also in Zheng Zhenduo 鄭振鐸, ed., *Xuanlantang cong shu* 玄覽堂叢書 (Yangzhou: Guangling shushe, 2010), vol. 12. I am grateful to Professor Li Min 李旻, an archaeologist at UCLA, who brought this treatise to my attention.

12 *Qinding Siku quanshu zongmu* 欽定四庫全書總目, 116.10b, in *Yingyin Wenyuange Siku quanshu* 景印文淵閣四庫全書 (Taipei: Taiwan shangwu yinshuguan, 1986), 3:522.

on the Pure Enjoyment of Cultured Idleness) by Gao Lian 高濂 (fl. 1573–81).¹³ The author of Text A is mainly interested in the monetary worth (*zhiqian* 直錢) of the goods listed. The text also discusses authenticity and suitable clients, since those factors affect a trader's ability to gain a good price for their wares.

Thus, this type of merchant's handbook is different from treatises and inventories written by emperors, aristocrats, and the literati, whose collection and appreciation of paintings, antique ritual wares, and inscriptions have already been well studied.¹⁴ People of high social strata accumulated symbolic capital through collecting antiques and artifacts imbued with rich philological, historical, and political significance, and further enhanced their own cultural importance by producing literary works, intellectual discourses, and ritual catalogues focusing on these cultural relics. Although some of these artifacts were also occasionally offered for sale, the texts produced during the practice of collecting do not usually document utilitarian information about commercial transactions. The rhymed prose (*fu*), poems, inscription studies, and catalogues composed or compiled by the social elites do not provide any insights into ordinary people's experiences of contemporary commerce either. Yet some of those "elite catalogues," together with other monographs about specialist knowledge concerning artifacts, flora and fauna, and foodstuff, were classified for the first time into a category called "Registers and records" (*Pu lu* 譜錄) in the book catalogue *Suichutang shumu* 遂初堂書目 compiled by collector You Mao 尤袤 (1127–1194), who was active during the Southern Song dynasty.¹⁵

13 It is one of the *Eight Discourses on Nurturing the Life* (*Zunsheng ba jian* 遵生八箋 / 箋) written by Gao Lian in late Ming. See Gao Lian, *Zunsheng ba jian jiaozhu* 遵生八箋校注, eds. and comm. Zhao Lixun 趙立勳 et al. (Beijing: Renmin weisheng chubanshe, 1994).

14 Patricia Buckley Ebrey, "Collecting and Cataloguing Antiquities," in *Accumulating Culture: the Collections of Emperor Huizong* (Seattle: University of Washington Press, 2008), 150–203; Ronald Egan, *The Problem of Beauty: Aesthetic Thought and Pursuits in Northern Song Dynasty China* (Cambridge, MA: Harvard University Asia Center, 2006), 162–236; Jeffrey Christopher Moser, "Recasting Antiquity: Ancient Bronzes and Ritual Hermeneutics in the Song Dynasty" (Ph.D diss., Harvard University, 2010); Yun-Chiahn Chen Sena, "Cataloguing Antiquity: A Comparative Study of the *Kaogu tu* and *Bogu tu*," in *Reinventing the Past: Archaism and Antiquarianism in Chinese Art and Visual Culture*, ed. Wu Hung (Chicago: Center for the Art of East Asia, Dept. of Art History, University of Chicago, 2010), 200–28.

15 You Mao, *Suichutang shumu* (Shanghai: Shangwu yinshuguan, 1936), 24. For You Mao's life and work, see Wu Hongze 吳洪澤, ed., *You Mao nianpu* 尤袤年譜, rpt. in *Songren nianpu congkan* 宋人年譜叢刊 (Chengdu: Sichuan daxue chubanshe, 2003), 5938–88. For the re-categorization of a few misleading book titles from the section on agriculture or genealogy to "registers and records" in earlier book catalogues, and the ensuing changes to knowledge system, see Geng Suli 耿素麗, "Qianxi guji mulu zhong zibu nongjialei yu pululei zhi guanxi" 淺析古籍目錄中子部農家類與譜錄類之關係, in *Wenxian* 文獻 2002.1: 158–69.

The *Pu lu* category includes a broad spectrum of titles, such as systematic inventories of specific goods across various social strata, many of which address the needs of merchants and some of which may have been written by dealers.¹⁶ This classification of specialist handbooks continues in the *Siku quanshu* 四庫全書 (Complete Library of Four Treasures), which categorizes utilitarian handbooks under “Registers and Records,” and contains Text A. Recent scholarship has established the importance of the Song-Yuan-Ming transition¹⁷ but, as yet, there has been a lack of analysis of the patterns of transmission and transformation of this expert knowledge, especially in the luxury trade, in the *longue durée*.¹⁸ Craig Clunas begins to uncover the “construction of meaning” and “a hierarchy of types of object” underlying the “systems of categorization” with his choice of three texts, which list many collectible artifacts and goods for international trade.¹⁹ Clunas also clarifies good taste as a code for social status in his ground-breaking examination of the *Changwu zhi* 長物志 (Treatise on Superfluous Things) by Wen Zhenheng 文震亨 (1585–1645).²⁰ Shifting the focus from the negotiation of the literati’s social status to the merchant’s skill and knowledge, my research aims to ascertain what textual continuity and modification can tell us about the transmission of knowledge and changes in consumer preferences.

Shiba Yoshinobu’s 斯波義信 seminal study on commerce in Song China investigates various aspects including institutional regulation, mercantile

16 For the study of *pu lu* as a way to transmit knowledge about nature and artifacts, see Martina Siebert, “Neue Formen für neue Themen: *pulu* 譜錄 als bibliographische Kategorie und als Schriften zu Sach – und Naturkunde,” in *Das Reich der Mitte – in Mitte: Studien Berliner Sinologen*, ed. Florian C. Reiter (Wiesbaden: Harrassowitz Verlag, 2006), 59–70.

17 Paul Jakov Smith and Richard von Glahn, eds., *The Song-Yuan-Ming Transition in Chinese History* (Cambridge, MA: Harvard University Asia Center, 2003), 1–34.

18 See Angela Leung, “Medical Learning from the Song to the Ming,” in *The Song-Yuan-Ming Transition in Chinese History*, 374–98.

19 The texts that he analyzes not only include a connoisseurship manual, but also sections from a city gazetteer and a travelogue. Craig Clunas, “Commodities, Collectables, and Trade Goods: Some Modes of Categorizing Material Culture in Sung-Yuan Texts,” in *Arts of the Sung and Yuan*, eds. Maxwell K. Hearn and Judith K. Smith (New York: Department of Asian Art, Metropolitan Museum of Art, 1996), 45–56.

20 As Wen Zhenheng appropriated many materials from Gao Lian’s *Zunsheng ba jian* and often added one to two sentences to comment on the prestige of the object categories, such rhetorical modification claims the ultimate cultural capital in Bourdieu’s sense. See Craig Clunas, *Superfluous Things*. For another systematic study of textual appropriation among connoisseurship manuals, see Mao Wen-fang 毛文芳, *Wanming xianshang meixue* 晚明閒賞美學 (Taipei: Taiwan xuesheng shuju, 2000).

culture and transportation, but he does not give special focus on *bao* or precious goods as a separate category of knowledge.²¹ However, the everyday encyclopedia (*riyong leishu* 日用類書) which is used extensively in Shiba's study prompted me to consult sources such as the *Jujia biyong shilei quanji* 居家必用事類全集 (Complete Collection of Classified Affairs Essential for Households). The content of the merchants' handbooks overlaps with everyday encyclopedias, which were published in great numbers from Late Ming on for the lower social strata, to popularize simplified and utilitarian knowledge in the form of rhymes, lists, and sections.²² Historians of print and material culture have examined this rich source to trace the transfer of knowledge.²³ Building on this approach, I discern how later texts incorporated those early publications about precious goods and modified them for a different readership.

The second text, "Baohuo bianyi" 寶貨辨疑, hereafter cited as Text B, is a small section from the *Jujia biyong shilei quanji*, an everyday encyclopedia dating from the Yuan dynasty (1271–1368).²⁴ This section includes twenty-six entries. Many of the entries were copied from Text A, although the anonymous

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- 21 See Shiba Yoshinobu, *Commerce and Society in Sung China*, trans. Mark Elvin (Ann Arbor: Center for Chinese Studies, University of Michigan, 1970), 37, 81, 111–25.
- 22 For a survey of low-brow compendia published in the Ming dynasty and their relation to earlier classification practices, see Benjamin Elman, "Collecting and Classifying: Ming Dynasty Compendia and Encyclopedias (*Leishu*)," in *Qu'était-ce qu'écrire une encyclopédie en Chine?* (Paris: Extrême-Orient, Extrême-Occident, 2007): 131–57. For a comprehensive introduction to the subcategories of everyday encyclopedias, their components, and the latest scholarship on the subject, see Endymion Wilkinson, *Chinese History: A New Manual*, 961–62, section 73.1.3.
- 23 Wang Cheng-hua 王正華 argues that the sections on calligraphy and painting manuals in the Fujian edition of the everyday encyclopedia she studied function as a cultural commodity of knowledge. By tracing the appropriation and modification of texts, she shows the evolving agenda, audience, and use of knowledge. See Wang Cheng-hua, "Daily Life, Commercialized Knowledge, and Cultural Consumption: Late-Ming Fujian Household Encyclopedias on Calligraphy and Painting" 生活、知識與文化商品：晚明福建版「日用類書」與其書畫門, in *Bulletin of the Institute of Modern History* 中央研究院近代史研究所集刊 41 (2003): 1–85.
- 24 "Baohuo bianyi," *Jujia biyong shilei quanji*, 5.82a–94b, rpt. in *Beijing tushuguan guji zhenben congkan* 北京圖書館古籍珍本叢刊 (Beijing: Shumu wenxian chubanshe, 1988), 61: 210–16. For further information on the encyclopedia, see Sakai Tadao 酒井忠夫, "Mindai no nichiyōruisho to shomin kyōiku" 明代の日用類書と庶民教育, in *Kinsei Chūgoku kyōiku shi kenkyū* 近世中國教育史研究, ed. Hayashi Tomoharu 林友春 (Tokyo: Kokudoshu, 1958), 25–154, particularly 132–36; Wu Huey-fang 吳蕙芳, "Riyong' yu 'leishu' de jiehe: cong *Shilin guangji* dao *Wanshi buqiren*" 「日用」與「類書」的結合——從《事林廣記》到《萬事不求人》, in *Ming Qing yilai minjian shenghuo zhishi de jiangou yu chuandi* 明清以來民間生活知識的建構與傳遞 (The Construction and Transmission of Everyday Knowledge since the Ming and Qing Dynasties) (Taipei: Taiwan xuesheng shuju, 2007), 26–28.

compiler significantly edited many of them and added new items such as amber. One page, illustrated with simple drawings of pearls, stands out in this otherwise truncated version. I argue that the modification of both order and content of the entries reveals the altered preference and perception of precious good of the time.

