

9 • Concluding Remarks: Foundations for a Future History of Chinese Mapping

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The maps studied here were generally products of a highly educated elite. The members of this elite possessed the means to produce maps like the *Yu ji tu* (Map of the tracks of Yu), which appear to have a mathematical and mensurational foundation, make consistent use of signs, and stand independent of text. More often than not, however, members of the elite chose not to make such maps. They regarded other interests as important in the production of cartographic images: aesthetic, religious, and political.

Of course, one can also see those interests at work in Western cartography, especially before the fifteenth century. But late in that tradition, after the Renaissance, they tend to become marginal to a central drive toward the mathematizing of landscape. In traditional Chinese cartography, that drive did not suppress other impulses. Chinese mapmaking was resistant to the idea that space should be homogenized to aid quantification. Chinese mapmakers remained acutely aware of locality. Part of this difference is a question of viewpoint: the mapmakers studied here did not make their living by cartography, but were part of an elite oriented toward civil service. The elite worked in localities; as administrators, its members had to be sensitive to local peculiarities. Also contributing to this sense of particularity of place was a strong interest in textuality. The map image worked in tandem with language to communicate something about space and place. As a result, study of place meant more than carrying out a survey: it involved studying the texts associated with that place. At least one more implication of this close relation between image and text is worth remarking. As more than a few titles of the works dealt with in the previous chapters illustrate, the classical Chinese language is highly metaphorical, and so are traditional Chinese maps. The term “metaphorical” is meant to be contrasted with “literal”: what was communicated by means of maps did not have to be numerical, measurable, or even directly perceivable. A traditional Chinese map might give a mathematical interpretation of the earth or the heavens, but it might also serve as an instrument of political persuasion, give form to emotional states, or even afford access to transcendent beings. In such ways, maps functioned as a form of rhetoric.

In light of the close relation between text and image, this intersection between the verbal arts and cartography seems more than accidental.¹ The range of information conveyed through maps cut across modern disciplinary boundaries; the split between the sciences and the humanities did not apply. Thus, to achieve literacy in traditional Chinese cartography, one needs grounding in the history of science and technology, art, literature, government, economics, religion, and philosophy—in short, the polymath range of the mapmakers. We have tried to see traditional Chinese mapping practices from the inside by adopting an interdisciplinary approach to Chinese maps. We have found that in a cartographic practice so enmeshed in textuality, measurement itself became a metaphor. It involved seeing something in terms of something else: for example, a wall in terms of “paces” (*bu*) or other arbitrary units of measure. As a way of seeing, measurement was not necessarily regarded as the standard of truth.

For this reason, we have taken exception to an approach that views Chinese cartographic history as tending toward scale mapping, as following a course similar to that of Western cartography, as anticipating much of what makes modern cartography “modern.” To be sure, as I suggested in a previous chapter, many of the elements needed to formulate a “modern” style of cartography involving projection from sphere to plane were probably available to Chinese intellectuals by the Yuan dynasty (1279–1368): a spherical conception of the earth and a means of locating points on the earth’s surface through astronomical measurements. These elements, however, did not find expression in Chinese mapmaking until Jesuit attempts to Westernize Chinese cartography.

The emphasis in much current research on finding antecedents for modern conceptions and practices has obscured the strength of traditional Chinese cartography. Contributing to this narrow perspective is the tendency

1. Somewhat ironically, the connection is hinted at in the modern Chinese term for scale: *bilichi*. The graph *bi* is also the term for metaphor or simile in traditional Chinese literary criticism. Scale can thus be understood as a yardstick or rule (*chi*) for interpreting the metaphorical relation between the standards (*li*) of map and reality.



FIG. 9.1. JAPANESE COPY OF A MAP FROM A SEVENTH-CENTURY CHINESE TEXT. This is a Japanese rendition of a map from the *Wuxing dayi* (Main principles of the five phases [or elements: wood, fire, earth, metal, water], ca. 600) by Xiao Ji (d. 614). The map and the text were copied by a Japanese Buddhist priest in the fourteenth century. The map is the only known representation of the original: extant Chinese editions no longer contain it. Titled “Yue du hai ze zhi tu” (Map of

mountains, streams, seas, and marshes), it is a general map of China. It is bounded on two sides by oceans and gives the locations of sacred mountains and rivers in black ink. Other place-names are written in red ink. The nine names that are enclosed in circles are the nine regions described in the “Yue gong” (Tribute of Yu). North is at the top.

