

Edo – the Transition of Prussian Blue

Jun Shirasu

Edo – the transition of Prussian Blue Preface

This text focuses on the increasing use of Prussian blue during the Edo period. The new pigment was invented in Berlin, Prussia in 1706 and quickly spread across Europe. The Tokugawa Shogunate gave exclusive access to Dutch and Chinese traders during the period that it controlled Japanese seas. Prussian blue imports first appeared in Sakai, Osaka, and after some years, reached Edo and the hands of the “Floating World” or Ukiyo-e artists. Their significant use of the hue set off a “Blue revolution,” the colour subsequently becoming known as “Japan blue,” the movement being led by Hokusai, Hiroshige, Kunisada and Eisen. However less well known figures played an important role during Bunsei period.

The essay is based on treatises by Jens Bartoll’s “[The Early Use of Prussian Blue in Paintings](#)” and Henry D. Smith II’s “[Hokusai and the Blue Revolution in Edo Prints](#)” which in turn refer to other authors including Saburo Miyashita, Sasaki Seiichi. Additional sources are referred to in the chronological guidance to Ukiyo-e art. An image survey was carried out using public access data bases from museums and institutes.

This is one of a series essays “The History of Blue” that draws together historical evidence about the use of blue and blue pigment, in minerals, paints, ceramics and prints. The colour appears at the beginning of civilization, starting in the Great Khurasan Road tied between Egypt and Afghanistan and spreading through Persia and China and to Japan. Its use forms a thread in art history through prehistory, early history, medieval times, the Renaissance and the Industrial Revolution. The colour was extracted from mineral ore, fermented dye plants, alchemized magnesium, insects and potash.

I am very grateful to authors and researches who supported me in the part of the essay “History Blue” that related to printmaking. Their unique perspectives and significant research enabled the essay to place the use of the colour blue in the history of art.

Jun Shirasu

Artist

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Prussian blue

In 1706, the Berlin based paint manufacturer “Diesbach” invented synthesized blue pigment; the inventor is sometimes known as “Johann Jacob Diesbach.” In 1708 Diesbach wrote to two friends, Johann Leonhard Frisch and to Gotfried Wilhelm Leibniz, the president of Royal Academy of Science in Berlin, that this pigment would replace expensive lapis lazuli¹.

By 1709, local traders were referring to the pigment as “Berlinisch Blau.” Frisch and Joseph Werner, the directors of the Royal Academy of Arts in Berlin, began sending it to painters across Europe to cities including Wolfenbützel, Leipzig, Basel, Paris and Italy.

It is said that Prussian blue was accidentally produced when Diesbach tried to make red using Cochineal, the crimson colour produced was then blended with potash supplied by Johann Conrad Dippel.² So the debate continues about the real inventor and the date too.

Jens Bartoll identified its early possible use in Watteau’s paintings “La mariee de village” and “Embarkation to Cythera,” dated 1710, and completed in Paris. Bartoll also referred to its use spreading “surprisingly ” fast, so the date of its invention could be as early as 1700, allowing more time for Diesbach to prepare for mass production of the pigment.

According to Batroll, the first painting to use Prussian Blue was [“The Entombment of Christ”](#) completed in 1709, by the Dutch painter Pieter van der Werff , (1666-1722), in the collection of the Picture Gallery, Sanssouci, Potsdam. In the picture the sheets that Christ is laid in are blue, as is a the long blue gown worn by Mary who is taking Christ’s pulse, and the clouds in the background are also blue.

The artist’s brother, Adriaen van der Werff, was a well known Dutch painter, who painted another [“Entombment of Christ”](#),³ a copy of his painting, as early as 1690-1709. However, in Adriaen’s sixteen other works from 1705 to 1714 no traces of Prussian blue was found following an analysis by Doener Institute, Munich, Germany. Batroll excluded Adriaen from the list of painters to first use Prussian blue.

The painters at the Prussian court in Berlin, such as Antonie Pesne, Adam Manyoki, and Friedrich Wilhelm Wiedemann started using the Prussian blue perhaps because the Royal Academy of Science and the Royal Academy of Art were housed in the same building as the court. As early as 1713, Samuel

¹ The letter was dated on 31st March, 1708. The well known Dutch painter Johannes Vermeer, 1632-1675, used lapis lazuli for “Girl with a Pearl Earring” and for paintings of porcelain and clothing.

² Georg Ernst Stahl “Experimenta, Observationes, Animadversiones CCC Numero, Chymicae et Physicae,” 1731 Berlin.