The third text is a chapter entitled “Zhenqi lun” 珍奇論 — hereafter cited as Text C — in the *Gegu yaolun* 格古要論 (Essential Criteria of Antiques).²⁵ The book in its entirety was compiled by Cao Zhao 曹昭 (fl. 14th c.) and dates from 1387 or 1388.²⁶ “Zhenqi lun” consists of forty-three entries, fourteen of which are not included in the other two texts, and two of which can be seen in Text B but not Text A. “Zhenqi lun” includes lots of material copied from Text A, however, Cao Zhao’s *Gegu yaolun* is a compendium, of which Text C is just a small section. The book also borrows from texts written by cultural elite, such as the paragon of literati connoisseurship manuals, *Dongtian qinglu ji* by Zhao Xihu 趙希鵠 (fl. 1180–1240), a royal descendant of the Southern Song dynasty.²⁷ Compared to Texts A and B, the *Gegu yaolun* in its entirety integrates handbooks from a much wider range of rhetorical registers. In the preface, the compiler Cao Zhao explicitly states his purpose, approach, and intended audience:

Whenever I came upon an object [of interest], I would search through all the books and illustrated catalogues [at my disposal] in order to trace its origin, evaluate its quality, and determine its authenticity before I move onto another. Even when I grow old, I still never get tired of it. My only concern is that my research may not be thorough enough. I often see young people from affluent backgrounds who are engaged in this lofty pursuit, but unfortunately lack discernment, despite for their genuine interest. Now I have selected subjects for discussion such as

25 Cao Zhao, “Zhenqi lun”, *Gegu yaolun*, 2.6b–17a, rpt. in *Yingyin Wenyuange Siku quanshu*, 871: 99–105. The English translation is available in Percival David, trans. and ed., *Chinese Connoisseurship: The Ko Ku Yao Lun, The Essential Criteria of Antiquities* (New York: Praeger, 1971).

26 The *Siku quanshu* edition is based on a copy owned by Kong Zhaohuan 孔昭煥, a 71st generation descendant of Kongzi. For details, see Meng Yuanzhao 孟原召, “A Comparative Study of Cao Zhao’s *Gegu yaolun* and Wang Zuo’s *Xinzheng Gegu yaolun*” 曹昭《格古要論》與王佐《新增格古要論》的比較, *Palace Museum Journal* 故宮博物院院刊 128 (2006.6): 82–94; Percival David, *Chinese Connoisseurship*, xlv–lvii.

27 Zhao Xihu, *Dongtian qinglu ji*, in *Dushuzhai congshu* 讀書齋叢書, *Ding ji* 丁集. Woodblock edition prepared by Gu Xiu 顧修 in Qing Jiaqing jiwu 清嘉慶己未, i.e. 1799.

ancient bronzes, calligraphy, paintings, and other rare objects. I have differentiated them by quality and authenticity and arranged them in sections and categories, under the title *Gegu yaolun*.²⁸

凡見一物必遍閱圖譜，究其來歷，格其優劣，別其是否而後已。迨老至，猶弗怠，特患其不精耳。常見近世納子弟習清事者，必有之，惜其心雖好，而目未之識。因取古銅器書畫異物，分高下，辨真贗，舉其要略，書而成編，析門分類，目之曰格古要論。²⁹

Cao Zhao aims to provide useful information to new collectors based on his own experience, which had been accumulated from both cross-referencing of existing texts and years of dealing with artifacts. The interpretation the practice of antique-collecting as a lofty pursuit fits the agenda of the literati discourse, which was constructed in Zhao Xihu's *Dongtian qinglu ji*. I could not find any such agenda of aestheticization and moralization in either Text A or B. Thus, the chapter "Zhenqi lun" is somewhat incongruous to the descriptive accounts that Cao Zhao transcribed from the literati's connoisseurship manuals, most notably, *Dongtian qinglu ji*. Moreover, the royal descendant Zhao Xihu never mentions the monetary value of the items he describes. The term he used is "precious" (*gui* 貴), which denotes superiority, usually in the context of an object's rarity. However, the key term of evaluation in "Zhenqi lun" is still "valuable" (*zhiqian* 直錢, literally "worth [a lot of] money"), a straightforward vernacular bi-syllabic term noting the price of objects. The fact that this term only frequently appears in one section (Text C) of *Gegu yaolun* confirms the eclectic textual sources of the whole compendium and the non-elite origin of "Zhenqi lun." The compiler of Text C has removed the verses at the beginning of each entry in Text A. He has also significantly edited the everyday language full of commercial jargon into a concise prose.

On the one hand, the common passages in all three texts suggest that the compilers were fascinated with price, potential customers, and the practical usage of goods, rather than their symbolic or intellectual value. They prioritize gold, silver, gems and precious materials above painting and calligraphy. I will explain the significance of several kinds of modification. First, the categories moving upward or downward probably indicate which goods were particularly valued in the market at the time of compiling the text. To explore this further, I choose to analyze the categories of jade and gold/silver, which were placed almost at two extremes of cultural hierarchies in different historical periods.

28 My translation, based on Percival David, trans. and ed., *Chinese Connoisseurship*, 3.

29 Cao Zhao, *Gegu yaolun*, in *Yingyin Wenyuange Siku quanshu*, 871: 86.

Second, I investigate how the omission or addition of information in later texts is resulted from the descriptions of empirical experiences or changes in preference. Apart from scrutinizing the entries on jade and gold/silver, I also examine a third category, pearls, as an example of artifacts from regions beyond China proper. Taken together, the three texts reveal the distinct articulation of knowledge of precious goods in different historical periods.

2. Jade

Jade occupies almost the same top rank among all goods, probably due to the enduring reverence it has been given in Chinese culture.³⁰ The entries on jade in the three texts show the different principles used by the compilers to distinguish between categories and transmit their own experiences in response to distinct epochal demands for commercial knowledge.

Text A

The organization of information about jade in Text A is probably shaped by the book's purpose — to provide commercial advice. The whole first *juan* consists of eight entries including jade, but it was arranged using inconsistent subdivision criteria. Material, color, shape, function, etc. all play a role in dividing the entries, as if the eight accounts together function as a primer to familiarize readers with these qualitative aspects, which will help them to classify jade-like goods. After the first entry, “Heirloom seal of the empire”

30 The section on jade is the highest ranked in both Texts A and C, and only second to the section on gold and silver in Text B. On the lasting symbolic significance of jade in Chinese history, see Berthold Laufer, *Jade: Its History and Symbolism in China* (New York: Dover Publications, 1989), 1–189. See also Jessica Rawson, *Chinese Jade: from the Neolithic to the Qing* (London: British Museum Press, 1995). There are voluminous texts expounding on various aspects of the knowledge about jade in pre-modern China. The technical categorization goes back as early as *Kaogong ji* 考工記 (Artificer's Record), rpt. in *Guoxue jiben congshu sibaizhong* 國學基本叢書四百種 (Taipei: Shangwu yinshuguan, 1968), 61–67. Jade wares had been highly charged with ritual and political significance and generations of scholars had been expounded on jade in the context of ritual studies. Moreover, Song Yingxing 宋應星 (b. 1587) briefly touches upon the natural source of jade in his *Tiangong kaiwu* 天工開物. For English translation of the book, see Song Yingxing, *T'ien-kung k'ai-wu: Chinese Technology in the Seventeenth Century*, trans. E-tu Zen Sun 孫任以都 and Shiou-chuan Sun 孫守全 (University Park and London: Pennsylvania State University Press, 1966), 300–04. Yet none of these approaches focuses on the mercantile value of jade.

(*chuan guo bao* 傳國寶) about a certain legendary imperial seal, which serves as a preface but contains no commercial details, the second entry immediately provides a concise overview of “Jade wares” 玉器. The next two entries, namely “False jade” 罐玉 and “Ancient jade,” focus on the authenticity and dates of antique jades. The color of the material is the criterion used to distinguish “green jade” 青玉 from “black jade” 烏玉. The section on jade ends with two entries on the functional forms of jade, “Jade belt” 玉帶 and “Jade hairpin” 玉插. The verse at the beginning of each entry summarizes the content in vernacular mnemonic phrases.

