

6. 発表要旨

2011年10月8日に、スタンフォード大学でおこなわれた、*Japanese Imperial Maps as Sources for East Asian History: A Symposium on the History and Future of the Gaihōzusu* と題するシンポジウムで、外邦図研究グループのメンバーは下記のようなタイトルの発表をおこなった（発表順）。これらの発表要旨のうち、小林のものを除く発表の要旨を掲載する。

Kobayashi, Shigeru: Japanese military and colonial maps of Asia-Pacific reas: An overview.

Yamamoto, Kenta: The *Gaihōzu* digital archive and their improvement.

Yamachika, Kumiko: Japanese imperial maps of the Meiji Era: Analysis of the explanatory notes and legends.

Ishihara, Hiroshi: The *Gaihōzu* and my research works on traditional markets in India and China. (この要旨のみシンポでの配付資料によるので、一部にミスプリントを含むことをお許しいただきたい)

なお、小林の発表を改訂した原稿は、そのご2012年3月にカリフォルニア大学バークレー校から発信されている e-journal 誌にフルペーパーが掲載された。同5月には、このプリント版も発刊されることになっている。電子版については下記の URL で参照できるのでご覧いただきたい。

URL: <http://cross-currents.berkeley.edu/issue-2>

(Kobayashi, S., Japanese mapping of Asia-Pacific areas, 1873-1945: An overview. *Cross-Currents: East Asian History and Culture Review*, 1(2).)

YAMAMOTO Kenta

The Gaihōzu Digital archives and their improvement

This presentation intends to give an account of the building process of the *Gaihōzu* Digital Archives¹ and consider the tasks for their improvement. It consists of the following contents: (1) the digitalization process of the maps, (2) the opening of the Digital Archives to the public, and (3) the tasks to be still to be undertaken. Finally, the future of the Digital Archives will be discussed.

The maps, called *Gaihōzu*, are now recognized as modern historical sources to be preserved carefully. However, most of them, printed on acidic paper, are not always well maintained. Some maps suffer marked deterioration from aging and should be preserved in a state of perfection. We have compared the following three ways to slow down the deterioration: (1) treatments, such as lamination, for preventing deterioration, (2) improving the air conditioning of the map storeroom, and (3) digital recording through scanning. We chose the last method because it will reduce the deterioration due to direct handling of the maps and encourage active use of the Archives through employing the digital images.

The digitalization of the maps was carried out along with the making of a map index. Researchers and students from the Department of Geography, Tohoku University, the Department of Geography, Kyoto University, The Kyoto University Museum, and the Department of Geography, Ochanomizu University participated in this project from 2004 to 2009. Finally, 14,310 maps were scanned, and the following four types of images of each map were stored.

- (1) non-compressed TIFF images (360 dpi) for storage
- (2) JPEG images (360 dpi) for publication.
- (3) JPEG images (long side 2,000 pixels) for browsing on the digital archive web page.
- (4) JPEG images (long side 480 pixels) as thumbnails for the web page.

The total amount of scanned data is more than 8TB and these images are stored in HDD (RAID 5). Altogether, four HDDs installed with the same data were separately deposited in the Department of Geography of Tohoku University, The Tohoku University Library, The Kyoto University Museum, and the Department of Geography of Ochanomizu University in order to safeguard against data loss through accidents, such as natural disasters.

The *Gaihōzu* Digital Archives were established in 2005 by the Tohoku

¹ <http://chiri.es.tohoku.ac.jp/~gaihozu/> for English,
<http://dbs.library.tohoku.ac.jp/gaihozu/> for Japanese

University Library and the Department of Geography, Tohoku University, and published digital map images through the Internet with a search system, which provides metadata including bibliographical information of the maps concerned.

Users can search the maps database with four different methods. The first, “World Map Search”, leads them from a world map to the areas concerned. The second, “Index Map Search”, provides index maps of the areas to be searched. With the third, “Lists of Index Data by Regions”, users start from the catalogue of the maps. Users can also start the operation from “Keyword Search”.

However, only 6,719 of all the digitalized maps can be viewed on the Digital Archives at the present time. Digitalized maps of some regions, such as China or the Korean Peninsula, are not published yet because it is anticipated that the publication of maps of these areas may lead to an international reaction. Concerning this issue, it may be enough to point out that in China and North Korea the use of maps of large scales, such as topographical maps, is strictly limited for civilians. In order to publish the images of many topographical maps for an unspecified large number of people without creating conflict, it is necessary to deepen the international community’s understanding of the purpose and role of the Digital Archives, even if the maps were made more than 65 years ago.

Another problem that the Archives confront is their maintenance. The Digital Archives have been controlled mainly by the Department of Geography, Tohoku University. However, the affiliation of the members concerned has changed rapidly along with the shifting of personnel, such as through job transfers. In order to maintain the Archives for long time, the departments of universities are not suitable. Transfers to some organizations, such as the National Archives, should be discussed.

The *Gaihōzu* Archives provide modern historical sources of the Asia-Pacific areas, not only for Japanese researchers and students, but also for foreign researchers and students. However, to this point, the Archives’ searching device was developed only for speakers of Japanese. It is certain that a multilingual searching system will promote the foreign use of the Archives. The association of the Archives with the databases of other fields is also necessary to promote the active use of the digital images.