³ Collection of Boijmans Art Museum in Rotterdam. The study of “Entombment” titled “Lamentation” by Adriaen, with different positioning of Christ and Maria. Collection of Phoenix Art Museum, USA.

Theodor Gericke (1665-1730) painted a portrait of Frederick I of Prussia using blue. Other Dutch members of the Prussian Academy, like van Royen, might have taken the opportunity to introduce the pigment to painters in Holland.

According to Frisch's letter⁴ of the 26th July 1714, he had sent a hundred pounds in weight of Prussian Blue to Paris. It is said that it firstly arrived with Antonio Watteau (1684-1721), then his successors Nicolas Lancret (1690-1743) and, Jean-Baptiste Pater (1695-1736) started using the colour. However if Watteau was already using Prussian blue by 1714, Frisch might have been replying to a request for a fresh supply. It's clear that the use of that the pigment had spread to Watteau's apprentices in Paris by 1716, by which time painters in Petersburg and Armenia⁵ knew about it.

The first cargo of Prussian blue arrived in Japan, in 1782 on a Chinese ship, about 1.2kg that traded at 18 silver monme, equivalent to 24,000 jpy⁶.

Below is a summary of chronological movements over trade and price of Prussian blue.⁷

1782-97	Isolated imports by Chinese ships, dealings at 18-37monme.
1792-1809	The Dutch chartered an American ship and sold the pigment at relatively higher prices between 59-251 monme. Still a small quantity available.
1810-16	No trading records from Chinese and Dutch shipping.
1817-23	Regular trade by Dutch ships. Started at high price but then fell rapidly, 456-108.
1824-28	Competitive period with Chinese traders that bringing in larger amount than ever and dealing in lower price 87-31. Dutch trading was temporarily suspended following the expulsion of Philipp Franz Siebold in 1828.
1829-	By 1840, the market dominated by Chinese traders. Dutch rejoined the market but their price and quantity were no longer competitive.

⁴ 37 letters between 1706 to Sept 19, 1716 were sent by Frisch to Gottfried Wilhelm Leibniz. Among 13 letters mentioned on the Prussian blue. Ref: "On The Discovery and History of Prussian Blue", by Alexander Kraft, Gesimat GmbH, Berlin/ Bull. Hist. Chem., VOLUME 33, Number 2 (2008), Dr. Seth C. Rasmussen, Dept. Chemistry and Molecular Biology, North Dakota State University.

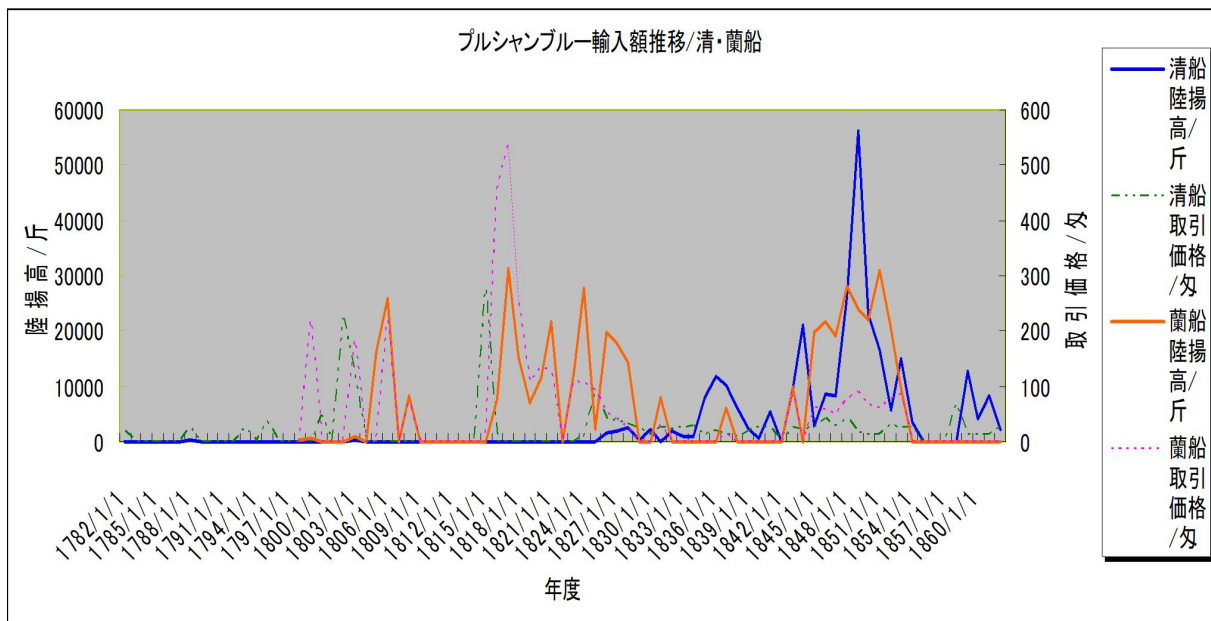
⁵ "[The Early Use of Prussian Blue in Paintings](#)" Jens Bartoll, Prussian Palaces and Gardens Foundation, Berlin-Brandenburg, Department of Conservation, Scientific Laboratory, POB601462 D-14414 Potsdam, Germany. Bartoll focused on three painters who were early users of Prussian blue: Watteau, Adriaen (1659-1722) and Giovanni Antonio Canal (1697-1768). The strongest evidence came from Watteau's "Embarkation to Cythera" dated around 1710 where the Prussian blue was derived from mixing with ultramarine (Optical spectroscopy and microscopy by Louvre). Canal's (Canaletto) earliest Prussian blue paintings were dated between 1719 and 1723. Bartoll couldn't find evidence of Prussian blue in any of Adriaen's paintings. (Analysis done for the Bayerische Staatsgemaltesammlung Collection, Munich and SPSG). The earliest use was discovered by optical spectroscopy on Pieter van der Werff's painting the "Entombment of Christ" 1709. Collection of Picture Gallery, Sanssouci, Potsdam, Germany.