The compiler of jade entries in Text A prioritizes the specific information that is needed in order to gain commercial profit, rather than knowledge that helps increase the reader’s comprehension. Since the content is not arranged in a systematic manner, it makes the section look rather disjointed, like a collection of miscellaneous jottings about such merchandise. Firstly, the author cuts out any information about the regional origins of different types of jade. Instead, local provenance and regional markets are given prominence in his introduction to specific jade projects. For instance, when Text A singles out “Jade belt” as a category of goods for discussion, which is not included in Text B or C, it documents the rarity of “snow white flat belt” 雪白大偏帶 in the markets of the Southern Song capital: “Snow white flat belts seldom appear at street markets. There are only two or three [circulating] in the officialdom. They are usually bestowed to princes for their disposal” 雪白大偏帶街市少有，官中止有兩三條，多賜與親王使。³¹ The knowledge about its use at court suggests that the compiler had access to information that merchants had when they traded with or for the court. In the entry on “Black jade”, the narrator even tells a story about a coerced purchase took place in the capital:

Back in the reign of Qiandao (1165–1173), a person from Sichuan carried a black rock stored in a basket of grass. He begged for a living in the capital city. Later Liu Furen from the jade workshop in the First Treasury had someone smashed the rock on the ground and bought it with little money before driving the person back to his hometown....

昔日乾道年間，有一川人用竹籃亂草盛貯一烏石，向都下教化為生。後被甲庫玉作劉夫人令人擲石于地擲碎，用錢些小收之，令此人歸鄉.....³²

31 *Baibao zongzhen ji*, 1.4a–b, in *Siku quanshu cunmu congshu, zibu*, 78: 789.

32 *Baibao zongzhen ji*, 1.4a, *ibid.*

This story provides some significant information. Text A was probably compiled after the end of the Qiandao reign (1165–1173). During the early days of the Southern Song dynasty, the court had a department of treasures and workshops called *jiaku yuzuo* 甲庫玉作, to which the jade workshop (*yuzuo* 玉作) was probably attached.³³ The author's familiarity with the court and its capital city is further confirmed by the discursive division of the market into the provincial parts and the cosmopolitan area.³⁴ "If the green jade has a rock-like pattern, it is not good. It is a good in inferior quality good."³⁵ The categories mentioned above are often sold to provincial officials. It's hard to find clients here" 如綠色或夾石樣範花樣不好, 皆是貓貨。已(以)上數等皆是賣外路官員, 此間少著主。³⁶ The spatial awareness here is driven by the groupings of clientele. The stylistic or formal awareness is also closely tied with an explicit sales agenda.

As a categorizing criterion, the kinds or forms of jade wares play a different role in the three texts, constituting the main difference in how the entries about jade are structured in each of them. The entries in Text A list specific kinds of jade accessories under subcategories. For example, ancient jade is often used to make a "hanging ring, disc, arm rest, fish tally, sword-guard, etc. Snow white with ancient [dirt] scars, especially blood red stains, is the best" 條環、璧環、枕臂、魚袋、劍額兒之屬雪白古浸者, 如上面有血浸紅色者最佳。³⁷ In the compiler's view, however, the marketability of jade

33 "The First Treasury was established in the Shaoxing Reign (1131–1162). When the official bureau could not provide the paintings or decorative artifacts needed in vehicles, they were obtained from the First Treasury. Thus, exceptionally skillful artisans gathered there" 御前甲庫者, 紹興中置。凡乘輿所須圖畫什物, 有司不能供者, 悉於甲庫取之, 故百工技藝之巧者, 皆聚於其間。See Li Xinchuan 李心傳, *Jianyan yilai chaoye zaji* 建炎以來朝野雜記, ed. Xu Gui 徐規 (Beijing: Zhonghua shuju, 2000), 17: 385, entry 453 "Yuqian jiaku" 御前甲庫.

34 The compiler mentions another court treasury called *gezi ku* 閣子庫 in an entry about an ink slab made of antique tile. See *Baibao zongzhen ji*, 3.5a, "Wa yan" 瓦硯, in *Siku quanshu cunmu congshu, zibu*, 78: 795. *Gezi ku* is recorded as a department in the Southern Song palace compound in Hangzhou. See Sishui qianfu 泗水潛夫 (i.e. Zhou Mi 周密), *Wulin jiushi* 武林舊事 (Hangzhou: Xihu shushe, 1981), 7: 119; *Song shi* 宋史 (Beijing: Zhonghua shuju, 1977), 173.12419.

35 It is not entirely certain if *mao huo* 貓貨 means fake or just poor quality goods.

36 *Baibao zongzhen ji*, 1.3b, in *Siku quanshu cunmu congshu, zibu*, 78: 789.

37 *Baibao zongzhen ji*, 1.2b–3a, in *Siku quanshu cunmu congshu, zibu*, 78: 788–89. For an extensive taxonomy of personal jade ornaments in early China, see Berthold Laufer, *Jade: Its History and Symbolism in China*, 194–293. For the fascination with red-brown stains on ancient jade, see James C. Y. Watts, *Chinese Jade from Han to Ch'ing* (New York: Asia Society, 1980), 28. For a chemical study of color stained jade, see Wang Changsui 王昌燧, "Lingjiatan guyu shouqin jizhi fenxi" 凌家灘古玉受沁機制分析, in *Keji kaogu jinzhān* 科技考古進展 (Beijing: Kexue chubanshe, 2013), 126–34.

wares not only depends on their material, but also their shapes and decorative patterns. The mercantile advice given about green jade shows which forms of jade wares were most popular in the capital city's central market: "If the color is lovely and the design and the execution is fine, you can find many customers for wine cups and bowls, or miscellaneous articles such as belts and straps, and hanging rings" 若顏色啣伶，樣製、碾造、花樣仁相，盞或腰條皮束帶、條環零碎事件之屬，多著主。³⁸ The most conspicuous part of this book's commercial advice concerns pricing and targeted customers, which can be found near the end of many such entries. The urge to share up-to-date information about the market shapes the structure of Text A, making it more akin to occasional reflections than any considered summary of knowledge.

Text B

In contrast with the straightforward yet disjointed commercial advice provided by Text A, the entries on jade in both Texts B and C are more comprehensive treatises, as they apply consistent criteria to categorizing goods. Text B classifies jade by its color: "White jade" 白玉, "Ancient jade" 古玉, "Dark green jade" 碧玉, "Yellow jade" 黃玉, "Black jade" 烏玉 are just subentries with only a few lines.³⁹ Text C ranks four kinds of jade according to the quality of their material, namely "Ancient jade" 古玉, "Sand jade" 沙子玉, "False jade" 罐子玉, and "Jade-like rock" 石類玉. Nonetheless, the more organized the entries are, the more elevated the language, and the less local and direct commercial information is provided. The introductory entries on "Jade wares" 玉器 in Texts B and C gloss over much of the information that Text A carefully discusses in its subcategories. Most of the vernacular verses about jade has been removed from Text B and none appears in Text C.⁴⁰ There is significantly less commercial advice in Texts B and C. In fact, even though Text C retains the comment "valuable" (*zhiqian* 值錢), it gives little explanation about this.

The information about the jade market recorded in Text A was modified as compiler of Text B considers such knowledge irrelevant to the contemporary

38 *Baibao zongzhen ji*, 1.3b, in *Siku quanshu cunmu congshu, zibu*, 78: 789.

39 Regarding the colors and types of jade, see S. Howard Hansford, "The Material and Its Sources," in *Chinese Carved Jades* (London: Faber and Faber, 1968), 26–48. See also James Watts, *Chinese Jade from Han to Ch'ing*, 26–30.

40 *Baibao zongzhen ji*, 1.2b–4b, in *Siku quanshu cunmu congshu, zibu*, 78: 788–89.

situation in the Yuan dynasty. For instance, the entry on “Green jade” 青玉 in Text A begins with a verse in the form of a heptasyllabic quatrain, before discussing how to rate an item according to color: “When appraising jade, [one should know that] there are several ranks, ranging from [the ones with] an unbroken green pattern as top-ranked, to the dark green ones at the bottom.” 凡看玉亦有數等，上至不斷青，下至碧綠色者。⁴¹ This brief classification coincides with a one-line comment in Text B. “Dark green jade: if the color is lovely, it’s exceptional. Ranging from [the ones with] an unbroken green pattern as top-ranked, to the dark green ones at the bottom. Deep green, mid green and pale green ones are in between. White ones are the cheapest” 碧玉：顏色御伶者絕品。上至不斷青，下至碧綠色。深綠色、青色、菜色者分數等比，白者價低。⁴² Text B also mentions the types of jade which cannot be found in Text A, and are even inferior to dark green jade, presumably unsaleable in Late Song. In brief, Text B is less concerned with providing immediate commercial advice about specific kinds of jade goods than offering ways to evaluate them using a set of different criteria.

Text B goes into great lengths to explain the importance of design in deciding the commercial value of jade items, though the entries on jade are arranged according to color in this text. In comparison to the fragmented information about specific kinds of jade wares in Text A and the total absence of any such discussion in Text C, the introductory entry “Jade wares” 玉器 in Text B pays close attention to the kinds of goods made from jade in a long list of tableware, accessories, and jewelry:

[Jade wares include] Plates, wine cups, bowls, pots, etc. If a piece has a handle, it should have a hole larger than a thumb in order to be considered a saleable article. It [Jade] is also used in belts, hanging rings, cap buttons, handkerchief rings, nuts on a certain part of a sword (?), and nuts on a Qin zither. Jade sword grips should be thick and long in order to be regarded as articles of value. It is also used in making accessories such as headpieces, jade forehead pieces, jade hairpins, jade combs, phoenix-shaped jade ornaments, jade rings, jade boxes, jade flowers, jade pendants, jade buckles, and the five miscellaneous items.

或盤、盞、碗、壺等。有把手者孔竅要容大指成器。或繫腰條環，笠帽頂頭，巾環劍納子，琴樣納子。玉刀靶肥長者成器。或首飾、

41 *Baibao zongzhen ji*, 1.3b, in *Siku quanshu cunmu congshu, zibu*, 78: 789.

42 *Jujia biyong shilei quanji*, 5.86a, in *Beijing tushuguan guji zhenben congkan*, 61: 212.