Size of the original: 33.3 × 46 cm. By permission of Taiichi Takemoto, Gamagori Aichi, Japan.

of research on cross-cultural transmission of ideas to focus on the Westernization of non-European cultures. What has been overlooked—and this is true even of researchers working in China—is the influence of Chinese practices on non-Chinese cultures. Cartographic works, as the following chapters on Korea, Japan, and Southeast Asia document, provide much evidence of this. Many Chinese maps are known through copies made by foreign hands (fig. 9.1).² Techniques and instruments used in cartography and graphic production also found their way from China to Japan, Korea, and Southeast Asia. In saying this, I am not suggesting that Chinese cartography so overwhelmed the indigenous practices that they were assimilated into it. That would repeat the mistake once made in the study of the relationship between European and Chinese cartography. The cultures in and around

China’s sphere of influence did develop their own distinctive map styles and genres, and they responded to Western cartography in different ways. In other cultures, for example, the relation between text and image does not seem to have been quite as strong. Thus European mapping seems to have been adopted more quickly in

2. For discussion of a Korean copy of a Chinese map different from the one illustrated here, see Marcel Destombes, “Wang P’an, Liang Chou et Matteo Ricci: Essai sur la cartographie chinoise de 1593 à 1603,” in *Actes du Troisième Colloque International de Sinologie: Appréciation par l’Europe de la tradition chinoise à partir du dix-septième siècle* (Paris: Belles Lettres, 1983), 47–65; and Kazutaka Unno, “Concerning a MS Map of China in the Bibliothèque Nationale, Paris, Introduced to the World by Monsieur M. Destombes,” *Memoirs of the Research Department of the Toyo Bunko (the Oriental Library)* 35 (1977): 205–17.

Japan than in China, and less quickly in Korea. Even though cultures in those places developed their own cartographic traditions, there is no denying the power and influence of Chinese mapping practice. It is hard to reconcile this evidence with judgments of “backwardness” and failures of accuracy.

The story told in the preceding chapters is still incomplete. The aim there has been to be more suggestive than definitive, since the body of traditional Chinese maps is too large to be dealt with justly even in two books of this size. There are also a number of unresolved issues and topics that require further research.

One regrettable omission from our account of Chinese cartography is the influence of Buddhism. We have presented a few artifacts associated with Buddhism, a map of a grave site, a mural of Wutai Shan, and two maps of Jambūdvīpa, but we have interpreted them in the larger context of Chinese cartography as a whole. A systematic account of Buddhist influence has not been attempted.

This omission requires a few words of explanation. For the crucial period from the first century through the ninth century, when Buddhism spread throughout China and won official patronage under some rulers, there are no cartographic artifacts. For later periods there are a few artifacts, such as the ones already illustrated, but these provide little evidence of a distinctive Buddhist cartography in China. Examples of Buddhist maps based on Chinese originals have been found in Korea and Japan, and these are discussed in the chapters on those cultures. Modern editions of the Chinese Tripiṭaka (*Da zang jing*) contain a few ritual diagrams showing the placement of objects and some architectural drawings, but again these seem to provide little evidence of a practice separate from those described previously.³ These are, however, initial impressions that should be tested in a more rigorous treatment.

A similarly regrettable omission is Daoist cartography. Daoism was organized into a number of sects that produced a corpus of sacred texts known as the Daozang (Daoist canon). The canon contains numerous examples of labyrinthine diagrams, nonary charts, star maps, floor plans, and pictorial maps. Study of these maps has just begun, and initial findings tend to reinforce some of the conclusions reached here. The maps in the Daoist canon served a variety of ritual and religious purposes: for example, as aids to communicate with the spiritual world, or as part of the accoutrements for rituals, worn as hats or even ingested. They appear to have been made by an elite—religious adepts, often members of the aristocracy. As members of the upper stratum of society, these scholars placed importance on text, and often their maps cannot be understood independent of text. Unfortunately, time has not permitted a thorough account of Daoist cartography here.⁴

The chapter on cosmographic mapping has pointed to the religious underpinnings of traditional Chinese cartography. Studies of Buddhist and Daoist cartography would deepen and broaden our understanding of those underpinnings. They would also help counterbalance the secularist bias in much recent work in the history of Chinese cartography.