⁶ "Nagasaki trading and Osaka" Saburo Miyashita, Senbun Do publishing. Co, 1997 / "Importing Prussian blue and reproduction" Saburo Miyashita- Ronshu Nohon no Yogaku (Foreign studies in Japan) edited by Takamichi Arisaka, Masahiko Asai, Seibun Do publishing. Co, 1993-2000

Henry D Smith II "Hokusai and the Blue Revolution in Edo Prints" refers to Dutch VOC trade ship couldn't sail to Nagasaki because of the English naval threat linked to the Napoleonic war during the period 1796-97. From 1804 to 09, the Dutch chartered American and Asian local ships. From 1810 to 13 when France invaded Holland, there was no Dutch ship arrived in Nagasaki.

⁷ Source Saburo Miyashita, quoted by HD Smith II.

[Chart: Record of Prussian blue trade by Qing dynasty and Dutch ship during 1782-1862]



Bold Blue/Quantity from Qing (1 斤/kin=1catty=600g) , Green dots/Price set by Qing (1 匁/momme=1mace; silver unit)

Bold Orange/Quantity from Dutch, Pink dots/Price set by Dutch

On the left side of chart, numbers show the net weight of shippment (0-60,000). On the right, numbers(0-600) are the price chart fixed by momme unit. (Data by Saburo Miyashita 1994.)

Foreign and local traders referred to Prussian blue by several names.

Prussian blue; ($C_{18}Fe_7N_{18}$) / Diesbach blue, Paris blue (Milon- France), Milori blue, Berlijns (Dutch), Turnbull's blue, Berlin blue, Yang Dian -洋藍, Yang Qing -洋青

Japanese Usage; Berulin Ao, Purossia Ai, Beilen Blau (Gen'nai Hiraga), Bero Ai - べ口藍, Toh Ai - 唐藍, Iwa Gunjo - 岩群青, Iwa Konjo - 岩紺青⁸

Osaka and Blue

During the Hoei period in Japan (1704-1710) a print called “[Haikai Ichimai Zuri](#) - 俳諧一枚摺” circulated among samurai and merchants class. This woodcut publication wasn't distributed widely but was shared in private circles, for sending Season's greetings, celebrating family events and party invitations etc. This custom spread in Edo, Kamigata (Kyoto and Osaka) and Mino (Nagoya). The elaborate designs of “Haikai Ichimai Zuri” were many. Some were made of paper with blended indigo fibre so that it resembled a pattern of [waves](#) , and the ink was also mixed with indigo based pigments such as like “Seitai- 青黛,” Chinese powder blue, otherwise used for medicine and cosmetics. Rich

⁸ Traditional Japanese blue for painting is known as “Kin Ao” -azrite- and the reference appears in the earliest record in “Shoku Nihongi” 797AD.” Hana Konjo - smalt” was also introduced to Edo but the coarse particle of the glass cobalt didn't suit for woodcut printing. Smalt was also suspended to use during Tenpo period 1830- 1843by the Sumptuary Law - Shashi Kinshi Rei.