玉額花、玉釵鐏、玉梳、玉鳳、玉環、玉盒、玉花朵、玉項鐏、玉帶繫、玉五事等件。⁴³

This list incorporates the kinds of goods mentioned in Text A but is substantially more diverse than that. The additional information explains why certain types of jade were so popular. Some jade gemstones used for decoration had to reach a certain size in order for merchants to sell them as independent pieces. Contemporary design, as Text B notes, was considered the most desirable.⁴⁴ Older wares were evaluated based on their potentials to be reused: “Contemporary design is the best. Pieces produced in the past are only valuable if they meet the right standard. Don’t bother with those that are not suitable for modification” 時樣為最。舊時碾造生活，合格者直錢，不堪改造者勿覽。⁴⁵ As the long list shows, the author is most interested in using jade materials to produce new items in various contemporary designs. The value and price of jade wares depended on the quality of the raw material, which was evident in the color of the pieces and the quality of their workmanship.

Text C

The profusion of fake goods on the market had a major impact on quality in later periods. The problem of forgery does not loom large in either Text A or B, but this issue preoccupies half of the four entries about jade in Text C. What distinguishes Text C from the others is its particular attention to the spectrum of quality, ranging from high quality jade to faux jade. On the one hand, the author mentions “sandy jade” 沙子玉 which is even more rosy and richer than white jade. On the other hand, he carefully differentiates “jade-like rock” 石類玉, which is an umbrella term for several kinds of rocks that are similar to jade but were unmentioned in the earlier texts:

43 *Jujia biyong shilei quanji*, 5.85a–b, in *Beijing tushuguan guji zhenben congkan*, 61: 212. For a brief introduction of exemplary categories of the jade artifacts mentioned, see Yang Boda 楊伯達, “Song Yuan Ming Qing sichao yuqi wenhua mianmianguan” 宋元明清四朝玉器文化面面觀. *Zhongguo meishujia wang*, accessed October 20, 2016, <http://jifa.meishujia.cn/index.php?act=app&appid=4096&mid=3503&p=view&said=98>. The abridged version of the article was originally presented at the Third International Conference on Ancient Cultures of South China and Neighbouring Regions 第三屆南中國及鄰近地區古文化研究國際學術會議 (Hong Kong: Chinese University of Hong Kong, November 23–27, 1998).

44 For an illustrated discussion of jade artifacts in the distinct “Yuan style,” see James Watts, *Chinese Jade from Han to Ch’ing*, 18–22.

45 *Ibid.*

Rock from the Mao mountains is whiter and more lustrous; water rock is cool white, some has a pattern etched into it by running water, and some has the color of rice. The good ones are similar to real jade. You cannot even carve a mark on them with a knife. After all, they have the same attributes as rocks, which are neither soft nor malleable. You should examine them carefully.

有茅山石，白而有光；有水石，冷白色，或有水路，或有飯糝色者。好者與真玉相似，雖刀刮不動，終有石性，不溫潤，宜細驗之。⁴⁶

This entry also shows the broad organizing principle used in Text C, that we will see again in the sections on gold/silver and pearls. Like other categories of precious goods in Text C, the entries on jade usually begin with information regarding their geographical origins. By elevating the language register and eliminating colloquial terms, the opening entry, “Jade wares” 玉器 in Text C, summarizes the scattered snippets of information from Text A. The compiler uses his favorite criterion — color — for classification in this section: “White jade” 白玉, “Yellow jade” 黃玉, “Dark green jade” 碧玉, “Ink colored jade” 墨玉, “Red jade” 赤玉, “Green jade” 綠玉 and “Vegetable/pale green” 菜玉 are the subcategories that the compiler breaks down into based on the visual (mostly chromatic) quality of the jade, before ranking them accordingly. Yet the author, Cao Zhao, does not care to provide any systematic knowledge about jade. He pays much more attention to the specific practice of falsification, which was damaging the quality of jade merchandise at the time of publication.

In summary, the sections on jade show some distinct structural principles and primary concerns specific to the eras when Texts A, B, and C were compiled. The elaborate entries in Text A almost assign equal importance to issues of form, color, and date, yet all these features were included simply to give tactical advice about finding customers. Text B is much more focused on providing comprehensive knowledge about the material and its contemporary design in the Yuan dynasty. Text C is particularly concerned about forgery, which may suggest an increasing number of adulteration incidents in the trade of jade, or at least a rising awareness about the problem during the Ming dynasty. The entries on jade show the potential for further developing such diverging strategies when transmitting knowledge about precious goods.

46 Cao Zhao, *Gegu yaolun*, 2.8a–8b, in *Yingyin Wenyuange Siku quanshu*, 871: 100.

3. Gold and silver

The transcription of mercantile knowledge about gold and silver provides further insights into each period's characteristics, in terms of both consumers' market preferences and some specific traits of goods selected for in-depth discussion.⁴⁷ The positioning of gold and silver in the three texts may imply their different status amongst all precious goods.

Text A

Two entries on gold and silver in the *Baibao zongzhen ji* can be found at the beginning of the fourth *juan*, following the first three *juan* which discuss jade, various beads, and precious rocks respectively. These two entries contain only information that would be most useful to merchants as practical advice while leaving the rest out. The entries also function as placeholders by referring to a lost text entitled “Jinyin lun” 金銀論 (Treatise on Gold and Silver), which might have enumerated a list of precious metals of different purity. Thus, the short entries in Text A suggest a larger pool of handbooks compiled for merchants. The following is the entry on “Gold” (*jinzi* 金子):

上石毒擦看分數	Rub [the gold] on a rock to see its level of quality.
入手輕肥驗真偽	Hold it [the gold] in your hands and evaluate its authenticity based on its weight.
貨賣剪開方定價	The goods must be cut open [and examined] before deciding on their price.
論中細說不曾差	The detailed discussion in the “Treatise” left nothing untold.

Golden treasure is one of the eight Buddhist treasures.⁴⁸ I skip it, as the

47 We can find brief technical descriptions of gold and silver in Li Shizhen, *Compendium of Materia Medica (Bencao Gangmu)*, trans. and annot. Luo Xiwen 羅希文 (Beijing: Foreign Language Press, 2003), vol. 8: “The Category of Metals, Stones and Minerals,” 902–910. Regarding the information about mining, assessment, forging technique of gold and silver, see *T'ien-Kung K'ai-Wu*, 235–47. However, both texts came after the handbooks examined in the current study. For references of gold and silver before the Song dynasty, see Joseph Needham, *Science and Civilisation in China*, vol. 5, pt. II (Cambridge: Cambridge University Press, 1974), 47–54.

48 It is unclear whether the “gold treasure” 金寶 here means seals used by the royal family of the Song dynasty or golden artifacts decorated with Buddhist symbols. See *Song shi*, 154. 3581–90. See also Qi Dongfang 齊東方, “Zhongguo gudai jinyinqi gaishu” 中國古代金銀器概述, in *Zhongguo meishu quanji: jinyinqi boliqi* 中國美術全集·金銀器玻璃器 (Hefei: Huangshan shushe, 2010), 18.

“Treatise on Gold and Silver” elaborates on it. If you have plates and wine cups with inlaid beads and seven treasures, sell them to specific clients.

金寶貨八寶之數，略而提過，金銀論中自說詳細，如有壘珠七寶盤盞，別尋主賣。⁴⁹

Besides referring to the missing treatise on gold and silver, this entry also implies a now-lost pool of knowledge on categorized goods and related texts that aimed to explain them. For example, we only learn that “Golden treasure” 金寶 is one of the “eight treasures” but are not sure about their content. Here, the recommended method of appraisal is to cut open the merchandise so as to ensure profitable pricing.

The entry on silver, entitled “Silver ingot” 銀錠, illustrates more vividly the explicit agenda of this mercantile advice. Again, the verse and the prose single out specific categories of goods and stress the need to target particular clients:

真花細切分數高	A clear patterned ingot with a fine cut, is of high purity.
紙被心低四角凹	An impure core and <i>zhi pi</i> [a kind which looks as if it is wrapped in paper-thin layers?] are sunken at four corners.
好弱幽微說不盡	The details of high and low quality silver can hardly be exhausted.
論中不錯半分毫	There is no tiny mistake in the “Treatise (on Gold and Silver).”

As for how to appraise the purity of silver ingots ranging from one hundred *fen* to sixty *fen*, the “Treatise on Gold and Silver” has already explained in detail. Silver ingots of a dull white color, which have small holes, are inferior. They are mostly *zhi pi*. When you handle a piece of silverware, first feel its hardness. If the color is good, it’s good. If you have gilded incense plates fashioned with open work and wares alloyed with gold, sell them to specific clients.

凡看銀錠上至一百分下至六十分，金銀論中細說子細。銀錠發孔色昏白者，低多是紙被。銀器入手先看軟硬，色澤好者堪好。如有鍍金突鏤香印盤及間鍍夾金器，令尋主賣之。⁵⁰

49 *Baibao zongzhen ji*, 4.1a, in *Siku quanshu cunmu congshu, zibu*, 78: 795.

50 *Baibao zongzhen ji*, 4.1a–b, in *Siku quanshu cunmu congshu, zibu*, 78: 795.

Commercial pricing and potential clients seem to be the guiding factors for the compiler of Text A to select which information about gold and silver to be extracted from a much longer treatise and, possibly, other inventories as well. He singles out items that are highly sought after in the market. These entries do not attempt to share any systematic knowledge about the goods. The transcription of his experience reveals a rather action-oriented utilitarian impetus. While selecting relevant information that will facilitate his commercial advice, Text A overtly rejects any systematic knowledge that has been passed along in earlier texts such as the “Treatise on Gold and Silver.”

