THE REDHAIRED IN JAPAN:
DUTCH INFLUENCE ON JAPANESE CARTOGRAPHY (1640–1853)

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B.A., The State University of Leyden, 1980

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF ARTS

in
THE FACULTY OF GRADUATE STUDIES
(Department of History)

We accept this thesis as conforming
to the required standard

THE UNIVERSITY OF BRITISH COLUMBIA
October 1983
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Abstract

In examining the spread of Dutch cartographical knowledge to Japan, this thesis intends to throw some light on a neglected chapter of the history of the West-European expansion of the sixteenth to nineteenth centuries. The thesis is based on the George H. Beans collection of Japanese maps of the Tokugawa era (1603-1868) preserved in the University of British Columbia Library, Vancouver. Its appendix contains a full description of all fifty-nine Japanese world maps, on which the conclusions of the thesis are based.

The hypothesis of distinctive and traceable Dutch influence on Japanese cartography in the period 1640-1853 has three major cornerstones: the exclusive position the Dutch held in Japan for more than two centuries after 1639, when the Japanese government closed the country to all Europeans but the Dutch; the dominant position in world cartography, both scientifically and commercially, the Dutch held during the seventeenth and part of the eighteenth century; the long cartographical tradition in Japan and the general interest in maps among the Japanese.

However, the development of Japanese cartography after 1639 shows hardly any traces of Dutch influence. Instead, most Japanese world maps -- the only kind which could have borne evidence of Dutch influence -- were derivatives of the so-called Ricci-map, a Chinese version of a current sixteenth century European world map made by Matteo Ricci, Jesuit missionary in China around 1600.

The explanation of this unexpected conclusion is threefold and has to be found in the limited accessibility of the Dutch maps to the Japanese: none of the goods the Dutch shipped to Japan became generally available to the Japanese, the cartographical works included; all things Western, including the maps, continued to be associated with all things Christian which were
suspicious; and the lack of knowledge of the Dutch language prevented the dissemination of Western cartographical information.
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Acknowledgements

As a Dutch graduate student of the State University of Leyden, The Netherlands, I would never have had the opportunity of studying Japanese maps in Canada, if Prof. Dr. J.R. Bruijn of the Leyden University had not enthusiastically smoothed the way to Vancouver for me. I owe him a great debt of gratitude for his unflagging support, backing and guidance. I am obliged to Prof. Dr. I. Schöffer (Leyden) and Prof. Dr. G. Schilder (Utrecht) for rendering kindly and spontaneously their assistance.

On the other side of the ocean Prof. Dr. R.W. Unger of the University of British Columbia, Vancouver, was a great quartermaster and later became an excellent supervisor. I am most grateful for his penetrating remarks, meaningful suggestions and criticism on my research, his guidance in my study as well as for his friendly hospitality.

In the actual research for my thesis I received great support from Frances Woodward, whose acquaintance with the cartographical collections of the University of British Columbia Library in general and the Japanese maps in particular was an indispensable help. The description of the maps in the appendix of the thesis gained much in clarity thanks to her suggestions. She even compiled the index of my thesis. I am much obliged for her enthusiastic support.

I would like to thank HAGIWARA-Takao for his assistance in translating the captions of several Japanese maps. The progress of my research benefited greatly from the always fast and friendly help of the staff of the Special Collections Division of the University of British Columbia Library. The staff of Interlibrary Loan traced many outlandish books and articles for me. I am grateful to Ton Vermeulen (Zoetermeer, Netherlands) and Dr. G. Schilder for making several 'Dutch' publications available to me. Last but not least I would like to express my deep
gratitude to the Canadian Federal Government for granting me a Government of Canada Award and thus making my study abroad financially possible.

EJ
Introduction

In the numerous studies dealing with the Western cultural and intellectual impact upon non-European societies in the wake of the West-European expansion of the sixteenth to nineteenth centuries, the spread of Western cartographical knowledge is a neglected chapter. Usually the dissemination of cartographical information is taken for granted. It is seldom actually examined, let alone proven. The reason for this general neglect is presumably that the history of cartography has only recently developed into a special discipline.

In examining one piece of the large jigsaw puzzle, the spread of Dutch cartographical knowledge to Japan, this thesis intends to throw one small ray of light on the neglected cartographical chapter as well as on the history of Japanese cartography in general, since little material on Japanese map making is available in any Western language. To be sure, the eminent historian C.R. Boxer discussed the Dutch influence on Japanese cartography in his celebrated essay *Jan Compagnie in Japan*, published in 1936. He had to draw the conclusion that the Dutch impact on Japanese map making was far less than might be expected. However, in the past forty-seven years much new information about both Dutch and Japanese cartography has become available. Many questions Boxer had to leave open can now be answered. Hence, a reconsideration of Boxer's arguments and conclusion is warranted.

The thesis is based on the rich George H. Beans collection of Japanese maps of the Tokugawa era (1603-1868) in the library of the University of British Columbia, Vancouver. The research has been restricted to Japanese maps depicting areas outside Japan and those were almost exclusively the world maps. There is no reason for expecting to find foreign influence on local and regional maps of Japan, since the knowledge of the contours of
Japan in the West was less extensive and detailed. In addition to the Japanese world maps, the thesis is based mainly on Western publications, the author being guiltless of adequate knowledge of Japanese. Japanese studies have been used only in so far as they included an English summary or were well-illustrated, an indispensable aid in research on maps. These restrictions should not have affected the results of the research, since the thesis focuses explicitly on Japanese world cartography from a Dutch point of view, a field of the history of cartography unfamiliar to Japanese scholars.

In the text those Japanese words, such as Kyoto, shogun, daimyo and bakufu, that either have become or are becoming part of the English vocabulary, are not underlined or given macrons. Furthermore, in Japanese names the family name precedes the given name. Also, in Japanese works the given name of artists and map makers, not their family name, is generally used. In this thesis these Japanese practices are observed, since Western scholars do not seem to have been systematic and use the family and give names indifferently.
The common Japanese name for the Dutch was Kōmo, 'redhairs', as to suggest the redhaired demons of Buddhist paintings rather than to describe the actual colour of the Dutchmen's hair.

(from: no. 1645.2a accompanying sheet to the Shoho map, depicting forty couples of different nationalities, Beans collection, University of British Columbia Library)
Dutch maps floated ashore in Japan ... : reasons for expecting to find Dutch influence on Japanese cartography

In 1798, the Japanese scholar HONDA-Toshiaki (1744-1821) put his idea about the spread of Dutch cartographical knowledge to Japan on paper:

'I have been told that in the Edo Observatory is kept a map of the world about seven feet wide and ten feet long [Joan Blaeu, Nova totius terrarum orbis tabula, Amsterdam 1648]; it is a copperplate engraving coloured in gold, silver, red and green. The precision and splendour of this map are said to surpass all description. It is extremely difficult to make an engraving of so great a size. Sometime during the 1650s several hundred copies of this map were made. Each of them was rolled up and placed in a box sealed with cloth and pitch, and the boxes were then thrown into the Atlantic and Pacific oceans as presents for the world. I have heard this story and imagine that the maps were thus distributed because it was desired to teach the world that the various nations were located as shown on the map ... One of these maps floated ashore in Satsuma and has been kept there by the daimyo as his secret possession. The map in the Observatory was obtained as a present from Holland when Yoshimune was shogun [1716-1745]1 (1).

It is a nice and even waterproof explanation of how Dutch cartographical information reached Japan and how it could have influenced Japanese cartography. However, the Dutch never threw their maps into the oceans. Even so, there is reason to believe that the Dutch taught Japan that the various nations were located as shown on their maps.

One of the major reasons why the Dutch should have influenced the development of Japanese cartography is the exclusive position they held in Japan after 1639, when the bakufu (Japanese Tokugawa government) closed the country to all Europeans but the Dutch. Foreign relations became restricted to China, Korea, the Ryukyu Islands and the Dutch East India Compagny (VOC). The Dutch merchants, however, were denied normal social relations with the Japanese. They were confined to the tiny manmade island of Deshima in Nagasaki harbour and passage to and from the island without official permission was strictly prohibited. Trade negotiations with
the bakufu authorities were conducted through official interpreters, since the Dutch were not allowed to learn Japanese. Throughout the year only about ten VOC officials, among whom theopperhoofd (chief), secretary, physician, warehouse-keeper, a few clerks and craftsmen, resided in Deshima. During the trading season, from July to early November, about twenty Dutchmen stayed on the island.

The only occasion the Dutch were officially permitted to meet and speak with Japanese, other than their interpreters and prostitutes, was during their court visit to Edo (present day Tokyo). Every year, and after 1790 every five years, theopperhoofd, surgeon, secretary and some Japanese officials and interpreters went up from Nagasaki to Edo to express Dutch gratitude for the shogun's favour of permitting them to trade with Japan. After being received in audience by the shogun, the Dutch party would stay in Edo for two or three weeks. On that occasion bakufu physicians, astronomers and others would interview the Dutch and their interpreters and ply them with questions (2).

The Dutch owed this indeed very restricted but exclusive position to their purely commercial behaviour during the decades before 1640. After Portuguese castaways had discovered Japan by chance in 1543, a flourishing trade developed. Portuguese, Spanish, English and Dutch merchants competed with the Chinese and Japanese themselves for a share in the new and lucrative trade. However, unlike the Protestant English and Dutch, the Catholic Portuguese and Spaniards sent not only trade goods but also missionaries to Japan. And it was the ever-growing menace of Christianity that dictated the Japanese seclusion policy.

After a long period of civil wars the disorder in Japan finally had ended at the start of the seventeenth century, when TOKUGAWA-Ieyasu (1542-1616) imposed his will on the country by force of arms. In 1603 he
assumed the title of shogun. Then a rightly ordered society was established led by a cultured governing class, the samurai. The great bulk of the rest of society fitted into three other classes, their status descending from farmer to artisan to merchant. The shogun controlled the great lords, the daimyo, through an ingenious hostage system, but he still did not feel strong enough to face the risk of a conspiracy of the great families with foreigners. Also, the bakufu feared that native converts to the Catholic religion might have conflicting loyalties, which might be the roots of a domestic uprising, fomented and aided by the Europeans. Therefore it took steps to eliminate any unregulated foreign influence.

Between 1614 and 1639 several edicts were promulgated, expelling all missionaries from Japan, closing all Christian churches, but also banning the return to Japan of Japanese nationals abroad, prohibiting the construction of sea-going junks of large tonnage and forbidding Japanese ships to leave for foreign countries under any pretext. In 1624 the Spaniards were denied access to the country. The English had left voluntarily the year before because of their disappointing profits. Finally, the Portuguese were expelled in 1639, after a rebellion on the Shimabara peninsula in Kyūshū had confirmed -- in the eyes of the bakufu -- all its suspicions.

The religious character of the revolt was generally assumed and its leaders proclaimed themselves Christian rebels, but the spark which set off the rebellion was the merciless tax-collection and oppressive rule of the local lords. An army of peasants held out for several weeks against the powerful government forces. The bakufu demanded help from both the Dutch and Chinese. The Dutch lent the East-Indiaman *De Rijp* which bombarded the castle where the rebels had entrenched. Though the Dutch collaboration was probably unavoidable under the circumstances, it simultaneously persuaded the Japanese that the VOC had come exclusively for trade. It also proved that the Dutch variety of the Christian religion was innocuous.
When in 1639 Japan definitely restricted its foreign relations, the Dutch were allowed to stay (3).

For more than two centuries, from 1640 to 1853, the Dutch settlement in Nagasaki harbour was the only window on the West for the Japanese. Through this small window the Dutch handed the Japanese not only lucrative trade goods but also modern Western knowledge. For the cartographical information, however, the Dutch were most likely not only the conduit, but also the creators of the knowledge they transmitted to the Japanese. For, until the end of the seventeenth century, Amsterdam was by far the most important centre of cartography in Europe, both scientifically and commercially.

The Amsterdam publishers dominated the world-trade in atlases, maps and charts. Their finest specimens of work, the large and beautiful wall-maps, indeed surpassed all description. Furthermore, in 1662 the Dutch map maker, printer and publisher Joan Blaeu (c. 1598-1673) succeeded in producing the most voluminous world atlas of all time. Blaeu's *Atlas maior*, published in Latin, French, German and Dutch and containing over six hundred maps, in nine to twelve volumes, illustrated the high standards of contemporary Dutch cartography and geographical knowledge. Dutch maritime atlases, too, were used throughout the world, as the numerous foreign language editions indicated.

Indeed, Samuel Pepys (1633-1703), the famous secretary of the Royal Navy, rightly complained, that the charts, even those of the coasts and harbours of Britain, made by the English were but transcripts of the Dutch charts, copied line for line and word for word. Also, John Seller's (c. 1627-1697) *English pilot* (London, 1671), the first major sea atlas compiled by an English cartographer, was printed from worn copperplates of an old Dutch atlas. Seller simply bought the plates and refurbished them. Though copying
of existing maps and sales of copperplates were common practice and one of
the characteristic features of commercial cartography, Pepys' complaints and
Seller's method illustrate that seventeenth century cartographical knowledge
originated in the Dutch republic (4).

To be sure, the glory of Amsterdam cartography began to wane at the
end of the seventeenth century. Practically no new initiatives were
undertaken. Instead, the Dutch publishers took over maps of the French
cartographers Guillaume (d. 1703) and Adrian (d. 1708) Sanson and Pierre
Moullart-Sanson (fl. 1695-1728) and Claude de l'Isle (1644-1720) and his sons
Guillaume (1675-1726) and Joseph Nicolas (1688-1768), who developed and
applied new scientific methods. However, the eighteenth century was by no
means a century of decline, even though Amsterdam lost its monopoly. For
a long time the Dutch remained supreme in the field of nautical cartography.
The production of charts was concentrated in the hands of the Van Keulens
(fl. 1680-1885), who headed the Hydrographic Office of the VOC as well.
In the mid-eighteenth century the Van Keulen firm completed for the first
time a world coverage with hydrographic charts in various series, differing in
concepts and scales. As a result, around 1750 the VOC possessed the
world's most advanced and best equipped chart collection of the time, even
though much of the material was older, hence less accurate, than the French
and English charts (5).

