

In 1997, Tokyo University's Historiographical Institute established the Centre for the Study of Visual Sources to apply new technologies to the study of historical pictures and maps. Of particular interest is the Centre's collection of photographs with an emphasis on portraits from the Bakumatsu to Meiji Restoration periods (1840s-1860s), gathered from sources both in- and outside Japan. Tani Akiyoshi guides us through some of the stories behind the images in the collection and shows how it's possible to un-layer almost archaeologically successive stages of development and practice in Japan's history of photography.

# Pioneering portraits: early photography in Japan

TANI AKIYOSHI (TRANSLATION AND EDITING BY OLIVER MOORE)

Among those who played a role in introducing early photography to Japan was Nakahama Manjiro (also known as John Manjiro), a fisherman from Usaura bay (now Tosashimizu on the southwest tip of Shikoku). Manjiro's first contacts with the West date to 1841 when, following his shipwreck on the far-flung Pacific island of Torishima, he was rescued by an American whaler. Dubbed by the crew John Mung, Manjiro worked his passage to Honolulu and then on to the United States. It was during his time in America that Manjiro turned his on-board learning into a more formal study of English and a wide range of new subjects.

He became a proficient navigator and much respected cultural interpreter, before cautiously returning to Japan in 1851 (technically, his unauthorised emigration remained illegal). In 1853, following his promotion to a senior rank of samurai, Manjiro was recommended as a possible interpreter for the Shogun's trade negotiations with the US Naval officer, Commodore Matthew Perry. However, it appears that the Tokugawa Shogunate objected to his presence in the talks, and eventually his skills were never put to use.

## Mastering the Ambrotype

In 1860, Nakahama Manjiro was posted with the first official overseas delegation to visit the United States. He sailed aboard the *Kanrin Maru*, the famous steam-propelled warship constructed in a Dutch shipyard and delivered to the Shogun government in 1857, and the first modern Japanese ship to cross the Pacific ocean.

Some time after the delegation made landfall in San Francisco, Manjiro bought a camera, with which he soon mastered the process of Ambrotype photography. (The major discovery in England in 1851 that collodion was a viable support for images captured on glass impelled a new photographic invention. The Ambrotype was a 'wet plate' photograph taken on a glass plate emulsified with collodion and further sensitised with silver nitrate. The process, first promulgated in America in 1854, undercut the costs of daguerreotyping, but it was famously messy, since the operator had to take the photograph and develop it before the emulsified side of the plate had dried.)

Some of the images that he produced are now owned by the Egawa Archive in Shizuoka. Via quite a different legacy, the same archive also safeguards a collection of *cartes-de-visite* assembled by Shibata Hyuga, a leading diplomat in the Tokugawa Shogunate, during a separate diplomatic mission to Europe. This collection includes a photograph of Shibata and the rest of the Japanese delegation during their visit to the Netherlands in 1862. More will be said at the end of this article about the voyage to Holland, for it yields useful comparative insights into Manjiro's activities in America and Japan.

What follows is a brief examination of a series of photographs on albumen paper and two ambrotype photographs (figs. 1 and 3) which portray men typical of a class of doctors and translators who, taking the Dutch Studies (*Rangaku*) as their point of departure, pioneered the study of photographic techniques in Japan.

From records of formal engagements contained in the administration transcripts of the Egawa *Daikan* (the official in charge of the territory immediately surrounding the Shogun at Edo), we know that the photograph of the samurai Ozawa (fig.1) was taken on the 1 September, 1860 in the Egawa mansion in Edo, and it is clear that Manjiro took the picture when he was still employed by and living in the grounds of the Egawa *Daikan*.

Records indicate that Manjiro stayed at the Egawa mansion itself for almost a fortnight in September 1860 during which time he was continually obliged to take photographs of a stream of visitors. Among the subjects were Matsudaira Oki (chief of the Shogun's escort) and other important members of the military government who called at the Egawa residence.

Interestingly, other records by these various guests also show that prior to his sojourn at the mansion - during the period in which he had already returned with the *Kanrin Maru* - news had already spread that Manjiro was in Edo producing photographs every day.

On the protective paper enveloping the portrait of Ozawa is a note: "In the

first year of the Manen reign period [1860], on the 16th day of the seventh month (1 September) at the seventh hour (i.e. 16:00), the photographer accepted a commission to take this photograph." The evident techniques for this photograph bear all the hallmarks of what Manjiro's eldest son Nakahama Toichiro was later to recollect; namely, that his father produced clear photographic portraits by either using a dark backing cloth or by spreading a black resin on the glass plate, either of which processes corresponded to practices then current in Europe and America.

By the end of the Edo period, Ambrotypes made in Japan were numerous. Most Japanese ambrotypes were produced by putting a black cloth or black paper between the glass photograph and the photographic case. An alternative technique was to paint Japan lacquer (a natural lacquer



Fig.1 Ambrotype photograph of the samurai Ozawa taken by Manjiro, 1 September, 1860. Dimensions: 8.4 x 7.1 centimetres and 1/6 plate size.

collected from the Urushi tree) on the glass side of the image [the non-emulsion side] which turns it a tea-brown colour yet also increases the reflectivity of the tonal contrast. (Un-backed or un-lacquered, the fully developed Ambrotype image resembles a negative on glass. This image can be displayed against a dark background at which point the image converts to positive, since the light-sensitised silver on its surface - dark areas - reflect light and appear pale, while the un-sensitised areas allow the dark background to show through).