Text B

The compiler of Text B attempts to make a more comprehensive and up-to-date introduction to gold and silver as merchandise in Mid Yuan. The entries on gold and silver are listed as the second and third categories in the text, preceded only by ivory plaque. It is reasonable to speculate that Text B’s author was responding to the general popularity of gold and silver wares during the Yuan dynasty.⁵¹ All three texts in question are concerned with the distinction of high purity gold and silver wares from alloy, nevertheless, such effort is most strenuous in Text B. The compiler may have copied from the “Treatise on Gold and Silver,” which is referred by but not quoted in Text A. The systematic appropriation of charts about the purity of precious metals is not immediately followed by any specific commercial advice about pricing. The compiler seems more interested in explaining the general status of gold and silver materials in the market, and he arranges his information according to the provenance and purity of the precious metals. The judgment of authenticity or forgery appears to be merely one of many aspects of appraisal, far from being the determining factor in evaluating the quality of a piece.

In Text B, the verse at the beginning of the entry on gold is three times as long as its counterpart in Text A, though it discusses the same three methods of evaluating the purity of gold. The first method is testing the metal with a stone, probably by knocking off some broken bits and examining their color. The second is cutting the metal open and examining the cross-section. The third method is feeling its hardness and weight. Texts A and B explain how

51 James C. Y. Watt, “A Note on Artistic Exchanges in the Mongol Empire,” in *The Legacy of Genghis Khan: Courtly Art and Culture in Western Asia, 1256–1353*, eds. Linda Komaroff and Stefano Carboni (New York: Metropolitan Museum of Art, 2002), 5, 63–73; Zhang Jingming 張景明, *Zhongguo beifang caoyuan gudai jinyinqi* 中國北方草原古代金銀器 (Beijing: Wenwu chubanshe, 2005), 225–46.

to do this in almost the same words: “Evaluate the authenticity based on its weight and feel it in your hands” 入手輕肥驗真偽 / 入手輕肥驗假偽. Text B also suggests the additional method of heating up the metal. Real gold will look yellowish if fired together with copper sulfate (*danfan* 膽礬). This firing approach is more developed in Text C.

The following is the verses in the entry of “Gold” from Text B:

金子十分至半錢 對樣分明石上試 更看裏夾幾多般 剪錯開時無疑忌	Gold ranks from ten fen to a half <i>qian</i> . Test a sample carefully on a rock. Further examine the strata alloyed inside. After cutting it open you will have no further doubt.
黑昏銅物在其中 淺淡蓋緣銀在內 銀有六分金有四	If it's blurry dark, copper is inside. Faint color results from silver. Silver is classified into six registers of purity and gold into four.
一處銷成全不類	Though forged in the same place, they are not similar at all.
要見良金方法真	If you ask for the best way to appraise high quality gold,
膽礬燒煨(鍛)黃即是	It remains yellow when smelt with copper sulfate.
色白聲鳴器子多 入手輕肥驗假偽 ⁵²	If it's pale and it resonates, it is too impure. Evaluate its authenticity based on its weight and feel in your hands.

The increasing knowledge about gold in Text B is primarily shown in the table-like layout about the provenance of goods. Kory (*Gaoli*), Sichuan, and Yunan were the furthest areas that produced special gold products, and such knowledge was beyond the scope of Text A. The term *daodi* 道地 highlights regional origins as a sign of the quality of gold material and, therefore, indicates the importance of locality in the effort to standardize the ways of appraising in Text B. The two pieces of verse are followed by several sub-entries (noted that annotations are bracketed):

52 *Jujia biyong shilei quanji*, 5.83b, in *Beijing tushuguan guji zhenben congkan*, 61: 211.

馬蹄金【像馬蹄樣少有】	Horseshoe gold [looks like a horseshoe, rare]
沙金【乃麩金之屑如沙細者】	Sand gold [scrap of wheat bran gold, as fine as sand]
橄欖金【出荊湖嶺南郡】	Olive gold [from Lake Jing in Lingnan prefecture]
子金【顆塊如子大】	Melon seed gold [in the size of melon seeds]
麩子金【碎屑如麩片出湖南高麗蜀中】	Wheat bran gold [flakes like wheat bran, from Hunan, Koryō, and Shu]
胯子金【像茶腰帶胯子，出湖南北郡】	Thigh gold (?) [like Ge tea, waist belt, and thigh, from Beijun county in Hunan]
葉子金【雲南者為道地，各處鋪戶拍造。杜葉亦淡，此為電金，再銷看顏色】	Foil gold [the authentic pieces are from Yunnan, though it is made by goldsmith shops everywhere. Forged (?) foil looks pale and is only gold on the surface. Examine the color before melting]

To discern alloy gold ingots or vessels that were made of inferior gold or silver by wrapping it in reddish foil gold, and those bear a hammering mark that was forged by pressing the ingot after it was heated: Check the foot of the vessel and see if there is a seam; if so it is [alloy]. If there is no seam but the rim looks thick and the object feels hard, it is an alloy vessel.

凡辨夾金錠或夾器皿用淡金，或銀使赤金葉裹，就熱研上錠子偽造錠痕。器皿看底足有縫即是。如無縫看唇厚，入手硬，夾器也。⁵³

The transcription of knowledge about gold and silver in Text B surpasses that in Text A, since it provides a systematic explanation of the standards regarding quality. Names that are similar to “melon seed gold” 子金, “wheat bran gold” 麩子金, and “sand gold” 沙金 were previously mentioned in the *Baozang lun* 寶藏論 (Discourse on the Contents of the Precious Treasury of the Earth), a treatise on Taoist alchemy dating from the tenth century.⁵⁴ The *Baozang lun* could be a source of the lost “Treatise on Gold and Silver.” Later in the Ming dynasty (1368–1644), Li Shizhen 李時珍 (1518–1593) quoted this geographical listing of different gold in his *tour de force* *Bencao gangmu* 本草綱目 (Compendium of Materia Medica), which further attests to the circulation

53 *Jujia biyong shilei quanji*, 5.83b–84a, *ibid*.

54 Terms that appears in the treatise like *guazi jin* 瓜子金 (“small golden nuggets”), *qingfu jin* 青麩金 (“caerulean bran flake gold”), and *cao sha jin* 草砂金 (“under-the-plant sand gold”) have been aptly translated in Joseph Needham, *Science and Civilisation in China*, vol. 5, pt. II, 275.

and credibility of Text B among specialists.⁵⁵

Purity is probably the most important qualitative difference among precious metal ores from different regions.⁵⁶ Instead of provenance, subcategories of different purities of silver are meticulously listed in Text B. Recent scholarship advances the conceptualization of forgery as well as various forms of fake artifacts.⁵⁷ The case of silver further situates the quality of materials in the spectrum between pure metal and its alloy.

The following is the entry on “Silver” (noted that the verse is not cited as it is the same as Text A):

金漆花銀【一百分足】	Silver with a gold lacquer pattern [100 percent purity]
濃調花銀【九十九分九釐】	Silver with a packed pattern [99.9 percent purity]
茶花銀【九十九分八釐】	Silver with a camellia-like pattern [99.8 percent purity]
大胡花銀【九十九分七釐】	Silver with a pattern like large foreign flowers [99.7 percent purity]
薄花銀【九十九分六釐】	Silver with a sparse flowery pattern [99.6 percent purity]
薄花細滲【九十九分五釐】	Silver with a sparse flowery pattern and fine <i>shen</i> patterns [99.5 percent purity]
紙灰花銀【九十九分四釐】	Silver with a pattern like paper ash [99.4 percent purity]
細滲銀【九十九分三釐】	Silver with fine <i>shen</i> patterns [99.3 percent purity] ⁵⁸
滲銀【九十九分一釐】	Silver with coarse <i>shen</i> patterns [99.1 percent purity]
斷滲銀【九十八分五釐】	Silver with broken <i>shen</i> patterns [98.5 percent purity]
無滲銀【九十七分五釐】	Silver with lots of <i>shen</i> patterns [97.5 percent purity]

55 Li Shizhen, *Compendium of Materia Medica*, 902–4.

56 The first record of silver ores of different quality occurred probably during the Three Kingdoms period (220–280). See Joseph Needham, *Science and Civilisation in China*, vol. 5, pt. XIII (Cambridge: Cambridge University Press, 1999), 133–34. Regarding the awareness of different silver ore purity, the oft-quoted example is recorded in the “Shihuo zhi” 食貨志 (Treatise on Food and Money) 6, in *Weishu* 魏書 (Beijing: Zhonghua shuju, 1973), 110. 2857. It states that the silver ore from Baideng Shan 白登山 was four times more pure than those from Li Shan 驪山, and thus produced higher quality silver.

57 Bruce Rusk, “Artifacts of Authentication: People Making Texts Making Things in Ming-Qing China,” in *Antiquarianism and Intellectual Life in Europe and China, 1500–1800*, eds. Peter N. Miller and François Louis (Ann Arbor: University of Michigan Press, 2012), 180–204; Bruce Rusk, “Not Written in Stone: Ming Readers of the ‘Great Learning’ and the Impact of Forgery,” *Harvard Journal of Asiatic Studies* 66.1 (2006): 189–231; Jonathan Hay, “Editorial: The Value of Forgery,” in *RES: Anthropology and Aesthetics* 53/54 (2008): 5–19.

58 I am not entirely sure what *shen* 滲 refers to here. It might mean the patterns resulted from the impurity in silver alloy.

These are the different levels of silver quality.

已上銀分數名額。⁵⁹

The nomenclature can be seen as an attempt to succinctly articulate the visual attributes caused by impurities. Text A only mentions that the purity of silver may range from one hundred percent down to sixty percent according to the “Treatise on Gold and Silver,” while Text B describes eleven subcategories of silver, based on the degrees of impurity. In contrast to the specific advice on pricing and clientele given in Text A, the detailed list of silver quality is followed by a general observation on customer preferences.