These seventeenth and eighteenth century Dutch cartographical works
were integrated into a long tradition in Japan. Along with the Europeans
and Chinese, the Japanese were among the most prolific producers of maps
in the world. The first documentary evidence of map making in Japan dates
from the mid-seventh century. An imperial edict of 646 ordered a survey of
the provincial boundaries. Records were to be made, maps drafted and
submitted to the central government. From that date, similar decrees were
occasionally promulgated. The oldest extant Japanese maps are the cadastral maps of the big temple estates from the mid-eighth century. The first map of all Japan dates from the beginning of the ninth century. It depicted the provinces as egg-shaped discs, like cocoons lined up in rows along the main highways and was designed only to show conceptually the relative locations of the provinces with respect to the capital. However, the map became very popular and variations of it were made in abundance until well into the seventeenth century.

In addition to the long tradition of map making, the Japanese had a deep and strong fondness for maps. Indeed, map making was also the art of decorating a large variety of articles and furnishings. Maps were depicted on flat and folding fans, swordguards, portable lacquer medicine boxes, on clasps, combs, cuff-links, wooden cups and on all kinds of ceramic ware for daily use. The popular game of sugoroku, a kind of backgammon, was played on a board depicting a map of the Tōkaidō highway. Also, maps for illiterates were made, in which the place-names were not given in characters but in pictures. They formed a kind of rhebus, in which the sound of the object shown made up a syllable of the place-name, providing a challenging guessing game as well. Furthermore, wealthy Japanese had their draught- and bedscreens beautifully decorated with all kinds of maps (6).

In short, because of the exclusive position of the Dutch in Japan for more than two centuries; because of the dominant position of the Dutch in world cartography, both scientifically and commercially, during the seventeenth and part of the eighteenth century; and because of a long cartographical tradition in Japan and a general interest in maps among the Japanese, there should have been a distinct and traceable Dutch influence on Japanese cartography during the period 1640-1853.
Notes:

(2) Though all studies dealing with the seclusion period of Japanese history discuss the exclusive position of the Dutch in Japan, this summary is mainly based on:
- J. Feenstra Kuiper, Japan en de buitenwereld in de achttiende eeuw (Japan and the outer world in the eighteenth century), The Hague 1921;
- G.K. Goodman, The Dutch impact on Japan, 1640-1853 (Leyden 1967) 19-34;
- O. Nachod, Die Beziehungen der Niederländischen Ostindischen Kompagnie zu Japan im siebzehnten Jahrhundert, Leipzig 1897;

- Totman, Japan before Perry, 133 ff.

(4) For the dependence of English cartography on the Dutch during the seventeenth century see the excellent essays in:

(5) The comprehensive study dealing with (the Golden Age of) Dutch cartography is yet to be written. The researcher has to gather his information from numerous articles, case studies and exhibition catalogues, the introductions to facsimile editions of atlases and maps and a few annotated bibliographies. A short but informative overview is to be found in:

- M. Nanba, N. Muroga and K. Unno, Old maps in Japan, Osaka 1973;
The main current of Japanese world cartography: the 'Ricci-maps'

The completion of the seclusion policy in 1639 had its effect upon Japanese map making. During the century before the closing of the country, when Europeans and Japanese had free intercourse, Japanese cartography displayed remarkable advances, both qualitatively and quantitatively. The maps the Europeans brought to Japan made the Japanese aware of the existence of lands beyond India and China, which until then were thought to constitute the whole rest of the world. Consequently, for the first time true world maps were constructed in Japan, though mainly to decorate draught- and bedscreens of high officials and rich merchants. In these maps cartographical accuracy was often sacrificed to suit the artist's creative sense. Nevertheless, depicting world maps of the Flemish and Dutch cartographers Abraham Ortelius (1527-1598), Willem Jansz Blaeu (1571-1638) and Pieter van den Keere (1571-c. 1646), these lavishly painted screens reflected the early Dutch contacts with Japan. Simultaneously, Japanese seafarers copied, and for the coasts of Japan corrected, Portuguese portolan charts. Furthermore, improvements in printing techniques increased map production (1).

The seclusion policy put an abrupt end to this period of advances and effected a general reorientation in Japanese map making. Regional, provincial, town and road maps came to dominate Japanese cartography as increasing inland traffic, both commercial transport and private travel, produced a growing need for new and more detailed maps for common use. Most maps were derived from official maps, which the bakufu occasionally produced. However, in spite of the general and practical interest in topographical maps of Japan, world maps continued to be produced throughout the seclusion period as well. Until the end of the eighteenth
fig. 2 Matteo Ricci's Chinese world map K'un-yü Wan-kuo Ch'üan-t'u (Map of the ten thousand countries of the earth) 3rd ed.; Peking 1602 (size: 1710 x 3610 mm, comprising six panels).

(from: Elia, Il mappamonde Cinese del P. Matteo Ricci S.I., tavola 1)
century the majority of these world maps was based on the so-called 'Ricci-map'.

Matteo Ricci (1552-1610) was an Italian Jesuit missionary in China from 1583 until his death. In 1584, a Chinese official asked him to make a Chinese version of a current European world map. The translation was a great success and several other, improved editions followed. In his map, Ricci shifted the surface of the globe along the equatorial line, until —in accordance with the traditional Chinese conception— China had become the centre of the world. As a consequence, Europe and Africa were depicted in the far western part of the map. North and South America lay in the East. As was common in sixteenth century European maps a huge Southern Continent, of which both New Guinea and Tierra del Fuego were parts, took up the whole bottom of the map.

Ricci adopted the oval projection, which, though in essence not a true projection, was much used by sixteenth century map makers in Europe. The consequence was that the degree net was constructed more or less arbitrarily. The parallels were drawn as straight lines, usually dividing the central meridian, sited east of New Guinea, into equal parts. The curving meridians, at least those in the hemisphere occupying the central portion of the map, passed through the poles.

In his map, Ricci also included extensive legends describing the several countries and their inhabitants. Surrounding the map he wrote all kinds of astronomical information, of which especially his explanation of the spherical shape of the earth was epoch-making. From time immemorial the Chinese had thought that the earth was flat and square and heaven round. Another astonishing feature of Ricci's maps was the insignificant place China held in the map. Until then the Chinese had believed that the Chinese empire comprised the greater part of the inhabitable world. Nevertheless, many
fig. 3 Painted manuscript copy of the Shoho map Bankoku Sōzu (Complete map of the world; Nagasaki 1645), the first true world map printed in Japan (see R 1645).

(no. 1645.2b Beans collection, University of British Columbia Library)
thousands of copies of the Ricci maps are said to have been printed in China, officially and secretly.

Because of the complex interrelation of the best European maps of the period, it is difficult to determine precisely which cartographical works Ricci used for reference. However, his maps show a striking resemblance to the world maps of Ortelius, in his atlas *Theatrum orbis terrarum* (Antwerp 1570 and later), which were undoubtedly one of Ricci's sources. In addition, characteristic features of the maps of Gerard Mercator (1512-1594) are included. Furthermore, the extent and contents of the descriptive legends show that Ricci not only used cartographical sources, but also took information from both Western and Chinese contemporary geographical and astronomical literature (2).

In the early seventeenth century copies of all the different editions of the Ricci map crossed the sea to Japan, where they circulated widely and became the prototype of most seventeenth and eighteenth century Japanese world maps. The Shoho map of 1645 (see R 1645.1) (3), the first true world map printed in Japan, was a derivative of Ricci's map. The Chinese legends were simplified and, as well as most place-names, translated into Japanese *katakana* (syllabic letters). To be sure, in Japanese maps foreign place-names were usually written in *katakana*, because it was much easier to express them phonetically. However, it is significant that in the Shoho map the names for the islands round Japan were also in *katakana*. Unlike the early seventeenth century screen maps, which only rich Japanese could afford to purchase, and in contrast to the original Chinese Ricci map, which only educated Japanese could read, the Shoho map was intended to enlighten the general public. It introduced Western geographical knowledge to a much wider public and was popular rather than educational, decorative rather than scientific. Many versions of the map itself, both in print and manuscript,
fig. 4  NAGAKUBO-Sekisui, Kaisei Chikyū Bankoku Zenzu (Revised general map of the world nations of the earth; Osaka and Edo after 1785), modeled on the Chinese world map of Matteo Ricci (see R 1785).

(from: Nanba, Old maps in Japan, plate 9)
fig. 5 Popularized edition of the Sekisui world map of 1785, published by the firm of EIJDO at Nagasaki around 1850. The twelve boxes containing illustrations of types of foreigners testify to the influence of the Shoho map (see R 1850.3).

(no. 1850.3 Beans collection, University of British Columbia Library)
painted on screens and scrolls, appeared in the years immediately after 1645 (see for example R 1645.2a-b and R 1645.2). Corruptions of the map were published throughout the seclusion period and as late as 1853 (see R 1671.1; R 1688.1; R 1708.4; R 1850.3 and R 1853.12). Consequently, the Ricci map made, through its derivative the Shoho map, generations of Japanese aware of the existence of a world of countries outside Japan.

In addition to the popular Shoho map many, more detailed world maps were published for the educated, including comparatively accurate reprints of the Ricci map (see R 1750.4; R 1720.3; R 1783.3 and R 1802.18). The bestseller among these Ricci derivatives was NAGAKUBO-Sekisui's (1717-1801) Chikyū Bankoku Sankai Yochi Zenzu (Complete map of the numerous countries on the globe) published in Osaka after 1785 (see R 1785.7). Though the map was an accurate derivative and for the area of Japan and China even more detailed than the Ricci map, its popularity was mainly due to Sekisui's own prestige as a geographer and cartographer, who could 'talk about things in far-off countries ... as if he [was] talking about things in his garden' (4). His map of Japan, published in 1779, surpassed all previous maps in accuracy. He also compiled the first historical atlas published in Japan, recording chronologically the various conditions of the provinces of China. Like the Shoho map, Sekisui's world map was reprinted in several editions (see R 1785.13). Moreover, the map was popularized and reproduced in reduced sizes several times during the first half of the nineteenth century. In some of these editions the continents are outlined in such a crude manner that they must have been directed at a most uncritical market (see R 1844.01; R 1850.2; R 1850.3; R 1850.4; R 1850.17; R 1853.12 and R 1853.13). These numerous, and all different, popular editions of the Sekisui as well as the Shoho map prove that in the mid-nineteenth century large groups, if not the majority, of Japanese society were familiar with and had accepted
fig. 6 Gotenjiku Zu (Map of the Five Indies) copied by the scholarly Buddhist priest Jokai in 1364. The map represents the Japanese image of the world before the arrival of the Europeans in the sixteenth century (see B 1364).

(from: Nanba, *Old maps in Japan*, plate 1)
Ricci's picture of the world. Despite Japan's national isolation, they were aware of Japan's insignificant place in a wide world.

The strong influence of the Ricci map on Japanese world cartography is also reflected in the development of the Buddhist world maps. Until the arrival of the Europeans in the mid-sixteenth century, all Japanese world maps depicted the Buddhist cosmos Jambu-dvīpa, which consisted -- according to the Japanese interpretation -- of the three great civilizations: India, China and Japan. The maps were derived a priori from religious concepts and not observations (see B 1364). Although Buddhist world maps remained in existence till the mid-nineteenth century (see B 1845.2), in the beginning of the eighteenth century maps began to appear, which attempted to incorporate the Buddhist world view into the geographical knowledge contained in Ricci's map (see B 1700.4 and B 1708.6).

In 1710, the Buddhist priest Hōtan (1654-1728) constructed his Nanbenbushū Bankoku Shōka No Zu (A map showing numerous countries as sweets in the hand), which depicted not only the traditional continent of Jambu-dvīpa, but also Europe and North and South America (see B 1710.4). Though Europe was shown as an archipelago in the northwestern corner of the map and South America appeared as a small island south of Japan, their existence testifies to tentative Western influence on the Buddhist image of the world. Hōtan's map was the first of this kind to be printed and became very popular, as both the many editions of the map itself (see for example B 1710.1) and its numerous derivatives prove. In fact, the map served as a model for all later Buddhist world maps (see B 1710.2; B 1744.1; B 1809.1 and B 1844.10). Its popularity and authority were due to its representation of the traditional world conception of the Japanese, a people imbued with Buddhist doctrine. Simultaneously, Hōtan's map provided a place in the Buddhist world for the Europeans, whose arrival and existence was known to all Japanese.
fig. 7 Hōtan, Nanbenbushū Bankoku Shōka No Zu (A map showing numerous countries as sweets in the hand) published by NAGATO-Chōbei at Kyoto in 1710. Hōtan's map was the first Buddhist world map printed in Japan, which incorporated European and other Western Countries (see B 1710).

(from: Ramming, 'Remarks', plate 2)
Bankoku Zu (Map of all countries) published by HONYA-Hikoemon in 1744. The map is a hybrid between the Buddhist and Ricci world maps. The continent of Jambu-dvīpa, the Buddhist cosmos, is placed in the wide world of the Ricci maps (see B 1744.2).