The reverse - non-emulsified - face of the Ozawa photograph, smeared as it is with a black resin resembling asphalt, is unlike any other example of the same period from either Edo or Yokohama (a centre for Japan's early photographic studios).

Almost without exception, whenever this technique of using black resin is manifest on Japanese photographs of this period, it can be read as the decisive tell-tale of an ambrotype photograph taken by Manjiro.

## Chemistry experiments

During the same period of Manjiro's activities in Edo, Ueno Hikoma, who would later open a photographic studio in Nagasaki in 1862, and his co-researcher Horie Kuwajirō staged a presentation in the Edo residence of Lord Fujido, one of Japan's leading feudal lords (*daimyō* of Tsu-han, now Mie Prefecture of Tsu City). They demonstrated the technique of wet plate photography which they had learned from the Swiss photographer P. Rossier after his arrival in Nagasaki in late 1859. Not long previously, Ueno and Horie had conducted chemistry experiments under the guidance of Doctor J. Pompe van Meerdervoort, a surgeon from the Netherlands, at Nagasaki's Naval Academy. The pair's technical mastery now assured, they arrived in Edo with wet plate photographic cameras purchased from the Dutch merchant A.J. Baudin. From a letter, dated 27th July, 1861, written by the scientist Utagawa Kyosai, describing photographic demonstrations

that he had witnessed at Lord Fujido's residence one month earlier, it is evident that Ueno Hikoma and Horie had arrived in Edo in June of the same year.

Most notable among the results of Ueno Hikoma's activities in Edo is an ambrotype portrait attributed to Horie Kuwajirō (now located in the Department of Art, Nihon University), which shows Ueno in Fujido's residence with medicine bottles in front of him. This photograph, the glass side of which has been coated with a black resin, is the only one of its type that can be associated with Ueno. Ueno Hikoma remained in Edo from June, until 20 October 1861, when he followed Fujido back to his domain.

## Convergence of techniques

Figure 2 is a portrait of the samurai Sadamichi. It is thought that Manjiro took the picture in July of 1861 at the Egawa mansion in Asada, Edo, and that subsequently he left Edo January 1862. During this period, supposing that Manjiro and Hikoma had exchanged the technology that each had acquired in the previous year, then the same period could also have provided the opportunity to demonstrate the technique of adding black resin. Evidently, wet plate photography in Japan emerged from two directions: a commercial process obtained by Manjiro in the portrait studios of the US; and the Dutch Studies' process learned by Ueno Hikoma and his followers in their own country. These two techniques converge in Edo in 1861. The wet plate technique, first invented in England in 1851, arrived in Edo having circumvented the globe east- and westwards.

Figure 3 is of the samurai and interpreter of Dutch and English, Moriyama Einosuke. Moriyama was also the translator of a second edition of *A Short Explanation of the Camera*, a technical treatise on photography transmitted to posterity as part of the Shimazu Family papers (now located in Tokyo University and designated a national treasure). In 1854, during Commodore Perry's second visit to Japan, Moriyama - who would eventually sign the formal reply to the American President - took part in the negotiations between both sides.

Moriyama took the opportunity to report to Shimazu Nariakira whatever daguerreotype techniques he could glean from the American visitors. (Shimazu Nariakira was a Japanese feudal lord (*daimyō*) of the Edo period, the 28th in the line of Shimazu clan lords of the Satsuma domain. Renowned for his interest in Western learning and technology, he also researched the daguerreotype). This can be surmised from 'Daguerreotypes: a new method of picture-taking' (*Shazō shinpō dageriutipe*), which is appended to the rest of his report now included with the Shimazu Family Papers.

Among other figures featured in the 'photographic techniques' papers of the Shimazu family are Matsuki Kooan (fig. 4) from the Satsuma domain and Kawasaki Dōmin (fig. 5), a doctor from the Saga domain, both of whom are figures linked to photographic research in Japan. Kawasaki's life bears similarities to that of Manjiro. Kawasaki was also a member of the 1860 delegation to America. Although he returned to Japan somewhat later than Manjiro, he too used his newly acquired wet plate methods to make ambrotype portraits of his personal friends and other contacts. In fact, in 1862 Matsuki Kooan and Kawasaki joined the imperial mission to Europe, and, during the mission's residence in Holland, they visited the photographic studios of Robert Severin in The Hague (fig.6). The Records of Industrial Techniques (*seiren kata kiroku*), compiled in the Saga domain (ruled by the *Nabeshima* family), contains a miscellany of items for research into photographic method. Recent research shows that among these records we can identify items which derive directly from a leading early Dutch treatise entitled *Photophilus*. (Breda, 1855).

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Figure 2: Photograph on albumen paper of the samurai Sadamichi. Taken by Manjiro in July of 1861



figure 3: Ambrotype portrait of the samurai and interpreter Moriama Einosuke.



figure 4: Photograph on albumen paper of Matsuki Kooan from the Satsuma domain. Kooan was a member of the 1862 imperial mission to Europe.



figure 5: Photograph on albumen paper of Kawasaki D min, a doctor from the Saga domain and member of the 1862 imperial mission to Europe.



figure 6: During the 1862 imperial mission to Europe, Kawasaki and Kooan visited the photographic studios of Robert Severin in The Hague.