benefactors encouraged Ukiyo-e artists, commissioning designs, and some artists included a light hearted element such as a board game, calendar or hand fan. This sense of fun was referred to as “asobi-gokoro” and it influenced other print forms like Kyoka – 狂歌, Zoshi-Ehon – 草子絵本 and Ukiyo-e 浮世絵 of the time.[1][2][3]

During the same period some prints were printed exclusively in blue. These were the earliest examples of “aizuri-e – blue monochrome print.” In 1770 (Meiwa 7) Kano Eiryō – 狩野永良 and Kujo Naozane – 九条尚実 collaborated on “[Six views in Arima](#) – 有馬六景 Arima Rokkei ”. Size of the book was Chu-bon size, and whole book was printed by blue. This was one of the earliest samples of blue book, “aizuri-bon.”

The blue colour used around this time was dayflower – 露草 and used an extract from its petals, however this blue tended to deteriorate quickly. Blue paper called “[Ai gami](#)– 藍紙” was dyed by dayflower. “Ai Ro- 藍蠟” and “Ai Bo- 藍棒” were a kind of small candle stick made from the skim surface of fermented indigo. Then Ai Bo was ground and was diluted with “beans soup - 豆汁 Gojiru ” to control the intensity of hue. When the colour was deteriorated by fastness, it turned to pale brown to yellow ocher⁹.

In 1815 (Bunka 5) Inoue Kyūko – 井上九皐, Kyoto printmaker, made an etching titled “[Batsuboku no Zu](#) – 伐木之図, Picture of cutting tree.” This print was printed by blue. This one of the earliest etchings was probably copied from Dutch painting and the original subject was delivered from St. Bonifatius’s [cutting oak tree](#). It is said Kyūko accomplished his original etching method by using “urushi – Japanese lacquer”¹⁰.

Eisen and Scholars

Naka Isaburo 中伊三郎 was a copper printmaker who trans engraved “Illustration of Anatomy – 解剖図譜 Kaibo Zuhu .” Isaburo was the son of Naka Tenyu 中天游, Dutch scholar, scientist and surgery, who run private school “House of philosophy – 思々斎庵 Shishi Sai An ” in Osaka. Tenyu asked his son to trans engrave “l’Anatomie du corps humain - Illustrated Anatomy” by Jan Palfijn (1650-1730), Flemish surgery, published in 1718 and Isaburo completed engravings in 1828 (Bunsei 7). Father and son sent prints to Otsuki Bansui 大槻磐水 in Edo, Dutch scholar and scientist. Bansui at the time was revising “Tafel Anatomie – 解体新書,”¹¹ its first translation with woodcut illustrations was published by Sugita Genpaku 杉田玄白 in 1774. Bansui’s revision adopted 46 copper engravings

⁹ It is interesting to search old prints of which the original hue was faded. For example some part of Hokusai’s “36 views of Mt. Fuji” were printed with indigo blue and later turned to yellow ocher.

¹⁰ The first etching in Japan was produced by Shiba Kokan- 司馬江漢 in 1783(Tenmei 3). In 1805 Aodo Denzen - 亜欧堂田善 in Fukushima also independently succeeded etching and made series of etching works like “Famous Views in Edo.”

¹¹ Dutch version of “Anatomische Tabellen” by Johann Adam Kulmus (1689-1745), German anatomist.

by Isaburo.¹² There is also a record that Isaburo knew Keisai Eisen 溪齋英泉. Most probably they knew each other by Bansui's publication and Isaburo sent Eisen a sample of copper prints to ask opinion about the image.¹³

Blue in Edo

Around the Bunsei 文政 period, people's livings were gradually improved and they were surrounded by more blue colours. Cotton plantation developed during 15th century, in Awa, Shikoku¹⁴ and indigo dye clothes also started spreading. Indigo dyeing arrived in Japan during Tang period (Nara) however the cotton plantation was succeeded much later. It has characteristic deep blue like black. Edo people found hue of coolness when it was much thinned. The light hue of indigo matched to designs of waves and wicker trees in "Yukata – summer dress." Patterns were gradually refined and known as "Nagaita Zome – 長板染 long stencil pattern" and "Naka kata Zome – 中形染 medium format pattern." "Edo Komon – 江戸小紋 Edo small emblems" appeared and was populated as Edo style of kimono pattern. They influenced to Edo's fashion sense, colour coordinate and styles. People shared such sophistication called "Iki," and the style was shared amongst down town urbanites, including with their thought, sense of humor and life philosophy. In the working class "Tattoo-刺青" was populated and joined in a part of the fashions.