What distinguishes Text B from Text A is the former’s statement on consumer preference for contemporary design. It asserts that ladies living in the Mongol regime preferred accessories with a contemporary design (*shi yang* 時樣),⁶⁰ rather than antiques. This text warns its readers that silver might be adulterated during the melting and recasting process:

When appraising various kinds of vessels and ware, headpieces, hairpins and bracelets: nowadays ladies of the household prefer work of contemporary design, and they are keen to modify and recast [their jewelry], so the purity decreases. You should particularly watch out for objects with gilded coatings and edges.

凡看諸般器皿，首飾釵釧，今時宅眷多喜時樣生活，勤去更改一番、騰倒一番，低也。但凡楞裹鍍金之類，尤宜仔細。⁶¹

59 *Jujia biyong shilei quanji*, 5.84b, in *Beijing tushuguan guji zhenben congkan*, 61: 211. See also Zhou Weirong 周衛榮, Yang Jun 楊君, Huang Wei 黃維 and Wang Jinhua 王金華, “Research on the Metal Composition of Ancient Chinese Silver Ingots” 中國古代銀錠金屬成分研究, in Zhou Weirong et al., *Zhongguo gudai yinding kexue yanjiu* 中國古代銀錠科學研究 (Beijing: Kexue chubanshe, 2016), 292–304; Zhou Weirong, Yang Jun, Huang Wei and Wang Xiaota 王小塔, “Research on the Casting Technology of Ancient Chinese Silver Ingots” 中國古代銀錠鑄造工藝研究, in Zhou Weirong et al., *Numismatics and the History of Smelting* 錢幣學與冶鑄史, vol. 2 (Beijing: Kexue chubanshe, 2015), 305–23.

60 For excavated examples of gold and silver wares with contemporary designs from the Mongol Yuan period, see Zhang Jingming and Zhao Aijun 趙愛軍, “Neimenggu diqu Mengyuan shiqi jinyinqi” 內蒙古地區蒙元時期金銀器, *Neimenggu wenwu kaogu* 內蒙古文物考古 1999.2: 51–56, 59. The growing interest in contemporary designs suggests a new stylistic rupture, probably due to multiethnic interaction. See also Hunan Provincial Museum, ed., *The Discovery of and Research on Gold and Silver Wares Unearthed from Caches of Song and Yuan Dynasties in Hunan* 湖南宋元窖藏金銀器發現與研究 (Beijing: Wenwu chubanshe, 2009).

61 *Jujia biyong shilei quanji*, 84b–85a, in *Beijing tushuguan guji zhenben congkan*, 61: 211–12.

The emphasis on contemporary design in the above entry echoes with the preference for contemporary jade design in the same book. Emphasizing on the style fashions of the time, Text B's author seems keen to provide systematized information about silver's provenance or purity, so that the reader should bear that in mind when appraising the quality or authenticity of goods. This is very different from the mercantile advice given on specific items in Text A.

Text C

Text C further pursues the methods of authentication that Text B briefly touches upon. On the one hand, the means of authentication not only involve sensory experience but also tools and procedures in the entries on gold and silver in Text C. The description of details indicates merchants' engagement with forgery at that time was getting more serious. The anxiety about counterfeits implies a drastic change in the supply of gold and silver in mid-Ming.⁶² On the other hand, the position of gold and silver in the entire system of objects in Text C, which is part of the *Gegu yaolun*, suggests the low status and lack of cultural prestige of the precious metals in Cao Zhao's inventory of goods. The urge to imitate the literati's cultural hierarchy in the midst of transcribing mercantile information characterizes this handbook published in the Ming dynasty. Although gold and silver were considered precious materials, they only ranked higher than ceramics, lacquerware, and woodwork. Text C, "Zhenqi lun" 珍奇論 of the *Gegu yaolun* 格古要論 excludes these entries altogether. It inserts four entries about gold and silver at the beginning of a different chapter entitled "On Gold and Iron" (*Gin tie lun* 金鐵論), which follows "On Precious Objects."

The gentrification of language and the literati's hierarchization do not prevent the entries from entering into a meticulous discussion about authentication. The entry on gold in Text C discusses a few kinds of gold with the same names as those in Text B. The subcategories are also arranged according to their regional origins. Yet, in addition to geographical information, each entry or subcategory on gold in Text C highlights the ore's hardness, color, and (al)chemical reaction with testing materials:

62 Richard von Glahn, *Fountain of Fortune: Money and Monetary Policy in China, 1000–1700* (Berkeley, CA: University of California Press, 1996), 48–82; Harriet T. Zurndorfer, "Another Look at China, Money, Silver, and the Seventeenth-Century Crisis," in *Journal of the Economic and Social History of the Orient* 42.3 (1999): 396–412.

[Gold can be] Found in the desert in southern and western foreign lands, Yunnan and Koryō. The melon seed gold and wheat bran gold from the southern foreign lands are both raw gold. Foil gold from Yunnan and Uyghur is processed gold. It is soft and colorful. Those in reddish hue are of high purity, and have a pattern like pepper shells, phoenix tails and purple clouds. If alloyed with silver, the texture becomes soft and the color turns blue when tested on rock, but does not turn dark if burned. Those alloyed with *qizi* (i.e. copper, aka. *zhanggong* or *shenzi*) resound and have bits scraped off when tested on rock. Their color is reddish and the texture is hard, but turning dark if burned. The old saying has it that gold fears rocks and silver dreads fire. The [gold] color is blue when it's seventy percent pure, yellow when eighty, purple when ninety, and reddish when it is one hundred percent pure. Thus, reddish means pure gold.

出南蕃、西蕃、雲南、高麗等處沙中。南蕃瓜子金、麩皮金，皆生金也。雲南葉子金，西蕃回回錢，此熟金也。其性柔而重色，赤足色者，面有椒花、鳳尾及紫霞。如和銀者，性柔，石試色青，火燒不黑。和氣子者（即紅銅，又名張公，又名身子）石試有聲而落屑，色赤而性硬，火燒黑色。古云：金怕石頭銀怕火。其色七青、八黃、九紫、十赤，以赤色為足色金也。⁶³

Text C omits a few subcategories of gold with higher purity, possibly because of their rarity in the contemporary market and the exhaustion of old gold mines. The foil gold (*yezi jin* 葉子金) from Yunnan in Text C seems to be regarded as high purity gold, but this subcategory is considered inferior quality in Text B, which warns its readers to be careful in dealing with this goods. On the other hand, Text C is more specific about the visual traits of different kinds of silver and copper alloy. This suggests a wider production of alloy and circulation of related knowledge in early Ming. While describing methods to distinguish low purity gold from pure gold, Text C includes an entry explaining how to forge high quality golden wares:

Chemicals to feign gold: put saltpeter, green vitriol, and salt into a pot. Mix them with clean water and boil it on a fire. Stop when the color changes. Then paint it in gold. Bake the object and let it burn a little longer in the fire until it is scorched. Quickly wash it in clean water. If it's not yellow enough, paint it again. Yet [the gold] is only on the surface.

【金炸藥】用燐硝、綠礬、鹽留器內，入淨水調和，火上煎，色變

63 Cao Zhao, *Gegu yaolun*, 2.17a–b, in *Yingyin Wenyuange Siku quanshu*, 871: 105.

則止，然後刷上金。器物烘乾留火內略燒焦色，急入淨水刷洗，如不黃再上，然只在外也。⁶⁴

The compiler of Text C does not seem to believe it is possible to accurately tell authentic objects apart from fakes just by observing their apparent physical qualities, but goes on to describe the procedures and materials used to make forgeries. I translate *yao* 藥 as chemicals here, as it means an artificial substance made from chemical manipulation. The example in this particular handbook showcases the author's extended effort to gain and record expertise about production, which goes beyond mercantile knowledge. Such knowledge shows the increasing interaction among merchants, artisans, and literati observers.⁶⁵ It reaches the point where the author not only records the characteristics of artifacts in order to authenticate them, but also draws on their extensive knowledge of forgery in order to show how well he can recognize the attributes of fakes.

It comes from mountains in regions like Xin and Chu prefectures. The surface of an ingot made from pure silver has a golden pattern. Second rate has a green pattern. Third rate has a black pattern. So these are called patterned silver. The luster looks like drops on a beehive.⁶⁶ The color does not change in fire. An even inferior silver has a pine pattern. Fake silver with a gold pattern is made by applying *mituoseng* (litharge) to it. If there are black spots on the surface and it is not lustrous, there must be black lead inside. After burning, ninety percent pure (silver) turns dead white with grey edges.

出信、處等州山中，足色者成錠面，有金花，次者綠花，又次者黑花，故謂之花銀，蜂窠內有倒滴而光澤火燒色不改，又次者松紋。假金花以密陀僧為之。若面有黑斑而不光澤者，必有黑鉛在內。九成者火燒後死白，邊帶灰色。⁶⁷

Just like many other sections in “Zhenqi lun,” Text C starts by stating which region the silver comes from. Then it explains the traits of different levels of purity in silver ingots. Specific forms of silverware are not mentioned at all, nor does the author classify levels of purity according to numerical percentages. He

⁶⁴ Ibid.

⁶⁵ For a more sophisticated analysis of the literati's role in textualizing or forging the information for assessment, see Bruce Rusk, “Artifacts of Authentication: People Making Texts Making Things in Late Imperial China.”

⁶⁶ This might be a method to ascertain the purity of silver, but I am not sure.

⁶⁷ Cao Zhao, *Gegu yaolun*, 2.18a, in *Yingyin Wenyuange Siku quanshu*, 871: 105.

highlights patterns on the surface and various colors that correspond to different levels of purity. Gold, green, black, and grey are easily observable traits for assessment. Though the numerical categorizations in Texts A and B look accurate, it is doubtful whether merchants were capable of analyzing silver's purity with this degree of precision without any instrument or melting process. In fact, the seemingly obscurer Text C provides a practical intervening method for assessment, stating that silver needs to be burned before further observation. Such a primitive experiment is not unlike the evaluation methods given for gold in Text C. At least the author here suggests an action that will reveal the transformation of a substance. He focuses on a particular substance, *mituo seng* 密陀僧, probably lead oxide, which was often used to water down silver.