(from: Muroga, 'Buddhist world map in Japan and its contact', plate 12)
Yet, the authority of Hōtan's map as a true world map faded when in 1744 HONYA-Hikoemon published the Bankoku Zu (Map of all countries), which was a hybrid between the Buddhist and Ricci world maps (see B 1744.2). Hikoemon's map was a very distorted Ricci derivative, in which Ricci's Eurasian continent was replaced by Hōtan's Jambu-dvīpa. In showing boldly that Jambu-dvīpa, the Buddhist cosmos, was only part of a much larger world, the map was a breach of faith with Buddhist doctrine. However, the Bankoku Zu also reflected a general nostalgia among the Japanese for the traditional Buddhist image of the world, while they simultaneously vaguely accepted the representation of the world in Western maps (see also B 1744.1; B 1809.1 and B 1822.4).

Nevertheless, in spite of the nostalgia, Ricci's map did change the Japanese picture of the world. In fact, the most popular world maps produced in Japan during the seclusion period were based on the Chinese world map of Matteo Ricci, Jesuit missionary in China around 1600. The numerous Japanese derivatives testify to its strong influence. Though Ricci based his Chinese map mainly on Flemish and Dutch cartographical sources, he clearly constructed his own, new world map. Consequently, the distinct and most dominant foreign influence on Japanese cartography during the period 1640-1853 has to be labelled sino-western, and not Dutch.

Notes:
(1) H. Nakamura, 'Nanban-byobu Sekai-zu No Kenkyu' (Studies on the Nanban screen world maps), Kirishitan Kenkyū 9 (1964) 1-273 (An annotated and well-illustrated list of all extant Japanese screen world maps);
- Idem, 'The Japanese portolanos of Portuguese origin of the XVth and XVIth century', Imago Mundi 18 (1964) 24-44;
- Nanba, Old maps in Japan, 159-162.
- Ramming, 'Evolution', 19;
- G. Schilder, Three world maps by Francois van den Hoeeye of 1661; Willem Janszoon (Blaeu) of 1607; Claes Janszoon Visscher of 1650 (Amsterdam 1981) 34 and 39. I am very much obliged to Dr. Schilder (Utrecht, Netherlands) for making his publication available to me.
(2) - J.F. Baddeley, 'Father Matteo Ricci's Chinese world maps, 1584-1608', Geographical Journal 50 (1917) 254-270;
- K. Ch'en, 'Matteo Ricci's contribution to, and influence on, geographical knowledge in China', Journal of the American Oriental Society 59 (1939) 325-359 and 509;
- E. Heawood, 'The relationships of the Ricci maps', Geographical Journal 50 (1917) 271-276;

(3) The numbers in brackets given in the text refer to the appendix (p. 45-73), which contains a full description of all fifty-nine Japanese world maps, on which the conclusions of this and the following chapter are based.

(4) Words of SHIBANO-Ritsuzan (1736-1807), a famous Confucian scholar, quoted in:
- C.C. Krieger, The infiltration of European civilization in Japan during the 18th century (Leyden 1940) 65.
The Westernization of Japanese world maps

The first Japanese scholar to question on paper the authority of the Ricci map and its derivatives as absolutely true and authentic world maps was ARAI-Hakuseki (1657-1725), an eminent counsellor of the shogunate government. In 1709, the bakufu ordered him to interview the Sicilian Franciscan missionary Giovanni Battista Sidotti (1668-1715). In spite of the strict national isolation policy, Sidotti had smuggled himself into a small island in the south of Kyūshū, disguised as a native samurai. He was however immediately arrested and brought to Edo where a court was held.

In the course of the interrogation Hakuseki made use of both a Ricci map and Joan Blaeu's (c. 1598-1673) large hemispheric world map *Nova totius terrarum orbis tabula* (Amsterdam 1648), which had been buried in the government library ever since it was received from the Dutch as a present for the shogun. Blaeu's wall-map was one masterpiece of seventeenth century Dutch cartography at the zenith of its development and as such by far superior and a violent contrast to the Ricci map in its accurate and authentic delineation of the world. For many decades it remained the generally accepted world view and several Western maps both large and small have been based entirely on it (1).

Hakuseki reported the conclusions of the investigation in his *Seiyō Kibun* (Memorandum concerning the West, preface 1715), a report in three volumes dealing respectively with the interviews themselves, world geography and the nature of Catholicism. At the same time Hakuseki completed an extended version of the second volume under the title *Sairan Igen* (Selected strange accounts, preface 1713). This world geography was based on not only the interviews with Sidotti, but also conversations with the Dutch opperhoofd during the annual visit to Edo, official documents of the bakufu, the Ricci as well as the Blaeu map and several other maps, atlases and
gloves kept at the government library. Yet, citations from the Ricci map remained predominant, even though Sidotti had pointed out its inferiority to the Blaeu map and Hakuseki realized that Ricci's map was out of date. He did not accept all the views of Ricci.

The *Sairan Igen* was the first Japanese study describing world geography systematically and objectively --'Holland, it is simply an awesome country' (2)-- based on, among other sources, direct Western, in casu Dutch information. As such it exerted a substantial influence upon the geographical conceptions of Japanese scholars in the eighteenth century, even though it was not actually published until nearly a century later, because it treated matters related to Christianity. Instead, it was copied frequently by scholars and circulated secretly (3).

In cartography the first token of any use of Dutch sources, information and knowledge emerged only at the end of the eighteenth century. In the explanatory text of his celebrated world map of 1785, Sekisui stated that his map was originally made in the Netherlands (see R 1785.7). However, there is no evidence that Sekisui's map was based on a Dutch, i.e. Western model. Instead, it is clearly a Ricci derivative. Apparently the reference to Dutch sources was meant to heighten the authority of the map. This is rather remarkable the more so since Sekisui himself was already held in high regard as a cartographer. Accordingly, his misleading reference should be interpreted as a reflection of the great authority Japanese scholars attributed to Dutch cartographical works at that time.

Indeed, the first printed Japanese world map derived directly from Western sources appeared in KUCHIKI-Masatsuna's *Taisei Yochi Zusetsu* (Illustrated geography of the Western world) in 1789. The map was a simple, but accurate version of a late seventeenth century Western hemispheric world map (see W 1789.1-2). In subsequent years, other
fig. 9 Chikyu Ryaku Zen Zu (Simplified map of the whole world), the first printed Japanese world map derived directly from Western sources, published in KUCHIKI-Masatsuna, Taisei Yochi Zusetsu (Illustrated geography of the Western world), Edo 1789. The prototype of the map must have been a late seventeenth century Western hemispheric world map (see W 1789.1-2).

(no. 1789.1-2 (vol. 15, 2-3) Beans collection, University of British Columbia Library)
fig. 10 HASHIMOTO-Sōkichi, Oranda Shinyaku Chikyū Zenzu (Complete map of the world, newly translated from Dutch sources), Edo 1796. The map must have been based on some unidentified Dutch hemispheric world map of the second half of the seventeenth century (see W 1796.1).

(no. 1796.1 Beans Collection, University of British Columbia Library)
fig. 11 ISHIZUKA-Saikō, Enkyū Bankoku Chikai Zenzu (Global map of land and sea), Kagoshima 1802. The prototype of the map must have been a mid-seventeenth century Western hemispheric world map (see W 1802.10).

(from: Kurita, Nihon Kohan Chizu Shūsei, plate 8)
hemispheric world maps, based on either late or mid-seventeenth century Western maps, were constructed by the Japanese scholars HASHIMOTO-Sōkichi (1763-1836) in 1796 and ISHIZUKA-Saikō in 1802 (see W 1796.1 and W 1802.10). Though only Sōkichi stated explicitly that his map was 'newly translated from Dutch sources', both Masatsuna's map of 1789 and Saikō's map of 1802 were most likely based on original Dutch hemispheric world maps as well. Their prototypes were constructed in the second half of the seventeenth century, a period when Amsterdam was by far the most important centre of cartography in Europe.

The exact Western source of only one Japanese hemispheric world map is fully known. SHIBA-Kōkan's (1747-1818) Chikyū Zenzu (Complete map of the world) printed in 1792 was a faithful copy of the Mappe-monde geo-hydrographique published by the firm of Johannes Covens (1697-1774) and Cornelis Mortier (1699-1783) at Amsterdam (see W 1792.2). As such Kōkan's map would be the most perfect example of Dutch influence on Japanese cartography, if it were possible to prove the Dutch origin of the Covens & Mortier map.

The Mappe-monde geo-hydrographique, which Covens and Mortier published after they had established their firm in 1721, was just a reprint of the world map published by Pierre Mortier (1661-1711), Cornelis' father, about 1700. Only the imprint of Covens & Mortier was substituted for that of Pierre Mortier. Mortier Sr. had received his training as a publisher in Paris and his knowledge of modern French cartography led him to copy the maps of the Sanson brothers at Paris (4). Hence, the plausible inference is that Mortier's Mappe-monde geo-hydrographique was also merely a copy, the more so since the current Sanson world map bore the same title.

However, comparison of the maps reveals at a glance that besides the titles and both being world maps they have nothing in common. In fact, the
fig. 12 SHIBA-Kōkan, Chikyū Zenzu (Complete map of the world), 1792. The map is an exact copy of Covens & Mortier, Mappe-monde geo-hydrographique, Amsterdam after 1721 (see W 1792).

(from: Nanba, Old maps in Japan, plate 13)
fig. 13  Pierre Mortier, Mappe-monde geo-hydrographique, Amsterdam c. 1700 (size: 570 x 970 mm).

(no. H2 / 10,000 (c. 1700) National Map Collection, Public Archives of Canada, Ottawa)
Mortier map is a rather curious world map which differed not only from the Sanson maps but from all known early eighteenth century maps in at least two striking features: the existence of an enormous Mer de l'Ouest, inundating the four Western provinces of Canada, and its delineation of Australia, Tasmania and New Guinea as parts of one single continent. Consequently, the east coast of Australia appeared on the map, seventy years before it was discovered.

The origin of Mortier's flights of fancy is impossible to trace. For the fount of the legendary Mer de l'Ouest tracks might still lead to the Paris cartographers, but the source for the 'existence' of the east coast of Australia remains totally elusive. It might have been French, it might have been Dutch, it might have been anything, including of course Pierre Mortier's own fantasy. It is, however, most unlikely that Mortier himself constructed the map, because he was a map publisher rather than a map maker (5).

Consequently, as long as the sources of the Mortier map remain mysterious and thus the Dutch origin of SHIBA-Kōkan's world map doubtful, there exists only assumed and no proven evidence of Dutch influence on Japanese cartography. Also, at the beginning of the nineteenth century Japanese scholars began to realize that the seventeenth century Western world maps were out of date. The modern maps the Dutch brought to Japan at that time depicted a world of newly and recently explored coasts and countries. Logically, the Japanese scholars began to use these late eighteenth and nineteenth century maps for reference. However the maps the Dutch shipped to Japan in the nineteenth century were either French or English or Dutch editions of originally French and English maps. As a result all nineteenth century Japanese world maps which were based directly on Western sources were derived from cartographical works which were not
fig. 14 TAKAHASHI-Kageyasu, Shintei Bankoku Zenzu (Newly revised world map), Edo 1810. The map is based on numerous Western sources as well as on information of Japanese explorers and surveyors. Consequently, the outline of Japan and the area around Mamia Strait are depicted more accurately than in any contemporary Western map (see W 1810.1).

(from: Ramming, 'Remarks', plate 1)
originally Dutch (see W 1844; W 1846; W 1848.26; W 1850.5-7 and W 1853.1).

The highlight of the 'Western' Japanese world maps, the official shogunate publication Shintei Bankoku Zenzu (Newly revised world map), was even based on information from Japanese explorers, in addition to many European sources. The map was constructed by the chief of the bakufu's astronomical observatory, TAKAHASHI-Kageyasu (1785-1829), in 1810 and was entirely up to date. It incorporated results of the coastal survey of Japan, made by INÔ-Tadataka (1745-1818) between 1800-1817, as well as the exploration of Sakhalin, carried out by Kageyasu's pupil MAMIYA-Rinzo (1775-1844) in 1808-1809. In charting more accurately both the outline of Japan and the area around Mamia Strait, Kageyasu's map was even ahead of contemporary Western maps (see W 1810.1).

When at the end of the eighteenth century the first Japanese world maps based directly on Western sources appeared, their seventeenth and early eighteenth century prototypes were most likely Dutch, even though it cannot be proven. In 1810, roughly two decades after the publication of the first 'Western' Japanese map, the shogunate produced a hemispheric world map, based on the most recent material from both East and West, which was in some areas more accurate than any contemporary Western world map. Then, knowing what the outside world looked like, Japanese cartographers used only modern French and English maps for reference.

Hence, the influence of the Dutch as creators of the cartographical knowledge that changed and westernized the Japanese image of the world as depicted in Japanese maps was only superficial and far less than expected. The numerous crude Ricci derivatives of the 1850s, which could have been intended only for a most uncritical market, further emphasize the shallowness of the Dutch influence in proving that at the eve of the
Shintei Konyo Ryaku Zenzu (Revised map of the world) published by TAKAGI-Kôzo in 1852. The map is an entirely up-to-date world map drawn in Ricci's oval projection with the prime meridian east of New Guinea (see W 1852.3).

(no. 1852.3 Beans collection, University of British Columbia Library)
'opening' of Japan the conception of the outside world held by the majority of Japanese was still the early seventeenth century world-picture of Ricci.

To be sure, the 1852 Shintei Konyo Ryaku Zenzu (Revised map of the world), which was an up-to-date Western world map drawn in the familiar Ricci oval projection (see W 1852.3), might have been an attempt to introduce the Western world view to the general public, but one swallow does not make a summer. Consequently, an explanation has to be thought of for not only the surprisingly little Dutch influence on Japanese cartography, but also the dominant position of the Ricci map during the first century and a half after the closure of Japan and its continuing strong influence during the first half of the nineteenth century.