Low price of novelty wares in blue and white was spread. Kato Tamikichi 加藤民吉 (1772- 1824), ceramist in Seto, Owari, succeeded mass production of blue and white ceramics called "Shinsei-Seto Yaki – 新生瀬戸焼 New born Seto Ceramics" during 1804 – 1818 (Bunka period). Tamikichi took a trip for his mission to Hizen, region of Arita and Hirado ware, to acquire secretly the recepie of Arita and Imari ware. By the time so called Imari ware, wares exported from Imari port, had been grown as the largest industry and received international acclaim through the Dutch East Indies. Tamikichi' disguised as a strange worker at kilns in Mikawachi, present Sasebo, and apprenticed for two years. After Tamikichi returned Seto, he was appointed to head of the feudal kiln and renewed local kilns to novelty porcelain ware that were sold nation widely. "Seto-mono - Seto ware" is still remaining in colloquial Japanese, to call blue and white ceramics of house hold goods.

Prints

From 1818 to 1830, Hokusai 北齋 made a series of New Years gift print called "Uma-Dzukishi 馬盡",

¹² Naniwa Jinbutsu Den – Kosai wo Hanatsu -Naka Tenyu (II -lower part) "Anatomy by Copper prints" by Takuji Miyoshi, Osaka Nichi Nichi Shimbun Newspaper publishing, 3rd November, 2007.

¹³ In "People mourning Chosaku-Do" by Mori Senzo 森銑三 in Kokugaku In Zasshi January, 1934 refers about Eisen' s letter to Takizawa Bakin 滝沢馬琴. In the letter there was a line of "concerning about copper print that was sent from Naka." Quoted by HDSmith from the reference of "Nihon Meiho no Bijutsu – Japanese treasure art " Vol.23 Hokusai-Hiroshige by Matsuki Hiroshi

¹⁴ The plantation was introduced and supervised by Hachisuga Han.

one of the prints produced in 1822 (Bunsei 5) titled “[Mayoke](#) 馬除”. The print admired by Sanseitei Marumi 三星亭真湖’s poem which is sung about the view of Lake Biwa¹⁵. which is drawn on the blue and white ware surface. This print is partially coloured by indigo blue¹⁶ and it is interesting to see how artist selected the booming blue motifs of the time. However Hokusai’s the earliest trial of blue print appeared as early as 1804¹⁷, like “[Yoshida](#)-吉田 and “[Imo arai](#) –芋洗.” They were produced almost twenty years earlier than Eisen’s “Kamakura” and “Kuruwa Zodan” in 1820’s.

The master school of indigo blue usage was the Utagawa, led by Kunisada I, Gototei 五渡亭国貞 from the late 18th century to throughout Edo period. One of the most successful triptych by Kunisada is “[Mokubo-ji Bosetsu](#) 木母寺暮雪” in 1820 (Bunsei 3) ¹⁸. The decent hue matches with bank side of Sumida river in snow where three Edo beauties holding umbrellas. Kunisada’s other “Mokubo-ji” shows, in contrary, Edo beauty dressed in “[Yukata](#),” another typical sample of colour coordination.

There is speculation with Kunisada I about his earliest use of Prussian blue. HD Smith refers in his “Blue revolution,” he saw some prints which could be observed possible traces of Prussian blue¹⁹, catalogued by Sebastian Izzard for the show (Kunisada’s World) in New York, 1993.

The similar hue is observed in “[Gakusei An- Shakuso An](#) - 樂聖庵 鵲巢庵” in 1820(Bunsei 4), which drew the scene of New Year’s resolution calligraphy called “Kakizome.”²⁰ A woman lies down on floor and her kimono printed by two layers of blue resembles Prussian blue, although there has no scanned analysis done with this sample.

The earliest artist who used Prussian blue in Ukiyo-e was identified by Matsui Hideo, a surgery and president of Koishikawa Ukiyo-e Museum²¹. It was Shunkosai Hokushu who produced series of Kabuki actor’s portraits of “Kamigata Yakusha-e” during Bunsei periods in Osaka. Hokushu named himself after he was accepted Hokusai’s apprenticeship when Hokusai visited Osaka in 1818 (Bunsei

¹⁵ Inscription: Hatsuhikage Nioteru haru ni Omi no ya Kagami no yama o Miru mo mabayuki 「初日影嶋（にお）照る春に近江のや かがみの山を見るもまばゆき」 In the rays Of the Spring sun On Lake Biwa, Mirror Mountain Also glitters https://ja.ukiyo-e.org/image/bm/AN00035207_001_1

¹⁶ Design on white and blue vase is Mii/Ishiyama temple and Mt. Hira. Picture on the lacquer ware is “Ukimi Do temple in Katata” and “Karahashi” in Seta. Design on the indigo towel is “Ferry at Yabase - Yabase no Watashi.” L.Smith, V.Harris, T.Clark, Japanese Art: Masterpiece in (London, The British Museum Press, 1990)

¹⁷ See page 12. “Untitled Tokaido,” Tokaido 53 Tsugi – Ritei 東海道五十三次一里程.