In summary, the entries on gold and silver in the three texts reflect the differing aims of their authors in transcribing mercantile knowledge in the Southern Song, Yuan, and early Ming periods, though their shared references show some continuity in the transmission of knowledge. Text A acknowledges ancient texts as the backdrop of knowledge and tends to foreground advice regarding selling particular goods. Text B is all about contemporaneity, systematically providing information about provenance and purity. Extensive lists of various forms of gold and silver wares emphasize the preference for contemporary design during the Yuan dynasty. Text C reveals a deeper anxiety about the circulation of fake goods, and suggests authentication methods based on hands-on experiments, which involve the physical or chemical transformation of the artifacts. Moreover, the positioning of the entries on gold and silver in the corpus of Texts A, B, and C signifies their respective (un)importance as tradable goods in the value system of the three historical periods. The textual modifications not only suggest changing fashions in precious goods consumption, but also in the market supply.

4. Pearls

The changing availability of goods over a long duration destabilized references to mercantile categories.⁶⁸ The transformation of the entries on pearls in these three texts shows how their authors struggled to understand the very goods they were assessing in their particular market. All three texts divide pearls into those from the north or the south, but their regional origins are of varying significance, in line with the authors' own agendas.

68 For a brief overview of pearls recorded in pre-modern Chinese texts, see Vincci Chui, "The Significance of Pearls in Premodern China" (M.A. Thesis, University of Toronto, 2011). See also *T'ien-Kung K'ai-Wu*, 295–300.

Text A & B

Text A is primarily interested in matching particular goods with specific clientele. Thus, the entry “northern pearl” (*bei zhu* 南珠) briefly explains the size, color, shape, drilling and corresponding value, which make them most suitable for a certain type of consumer, without providing further details on its origins.⁶⁹ “Southern pearl” (*nan zhu* 北珠) is only described in one sentence fragment. It is very difficult to understand the terms such as *pajian qing* 披肩青 (“cap blue”) or *zhuanshen qing* 轉身青 (“wrap-around blue”) used in Text A without knowing the wider context. Text A only provides details that are necessary to discuss a market niche. The entry on pearls in Text A is part of the section dealing with six kinds of beads, as well as crystal and agate.

Text B provides an exceptional amount of additional information on northern and southern pearls when compared to Text A. The compiler copies the verses from Text A but expands the prose part by dividing it into four entries in order to address evaluation issues from four perspectives. First, the “northern pearl” entry in Text B does not mention anything about “southern pearls.” It urges the reader to adjust their eyes in order to gain the most accurate perception:

When assessing the color of northern beads, you should finish your initial scrutiny, then close your eyes, and glance at it again quickly. If the color looks the same, it is considered well examined.

凡看北珠顏色，是看訖，閉目再閃看。顏色一同，方為驗也。⁷⁰

After this corporeal instruction, Text B tries to describe the subtle mixture of blue and white colors in the pearls:

69 Northern pearls may refer to the pearls produced in the northeast region, which became extremely popular towards the end of the Northern Song dynasty. “In the Chongning Reign (1102–1106), extravagance prevailed. People at court vied for northern pearls. Northern pearls all came from the north and were traded in marketplaces. . . . Among the good northern pearls, the large ones are like marbles (*danzi*), and the small ones resemble parasol tree seeds. They all come from harbors near the Liaodong region” 當中國崇寧之間漫用奢侈，宮禁競尚北珠。北珠者，皆北中來榷場相貿易……北珠美者，大如彈子，小者若梧子，皆出遼東海汊中。Xu Mengxin 徐夢莘, *Sanchao beimeng huibian* 三朝北盟會編 3.9a, rpt. in *Yingyin Wenyuange Siku quanshu*, 350: 23.

70 *Jujia biyong shilei quanji*, 5.88b, in *Beijing tushuguan guji zhenben congkan*, 61: 213. See also Valerie Hansen, “The Kitan People, the Liao Dynasty (916–1125) and their World,” *Orientation* 42.1 (2011): 34–42. For a thorough textual introduction of exotic imported goods in Ningxia, see Yang Rui 楊蕤, “Xixia wailai shangpin xiaokao” 西夏外來商品小考, *Social Sciences in Ningxia* 寧夏社會科學 2002.6: 70–73.

The blue color on some beads is like the azure breaching from the seam of clouds after a shower in late summer or early autumn, like a blue sky shining through white clouds. This shade of blue indicates first rate quality. 其珠青者，亦如暑末秋初，乍雨還晴，雲綻處閃出青天帶，白雲中現出青天。此青係真色第一。⁷¹

Color is notoriously hard to communicate through language. This text conveys visual quality by comparing the pearls' color to a blue sky peeking out from white clouds, so that the reader might be able to envisage the correct color spectrum. Then it describes a rigorous hierarchy of colors and the positioning of color on the pearls' surface, providing four different ways to classify the blue on a pearl's surface: "light blue" 嫩青色 refers to blue clouded by a nebulous white, and "maharaja top blue" 摩孩羅兒頂青 refers to the top part of a pearl seemed to be covered in blue. "If the blue color reaches above the waist, it is called 'cap blue' 披肩青", which is ranked as the second best quality. "If the color reaches further down the waist, it is known as 'wrap-around blue' 轉身青", which is the best quality. The "ghost eye" 鬼眼睛 is not as valuable, because only "the very top has a bit of blue color." In contrast to such careful explanations on the qualitative terms, there is only one simple sentence in Text A which discusses the blue color: "It is nice if the blue color wraps around the body" 轉身有青顏色為妙。⁷²

Although the following entry in Text B includes another two sentences about shape and drilling from Text A, it frames them as a stand-alone method, namely, "Tips for Assessing the Rank, Value, and Coloration of Large Pearls" 看大珠身分顏色節病訣. The term *jue* 訣 connotes a secret knowledge which was only shared by insiders. Only five entries in Text B describe a method or formula to evaluate goods into a group of related subcategories, and four out of these five concern pearls.

Here is the part in Text A that appraise pearls based on drilled holes and color:

Raw pearls with no drilled holes or with double drilled holes are the best. Those with straight holes, ancient holes, drumstick-shaped holes, re-drilled holes as well as those with oily yellow, ceramic white or powder white bones are mass-produced goods.

生珠兒不曾鑽者並竅鑽者尤佳，直鑽、古鑽、鼓槌鑽、改鑽，骨色油黃、磁白、粉白者皆是上下路客貨。⁷³

71 *Jujia biyong shilei quanji*, 5.88b–89a, in *Beijing tushuguan guji zhenben congkan*, 61: 213–21.

72 *Baibao zongzhen ji*, 2.1b, in *Siku quanshu cunmu congshu, zibu*, 78: 790.

73 *Ibid.*

Just as several hues and distributions of the blue color was explained in the entry of Text B, Text A also articulates how yellow and white color appears on the pearls, the meaning of different ways to pierce holes in pearls, and their shape. These classifications help to explain how each feature affects the value of the products. In Text B, the term for high quality is changed from *you jia* 尤佳 to *you de* 尤得, which means “particularly desirable.” *You de* 尤得 may be a colloquialism of the Yuan period. Yet even more significant changes can be seen in the visual format of the texts.

Throughout Text B, the author consistently frames each entry’s title with two kinds of concentric circles in the shape of a tortoise shell. Two styles are used which imitate relief and intaglio seals. Longer titles, like the “Tips” or subcategories are typeset to look like intaglio, using white characters on a black background. The most striking visual tool is a chart called an “Assessment of the southern and northern pearls” 看南北珠式,⁷⁴ which illustrates the various shapes of pearls, as well as their size and the positioning of colorful spots on the surface. (fig.1) Although the woodblock print does not reproduce the polychrome charts, it makes full use of indexical drawings to provide the information. Small marks on a circle show the sorts of visual traits that can help merchants to identify the right subcategory. The names of each subcategory are printed alongside the diagram, which represents a specific type of pearl. Furthermore, in Text B, the chart provides more details of the pearl attributes than the main text. Visual traits like *tiansheng zi* 天生子 or *xiankai* 鮮開 can be found in the main text of Text A but not Text B. Over half of the chart provides a detailed description of the shape and size of pearls corresponding to their appropriate price – ranging from *qian* 錢 to *fen* 分. This is not discussed at all in Text B, but is mentioned in the first sentence of the entry on pearls in Text A. The fact that an illustration in Text B refers to subcategories of Text A reveals the intricate intertextual relations between these merchants’ handbooks. Thus, it is probable that there was a larger repertoire of such handbooks teaching commercial knowledge. The compilers of Texts A and B only selected information that mattered most to them from the corpus, and made certain modifications to fit their contemporary situations.

74 *Jujia biyong shilei quanji*, 5.88a, in *Beijing tushuguan guji zhenben congkan*, 61: 213. With minor revisions, the illustrated chart of pearls found its way into *Sancai tuhui* 三才圖會 as “Pictures of the Southern and Northern Pearls” 南北珠圖. See Wang Qi 王圻 and Wang Siyi 王思義, eds., *Sancai tuhui* (Shanghai: Shanghai guji chubanshe, 1988), 3: 1979.