Notes:

(1) A copy of Blaeu's map, in perfect condition, is extant in Japan as well as one of its derivatives Nova totius terrarum orbis tabula emendata a N. Visscher (Amsterdam, after 1660), published by Frederick de Wit (1630-1706).
   - H. Nakamura, 'Honpō Ni Tsutawaru Buraua Sekaizu Ni Tsuite' (J. Blaeu's large world maps preserved in Japan) in: Chirigakushi-Kenkyū 1 (Kyoto 1957) second article, 1-41 and English abstracts 3-5;
   - F.C. Wieder, Monumenta cartographica. Reproductions of unique and rare maps (5 vols.; The Hague 1925-1933) III;


(3) - S. Ayusawa, 'Geography and Japanese knowledge of world geography', Monumenta Nipponica 19 (1964) 284-285;
   - Ishiyama, 'Yōgaku scholars', 18-21;
   - Nakamura, 'Honpō Ni Tsutawaru Buraua Sekaizu Ni Tsuite', English abstracts 3-4;
   - Nanba, Old maps in Japan, 163;
   - W.B. Wright, 'The capture and captivity of père Giovanni Battista Sidotti in Japan from 1709 to 1715', Transactions of the Asiatic Society of Japan 9 (1881) 156-164.

The facts that Covens and Mortier established their firm only in 1721, that their map was a reprint of the 1700 Mortier world map and that the sole and original title of the Mortier map was *Mappe-monde geo-hydrographique* explain why Nanba's statement that SHIBA-Kōkan's map was based on 'a French edition of a world map published by Covens & Mortier at Amsterdam in 1720, which by then was already half a century old' is incorrect (see W 1792.2).

(5) The cartographical puzzles of the Mortier map are discussed, yet not solved in:
- R.V. Tooley, 'Early maps of Australia. The Dutch period', *Map Collectors' Series* 23 (1985) no. 71;
- H.R. Wagner, 'Apocryphal voyages to the Northwest coast of America', *Proceedings of the American Antiquarian Society* 41 (1931) 209-212;
Strange characters like the legs of a mosquito ...

the Dutch language as a barrier in the dissemination of Western cartographical knowledge in Japan

The most plausible explanation for the unexpected low level of Dutch influence on Japanese cartography during the period 1640-1853 has to be found in the very limited accessibility of Dutch cartographical works to the Japanese. A handful of Dutch VOC officials resided in the 'state prison' of Deshima and their contacts remained restricted to prostitutes, interpreters and bakufu officials. The average three Dutch East-Indiamen a year brought only a very limited quantity of trade goods to Japan. The bakufu authorities controlled and had to approve all trade goods and personal belongings the Dutch brought ashore at Deshima. As a consequence, none of the goods the Dutch shipped to Japan became generally available to the Japanese. The cartographical works were no exception.

The Dutch indeed imported maps, atlases and globes, though not as trade goods, as the several extant copies of seventeenth and eighteenth century Dutch cartographical works in Japan prove. Covens & Mortier's Mappe-monde geo-hydrographique and the large wall-maps of Joan Blaeu and Frederick de Wit have already been mentioned. Petrus Schenck's (1660-c. 1719) Atlas contractus (Amsterdam c. 1700), L'Atlas de la mer ou aquatique (Amsterdam 1698) of Jacobus (d. 1679) and Casparus (1635-1711) Lootsman, Pieter Goos' (c. 1615-1675) Zee-atlas ofte water-wereld (Sea atlas or the water world; Amsterdam 1676) and Louis Renard, Atlas van zeevaart en koophandel door de geheele weereeld (Atlas of navigation and commerce of the whole world, 1745) published by Reinier (1698-1750) and Josua (1704-1765) Ottens, printers at Amsterdam, are additional examples (1).
Also, references to the importation of cartographical works can be found in Dutch records of the Japan trade as well as in NISHIKAWA-Joken, Zoho Kai Tsushō Kō (Enlarged edition of notes on foreign trade, Kyoto 1708). The first edition (1695) of Joken's study was the first work ever printed in Japan dealing with foreign countries other than China and Korea. In his description of the Dutch Republic and the Dutch, who have 'red and short hair [and] big noses', he listed all kinds of products the Dutch brought to Japan, including globes, charts and world maps, which were however 'not in trade' (2).

Instead, most cartographical works were destined as presents for the shogun. In Edo the maps, atlases and globes were kindly accepted and then carefully stored away in the government library, where very little use was ever made of them. Some cartographical material passed into the possession of bakufu officials, who, however, had neither the desire nor the wit to make full use of it, because during the greater part of the seclusion period all things Western continued to be associated with all things Christian, which were suspicious. However, it was not just the limited availability and Christian association which prevented the Japanese from deriving cartographical information from Dutch maps, atlases and globes.

Until the second half of the eighteenth century hardly any Japanese mastered the Dutch language. Throughout the seventeenth century the official interpreters at Nagasaki, who conducted the trade negotiations with the VOC, communicated with the Dutch in Portuguese, at that time the lingua franca of the East. In the last quarter of the seventeenth century they began the study of Dutch, but their proficiency remained almost entirely restricted to the translation of spoken Dutch. Not until about 1740 were interpreters officially encouraged to learn to read Dutch books.
Simultaneously and independently of the official interpreters, amateur scholars also strove to acquire knowledge of the language, of which 'the strange characters were like the legs of a mosquito, and besides it was written slantingly as crabs creep and not easy to learn' (3).

The mid-eighteenth century official encouragement of the study of Dutch originated in the bakufu's generally milder and more positive attitude toward Western knowledge. This attitude itself stemmed from the bakufu's and especially shogun TOKUGAWA-Yoshimune's (r. 1716-1745) desire to utilize practical Western knowledge to improve medical treatment in Japan or to develop new crops and increase agricultural production or to correct the Japanese calendar. The official policy of encouraging the study of Western practical sciences eventually gave rise to a broad interest among scholars in Rangaku (Dutch learning) i.e. research on the Dutch language and every other form of Western knowledge and technology imported by the way of that language (4). As a result, not only the traditional interest in world geography and cartography invigorated, but, more important, Rangaku also razed the Dutch language barrier. Only when Dutch maps could be read, could their superiority over the Ricci maps be understood.

The experience of Hakuseki illustrates how the lack of knowledge of Dutch indeed prevented the dissemination of Western cartographical and geographical information. Even though Sidotti had explained the inferiority of the Ricci map to him, Hakuseki adhered to Ricci's description of the world, which he could read and understand. Also, the development of medical science in Japan illustrates how the language barrier hampered the transmission of Western knowledge. A VOC physician resided on Deshima throughout the year and he was plied with questions during the annual interrogation at the court of Edo. Japanese doctors could personally
examine his medical treatments, which he could even explain orally. Nevertheless, until the second half of the eighteenth century the Japanese adopted only matters of Western external medicine, especially surgery, which could be taught when the VOC physician operated upon patients. Simultaneously, Japanese faith in the ancient Chinese textbooks on internal medicine, which could be read and understood, remained unshaken (5).

Only when at the end of the eighteenth century Rangaku had razed the huge language barrier and simultaneously Western knowledge had lost much of its Christian association and Western works had become more easily available, were Japanese map makers capable of using Dutch maps for reference. By then, however, the Dutch had lost their dominant position in world cartography, not only in the production of atlases but also after 1750 in nautical cartography. The maps and atlases the Dutch shipped to Japan at the end of the eighteenth and during the first half of the nineteenth century were Dutch translations and copies of mainly French and English cartographical works. Though the Japanese initially based their 'Western' world maps on seventeenth and early eighteenth century, most likely Dutch, maps, --after all, these were as exciting as if they had just been constructed-- they soon turned to the more up-to-date French and English sources.

The limited accessibility of Dutch cartographical works to the Japanese explains not only the superficial Dutch influence on Japanese cartography, but also the dominant position of the Ricci world maps until the end of the eighteenth century. Numerous copies of all the different editions of the Ricci map had been shipped to Japan in the early seventeenth century and they were generally available. To be sure, Western maps were imported into Japan before 1640 as well, but they were far too expensive and could be purchased only by wealthy Japanese
to be copied on their bedscreens. More important, Japanese scholars and officials could read the Chinese place-names, text and explanations of the Ricci map without any difficulty. Furthermore, thanks to the profane Japanese derivatives such as the Shoho map, the Ricci world map soon lost its Christian association.

Yet, the limited and unhampered accessibility of the Dutch and Ricci maps respectively until the end of the eighteenth century does not explain the strong influence the Ricci map exerted during the first half of the nineteenth century. Though Rangaku was a true mania among Japanese scholars, it hardly touched the general public. The place-names, text and explanations of the 'Western' Japanese world maps were usually written in Chinese and not in katakana, which uneducated Japanese could read. Furthermore, they were printed in very limited numbers as SHIBA-Kōkan affirmed: 'It [his world map] cannot be offered for sale. Only important persons are permitted to have it, and the price is therefore irrelevant' (6). As a consequence, on the eve of the 'opening' of Japan in 1853 the Western world view was fairly well known in both bakufu and intellectual circles. By making known facts about foreign countries, the Western world maps contributed to the bakufu's awakening of consciousness that, when Perry arrived in 1853, only a friendly cooperation could save Japan. Simultaneously, the general public still adhered to an early seventeenth century world-picture, constructed by Matteo Ricci. 'Redhaired' influence on the Japanese world image as depicted in their maps was only superficial, even though Dutch maps floated ashore.

Notes:
(1) It would be of great interest to the history of Dutch cartography to compile a full and annotated list of all Dutch cartographical works extant in Japan. The Japanese sample of Blaeu's wall-map is unique in being surrounded by the first edition of the explanatory text.
L'Atlas de la mer ou aquatique, bearing the imprint of both Jacobus and Casparus Lootsman and published in 1698, is not recorded in Koeman, Atlantes Neerlandici, the most authoritative bibliography of Dutch atlases.

References to the maps and atlases mentioned:
- Covens & Mortier map: see W 1792.2;
- Blaeu and De Wit wall-maps: see p. 37 note 1;
- Schenck atlas: C.L. French, Shiba Kōkan: artist, innovator, and pioneer in the Westernization of Japan (New York 1974) 134 note 47;
- Lootsman atlas: H. Ishiyama, 'Rangaku Ni Okeru Oranda Chiri Gaku' (Old Dutch books on geography and the Western learning in Japan under the shogunate regime) in: Chirigakushi-Kenkyū 2 (Kyoto 1962) 110;
- Goos atlas: Idem, 'Yōgaku scholars', 22;

(2) Both references to Dutch records and quotations from Joken's study:
- C.R. Boxer, Jan Compagnie in Japan, 1600-1817. An essay on the cultural, artistic and scientific influence exercised by the Hollanders in Japan from the seventeenth to the nineteenth centuries (3rd ed.; Oxford 1968) Chapter I passim and appendix I.

(3) - Boxer, Jan Compagnie, 14 and 59-66;
- Keene, Japanese discovery, 10-15;

Quotation from: Krieger, Infiltration, 55.

(4) - Goodman, Dutch impact, 63 ff;
- J. Numata, 'The acceptance of Western culture in Japan: general observations', Monumenta Nipponica 19 (1964) 235-242;

(5) - Boxer, Jan Compagnie, 44-50;
- Feenstra Kuiper, Japan en de buitenwereld, 259-266'
- R. Otori, 'The acceptance of Western medicine', Monumenta Nipponica 19 (1964) 254-274;

(6) Quoted in: French, Shiba Kōkan, 124.
Appendix: an annotated list of fifty-nine Japanese world maps (1640-1853)

The list does not contain all Japanese world maps constructed in the period 1640-1853. Globes and maps depicted on screens, fans, sword-guards, medicine boxes, all kinds of ceramic ware etc. are left out. Also, the list does not include maps, of which only the title and name of the author or publisher are known. Furthermore, Japanese reprints of Chinese world maps are left out. Only one exemption to these selection criteria is made for the oldest Japanese world map still in existence, representing the Japanese image of the world before the arrival of the Europeans (map B 1364).

The fifty-nine Japanese maps are divided into three groups:
I. Buddhist world maps, depicting the Buddhist conception of the world (marked B).
II. 'Ricci' world maps, derived from the Chinese world map constructed by Matteo Ricci, Jesuit missionary in China (marked R).
III. 'Western' world maps, derived from Western cartographical material brought to Japan mainly by the Dutch (marked W).

Within each group the maps are listed chronologically, their numbers indicating the year of publication. The numbers correspond to those in Beans, List of Japanese maps, the most complete non-Japanese publication of this kind available. The world maps, which were not listed in Beans and thus did not have a 'Beans-number', received a number following the last given in Beans: if Beans' last number of maps published in 1850 was no. 1850.16, the unrecorded 1850 Japanese world map received no. 1850.17. The number is placed in brackets, if the date of publication is uncertain. An asterisk indicates that the map is available in the Beans collection at the University of British Columbia Library.
In describing the world maps the Anglo-American Cataloguing Rules for Cartographical Material, based on the International Standard Bibliographical Description, are applied for the plain bibliographical data of the maps. They comprise for each map, as far as known and relevant, the following information respectively:

**Romanized Japanese title** : (Translated title) / statement of responsibility, i.e. names of the map maker, engraver, examiner etc. -- place of publication : publisher, date of publication. -- medium, i.e. manuscript, wood-cut or copper-engraved : description, i.e. projection, coloured ; size (height x width). -- (bound) in: Author, **Romanized Japanese title** (Translated title).

The abbreviation 's.l.' stands for *sine loco*. The term 'coloured' means 'hand-coloured', since until the end of the eighteenth century all maps were hand-coloured.