¹⁸ “Nondestructive determination of colorants used for traditional Japanese Ukiyo-e woodblock prints by the 3-dimensional fluorescence-spectrum using fiber optics” – Catalogo Articoli (Spogli Riviste) / Shinya Katsuhara, Susumu Shimoyama, Yasuko Noda, Den material Colour Science Research Centre, published by Bunseki KAGAKU vol.47 No2., pp93-100, 1998. This analysis evaluated Hokusai’s red and yellow in “Yokkaichi” as safflower and turmeric and Kunisada’s blue in “Mokubo ji” as indigo.

¹⁹ Some were mentioned as “painting that he (Izzard) dated to c. 1822 (pl.26), q gokan cover of 1824 (fig.8, pp.28), a fan print dated 1825 (fig. 10, pp.29), and a variety of prints that he dated from the years 1824-28 (pls. 36, 39,, 40-42, and 44). Did he indicate exactly which area of the print he considered to be Berlin blue, and in every case, it was a very dark shade, which is precisely the least likely candidate for Berlin blue, which can best achieve such dark shades only with admixture with Sumi or natural indigo. It is now clear that such judgments with the naked eye are often unreliable, and that scientific tests are required to confirm the presence of Berlin blue; see notes 21, 53, and 63 for various such tests, and Berrie, ‘Prussian Blue’, 205-10, for a technical discussion of still other methods.”

²⁰ Waseda Museum collection

²¹ Matsui’s research was summarized in a report of February 2004, submitted by Waseda University Theatre Museum. The identification was confirmed by using three dimensional fluorescence spectrum technique developed by Shimoyama Susumu.

1). One of the merchants selling Prussian blue in Sakai, Osaka, was Omiya Chozaburo,²² a pharmacy and was unearthed with whole sale records by Miyashita Saburo. This period of Osaka was a commercial front of import trades and cultural centre of foreign thoughts and intelligence.

Early use of Prussian blue in Hokushu's Kabuki actor "Yakusha-e" appeared in 1821 (Bunsei 4) and onwards. Some of the earliest prints are probably "[Chie Nai](#)-知恵内" acted by Ichikawa Ebijuro I (市川鰻十郎) and "[Ishikawa Goemon](#) -石川五右衛門" performed by Nakamura Utaemon (中村歌右衛門).²³

In these prints the blue hues seem to have more stability and solidity than other type of blue. These prints are filled with liveliness that corresponded with the painter's satisfaction. In the subsequent Hokushu's prints are more settled and paid attention over the balance of Prussian blue. Hokushu's successor Shunkosai Hokuei -春江斎北英²⁴ also left some prints in early Tempo period.[\[a\]](#)[\[b\]](#)

Around early 19th century, Tokaido developed as the busiest street which connected between Kyoto and Edo. It had necessity of commute for feudal lord's annual visit to Edo castle, however it was started using by merchants to carry products to the capital city too. This development made people attract to tourism, both by business purpose as well as like pilgrimage to shrines and mountains. Printed map and city guide "Shokoku Meisho zu" and "Kirie zu" were sold at shops along the streets. During Kyowa and Bunsei period, 1802-1822, comical travelogue called "[Tokaido-chu Hizakuri-ge](#)" by Jippen Shaikku became best selling novel and accelerated tourism. [\[c\]](#)

Hand Fan and Prussian Blue

After some years of practical use in Osaka, Prussian blue finally arrived to the market in Edo, It is described by Seisodo Toho -青葱堂冬圃 and in his essay called "Masaki no Katsura²⁵" about the first impression of Prussian blue.²⁶

²² Saburo Miyashita "Nagasaki trading and Osaka" Seibun Do publishing, 1997

²³ Description and the plate no.40 of HD Smith's "Hokusai and the Blue Revolution in Edo Prints" doesn't match. Smith added details for the plate as "Shunkosai Hokushu, Ichikawa Ebijuro I as Chienai in Kiichi Hogen sanryaku no maki -." However the image can be read as "Arashi Kitsusaburo Rikan - 璃寛." This portrait is Rikan's Shini-e, a death portrait, and is portrayed by "Gototei Kunisada - 五渡亭国貞" published by Yamamotoya Hekichi. Rikan died on 9th month of Tempo 4, 1821. The source of Smith's plate is unknown, otherwise couldn't find at Waseda University Tsubouchi Memorial Theatre Museum Ukiyo-e Data Base. [Smith's plate no.4](#). See other sample of Shini-e portrait of Rikan[\[d\]](#)[\[e\]](#)[\[f\]](#).

