NEW MAPS FOR THE MODERNIZING STATE: WESTERN CARTOGRAPHIC KNOWLEDGE AND ITS APPLICATION IN 19TH AND 20TH CENTURY CHINA

Iwo Amelung

Research on the history of Chinese cartography has made rapid progress during recent years. In a simplified way, different approaches and main areas of interest can be classified in the following manner:

1. Invention, development and application of surveying and map-making techniques are mainly viewed and evaluated in terms of ‘modernity’ and ‘science’. This is the classical “Needham approach”, which itself is an echo of Chinese works on cartography and exerts considerable influence on research on cartography done in China.¹

2. A reaction to the Needham approach, which on the one hand rejects some of Needham’s assertions and on the other hand tries to highlight cultural factors that need to be taken into account when studying Chinese cartography. It is best represented by Cordell Yee in his contributions to The History of Cartography.²

3. Using maps as source for research into the Chinese worldview and its changes especially under Western influence, as has been done by Richard Smith.³

4. The application of new theories of map-making which highlights notions of space, political power, the relationship of men and nature in reading maps, the construction of “knowledge-spaces” and especially view the use of maps as tools of the empire and colonial dominance.⁴

All these approaches, which are not necessarily mutually exclusive, have greatly benefited from the better availability of sources, the

¹ Cf. Needham (1959: 497–590); early Chinese works on the history of cartography in China, on which Needham drew heavily, include Wang Yong (1938, 1953).
³ Cf. Smith 1996.
compilation of better bibliographies\textsuperscript{5} and especially from the publication of cartographic and geographic sources during the last ten years.\textsuperscript{6} There are, however, still large areas of Chinese cartography which remain largely unresearched. To some extent this may be due to certain restraints (or rather ‘areas of non-interest’) which the application of the approaches outlined above exerts on the choice of the material analyzed.

In this paper, I will try to shed some light on one of the areas which to my knowledge up to now has not been subjected to the close scrutiny it deserves: The transition from ‘traditional’ Chinese cartography to ‘modern’ surveying and mapping, which took place during the second half of the 19th century and the first years of the 20th century. By employing the term ‘modern’ here, I do not intend to construct a dichotomy between ‘modern’ and ‘backward’, but merely intend to denote that kind of maps which in Europe and the West was considered as an indispensable ingredient for the development of the modern nation state and as a necessity for ruling and administrative needs at home and abroad.\textsuperscript{7} The function attributed to maps and the standards of accuracy applied to them had, of course, slowly evolved in the West as well, culminating in the unattainable goals of cartographic perfection (the map is the land) and the construction of a totalizing knowledge archive. While historians of Western cartography in recent years have been successful in “deconstructing the map”\textsuperscript{8} and made clear the hubris implicit to ideas of mapping and surveying especially in the 19th century, there is little doubt that Chinese reformers and modernizers, once they had realized the real or supposed importance of exact maps for the powerful Western nation state, strove hard to obtain them for China as well. Without trying to address the question, to what extent such an approach—visible in many other areas as well—constituted “self-colonialization”,\textsuperscript{9} it seems important to point out that the developments in China certainly differed from those in colonized countries such as India where the colonial

\textsuperscript{5} Cf. especially Beijing tushuguan shanben tezang bu yutuzu (1997).
\textsuperscript{6} Cf. for example Cao Wanru et al. (1997), Ancient Map Research Team of the Chinese Academy of Surveying and Mapping (1998), and Zhongguo diyi lishi dang’anguan (2001).
\textsuperscript{7} Cf. for example Turnbull (1996: 16). Turnbull also draws attention to the fact that “modern cartography” substituted the so-called “literary mode” of geographical information since the late Middle Ages. Given the close relation of illustration and explanation in Chinese tradition, it might be useful to look more closely into the question to what extent and when a similar transition took place in China.
\textsuperscript{8} Cf. Harley 1989.