To the full bibliographical description is added information essential for the thesis argument about the Dutch influence on Japanese cartography:

A description of the contents of the map; its sources; and the influence of the map upon the development of Japanese world cartography.

Bibliographical references conclude the description of each world map.
I. Buddhist world maps

B 1364  Gotenjiku Zu : (Map of the Five Indies) / copied by Jūkai (b. 1297), a scholarly priest. -- Nara : Hōryūji temple, 1364. -- manuscript : coloured ; 1770 x 1665 mm.

The map represents the Japanese image of the world before the arrival of the Europeans. An egg-shaped continent Jambu-dvīpa (Five Indies), which was the whole inhabited world according to the Buddhist cosmographical view, stretches across the sea to the south of Mount Sumeru, which was said to be the centre of the universe. The greater portion of the continent can be equated topographically with the Indian peninsula, divided in five sections (Five Indies) of the North, South, East, West and Centre. Central Asia extends on its northern border, Persia lies to the West and China to the East. The island of Ceylon is located in the Southeast and Japan lies across the sea to the Northeast. In the upper central region the sacred Lake of Anavatapta is depicted, symbolizing Lake Manasarovar in the Himalayas, around which the confluence of four great rivers, representing the Ganges, Indus, Oxus and Tarim, forms a swirling clockwise flow.

The map is a tracing of a Chinese map, which was based on Si-yü-ki (Account of the countries west of the Great T'ang (= China)), the journal of the seventh century pilgrimage to India of the Chinese Buddhist monk Hsian-tsang. His route along the Indian sites sacred to Buddha is shown in a red line.

The Gotenjiku Zu is the prototype, from which all Japanese Buddhist world maps developed. The 1364 map is the oldest map of its kind still in existence.

- G.H. Beans, A list of Japanese maps of the Tokugawa era (1 vol. and 3 supplements; Jenkintown 1951-1963) 9, no. 1365.1;
- N. Muroga and K. Unno, 'Nihon Ni Okonawareta Bukkyo Kei Sekaizu Ni' (The Buddhist world maps in Japan) in: Chirigakushi-Kenkyū 1 (Kyoto 1957) English abstracts, 5-6;
- Idem, 'The Buddhist world map in Japan and its contact with European maps', Imago Mundi 16 (1962) 49-50;
- Nanba, Old maps in Japan, 160-161, 177 and plate 1.

B [1700.4]  ... : 'Muroga MS. map'. -- manuscript : coloured ; 1385 x 1545 mm.

This map of Jambu-dvīpa is not dated, but Muroga places it between 1653-1707. The cartographer aimed at an accurate configuration beyond anything, but simultaneously it was impossible for him to disprove the Buddhist conception of the world. As a result Jambu-dvīpa is indeed represented in
its traditional egg-shape, but Southeast Asia is added and China and India are delineated more or less accurately. For the first time India is shown as a peninsula projecting sharply to the south and the coastline near the estuary of the Indus is also drawn with some realism. The peninsula of Indo-China, however, is pushed back into the interior of the continent. The distances from Japan to each country are given in the map.

Although the exact sources of the map are unknown, the addition of Southeast Asia and the correct depiction of the Indian peninsula suggest an attempt to utilize, though partially, some geographical knowledge of the West.

In showing for the first time some Western contacts, the map is an important link in the development of the Buddhist world map. It served as a model for map B 1708.6 and B 1710.4.

- Beans, List of Japanese maps, supplement B (1958) 13-14;
- Muroga, 'Nihon Ni Okonawareta Bukkyo Kei Sekaiyu Ni Tsuite', 7 and plate 12;


ZUDA-Rōkashi is better known as scholar priest Hōtan, founder of the Kegonji temple at Kyoto.

Description of the map under B 1710.4, of which this is a small trial map.

- Beans, List of Japanese maps, supplement B (1958) 14;
- Muroga, 'Nihon Ni Okonawareta Bukkyo Kei Sekaiyu Ni Tsuite', plate 16;

B 1708.6 ... : 'Nanba MS. map'. -- manuscript : coloured ; 1520 x 1560 mm.

This world map follows B 1700.4, but lacks its accuracy and seems to be designed more ornamentally. It is covered with minute place-names in katakana, including for the first time also names of European and other Western countries, which however are given inconspicuous and imaginary positions in the northwestern corner. Spain and Italy are merged with the provinces of the Dutch Republic. Mexico appears as an island in the middle of Europe and American place-names are written on the border of Asia and Europe.
The map is based on B 1700.4 and the innumerable place-names are derived from NISHIKAWA-Joken, Zōho Kai Tsushō Kō (Enlarged edition of notes on foreign trade, 5 vols.; Kyoto 1708 - see R 1708.3). The curious position of Mexico and the American place-names is the cartographer's interpretation of Joken's remark that 'America lies east of Japan on a map [see the description of R 1645.1], but geographically it is one of the Western countries, Japan being the country situated in the farthest East' (quoted in Muroga, 'Buddhist world map in Japan and its contact', 60).

Though the map marks an epochal development of the Buddhist world map, its influence was limited, because the innumerable place-names hampered copying.

- Beans, List of Japanese maps, supplement B (1958) 15;
- Muroga, 'Nihon Ni Okonawareta Bukkyo Kei Sekaizu Ni Tsuite', plates 14 and 15;
- Idem, 'Buddhist world map in Japan and its contact', 59-60 and plate 7.

B 1710.4*

Nanbenbushū Bankoku Shōka No Zu: (A map showing numerous countries as sweets in the hand) / made by ZUDA-Rōkashi (1654-1728). -- Kyoto or Edo: BUNDAIKEN-Uhei, 1710. -- wood-cut; 1140 x 1437 mm.

ZUDA-Rōkashi is better known as scholar priest Hōtan, founder of the Kegonji temple at Kyoto.

Uhei published two editions of Hōtan's map; one in Kyoto, the other in Edo.

The map incorporates Western geographical knowledge into the Buddhist world view. The continent of Jambu-dvīpa, including Lake Anavatapta and the four rivers, and large parts of Asia take up the greater part of the map. Europe is depicted as a group of islands in the northwestern corner of the continent. The unnamed continent of North America lies in the northeastern corner and is connected with Jambu-dvīpa by a long narrow land-bridge. The South American continent appears as a small island south of Japan. The detailed explanatory texts are written in Chinese. The place-names are in both katakana and Chinese.

Hōtan derived much information from both B 1700.4 and B 1708.6, but for the place-names he also used R 1708.4 for reference. The depiction of South America and the land-bridge between Jambu-dvīpa and North America is copied from Daimin Kyuhen. Bankoku Jinseki Rōtei Zenzu (Complete map of the nine large regions of the Greater Ming (China) and of all countries of the world, Kyoto 1700), which was a Japanese reprint of a Chinese map of 1663. In addition,
Hōtan consulted 102 Buddhist scriptures and Chinese classics, which are listed in the upper margin of the sheet.

Hōtan's map was very popular and circulated widely — as the numerous surviving copies prove — because it appealed strongly to the conservative minds of a people imbued with Buddhist culture. The map itself was published in several editions (see also 1710.1), but also many simplified and popular editions were produced until well into the nineteenth century (see B 1710.2; B 1744.1; B 1809.1 and B 1844.10).

- Beans, List of Japanese maps, supplement A (1955) 13;
- M. Kurita, Nihon Kohan Chizu Shūsei (Collection of old printed maps of Japan; Tokyo and Osaka 1932) plate 3;
- Muroga, 'Nihon Ni Okonawaretta Bukkyo Kei Sekaizu Ni Tsuite', plate 1;
- Idem, 'Buddhist world map in Japan and its contact', 58, 62-64 and plate 9;
- Nanba, Old maps in Japan, 179 and plate 8;

B 1710.1*

Nanbenbushū Bankoku Shōka No Zu : (A map showing numerous countries as sweets in the hand) / made by ZUDA-Rōkashi (1654-1728). -- Kyoto : NAGATO-Chōbei, 1710. -- wood-cut : coloured ; 1140 x 1437 mm.

ZUDA-Rōkashi is better known as scholar priest Hōtan, founder of the Kegonji temple at Kyoto.

Another edition of Hōtan's map, published by Chōbei using the same blocks as B 1710.4.

- Beans, List of Japanese maps, 20 and plate p. 21-22;
- Ramming, 'Remarks', 128 and plate 2.

B 1710.2* Bankoku Shōka No Zu : (Outline map of all countries). -- wood-cut ; 485 x 675 mm.

The map is a reduced and simplified version of B 1710.4 and therefore must have been published after 1710. The explanatory text is written in katakana.

The map was published in three or four variant editions.

- Beans, List of Japanese maps, 20;
- Muroga, 'Buddhist world map in Japan and its contact', 64.
B 1744.1 Nanenbudai Bankoku Shūran No Zu : (Outline map of all countries in Jambu-dvīpa) / made by KABŌ-Hyōzō. -- s.l. : HONYA-Hikoemon, 1744. -- wood-cut : 517 x 710 mm.

Reduced and simplified version of B 1710.4. Five European East-Indiamen are depicted in the map. The explanatory text and place-names are written in katakana.

The commentary of the map is based on NISHIKAWA-Joken, Žōho Kai Tshūshō Kō (Enlarged edition of notes on foreign trade, 5 vols.; Kyoto 1708 - see R 1708.3). Since the map lacks any reference to Buddhist dogmas, the cartographer and publisher apparently intended to meet by the means of the familiar Buddhist world map the growing interest of the Japanese in the outside world rather than to oppose a Buddhist conception of the world to the Western maps.

This map was published in three or four variant editions.

- Beans, List of Japanese maps, supplement B (1958) 18;
- N. Muroga and K. Unno, 'Edojidai Kōki Ni Okeru Bukkyo Kei Sekaiizu' (Buddhist world maps in the late Edo era) in: Chirigakushi-Kenkyū 2 (Kyoto 1962) English abstracts, 11;
- Idem, 'Buddhist world map in Japan and its contact', 64 and plate 10.

B 1744.2 Bankoku Zu : (Map of all countries). -- s.l. : HONYA-Hikoemon, 1744. -- wood-cut : Buddhist map in oval projection, coloured ; 360 x 600 mm.

The map is a hybrid between the Buddhist and Ricci world maps. The Eurasian continent of Ricci's map is replaced by Hotan's Jambu-dvīpa. The remaining continents are depicted in a distorted manner. In clearly demonstrating that Jambu-dvīpa, the Buddhist cosmos, is only a part of a much larger world, the map is a breach of faith with Buddhist doctrine.

- Beans, List of Japanese maps, supplement C (1963) 11;
- Muroga, 'Edojidai Kōki Ni Okeru Bukkyo Kei Sekaiizu', 11-12 and plate 6;
- Idem, 'Buddhist world map in Japan and its contact', 65 and plate 12.

B 1749.2 ... -- manuscript : coloured ; 1675 x 1348 mm.

Traditional Buddhist world map of the egg-shaped continent Jambu-dvīpa.
Bankoku Ichiran Zu : (Outline map of all countries on earth) / made by KOYANO-Yoshiharu (1756-1812). -- Kurashiki : Kōzanro, 1809. -- wood-cut : coloured ; 1060 x 1275 mm.

with accompanying text: Bankoku Ichiran Zusetsu (Notes on the outline map of all countries on earth) published by FURUYA-Harumoto at Osaka in 1810.

KOYANO-Yoshiharu is known as Kōzan, a doctor from Kurashiki in Bitchū Province (present day Okayama Prefecture). The map was published by Kōzanro, his private school for Confucian studies.

The map expresses the ancient Japanese conception of the world consisting of three great civilizations: India, Japan and China, which cover the greater and central part of the map. Areas outside those countries appear as superfluous addenda. To match China and India, which is still the Holy Land of Buddha drawn as in B 1710.4, Japan is depicted far too large. The shapes of Europe, Africa and America are badly distorted.

Kōzan incorporated in his map elements from Chinese sources and Buddhist literature as well as images of both the Ricci and the Western hemispheric world maps. The depiction of China is based on NAGAKUBO-Sekisui's maps of China.

The map and text were not prepared for sale, but devised for use at Kōzan's academy only, because, as he explains in his preface, the hemispheric Japanese world maps, which began to appear at that time, were for beginning students too difficult to understand. Therefore Kōzan drew a plain and easy one.

- Beans, List of Japanese maps, 32;
- Muroga, 'Buddhist world map in Japan and its contact', 67-68 and plate 13;
- Nanba, Old maps of Japan, 181 and plate 15.

B 1810.12


Though the map shows the egg-shaped continent of Jambu-dvīpa, the absence of Lake Anavatapta and the four
rivers and the depiction of the equator and both tropics suggest some (Sino-)Western influence.

- Beans, List of Japanese maps, supplement C (1963) 16;

**B [1822.4]**

Enbudai Zu : (Map of Jambu-dvīpa) / made by priest Zontō. -- Edo : (1822). -- wood-cut ; 560 x 1300 mm.

This map of Jambu-dvīpa is not tied to the traditional form of the continent and it is brought up to date by adding a part of hemispheric world map W 1810.1. Zontō, however, avoided an hemispheric representation by making modifications in both outline and composition, since he denied the spherical theory of the shape of the earth. North and South America are left out.

- Beans, List of Japanese maps, supplement C (1963) 16;
- Muroga, 'Edojidai Rōku Ni Okeru Bukkyo Kei Sekaizu', 13 and plate 24;
- Idem, 'Buddhist world map in Japan and its contact', 68 and plate 14.

**B [1844.10]**

... -- manuscript ; 1284 x 1526 mm.

A faithful copy of 1710.4, though Europe is shifted to the northernmost extremity of the continent of Jambu-dvīpa. North and South America have disappeared and in their place small islands bearing American place-names are scattered over the eastern ocean. Different types of ships are depicted in the seas surrounding the continent and also a balloon with a hand-operated propelling apparatus.