²⁴ Also named as Shunbaisai 春梅斎 before 1829 (Bunsei 12).

²⁵ "Masaki no Katsura" Vol.8 out from Vol.9. Toho accomplished series of essay by 1854. Original has not been confirmed but only the photo copy from HD Smith's treatise. Three volumes in the National Diet Library were hand copied version in late years. Collection at University of Tokyo Library has not confirmed either. Document is only left on "100 unfinished essays / Mikan Zuihitsu Hyakushu vol. 16-未刊隨筆百種 16 卷" by Mitamura Engyo in 1855. Revision was published by Yoneyama Do in 1928.

²⁶ 筆者抄訳、以下原文。"此絵の具摺物に用ひはじめハ、文政十二年よりなり、(中略)されど未錦絵には用ひざりしが、翌年堀江町式丁目団扇問屋伊勢屋惣兵衛にて、画師溪斎英泉(英山門人)画たる唐土山水、うらハ隅田川の図をヘロリン一色をもつて濃き薄きに摺立、うり出しけるに、其流行おひたしく、外団扇屋それを見、同じく藍摺を多く売り出しける、地本問屋に

“Berolin – was also called ‘To Ai-唐藍’ used for making green by mixing with safflower red – was used at the first time in 1829 (Bunsei 12). One day I visited Oh-oka Unpo 大岡雲峰 from my place in Yotsuya, he showed me the Berolin and said this might be good for Ukiyo-e to print instead of dayflower either indigo blue. Soon later I bought Berolin and used it for prints. I realized it had some specific character, unlike dayflower, with extent of gloss. Soon after everyone around “Kyoka poem” and “Haikai poem” started using the blue. By this time no one used Berolin for “Nishiki-e – a colourful Ukiyo-e,” but in the following year Keisai Eisen 溪斎英泉 made “Uchiwa-e – hand fan print” printed only by Berolin, from the wholesaler Iseya Sobei 伊勢屋惣兵衛 in Horie cho 2 in Nihom-bashi, with pictures of Tang style Chinese landscape in front and a riverside of Sumida in the back. This fan print was sold and sold, and other wholesalers also started selling similar Berolin fan. One of the publishers, Eiju-Do Nishimura Yohachi 永寿堂西村与八 in Bakuro-cho produced 36 views of Mt. Fuji by Hokusai that was printed by Berolin. This was also marked enormous sales by double more than fan prints. Then Berolin spread to other Nishiki-e prints and I thought it must be useful if it was mixed with Sumi ink to use for marking Haikai instruction”.

Keisai Eisen, 1790-1848 (Kansei 2), was born in Hoshiga Oka, (present Nagata-cho) in Edo. His father Ikeda Shigeharu, lower samurai, was also a master of calligraphy (by Eizan Fugensai), Haikai poem, tea manner and also a hard reader. Eisen lost his mother and later father Shigeharu in his childhood and had to grow three sisters. He was once fostered by Mizuno family, and then he decided to be an Ukiyo-e artist. Eisen was apprenticed first to Kinji Shinoda, Kyogen play writer, then to Kikukawa Eizan 菊川英山 and mastered “beauty” pictures. Eisen was unlikely to settle in one place and repeated moving. He behaved like a hermit, and occasionally embarrassed his surroundings by hard drinking²⁷. By coincidence his master Eizan’s atelier once located nearby Hokusai’s and Eisen often visited his second master. Despite of his desperate crush, he kept intellectual studies about Western and Chinese cultures by reading books. As early as in 1824 (Bunsei 5) Eisen already produced blue prints called “aizuri-e” like [“A scene of flourished Kamakura - 鎌倉繁栄ノ有様”](#) and [“Chat in brothel - 廓雑談 -Kuruwa Zodan,”](#) collaborated with Hana San Jin 鼻山人²⁸ in 1826 (Bunsei 7). Eisen produced an enormous prints of Oiran’s and Shunga pornography, and even though his masterpieces are well known including “Sakura in the hazy Spring evening - 櫻曇春朧夜 - Hanagumori Haruno Oboroyo,” [“Full bloom of Sakura in the Sumida riverside - 墨田堤桜盛 - Sumida Dutsumi Hana Zakari”](#)[1][2][3], and “Shallow layer of Spring snow - 春野薄雪 - Haruno Usu Yuki.”²⁹

ては、馬喰町永寿堂西村与八方にて、前北斎の系がきたる 富士三十六景をへロリン摺になし出板す、是又大流行、団扇に倍す、其ころ外にしき絵にも、皆へロリンを用る事になりぬ、

²⁷ “Ukiyo-e Ruiko - 浮世絵類考 ” by Ota Nampo 大田南畝 1749-1823, Iwanami Bunko Publishing, co, 1941.