YAMACHIKA Kumiko

Japanese Imperial Maps of the Meiji Era : Analysis of the explanatory notes and legends

1. Japanese Imperial Maps of the Meiji era in the Library of Congress collection
2. The Japanese Imperial Maps of China in the Meiji Era
3. The Japanese Imperial Maps of the Korean Peninsula in the Meiji Era
4. The explanatory notes and legends
5. Conclusion

In the process of researching Japanese Imperial maps, it was found that many maps prepared by Japanese Imperial Army were housed in the Library of Congress in Washington, D.C. USA¹. We investigated them and found a lot of maps of foreign countries which had been drawn by the Japanese army officers in the Meiji Era². Our research revealed the fact that Japanese military officers, though their methods were rudimentary, got information in China and the Korean Peninsula and prepared maps before the establishment of the Imperial Land Survey for the Sino-Japanese War³.

These maps are important materials for providing geographic information about the past. In this presentation, I will give an overview of Japanese Imperial Maps of the Meiji Era, focusing on an analysis of the explanatory notes and legends. Since the notes offer text, they are valuable as materials which tell us the backgrounds of the map makers.

The explanatory notes of the maps of China show when and where surveyors investigated for making the map. And the information is offered what kind of scale was adopted, and how makers surveyed the land. In the legends, villages, castles and roads are particularly important because they were drawn in most maps. They were classified according to the feature still more detail. There is a possibility that Common way of drawing of legends had been established around 1884. Same can be said about the maps of China and the Korean Peninsula.

¹ Imazato, S. and Hisatake, T. 2009. Japanese overseas maps in the Library of Congress and the Library of American Geographical Society, In *Japanese Modern Cartography concerning Asia-Pacific Areas: Approaches to Gaihōzu*, ed. S. Kobayashi, 55-69, Osaka University Press. (in Japanese)

² Watanabe, R., Yamachika, K. and Kobayashi, S. 2009. Map making of Korean Peninsula by Japanese army officers during 1880s: The study of the maps in the Library of Congress, Washington, D.C. *Map (Japan Cartographers Association)*, 47(4):1-16. (in Japanese)

Yamachika, K., Watanabe, R., and Kobayashi, S. 2010. The route maps of the Korean Peninsula drawn by Japanese army officers during 1880s. *Proceedings of the 14th International Conference of Historical Geographers, Kyoto 2009*, 307-308, Kyoto University Press.

³ Kobayashi, S., Watanabe, R., and Yamachika, K. 2010. The travel and surveying for the preparation of maps in East Asia by Japanese army officers during the 1880s. *The Shirin (The society of Historical Research)*, 93:473-505. (in Japanese)

ISHIHARA Hiroshi

Gaihōzu and my research works on traditional markets in India and China works

During 1980s I conducted research works on historical and economic geography of traditional markets in Indian Subcontinent. At that time three types of topographical maps were available as base maps for the research work. First ones are 1:50,000 contemporary topographical maps published by Indian Government. They are sold in India but forbidden to take out abroad. Moreover many maps are not sold because of military reasons. Second ones are 1:50,000 gaihōzu maps. Their photocopies are available inexpensively at some universities and libraries in Japan. But 1:50,000 gaihōzu maps were produced only for East part of the sub-continent. Third ones are so called One Inch Maps (1:63,600 maps) produced by British Colonial Government. They are available through photocopy service at British Library; excellent but expensive service. I prepared photocopies of gaihōzu maps in Japan and contemporary maps in India, and ordered the ones unavailable in both countries from British Library.

One Inch Maps were produced in 1910s, 1920s or 1930s, the gaihōzu maps were reproduced from them in 1942, and the contemporary maps were reproduced from One Inch Maps with some revision in 1950s, 1960s or 1970s. All of these maps contain the information of market site and market day. They were very useful for historical analysis of the markets. Moreover all of the maps were useful even for contemporary field works, for the change of landscape has been relatively small in the subcontinent in these years.

Since 1970s, on the other hand, I have been engaged in research works on historical and economic geography of traditional markets in China. When I wanted to analyze historical development of traditional markets in North China, three kinds of 1:100,000 maps were available. First ones are "Tentative North China 1:100,000" gaihōzu maps. They were surveyed from 1904 till 1920s by simple method as secret surveying. So direction, settlement pattern, place name etc. on these maps are sometimes not correct, although their style looks to be sophisticated. Second ones are 1:100,000 maps surveyed by Min-kuo Government Army. They were surveyed by ordinary method. So distance, direction, etc. are correct and many place names are contained, although their style looks to be unsophisticated. Third ones are "North China 1:100,000" gaihōzu maps. They were produced in 1930s being revised mainly by Min-kuo Government Army maps which were caught through military actions and partially by aerial photographs which Japanese military forces began to take since 1928. These maps are therefore usually correct of direction, distance, settlement pattern and place name.

I adopted second type and third type ones as base maps for analysis of markets using local gazetteers from Ming, Ching and Min-kuo eras. They were useful for such historical analysis, but not useful for fieldworks on contemporary markets, for every thing (landscape, place name, administration boundary etc.) have changed very much there because of the revolution and recent economic growth. Contemporary 1:50,000 topographical maps however are not accessible for us foreigners.

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