The ships and balloon might have been derived from Fukada-Shikyō, Seiyōsen Zushū (Collected illustrations of Western ships, 1844).

- Muroga, 'Buddhist world map in Japan and its contact', 64-65 and plate 11.

**B 1845.2**

Nan-enbushū Saiken Zusetsu : (Illustrated description of Jambu-dvīpa with its exposition) / made by priest Egon. -- Ōmi Province : Sūgakusha, 1845. -- wood-cut : coloured ; 695 x 395 mm.

The map represents the Buddhist opposition to European astronomical and geographical knowledge. In the upper part of the map Jambu-dvīpa is shown as the flat top of a globe. In the bottom part of the map a strange egg-shaped continent is depicted, which at its southernmost part fades
into the European, African and Asian continents. In the southeast corner Australia is depicted. Its shape, though deformed, resembles the depiction of the Australian continent in for example Kōkan's map (W 1792.2). North and South America lie in the southwest corner of the map.

- Muroga, 'Edojidai Kōki Ni Okeru Bukkyo Kei Sekaizu', 14 and plate 25;
- Idem, 'Buddhist world map in Japan and its contact', 68 and plate 16.
II. 'Ricci' world maps

Bankoku Sōzu: (Complete map of the world), 'Shoho-map'
-- Nagasaki: 1645. -- wood-cut: oval projection, coloured
; 558 x 1366 mm.

accompanied by a sheet of the same size, depicting forty
couples of different nationalities, including the Japanese,
Chinese, Dutch, Patagonians and the 'Dwarfs'.

The map derives its popular name 'Shoho-map' from the
year period in which it was published: Shoho (1644-1648).

In comparison with contemporary Western world maps the
surface of the globe is shifted along the equatorial line, so
that the central meridian runs east of New Guinea and Asia
is shown in the central part of the map. Africa and
Europe take up the far western part and North and South
America lie in the East. A huge southern continent, of
which New Guinea is the northernmost point, covers the
bottom of the map from east to west.

The map is based on the 1602 edition of the Chinese world
map, constructed by the Italian Jesuit Matteo Ricci. Most
place-names are translated from Chinese into Japanese
katakana. The legends are fewer in number and simplified.
The anonymous cartographer copied Ricci's oval projection,
but he did not understand the geographical principles behind
the graduations of latitude and longitude. He drew the
meridian lines at irregular intervals and marked 175 degrees
to the west of the prime meridian and 160 degrees to the
east. The depiction of the couples on the accompanying
sheet might be inspired by the Ricci legends as well as by
the decorations of Dutch maps with vignettes in the margins
depicting foreign couples and views of cities of various
countries.

The Shoho map is the first true world map printed in
Japan. Five editions were published between 1645 and 1652.
The map was very popular and continued to be reproduced
in an increasingly crude and modified form until well into
the nineteenth century (see for example the R 1850 maps).
Until the end of the eighteenth century this kind of Ricci
map was the prototype of most Japanese world maps other
than those expressing the Buddhist idea of the world.

NOTE: Though the accompanying sheet gives Nagasaki as
place of publication, the various sources disagree about the
actual place of publication of the map. Beans supposes
Nagasaki. Boxer, however, suggests Nagasaki, Osaka and
Kyoto as possible places of publication. Finally, Nanba
considers Kyoto the most likely.
Beans describes the couples on the accompanying sheet as 'forty-two types of foreigners'. However, only forty different nationalities are depicted. Furthermore, the Japanese themselves are represented as well, so that only thirty-nine foreign couples remain. It is not clear on which source Beans bases his description, though he refers to Boxer, who however does not mention any number in relation to the printed map 1645.1. Instead he explains (p. 11 note 1) that in painted Shoho world maps the number of couples may vary between forty and forty-two, because occasionally the Ryukyu, Koreans and Japanese are excluded.

Wallis suggests that, in addition to Ricci's map, the Shoho map is also based on Portuguese charts, because some place-names (Ingeresu - England) are undoubtedly of Portuguese origin. At that time, however, these Portuguese renderings were used as the common 'Japanese' names of these places and countries. Hence, in translating Ricci's 'Big Wave Mountain' into Kapo chi Boha Esupeonshiya (Cape of Good Hope) the cartographer simply translated the Chinese name into Japanese.

- Beans, List of Japanese maps, 11;
- Boxer, Jan Compagnie, 9-11 and 71-72;
- Krieger, Infiltration, 17-18;
- Nanba, Old maps in Japan, 162, 178-179 and plate 7;

R 1645.2*a-b  b. Bankoku Sōzu : (Complete map of the world), 'Shoho-map' -- painted manuscript : oval projection, coloured ; 570 x 1170 mm.

a. accompanied by a separate painting (size: 569 x 1316 mm), depicting the same forty couples as in R 1645.1.

The map is cartographically similar to R 1645.1.

- Beans, List of Japanese maps, 12.

R 1645.2*  Bankoku Sōzu : (Complete map of the world), 'Shoho-map' -- painted manuscript : oval projection, coloured ; 597 x 1355 mm.

The map is cartographically similar to R 1645.1.

- Beans, List of Japanese maps, 12.

R [1646.2*]  ... / made by KOBAYASHI-Kentei (1601-1684), being the courtesy name of KOBAYASHI-Yoshinobu. -- painted manu-
The dating is based on an inscription in a printed version of later date (see R 1708.5), but both pre-1646 and post-1667 dates are possible, because Kentei was imprisoned from 1646 to 1667 under suspicion of being a Christian.

The map is based on and similar to the northern and southern hemispheres in the margins of the 1602 edition of the Ricci map.


R 1671.1

Bankoku Sōzu: (Complete map of the world). — Nagasaki: HAYASHI-Tsugiemon of Kyoto, 1671. — wood-cut: oval projection, coloured; 400 x 560 mm.

The map is a derivative of the Shoho map. The pictures of thirty-five of the originally forty couples and the map are printed on one single sheet. As a result the oval projection is compressed into a circular 'projection' and the continents are distorted.

NOTE: Beans speaks erroneously of forty instead of thirty-five pictures.

- Wallis, 'Influence of Father Ricci', 45 and plate 7.

R 1688.1

Bankoku Sōkai Zu: (Map of the world) / made by ISHIKAWA-Ryūsen, ukiyo-e artist of Edo. — Edo: SAGAMIYA-Tahei, 1688. — wood-cut: oval projection; 550 x 1253 mm.

Description under R 1708.4, which is an identical later edition.


R 1708.3*

The first edition (1695) of Joken's study, inter alia based on Ricci's world map, was the first work ever printed in Japan dealing with foreign countries other than China and Korea.

This double-page world map is a simplified derivative of the Ricci map, folded on its prime meridian. It contains some explanatory text and few place-names.

- Beans, List of Japanese maps, 20;
- Boxer, Jan Compagnie, 16-17.

R 1708.4*

Bankoku Sōkai Zu : (Map of the world) / made by ISHIKAWA-Ryūsen, ukiyoe artist of Edo. -- Edo : SUHARA-Mohei, 1708. -- wood-cut : oval projection, coloured ; 550 x 1253 mm.

The map is a corruption of the Shoho map. Africa and Europe have become a group of islands. Japan is depicted far too large and shifted to the centre of the map. As a result the prime meridian is not the axis anymore and the map is divided into 200 degrees to the west and only 140 degrees to the east.

The map was used by Hōtan as a source of reference (see B 1710.4).

- Beans, List of Japanese maps, 20 (no 1708.1) and supplement A (1955) 12;
- Kurita, Nihon Kohan Chizu Shūsei, plate 2;
- Nanba, Old maps in Japan, 179.

R 1708.5*

Bankoku Enbizu : (Thoroughly prepared world map) / made by KOBAYASHI-Kentei (1601-1684), being the courtesy name of KOBAYASHI-Yoshinobu : copied by INAGAKI-Mitsuo of Osaka, his pupil. -- 1708. -- wood-cut : polar hemispheres, coloured ; 433 x 997 mm, diameter 425 mm.

The map is a printed edition of Kentei's map R 1646.2.

NOTE: Nanba gives a different title of the map: Sekai Bankoku Chikyu Zenzu (Complete map of the countries of the globe).

- Beans, List of Japanese maps, 20 and supplement A (1955) 12;
- Nanba, Old maps in Japan, 164.

Description under R 1802.13, which is a later edition.


R 1720.3 Bankoku Yotizu : (A world map) / made by HARAME-Sadakiyo. -- Edo : 1720. -- wood-cut : oval projection; 860 x 1500 mm.

The map is designed on the basis of the Ricci map. It was one of the sources of map R 1785.

- T. Ikeda, 'World maps in Japan before 1853' in: Comptes rendus du Congrès International de Géographie, Amsterdam 1938 (3 vols.; Leyden 1938) II, 358;
  - Nanba, Old maps in Japan, 179.

R 1750.4 Chikyū Bankoku Ichiran No Zu : (Outline map of all countries of the universe). -- manuscript : oval projection, coloured; 880 x 1656 mm.

The map is a more accurate derivative of Ricci's world map than the Shoho map. It also contains more text and many more place-names.

NOTE: The map is not dated. Ramming supposes that the map was made at the end of the seventeenth century. However, the map might have been drawn at the end of the eighteenth century because of its strong resemblance to R 1783 and R 1785.

- Ramming, 'Remarks', 128 and plate 5.

R 1783.3* Chikyū Ichiran Zu : (The globe at a glance). -- s.l. : ŌNOGI-Ichibei of Osaka, UMEMURA-Saburobei of Kyoto and SUHARAYA-Ichibei of Edo, 1783 -- wood-cut : oval projection, coloured; 820 x 1500 mm.

The preface of the map is written by MITSUHASHI-Chōkaku, who is not necessarily the cartographer.

The map is a derivative of Ricci's world map, but a much smaller Southern continent only covers the central part of the bottom of the map and other continents are distorted. Japan is depicted too large and all the provinces are named.
Chikyū Ichiran Zu: (The globe at a glance). -- Osaka: ŌNOGI-Ichibei of Osaka and ASAI-Shōemon of Kyoto, 1783. -- wood-cut: oval projection, coloured; 820 x 1500 mm.

The preface of the map is written by MITSUHASHI-Chōkaku, who is not necessarily the cartographer.

Same map as R 1783.3, but published by different publishers.

Chikyū Bankoku Sankai Yochi Zenzu: (Complete map of the numerous countries on the globe) / made by NAGAKUBO-Sekisui (1717-1801), accomplished geographer and Confucian scholar of Mito. -- Osaka: ASANO-Yahei, after 1785. -- wood-cut: oval projection, coloured; 930 x 1610 mm.

The map is an accurate derivative of the Ricci map. It gives many place-names, especially of Japan, China and surrounding areas. Explanatory notes are written in the upper margin of the map.

Sekisui based his world map on his own map of Japan (1779), his historical atlas of China, the R 1720.3 map and probably an original copy of the Ricci map as well as on other, unidentified sources. In the upper margin of the map Sekisui wrote that his map was originally made in the Netherlands. However, there is no evidence that the map is derived from a Dutch model.

The map was a bestseller. During the first half of the nineteenth century it was revised and reprinted in reduced sizes and simplified editions several times (see the R 1850 maps).

Kaisei Chikyū Bankoku Zenzu: (Revised general map of the world nations of the earth) / made by NAGAKUBO-Sekisui (1717-1801), accomplished geographer and Confucian scholar
of Mito. -- Osaka : ASANO-Yahei; Edo : YAMAZAKI-Kinbē, after 1785. -- wood-cut : oval projection, coloured; 1000 x 1575 mm.

Except for the title, the additional publisher at Edo, the overall size and the type-setting of the explanatory text in the upper margin, the map is identical to its first edition R 1785.7.

- M. Nagakubo, 'Nagakubo Sekisui no Chugoku chizu, sekai chizu henshu ni tsuite' (Compilation of maps of China and of the world by Nagakubo Sekisui), Chizu 9 (1971) 21 (upper plate) and 23;
- Nanba, Old maps in Japan, 179 and plate 9..

R 1802.13* ... -- Osaka : KOGATANAYA-Rokubei and three KAWACHIYA houses, 1802. -- wood-cut : oval projection; 180 x 417 mm. -- in: Tōdo Kunmō Zui (A Chinese illustrated encyclopedia), 14 vols. in 5; vol. 1, 66-68.

This three-page map is a simplified version of the Ricci map. The world is depicted in two connected circles. This might be an imitation of the Japanese hemispheric world maps, which first began to appear at the end of the eighteenth century. Because the map continues through the connection from one circle into another, it cannot itself be called an hemispheric map (as Beans states).


R 1802.18 Konyo Zenzu : (A world map) / made by INAGAKI-Shisen. -- 1802. -- oval projection, coloured; 550 x 1180 mm.

This map is a reduced version of the 1602 edition of Ricci's map. The explanatory text is translated into Japanese.

- S. Ayusawa, 'The types of world map made in Japan's age of national isolation', Imago Mundi 10 (1953) 123;
- Beans, List of Japanese maps, supplement B (1958) 26;
- Ikeda, 'World maps in Japan', 358.

R 1844.01* Chikyū Bankoku Sankai Yochi Zenzū : (Complete map of the numerous countries on the globe) / made by NAGAKUBO-Sekisui (1717-1801), accomplished geographer and Confucian scholar of Mito : revised by DEN-Rinkoku. -- 1844. -- wood-cut : oval projection, outlined in colour; 255 x 393 mm, overall size including the text sheet 335 x 795 mm.
The map is a reduced and simplified version of Sekisui's map R 1785.7.