Figure 1: “Assessment of the southern and northern pearls”
(in Text B “Baohuo bianyi”)

式 珠 北 南 看				
三分	二錢	兔眼精	腰靴	寶柱
四分	三錢	橫羅	斷紅	鼠頭
五分	四錢	曾皮	解眼	天生子
六分	五錢	轉身	柱頭兒	相屬兒
七分	六錢	青殼	泥心	解開
八分	七錢	披肩	骨色	連身
九分	八錢	珠兒	磨身	珠丹
十分	九錢	兒身	飛兒	古殼
者納其大綱	一兩	分	整盤	呵腕
此珠身分	一分	千顆	稻兒	披肩
	二分	為率		雪花

Having attested to the existence of a larger corpus of merchant’s handbooks, the fourth entry of Text B on pearls confirms that it has borrowed from handbooks other than Text A. Though it is called “Kinds of southern and northern pearls from the West Lake” 南北西湖珠式, the entry does not discuss any local facts from the West Lake at all. Some lines are just blatant repetition of the information already mentioned in the entry on northern pearls, and the most obvious example of this is the passage on the color blue:

The blue color on the northern pearls should be beautiful. Cap blue and wrap-around blue pearls in the size of four to five *fen* are not usually cheap. Some are called ‘ghost eyes,’ because they have a single spot of blue [on the very top of the pearl].

北珠兒看青要美。披肩青、轉身青迭四五分者，價貴不廉。或鬼眼睛，一點青也。⁷⁵

75 Jujia biyong shilei quanji, 5.88a, in Beijing tushuguan guji zhenben congkan, 61: 214.

Other attributes relating to color and drilled holes also appear to be adapted from previous entries. Why would the author repeat the same information within such a short handbook? It is very possible that he merged passages from several different handbooks. It is worth reminding that the eclectic nature of Text B comes from the fact that it is only one part of the everyday encyclopedia *Jujia biyong shilei quanji*. Sakai and Wu have noted the collage formation of the texts and the practical purpose of the whole compilation, which differentiates it from other everyday encyclopedias.⁷⁶

Only one entry on pearls in Text B discusses forgeries, showing a desire to identify faux pearls in the market of the Yuan period:

“Assessment of the kinds of pearls in boxes” 看入匣珠子式

You should dip silk in water and rub its surface. If the silk doesn't turn blue, the color is real. For those with fake color, they are often made by [forgers] first using a roll with good blue paper, and then rubbing it on the pearls. There are also blue ones with oily yellow bones, which are made by first making a roll with bamboo paper, spreading powder over it, and then rubbing the pearls with the paper. Then they turn white and shiny. Watch out.

用絹帛蘸水，突其面兒，其絹帛不青乃真色。有色偽者，多用好青紙筒作卷兒，突其珠兒。有青色，又有骨色油黃者。用竹紙筒作捲兒，韶粉在內，突其珠子，粉白精神，仔細矣。⁷⁷

This entry not only instructs the reader in how to discern artificially applied blue pigment, it also explains some methods of forgery. While explaining the technical process, this entry — like other ones in Text B — repeatedly uses the verb *tu* 突 to describe how a buyer should test the pearls by thrusting into silk and paper and rub their surface. In brief, the eclectic expansion of entries about pearls in Text B indicates the compiler's effort to provide some systematic knowledge. However, he does not place the pearls' place of origin highly in this system of knowledge.

⁷⁶ Sakai Tadao, “Mindai no nichiyōruisho to shomin kyōiku,” 134; Wu Huey-fang, “‘Riyong’ yu ‘leishu’ de jiehe: cong *Shilin guangji* dao *Wanshi buqiuren*,” 26.

⁷⁷ *Jujia biyong shilei quanji*, 5.89b–90a, in *Beijing tushuguan guji zhenben congkan*, 61: 214.

Text C

There are only two entries about pearls in Text C within some thirty categories of precious goods, quite a few of which arose from trades between the Mandarin-speaking region and the Khitan, Tangut, or Silk Road states.⁷⁸ The geographical origin of these precious goods almost functions as a brand, and the author, Cao Zhao, is eager to show off their exoticness. Thus, information about where they were made is unfailingly given at the beginning of every entry about each category of goods, in contrast to Text B's omission of any geographical information. Moreover, Text C drastically reduces the number of details given in order to shorten the entries about pearls. This fits the literati's agenda of self-identification by understating such explicit symbols of wealth. The compiler removes the colloquial terms from earlier texts and includes two very brief entries, yet we can still detect clear traces of appropriation, and therefore identify some patterns of modification:

Southern pearls: from the mother-of-pearls in the southern ocean. Those from the southern foreign lands are good quality. Those from Guangxi easily turn yellow. Round, white, and shiny ones are expensive. The price depends on their size, quantity, and weight. An old saying has it that roundness comes first and whiteness second. It is also said that an [extraordinarily] round one is worth ten [ordinary] pearls.

【南珠】出南海蚌中，南蕃者好，廣西者易黃。身分圓及色白而精光者，價高。以大小、粒數等分兩定價，古云一圓二白，又云一顆圓，十顆錢。

Northern pearls: from the northern sea. The price *also* depends on their size and weight. The round ones with a blue hue around their body or a blue cap are most expensive. Those with matte white, oily yellow or murky colored bones are cheap.

【北珠】出北海亦論大小分兩定價。看身分圓，轉身青色披肩結頂者，價高。如骨色粉白、油黃、渾色者，價低。⁷⁹

78 There is abundant evidence of the Khitan aristocracy wearing necklaces made from a mixture of beads including amber, crystal, pearl and coral. See Hsueh-man Shen 沈雪曼, ed., *Gilded Splendor: Treasures of China's Liao Empire (907–1125)* (New York: Asia Society, 2006), 72, 164, 172.

79 Cao Zhao, *Gegu yaolun*, 2.14a–b, in *Yingyin Wenyuange Siku quanshu*, 871: 87–103.

The term “also 亦” in the entry on northern pearls shows that the compiler deliberately reversed the usual order of northern and southern pearls, probably to place his own region first. He rates the pearls from southern foreign countries above those from Guangxi province inside the Ming Empire borders. Brief as they are, these two entries do outline the main criteria used for pricing pearls, including color, roundness of shape, and size. However, the unsophisticated summary and ranking suggest that the compiler somewhat looked down on pearls. In this context, the casual references (*gu yun* 古云 and *you yun* 又云) suggest a slight nonchalance towards this information about far-off goods, which he may not consider relevant to the contemporary market.

In short, the medium length entry in Text A was first expanded into a detailed, illustrated account in Text B, but then condensed into an even shorter version in Text C. The illustrated chart in Text B takes the ordering of information to the next level. Although pearls are treated as less precious in Text C, the emphasis on their geographical origin reveals a fascination with exoticism and, therefore, a proactive fabrication of the idea of “foreign goods” in the market, as well as in words.

5. Conclusion

The knowledge of precious goods being transmitted in these merchants’ handbooks was formed by their own context. Given the extensive intertextuality which I uncovered among the three relatively early texts, we cannot assume any transparent textual transcription of embodied knowledge about *luxuries*. However, we should not reject the empirical basis on which contemporary mercantile discourses on precious goods were constructed in the three distinct time periods. By and large, the discourses in these treatises construct a distinct body of knowledge shaped by a mercantile agenda that was very different from those of connoisseurship manuals or art catalogues written by emperors and aristocrats.

First, the language used in each book not only displays their differences in social register, but the colloquial terms also help to identify their temporal and regional particularities. The three texts suggest a transformation in the community of high-end dealers across time. Though Texts A and B are quite similar, we can still distinguish them unmistakably by certain linguistic markers. The language in Text C is of a higher register, namely the literati’s parlance, yet it still uses the explicitly mercantile term *zhi qian* (“valuable”). The eclectic sources of the volume *Gegu yaolun* leads to an opacity in

language that echoes the ambiguity of the professional identity of the dealer/literati in the Ming dynasty.

Second, as I have shown, all these treatises copied from other source materials of a larger pool of merchants' handbooks, and their respective structures — especially using the same categories in different orders — suggest how certain precious goods became more or less popular at different times, at least in everyday fashions. The structural organization of individual entries largely depends on the kind of information that the compilers chose to include. Text A often offers advice about finding suitable customers for the goods being described. Text B shortens many entries to achieve a systematic comprehensiveness while compiling repetitive source material and using illustrated charts. Most of the entries in Text C begin by detailing the items' places of origin, before ordering them into subcategories, depending on their color.

Third, the selection and organization of the information allow us to observe the general value system specific to each treatise. Text A clearly and explicitly focuses on targeting suitable customers. Both Texts A and C admire good antiques as well as contemporary items, but Text B is obviously more interested in contemporary products. Both Texts B and C recommend some physical and chemical ways to authenticate *baohuo*. Text C is much more concerned with forgeries circulating in the market in the Ming dynasty.

To conclude, this investigation has only sampled three of the tens of categories of precious goods within three merchants' handbooks. They exemplify what we can learn about the evolving formulation of commercial knowledge in China's middle period, by tracing the textual modification of individual categories. These texts still offer considerable potentials for studying this realm of a transcribed commercial knowledge which claim to inform readers about how to evaluate the quality of artifacts by examining their physical traits and employing various assessment techniques. Even though to some extent the books overlap each other, such merchant-dealer's knowledge is very different from the conversations about collectibles among scholar-connoisseurs, which prioritizes symbolic value and taste judgments. What I call "mercantile knowledge" may shed new light on the less explored categories of artifacts which are found in museums and private homes today.

寶貨須知：從南宋到明初三種商人書看商業知識的傳播

陳愷俊

布朗大學東亞系

本文通過比較三種記錄珍寶商品文本的異同，意欲探求由南宋至明初關於寶貨的商業知識之傳播及變化。其中，《百寶總珍集》未署撰者，暫定為南宋之作；寶貨辨疑 出自元代日用類書《居家必用事類全集》；珍奇論 見於明初曹昭所編《格古要論》。本文選取與「玉」、「金銀」和「珠」三類寶貨相關的文字進行比較，指出其相襲部分透露了商賈逐利之心，既有別於皇家典儀圖譜，亦不同於官宦士人格古雅興。繼而通過審視三種寶貨內容相異之處，闡發時代消費偏好以及編者專業知識的演變。

關鍵詞：寶貨 《百寶總珍集》 《格古要論》 商人書 消費史

