

Painting or Photograph? - Study of Avant-Garde photographer Noboru Ueki (1905-1992)

Yoko Shiraiwa¹, Takako Yamaguchi², Masahiko Tsukada³, Takayasu Kijima³

¹Shiraiwa Conservation Studio, ²Tokyo Photographic Art Museum, ³ Tokyo University of the Arts³

Contact: Yoko Shiraiwa, ys-i@gol.com

Abstract

Japanese photographers, since the Meiji period have explored different processes which involved applying inks or colours on photographic prints. Before the appearance of colour photography, there were a handful of Japanese photographers experimenting with colours. Among them, we focused on Noboru Ueki (1905-1992), who was active during the divergent era of Japanese photography. During 1950s, he started to produce a group of hand coloured gelatin silver prints. Here we will report our research on his painted photographic works in historical and technical aspect. This study can lead to understanding more deeply about his works and an interaction between Art and Photography which made a significant turning point in the history of Japanese photography.

Keywords: hand coloured photographs, painting materials, technical analysis, Noboru Ueki, Japanese photography.

About the photographer : Noboru Ueki

Noboru Ueki was born in Fukuyama-city, Hiroshima Prefecture to a father who ran a photographic studio. He soon aspired to work in a larger city and left for Kyoto in 1927 when he was 22 years old. There, he found Ryutaro Kohno Photography studio and started to work as an intern retoucher. At Kohno's studio, he learned retouching and bromoil process, which was popular in Japan at that time. After he got his first Vestan camera (which is a small version of Vest Pocket Camera by Kodak), he started to take photographs outdoors, capturing local people working in the fields.

In 1934, he opened Noboru Hiroi Photo Studio (taking his wife's family name) in Kyoto, subsequently changed the studio name to Noboru Ueki Photo Studio in 1946. 1930s was a very rich era of Modern Photography in Japan, with several groups and communities of photographers flourished across the country. He was a member of two important associations; Nihon Kōga Kyōkai (Art Photography Association) and Bijutsu Bunka Kyōkai (Fine Art and Culture Association). He started to publish his works in the periodicals after the war and became an active member of the group, Kyoto Photo Society (K.P.S.). Although Ueki had always been a commercial photographer, he became more and more interested in making Avant-Garde works using techniques such as photomontage, multiple exposure, deformation (making deformed image manipulating lens and mirrors during shooting or by bending the paper during exposure), soft focus, eventually leading to hand coloured works in 1950s. He was one of the first photographers in Japan after the war to pursue colour as an important factor for creating Art photography and produced a substantial number of hand coloured works.

Ueki's works

His earlier works from the 1930s represent Pictorialism style and some are called Zokingake. Zokingake is a Japanese word meaning dusting off or wiping with a cloth (Teraoka, 1933). Few Japanese photographers practiced this technique, which is said to be derived from oil and bromoil print. Zokingake is based on gelatin silver print. You first apply oil paint to the entire surface

(sometimes thin oil is applied before the paint) then wipe off the highlights and mid tones with a cloth. It is not building up images by application, but removing the paint to get the desired finish. Zokingake's softly focused, airy images were popular, especially still life and landscape which had similarities to Japanese traditional paintings. Unlike bromoil process Zokingake does not have a bleaching step and usually black or dark brown colours were used, which sometimes makes process identification difficult.

After the war, Ueki became interested in hand colouring the print. His background as a retoucher made him confident to retouch or finish the prints, adding his hand works to produce unique images. Ueki, according to a published review, exhibited 20 hand coloured prints in the 1948-49 exhibition; Jiyu Shashin Bijutsuten (Free Photographic Exhibition) in Kyoto and Osaka (*Shashin to Gijyutsu*, 1950). They were vividly coloured photographs depicting abstract and constructive forms. Over 40 of Ueki's hand coloured gelatin silver prints exist, mostly in the collection of Tokyo Photographic Art Museum (Fig.1). These works are crossing borders of photography and painting, evidence of him exploring and creating surreal, abstract images, using monochrome photographs as a base. He was playing with light and shadows, forms and colours.



Fig. 1 - Ueki's hand coloured photographs from late 1940s - 1955
Collection of Tokyo Photographic Art Museum

Colouring materials for photographs

Painting on photographs in Japan goes back to hand coloured albumen prints from the Meiji Period. It may be, that from this tradition, Japanese photographers had been proactive towards coloring or retouching prints often combining different techniques from different fields of Art. There were citations of Japanese photographers using Eastman Kodak's Velox Transparent watercolor stamps and Oriental Transparent Oil Colours in late 1920s (*Fototimes*, 1929). These were used over oil based medium such as turpentine oil or linseed oil. It is important to mention that bromoil was extremely popular in Japan during 1920s and 30s and bromoil inks and medium by Sinclair and Roberson from U.K. were available at that time (Ishida, 1930). Faber's Polychromos colour pencils were imported by Konishiroku (Konica Corporation) in 1931. Eastman Kodak's Transparent oil color was probably imported as well around the time when it was on the market.