**R 1850.2***

Chikyü Bankoku Sankai Yochi Zenzu Setsu : (Complete map of the numerous countries on the globe with explanations) / made by NAGAKUBO-Sekisui (1717-1801), accomplished geographer and Confucian scholar of Mito : revised by YAMAZAKI-Yoshinari. -- Edo : TAKATANI, 1850. -- wood-cut : oval projection, colour-printed ; 447 x 470 mm.

The map is a popularized edition of Sekisui's map R 1785.7. The continents are outlined in a very crude manner.


**R 1850.4***

Chikyü Bankoku Sankai Yochi Zenzu Setsu : (Complete map of the numerous countries on the globe with explanations) / made by NAGAKUBO-Sekisui (1717-1801), accomplished geographer and Confucian scholar of Mito : revised by YAMAZAKI-Yoshinari. -- Edo : TAKATANI, 1850. -- wood-cut : oval projection, colour-printed ; 399 x 590 mm.

The map is a popularized edition of Sekisui's map R 1785.7. Except for size the map is identical to R 1850.2.


**R 1850.17***

Chikyü Bankoku Yochi Zenzu Setsu : (Complete map of the numerous countries on the globe with explanations) / made by NAGAKUBO-Sekisui (1717-1801), accomplished geographer and Confucian scholar of Mito : revised by YAMAZAKI-Yoshinari. -- Edo : TAKATANI, 1850. -- wood-cut : oval projection, colour-printed ; 280 x 390 mm.

The map is a popularized edition of Sekisui's map R 1785.7. It is a reduced version of R 1850.2.

- F. Woodward and T. Gonnami, Addenda to the George H. Beans collection of Japanese maps of the Tokugawa era, Typescript Special Collections Division of the University of British Columbia Library, Vancouver 1979 and 1983.

**R 1850.3***

... -- Nagasaki : Firm of EIJDO, (1850). -- wood-cut : oval projection, colour-printed ; 320 x 443 mm.

The map is modeled on Sekisui's map R 1785.7, but the continents are outlined in the crudest possible manner.
Japan is depicted far too large and shifted to the centre of the map. Twelve boxes containing annotated illustrations of different nationalities are spread over the map, testifying to the influence of the Shoho map (see R 1645.1).

NOTE: Beans speaks erroneously of eleven instead of twelve boxes.

- Beans, List of Japanese maps, 40.


The map is modeled on Sekisui's map R 1785.7. It is identical to R 1850.3, except for the depiction of two paddle steamers in the North Pacific.

NOTE: Though the map itself is undated, Nanba fixes the time of publication at 'mid-nineteenth century, definitely not earlier than 1850'. However, in 1853 four Russian ships, among them one paddle steamer, visited Nagasaki. It was the first time the Japanese saw a steam ship and they were deeply impressed. Therefore, it is most likely that the R 1850.3 map was updated and published in 1853 or after.

- Nanba, Old maps in Japan, 179-180 and plate 10;


The map is a popularized edition of Sekisui's map R 1785.7. It resembles R 1850.2, but is printed from different blocks. In the margins of the map six ships, among them one paddle steamer, are depicted. Hence this undated map can be dated 1853 or later (see NOTE 1853.12).

- Nanba, Old maps in Japan, 180 and plate 11;
III. 'Western' world maps

W 1775.6  
Chikyū Zu: (Map of the globe) / drawn by HAYASHI-Shihei (1738-1793), famous scholar and cartographer of Sendai. -- Nagasaki : 1775. -- manuscript : hemispheres.

Shihei drew his map during his stay in Nagasaki, based on an unidentified Western hemispheric world map.

NOTE: Ayusawa states that the map is a copy of a Dutch map. Though this is likely, it cannot be proven.

- Ayusawa, 'Types of world maps', 125;

W 1789.1-2*  
Chikyu Ryaku Zen Zu: (Simplified map of the whole world).
-- Edo : 1789. -- wood-cut: hemispheres ; 183 x 266 mm, diameter 133 mm. -- in: KUCHIKI-Masatsuna, Taisei Yochi Zusetsu (Illustrated geography of the Western world), 17 vols.; vol. 15, 2-3.

The preface is written by HATOTANI-Kōhei.

The map is a simple, but accurate version of a late seventeenth century Western hemispheric world map. Australia is depicted as well as the west coast of New Zealand. The northwest coast of America is still left blank and California is shown as an island.

The work is a translation of the section on Europe in Johann Hübner, Kort begryp der oude en nieuwe geographie (Abstract of old and new geography) 5th ed.; Utrecht 1736, in itself a Dutch translation of the original German version.

NOTE: Both French and Krieger date the work at 1788.

The Beans collection has vols. 1; 4; 6; 9; 11 and 15 only.

- Beans, List of Japanese maps, 26-27;
- Boxer, Jan Compagnie, 20;
- French, Shiba Kōkan, 175;
- Ishiyama, 'Yōgaku scholars', 33-34;
- Krieger, Infiltration, 87;
- Nanba, Old maps in Japan, 164.

W 1792.1  
Yochi Zenzu: (Complete map of the earth) / made by SHIBA-Kōkan (1747-1818), famous artist and Rangaku scholar. -- Edo : 1792. -- copper-engraved : hemispheres, coloured ; 555 x 866 mm, diameter 423 mm.

accompanied by a pamphlet with explanatory notes:
1792.3 **Yochi Ryakusetsu** (Brief explanation of the earth, 1792), illustrated with two diagrams of the western and eastern hemisphere respectively.

Description under W 1792.2, of which this map is an early state.

- Boxer, *Jan Compagnie*, 21;

**W 1792.2**

Chikyū Zenzu: (Complete map of the world) / made by SHIBA-Kōkan (1747-1818), famous artist and Rangaku scholar. -- Edo: 1792. -- copper-engraved: hemispheres, coloured: 555 x 866 mm, diameter 423 mm.

accompanied by a pamphlet with explanatory notes:

1793.1* **Chikyū Zenzu Ryakusetsu** (Brief explanation of the complete world, 1793), illustrated inter alia with two diagrams of the western and eastern hemisphere respectively. Enlarged with a short description of the countries of the world, the pamphlet was reprinted in 1797 and 1800.

**NOTE:** In his description of the pamphlet Boxer wonders why the preface gives 1797 as the date of publication and the penultimate page 1793. However, he obviously examined a sample of the second enlarged edition.

The map is an exact copy of the *Mappe-monde geo-hydrographique* published by the firm of Covens & Mortier at Amsterdam after 1721. It depicts the four western provinces of Canada as one enormous legendary Mer de l'Ouest as shown in the Dutch map. The Strait of Anian connects the Pacific Ocean with Hudson Bay. California is a peninsula. New Guinea and Tasmania are joined to Australia. The west coast of New Zealand is part of a huge Southern continent. Only Japan is depicted in a slightly different way. In the Dutch map Hokkaido is shown as part of the Asian mainland. Kōkan rectified this mistake. Lack of space made it impossible to transcribe all place-names into Katakana, so that only the large countries are identified.

In comparison with the early state of the map (W 1792.1) several place-names are added as well as an inscription above the eastern hemisphere (translated by French, 126). Furthermore, six pictures are inserted, depicting: 1. the stalk, flower, and seed of a saffron plant and a poppy; 2. the branch, fruit and seed of a peach tree; 3. a narwal; 4. whale-fishing off Greenland; 5. Dutch ships in the waters off the Cape of Good Hope; and 6. Adam’s Peak in Ceylon. Kōkan derived the inspiration for these themes from F. Valentijn, *Oud en Nieuw Oost-Indië* (Old and New East Indies) 5 vols.; Amsterdam 1726. The picture of
Adam's Peak, for example, is an exact copy. Kōkan's map was the first Japanese map printed from a copperplate. The technique of engraving on a copperplate had been known in Japan as early as the sixteenth century, but the knowledge was lost after 1640.

Though Kōkan's pamphlets and numerous other texts were published until the woodblocks wore out, exerting a lasting influence on the Japanese conception of geography, his world map was printed in very limited numbers: 'It [his world map] cannot be offered for sale. Only important persons are permitted to have it' (quoted in French, 124).

NOTE: Actually almost all scholars are confused about the source of Kōkan's map. Boxer makes an educated guess in stating that the original prototype was 'no doubt' some Dutch map of the mid-seventeenth century. He bases his suggestion mainly on the depiction of Australia. However, the characteristic feature of Dutch maps, and all their derivatives, was the depiction of actual discoveries only. They showed blank spaces for unexplored coasts. In the mid-seventeenth century this meant that the traditional Southern continent had disappeared from the maps and was replaced by Tasman's discoveries of Tasmania and New Zealand (1642-43). It meant that the northwest coast of America was left blank. Also, California was shown as an island. For all these reasons Kōkan's map cannot possibly be based on a mid-seventeenth century map.

Other scholars suggest that Kōkan's map was based on either a 'French map' (Ayusawa) or 'a French edition of a world map published by Covens & Mortier at Amsterdam in 1720, which by then was already half a century old' (Nanba). However, the Covens & Mortier map was neither a French map nor a French edition of a Dutch map nor published in 1720 nor 'already half a century old'. For a full discussion of the Covens & Mortier map, see p. 30-33.

- Ayusawa, 'Types of world maps', 125-126;
- Beans, List of Japanese maps, 29;
- French, Shiba Kōkan, passim but especially chapter VIII and plate 89-90;
- Ishiyama, 'Yōgaku scholars', 26-27;
- Krieger, Infiltration, 101-102;
- Kurita, Nihon Kohan Chizu Shûsei, plate 6;
- Nanba, Old maps in Japan, 180 and plate 13.

Oranda Shinyaku Chikyū Zenzu: (Complete map of the world, newly translated from Dutch sources) / made by HASHIMOTO-Sōkichi (1763-1836), an umbrella maker, who became a Rangaku scholar practising medicine in Osaka: examined by NAGAKUBO-Sekisui (1717-1801), accomplished geographer and Confucian scholar of Mito; engraved by KOBAYASHI-Heihachi of Osaka and OGAWA-Tazaemon of
Kyoto. -- Edo : 1796. -- copper-engraved : hemispheres, coloured ; 511 x 914 mm, diameter 330 mm.

The map is based on some unidentified Dutch hemispheric world map. New Guinea and Tasmania are part of the Australian continent, of which the east coast is omitted. The west coast of New Zealand is part of a huge Southern continent. California is an island. A long uninterrupted coastline connects Northwest America with Asia. The place-names are in Japanese. The surrounding text is written in Chinese and gives details about world geography. The Dutch title Algemeene waereld kaart (General world map) is impressed in the covers of the map.

The map was reprinted three times, twice in 1796 and then at an unspecified later date.

NOTE: Both Boxer and Ishiyama and Beans hold debatable opinions about the still unidentified original prototype of Sōkichi's map. Boxer supposes that the map is 'chiefly based on a Dutch model of c. 1660'. However, though California is shown as an island as was common in mid-seventeenth century maps, the existence of a Southern continent and the northwest coast of America connected with Asia is not characteristic of mid-seventeenth century maps at all (see NOTE W 1792.2). On the other hand Ishiyama states that the map is 'as accurate as Guillaume de l'Isle's Mappe-monde (1700)'. However, De l'Isle's world map is famous for suggesting for the first time since the early seventeenth century that California was a peninsula, though it left the actual connection with the mainland blank. Therefore, Sōkichi's map cannot possibly be based on a De l'Isle map. Furthermore, Beans describes the map as 'cartographically quite similar to' and 'less advanced than' Kōkan's map. Boxer, too, states that Sōkichi's map is 'far below the standard of that of SHIBA-Kōkan'. However, the depiction of California as an island and the absence of the Strait of Anian and the ridiculous Mer de l'Ouest make Sōkichi's map essentially different from Kōkan's. Sōkichi's map is 'less advanced' only in the depiction of California. Nevertheless, the original prototype of Sōkichi's map seems to be of an earlier date than that of Kōkan, suggested especially by California and the absence of the Mer de l'Ouest, which only began to appear on maps in the early eighteenth century. However, 'of an earlier date' is not synonymous with 'less advanced'.

- Beans, List of Japanese maps, 29-30 and plate p. 28-29;
- Boxer, Jan Compagnie, 21-22;
- Ishiyama, 'Yōgaku scholars', 27;
- Krieger, Infiltration, 111;
- Kurita, Nihon Kohan Chizu Shūsei, plate 7.

The map as a whole bears a double title, both hemispheres being maps of 'one half of the earth'.

The map is a crude and simplified edition of W 1792.2, oriented with the south at the top.

The same year a second popular edition of this work was published by K.-Yumahashi. The map, however, was printed from the same blocks.


**W 1802.10** Enkyū Bankoku Chikai Zenzu : (Global map of land and sea) / made by ISHIZUKA-Saikō, scholar in geography and Chinese. — Kagoshima : 1802. — wood-cut : hemispheres, coloured ; 1190 x 2200 mm, diameter 936 mm.

The map is based on some mid-seventeenth century Western hemispheric world map. Only the explored coasts of Australia and Tasmania are depicted. California is an island and a fraction of the northwest coast of America is shown. Text surrounds the map and gives accurate accounts of heavenly bodies. Both place-names and text are written in Chinese.

The Western source of Saikō's map must have been of an earlier date than that of W 1796.1, since South America is shown as a rather swollen continent, since Australia and Tasmania are not connected and since California is depicted as an elongated island, all three characteristic features of for example the large 1648 world map of Blaeu. Besides a Western source, Saikō also took information from Ricci's map. Many of the place-names and portions of the notes and astronomical information correspond with the Ricci map, which Saikō apparently still considered to be an authoritative model.

NOTE: Ayusawa states that the map is a copy of a Dutch map. Though this is most likely, it cannot be proven.