Basic cartobibliographic problems still need to be resolved. One is the development of a suitable vocabulary for describing Chinese maps. This is lacking even from traditional Chinese bibliographic practice, which simply lists titles of maps along with names of authors (if known). Current terminology is also not quite adequate. For example, the “single-sheet” or “loose-sheet” map trade of commercial publishers did not develop in China as in Europe, so many means of categorizing or dating or comparing maps useful to cartobibliographers of Western maps are unavailable to those working with Chinese maps. It is often meaningless to speak of “editions” or “states,” since many maps were hand copied. Until someone has determined systematically how much fidelity was required for one map to be called a copy of another, any hypothesis about chronological sequence must be to some extent arbitrary. A clear chronological sequence would provide a firmer basis for discussing stylistic progression and the development of map genres. The practices of copyists in Japan and Korea also need to be studied in order to determine the usefulness of purported copies to the study of Chinese cartography. It is important to know what, if anything, a fourteenth-century Japanese rendition of a seventh-century Chinese map (see fig. 9.1) allows one to infer about the Chinese original. Such basic research would permit the development of connoisseurship of Chinese maps—something needed since artistry was central, not peripheral, to traditional Chinese mapmaking.

The artifactual record raises at least one more question. If maps were important to the endeavor to understand the cosmos and to preserve tradition, the question arises why so few maps before the Song dynasty (960–1279) have survived. One possible answer is that practically no book illustrations from before the Song have survived, and the attrition of books before the invention of printing was enormous. But if reproducing maps was difficult before the Song, one might reason, maps would be that much more valuable and thus worthy of preservation. This reasoning holds true to a certain extent. The military

3. For Buddhist cartography as it developed elsewhere in Asia, see esp. pp. 254–56, 371–76, 619–38, 714–40, 777–84.

4. But see Judith M. Boltz, “Cartography in the Taoist Canon,” *Asia Major*, forthcoming. Boltz has also published a book that reproduces some examples of Daoist maps: *A Survey of Taoist Literature: Tenth to Seventeenth Centuries* (Berkeley, Calif.: Institute of East Asian Studies, 1987).

and administrative usefulness of maps was recognized, and they were collected by the central government and stored in archives. Warfare and the attendant destruction of archives can then be blamed for some loss of maps, as well as other documents. Another cause of the destruction of original maps, however, may be found in the very institutions that encouraged their production. The practices of historical scholarship, the very process of preserving the past, may have also contributed to the loss of original maps. Original documentary materials do not seem to have possessed intrinsic value for their originality; what mattered most was their content. To write a history was primarily to edit and select from original documents rather than to construct a narrative. Once the information from the source material was incorporated into the official account, the original seems to have been considered dispensable. Maps were part of this documentary culture. Once the informational content of a map was incorporated into a description in a geographic treatise of an official dynastic history, for example, it was likely that the map would be discarded. Its visual appearance, as modern scholars have demonstrated, would have been reproducible from the verbal description.⁵ Historians of Chinese mapping thus confront the somewhat paradoxical situation of being both reliant on and hindered by the practices of traditional Chinese historiography: political institutions fostered both the production and destruction of the artifacts essential to the historian's work.

A similar problem persists in modern accounts of traditional maps. More interest is shown in the informational content of the map than in its physical description. If a map cannot be studied for content, it almost dis-

appears from the record. Examples of this are the third map found at Mawangdui and the fragment found at Fangmatan, which apparently have not been given much scholarly attention since the reports of their discovery. Though fragmentary, they could shed light on how maps were produced. Our knowledge of map production is based on inferences from other branches of the graphic arts, such as book printing, painting, and calligraphy. We still do not know if Chinese scholar-officials received any training specifically in mapmaking: How did one go about making fish-scale maps, for instance? What was considered important in their manufacture? Answers to such questions seem to require more attention to the craft of mapmaking, and again the allied graphic arts may provide more insight into that craft. Painting, calligraphy, and mapmaking, for example, are all related by their reliance on line. But whether and how the expressiveness of line in painting and calligraphy is transferred to mapmaking is still unknown.

As I suggested above, the range of unanswered questions about traditional Chinese maps is enormous. That fact alone is enough to suggest that the study of traditional Chinese cartography involves far more than comparing traditional Chinese maps with modern works and calculating how small the "errors" are. If our work has succeeded in any way, it is in showing that such a "modernist" approach cannot take the measure of traditional Chinese cartography.

5. For an example of modern reconstructions of Chinese maps from textual sources, see D. D. Leslie and K. H. J. Gardiner, "Chinese Knowledge of Western Asia During the Han," *T'oung Pao* 58 (1982): 254-308.