Investigating Ueki's technique

His choice of photographic paper

By going through the collection of Ueki's hand coloured works at Tokyo Photographic Art Museum, we have noticed he used several different photographic papers for his hand coloured works. As he published his works in the periodicals in 1950s, we were able to gather some information. We confirmed from the periodicals that some of the chlorobromide paper Ueki used were: Yae G, Somei FS, Somei GS (all three by Rokuosha / Konica Minolta, a manufacturing division of Konica, producing dry plates and papers); Bellona F2 and Bellona F3 (both by Fujifilm); Gekko V2 (Mitsubishi), (*ARS Camera Annual*, 1950. *Photography Shinsei Shashin Zasshi*, 1950) .

On verso of some of the prints, in addition to his signature, he has handwritten information about the camera he used, aperture, and the type of paper. The papers he used could be loosely grouped into two types; smooth, slightly glossy, light weight paper and grained, luster, medium weight paper (Fig. 2). The size of the hand coloured works are varied but most of them are approximately 56 x 46 cm.

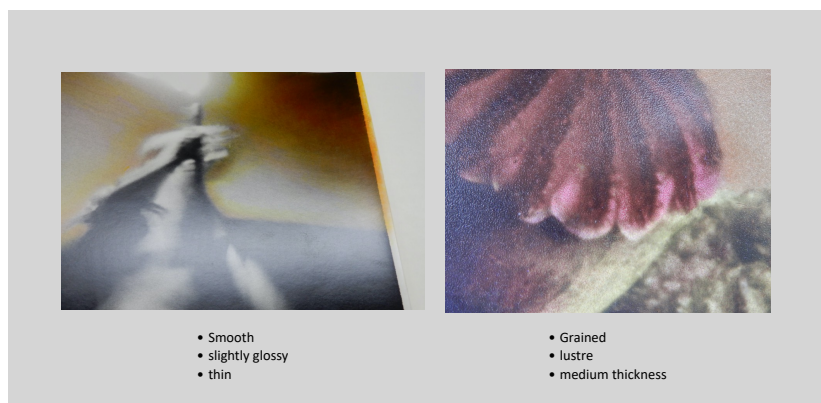


Fig. 2 - Types of photographic paper Ueki' used

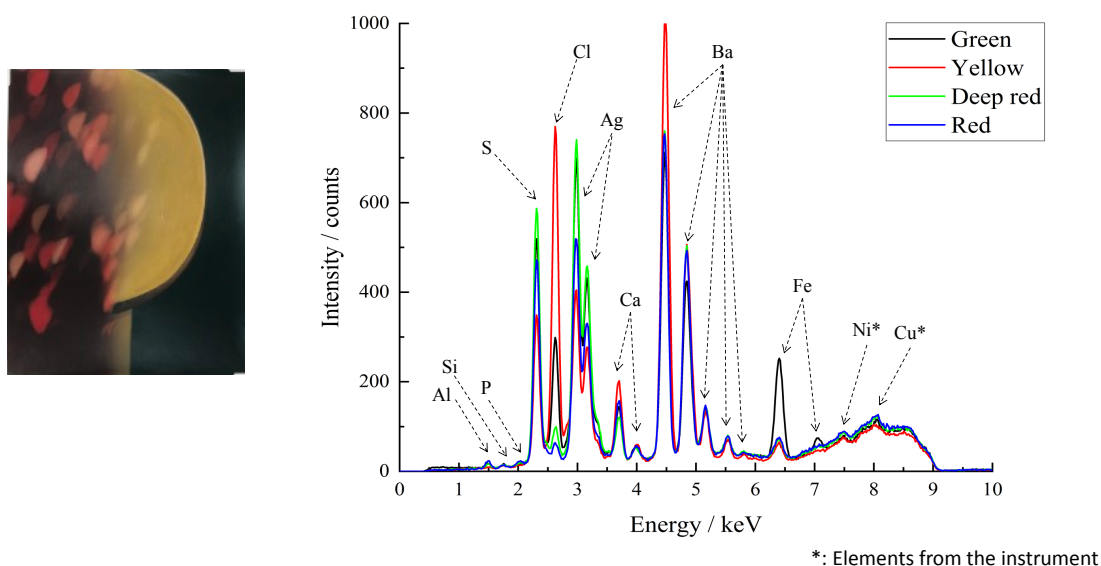
Painting medium and application

At a first sight, it is difficult to see brush strokes or signs of painted surface on the works. Vibrant colours are blended into the surface of the print. He layered and mixed the paint, sometimes outlining the forms in the image and emphasizing highlights. There are some works which have unpainted sections, however, they appear natural with no awkwardness. Under the microscope, the surface appears different according to the types of the paper and how the colouring was done. The grained paper has the paint in the texture of the rough surface. The smooth paper has the colours staining the surface. It is probable that he selected specific painting medium for different papers to achieve the effect he desired. Some works he used coloured pencils and a blending stump scratching the painted surface to create a special effect. For large sections, he probably used cotton or soft cloth to apply paint with adding touches using fine brushes, just as he would do Zokingake or retouching. Although he often coloured the entire print, occasionally photographic image appears through thinly and subtly painted surface.

Scientific analysis of paints

We investigated the paints of selected works of Ueki in the collection of Tokyo Photographic Art Museum by non-invasive methods. We used a handheld XRF spectrometer (Thermo Niton XL3t) and a portable FTIR spectrometer (Bruker Alpha) in external reflection mode.