- Ayusawa, 'Types of world map', 125;
- Ikeda, 'World maps in Japan', 358 and plate 1;
- Kurita, *Nihon Kohan Chizu Shūsei*, plate 8;
W 1809.4  

Shinsen Sōkai Zenzu: (Complete atlas with new materials) / TAKAHASHI-Kageyasu (1785-1829), chief of the bakufu's astronomical observatory. -- Edo: 1809. -- copper-engraved: 212 x 333 mm.

Description of the map under W 1810.1, of which this is a small, but accurate trial map.

- Ayusawa, 'Geography', 289.

W 1810.1*  

Shintei Bankoku Zenzu: (Newly revised world map) / made by TAKAHASHI-Kageyasu (1785-1829), chief of the bakufu's astronomical observatory: engraved by AŌDŌ-Denzen (1748-1822). -- Edo: by the shogunate, 1810. -- copper-engraved: hemispheres, coloured; 1154 x 1829 mm, diameter 893 mm.

The map is most accurate and entirely up to date. It incorporates all the latest material, from both East and West. It is based on Aaron Arrowsmith, Chart of the world upon Mercator's projection, London 1790, but also on many other European sources as for example the depiction of the Bass Strait, discovered by Matthew Flinders in 1798-99, proves. The results of the exploration of Sakhalin, carried out by Kageyasu's pupil MAMIYA-Rinzo (1775-1844) in 1808-1809, are shown. The depiction of Japan is based on the sketch maps of INŌ-Tadataka (1745-1818), who made a complete and very accurate coastal survey of Japan between 1800-1817. The map has four inset hemispheres (diameter 159 mm each), depicting the world centered in Kyoto (1810.2) and in the South Atlantic Ocean (1810.4) and the North (1810.3) and South (1810.5) polar hemispheres respectively. Chinese text surrounds the hemispheres.

The map remained the most authoritative world map in Japan until the early years of the Meiji period (1868-1912). It was even ahead of contemporary Western maps in charting more accurately the outlines of Japan as well as the area around the Mamia Strait. The map was copied as well as revised and reprinted several times (see W 1836.3; W 1848.26 and W 1850.8).

- Ayusawa, 'Types of world map', 124;
- Beans, List of Japanese maps, 32 (no. 1810.1-5);
- A. Funakoshi, 'Shintei Bankoku Zenzu no shuyo shiryo Arousunisu no genzu ni tsuite' (The original map of Arrowsmith as a main source of Shintei Bankoku Zenzu (Revised map of the world)), Shirin 62 (1979) 1-46 and 164.
- Ikeda, 'World maps in Japan', 359 and plate 2;
- Ishiyama, 'Yōgaku scholars', 27-28;
- Kurita, Nihon Kohan Chizu Shūsei, plate 9;
- Nanba, Old maps in Japan, 165, 181 and plate 16;
- Ramming, 'Remarks', 128 and plate 1.


The four-page map is a crude Western style world map, oriented with the south at the top. It shows many tracks of exploration voyages all over the world.

The sources of the map, either Japanese or Western, remain elusive.

- Beans, List of Japanese maps, 34.

W [1836.3] Chikyū Bankoku Zenzu : (Complete map of all countries of the world) / made by GIHEI-Matsuda (1786-1867). — Kansei district : (1836). — copper-engraved : hemispheres ; 240 x 337 mm, diameter 82 mm.

Matsuda was the first Gengendō, i.e. the founding member of a group of artists, who specialized in copper-engraving.

The map is a small piece of art. It is inspired by, if not copied from, the inset hemispheres of map W 1810.1, depicting the world centered in Kyoto (1810.2) and in the South Atlantic Ocean (1810.4).

- Beans, List of Japanese maps, supplement A (1955) 22;

W 1844.11 Shinsei Yochi Zenzu : (New complete map of the earth) / made by MITSUKURI-Shōgo (1821-1847). — 1844. — hemispheres ; 355 x 1025 mm.

accompanying text : Konyo Zushiki (Explanatory notes on the world map).

The map is based on an unidentified French original of either 1835 or 1836.

The map became a model for the world maps published during the 1860s.

- Ayusuwa, 'Geography', 290;
Dōban Bankoku Yōchi Hōzu: (Copperplate map of the world on Mercator projection) / made by NAGAI-Soku (d. 1854), a Rangaku scholar : engraved by YASUDA-Raishū. -- 1846.
-- copper-engraved : Mercator projection, outlined in colour ; 328 x 1250 mm.

The map is the first Japanese world map drawn on Mercator projection. Japan is in the centre of the map. Four insets at the top of the map show the southern, eastern, western and northern hemispheres respectively. The delineation of the continents shows a very strong resemblance to W 1810.1.

In the explanatory notes Soku states that his map is a translation of an English map published in 1839, with revisions and additional place-names taken from N.G. van Kampen, De aard beschauwd (sic!) in haren natuurlijken toestand (The earth treated in its physical condition, 1823).

Kaei Kōtei Tōzai Chikyū Bankoku Zenzu: (Complete map of all countries of the world, published in the Kaei period) / made by KURIHARA-Shinchō. -- Edo : CHOJIYA-Heibei, (1848). -- wood-cut : hemispheres, coloured ; 357 x 629 mm, diameter 290 mm ; overall size including text sheet 658 x 652 mm.

The Kaei era is the period 1848-1854.

The map is an accurate modern world map, showing strong resemblance to map W 1810.1.

In the explanatory text, written by ABE-Akitō, the author states that the map is based on a French map of 1835.

Bankoku Chiri Saizu: (Detailed map of the world). -- 1850.
-- wood-cut : three maps on two accordion folded sheets, outlined in colour.

1850.5: eastern and western hemispheres, diameter 118 mm and
1850.6: polar hemispheres, diameter 51 mm on one single sheet; overall size including text 286 x 369 mm.
1850.7: Mercator projection, 214 x 365; overall size including text 286 x 365 mm.

The maps are inspired by, if not copied from, map W 1846.6.

W 1850.8* Shintei Bankoku Zenzu: (Newly revised world map) / made by SHIRAI-Tsūki of Utsunomiya: engraved by EGAWA-Sentarō and TAKEGUCHI-Teisai. — Edo : SENRYŪKUTSU, 1850. — copper-engraved: hemispheres, outlined in colour; 696 x 1137 mm, diameter 555 mm; overall size including text sheet 696 x 1375 mm.

The map is an accurate and faithful copy of W 1810.1.

W 1852.3* Shintei Konyo Ryaku Zenzu: (Revised map of the world) / engraved by TAKEGUCHI-Teisai. — s.l. : TAKAGI-Kōzo, 1852. — copper-engraved: oval projection, outlined in colour; 398 x 722 mm; overall size including two text sheets 492 x 1057 mm.

Though the anonymous cartographer drew his map in Ricci's oval projection with the prime meridian east of New Guinea, the depiction of the world is entirely up to date and very accurate. The map seems to be a hybrid between the still popular Ricci map and W 1810.1.
- Beans, List of Japanese maps, 40;  
- Nanba, Old maps in Japan, 165.

W 1853.1* Chikyu Bankoku Hozu: (Square map of all countries of the terrestrial globe). — wood-cut: Mercator projection, colour-printed; 705 x 1246 mm.

The map is a popularized version of W 1846.6.
- Beans, List of Japanese maps, 40.

W 1853.14* Kotei Bankoku Zenzu: (Revised world map) / NAGAYAMA-Kan. — 1853. — wood-cut: hemispheres, coloured; 213 x 415 mm, diameter 200 mm; overall size including text slips 333 x 506 mm.
The map is a simple, but up-to-date Western style world map.

Its sources, either Japanese or Western, remain obscure.

- Woodward, Addenda.
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Index of Japanese cartographers, engravers, authors and publishers

The plain numbers refer to the thesis text, the B, R and W numbers to the maps in the appendix.

ABE-Akitō
   Author. W 1848.26

AŌDŌ-Denzen, 1748-1822
   Engraver. W 1810.1

ASAI-Shōemon of Kyoto
   Publisher. R 1783.1

ASANO-Yahei
   Publisher, Osaka. R 1785.7; R 1785.13

BUNDAIKEN-Uhei
   Publisher, Kyoto and Edo. B 1710.4

CHOJIYA-Heibei
   Publisher, Edo. W 1848.26

DEN-Rinkoku
   Cartographer. R 1844.01

EGAWA-Sentarō
   Engraver. W 1850.8

EGON
   Priest. B 1845.2

EIJDO
   Publishing firm, Nagasaki. 17; R 1850.3

ENZŪ, 1754-1834
   Priest at the Eshō-in temple, Edo. B 1810.12

FURUKAWA-Saburobei
   Publisher, Kyoto. R 1708.3

FURUYA-Harumoto
   Publisher, Osaka. B 1809.1
GANKYŌ-Kōudō
Publisher, Osaka. W 1802.1-2

GIHEI-Matsuda, 1786-1867
The first Gengendō, i.e. founding member of a group of artists specialized in copper-engraving. W 1836.3

HARAME-Sadakiyo
Cartographer. R 1720.3

HASHIMOTO- Sōkichi, 1763-1836
Umbrella maker, became a Rangaku scholar practising medicine in Osaka. 28; 30; W 1796.1

HATOTANI-Kohei
Author. W 1789.1-2

HAYASHI-Shihei, 1738-1793
Famous scholar and cartographer of Sendai. W 1775.6

HAYASHI-Tsugiemon of Kyoto
Publisher. R 1671.1

HIRAZUMI-Sen-an
Author of Morokoshi Kinmō Zui R 1719.2

HONYA-Hikoemon
Publisher. 22-23; B 1744.1; B 1744.2

HŌTAN see ZUDA-Rōkashi

INAGAKI-Mitsuo of Osaka
Pupil of KOBAYASHI-Kentei. R 1708.5

INAGAKI-Shisen
Cartographer. R 1802.18

ISHIKAWA-Ryūsen
Ukiyoe artist of Edo. R 1688.1; R 1708.4

ISHIZUKA-Saikō
Scholar in geography and Chinese. 29-30; W 1802.10
JIEISHA
Publisher, Edo. R 1853.13

Jūkai, 1297-
Scholarly priest at Horyuji temple, Nara. 19; B 1364

K.-Yumahashi
Publisher. W 1802.1-2

Kabō-Hyōzō
Cartographer. B 1744.1

Kawachiya
Publishers. R 1802.13

Kobayashi-Heihachi of Osaka
Engraver. W 1796.1

Kobayashi-Kentei, 1601-1684
Courtesy name of Kobayashi-Yoshinobu. R 1646.2; R 1708.5

Kobayashi-Kōhō
Cartographer. R 1853.13

Kogatanaya-Rokubei
Publisher, Osaka. R 1802.13

Koyano-Yoshiharu, 1756-1812
Known as Kōzan, a doctor from Kurashiki in Bitchū Province (now Okayama Prefecture). Founded Kōzanrō, private school for Confucian Studies. B 1809.1

Kuchiki-Masatsuna
Author of Taisei Yochi Zusetsu. W 1789.1-2

Kurihara-Shinchō
Cartographer. W 1848.26
MITSUHASHI-Chōkaku
Author. R 1783.3; R 1783.1

MITSUKURI-Shōgo, 1821-1847
Cartographer. W 1844.11

NAGAI-Soku, d. 1854
Rangaku scholar. W 1846.6

NAGAKUBO-Sekisui, 1717-1801
Accomplished geographer and Confucian scholar of Mito.
16-18; 26; R 1785.7; R 1785.13; R 1844.01; R 1850.2; R 1850.4; R 1850.17; W 1796.1;

NAGATO-Chōbei
Publisher, Kyoto. 21; B 1710.1

NAGAYAMA-Kan
Cartographer. W 1853.14

NISHIKAWA-Joken
Author of Zōho Kai Tsushō Kō. 40; B 1708.6; B 1744.1; R 1708.3

OGAWA-Tazaemon of Kyoto
Engraver. W 1796.1

ŌNOGI-Ichibei of Osaka
Publisher. R 1719.2; R 1783.3; R 1783.1

SAGAMIYA-Tahei
Publisher, Edo. R 1688.1

SATŌ-Sukekore
Author of Shōten Zusetsu Shōkai. W 1824.1-2

SENRYŪKUTSU
Publisher, Edo. W 1850.8

SHIBA-Kōkan, 1747-1818
Famous artist and Rangaku scholar. 30-31; 33; 43; W 1792.1; W 1792.2
SHIRAI-Tsuki of Utsunomiya
Cartographer. W 1850.8

SUGAKUHA
Publisher, Ōmi Province. B 1845.2

SUHARA-Mohei
Publisher, Edo. R 1708.4; R 1719.2

SUHARAYA-Ichibei of Edo
Publisher. R 1783.3

TAKAGI-Kōzo
Publisher. W 1852.3; 36

TAKATANI
Publisher, Edo. R 1850.2; R 1850.4
R 1850.17

TAKEGUCHI-Teisai
Engraver. W 1850.8; W 1852.3

TAKAHASHI-Kageyasu, 1785-1829
Chief of the bakufu's astronomical observatory. 34-35;
W 1809.4; W 1810.1

UMEMURA-Saburobei of Kyoto
Publisher. R 1783.3

UMEMURA-Yemon
Publisher, Kyoto. R 1708.3

UNTONSAI
Publisher. W 1824.1-2

YAMAZAKI-Kinbē
Publisher, Edo. R 1785.13

YAMAZAKI-Yoshinari
Cartographer. R 1850.2; R 1850.4;
R 1850.17

YASUDA-Raishū
Engraver. W 1846.6
ZONTŌ
Priest.

ZUDA-Rōkashi, 1645-1728
Better known as scholar-priest Hōtan, founder of the Kegonji temple, Kyoto.