XRF showed similar results at all colors in different prints. As shown in the figure (Fig.3), the detected elements were almost the same in different colors although the ratios of peak height varied (the figure shows only the low energy area where peaks with significant intensity were obtained). These detected elements, such as barium (Ba), calcium (Ca) and silver (Ag), might be present in the original print, but not in the paint. The peak height of iron (Fe) at green color was higher than other colors. It implies the presence of Prussian blue and was confirmed by FTIR showing a characteristic sharp peak of cyanide stretching around 2090 cm^{-1} .



FTIR was used to obtain information about organic materials present in the paints; their colorants and binding media. Obtained reflection spectra were interpreted by comparing with databases, such as IRUG Spectral Database, applying Kramers-Kronig transformation as needed. At most of the colors, we obtained spectra with the peaks (2920, 2850, 1740, 1460 and 1170 cm^{-1}) which could be attributed to fatty oil, but this interpretation is not definitive as the overlapping peaks from other materials prevent the comparison of other spectral features. In some parts, the presence of protein was also suggested, but it was not clear if it is present in the paint or if it comes from the gelatin layer of the original photograph. As for the colorants, in addition to the confirmation of Prussian blue, by FTIR we could find the use of alizarin crimson in red paints, which is a lake pigment produced with synthetic alizarin (color index number PR83).

After the above-mentioned non-invasive analysis, we could obtain a minute fragment of green paint from the back of one print. We are planning to perform GCMS analysis to investigate further its binding media.

Conclusion

Ueki's hand coloured photographs were made during a short period of time just before colour photography became common. He chose specific images for this group and he took advantage of combining of several techniques he acquired throughout his career in order to make a group of highly artistic works. We will continue our research and hope to explore his painted photographs as well as unravel the diversity and richness of photography in Japan during this period.

Bibliography

ARS Camera Annual (1950, 1951, 1953), Tōkyō: Arusu.

Hikari to kage no geijutsu: Shashin no hyōgen to gihō (2012). Tōkyō: Heibonsha.

Ishida Kiichirō (1930) *Buromuoiru Ingahō*. Tōkyō: Arusu.

Kohga (1952), vol. 14, No. 5. Tōkyō: Arusu.

Masterpieces of Japanese pictorial photography (2011). Tōkyō: Tokyo metropolitan museum of photography.

Photography Shinsei Shashin Zasshi (1950). Vol. 2, No. 2 and Vol. 2, No. 13. Tōkyō

Phototimes (1929), vol. 6, No. 9. Tōkyō: Phototimes.

Price, Beth A., Boris Pretzel and Suzanne Quillen Lomax, eds. Infrared and Raman Users Group Spectral Database. 2007 ed. Vol. 1 & 2. Philadelphia: IRUG, 2009. Infrared and Raman Users Group Spectral Database. Web. 20 June 2014. <www.irug.org>.

Shashin to Gijyutsu (1950). Vol 15 (5). Tōkyō: Fujifilm Corporation.

Teraoka, T. (1933) Inga Shusei no jissai. Tōkyō: Genkosha.

Ueki, N., Kobayashi, Y. and Kaneko, R. (2019) *K.P.S. no Jidai = noboru ueki & yūshi Kobayashi of the K.P.S.* Tōkyō: MEM Inc.