²⁸ 1790-1858

²⁹ Eisen’s pillow book called “Keichu Kibun – Makura Bunko 闇中紀聞 枕文庫” was a sex book and it could be categorized as medical book. His pornographic prints can be overviewed at British Museum Collection Search;

By Henry D. Smith II, after Eisen's blue fan print "[Tang's landscape](#) - 唐土山水 - Morokoshi Sansui" was boomed in the summer 1829, it was only in following summer in 1830, the other fan sellers tried to catch up with Eisen's boom and prepared with fan prints "[Miho bay](#) - 三保之浦 - Mihono Ura" by Kunisada - 胡蝶楼国貞 and "[Summer flowers](#) - 夏草 - Natsukusa" by Gountei Sadahide 五雲亭貞秀. Kunisada's "Miho no Ura" captured blue Fuji, inside of Uchiwa format, that is emerging from the blue haze in decent quietness.

By the reference from "Masaki no Katsura," Seisodo Toho's unfinished essays, Hokusai's 36 views from Mt. Fuji in aizuri "blue prints" was released soon after the blue fan print boom in 1830. It was in November, 1930 (Bunsei 13)³⁰, Nishimura Yohachi announced in the advertisement of "36 views of Mt. Fuji" in one of the last pages of "Sho Hon Jitate vol. 12 - I - Josatsu³¹." [1][2][3]

"36 views of Mt. Fuji by the master Sakino Hokusai Iitsu will be released soon in aizuri- blue print one by one, a station by a station, appearances of different Fuji by the locations, for example from Shichiri ga Hama and from Tsukuda Jima etc are all distinctive shapes and these must be also helpful for all painting trainers, they are being engraved one by one up to more than one hundred not limited by thirty six." ³²

In this advertisement, Nishimura was telling that Hokusai already prepared two prints "[Shichiri ga Hama](#)" and "[Tsukuda Jima](#)" at first. So this famous series wasn't started by "Nihom-bashi," Edo's 1st landmark, either according to the stations from the east to the west.

Compared with three views of Fuji painted by Kunisada's "Miho no Ura," Hokusai's "Shichiri ga Hama" and "Tsukuda Jima," the impression gives us some extent of similarity. At first "Miho no Ura" and "Shichiri ga Hama" look like the mirror images each other. It raises another speculation about compositions in "Tsukuda Jima." This scene is shooting a long distance view of Fuji from Tsukuda-Jima, bay area of Nihom-bashi, and there are some boats carrying shipment in front. These are likely to Hokusai's favourite motifs in order to adjust the composition. It can be drawn an orbital curb from the left bottom of Fuji's skirt and it descends down along tips of boats, and then terminates to the left bottom. This curb line also fits to "Shichiri ga Hama" in which the coastal line

http://www.britishmuseum.org/research/collection_online/search.aspx

After his retirement from Ukiyo-e painter he renamed as Wakatakeya Risuke -若竹屋里助 and ran brothel at Nezu, Ueno. In 1833 Eisen wrote an Ukiyo-e painters list book called "Mumeiou Zuihitsu -无名翁随筆" by writer's name Ikeda Nobuyoshi and listed 86 artists.

³⁰ Bunsei13 lasted by 9th December by lunar calendar that was equivalent to 23rd January, 1831 by Gregorian Calendar. As the new calendar name Tempo -天保 counts back to the entire year from the beginning, so the Bunsei 13 is also called Tempo 1 as year of Kanoe-tora 庚寅 by 12th February, 1832, The following year Kanoto-u 辛卯 started from 13th Feb, 1831 and ended up on 1st Feb, 1832.

³¹ Upper volume.

³² "Shohon Jitate" No.12 upper volume was printed as the New Year's issue Vol.1 for the year of Kanoto-u. The front page is displayed by the New Year's celebration with rice barrels and Nishimura's New Year's greetings. However this was presumably printed during the 11th month of Kanoe-tora, because Nishimura also announces new releasing books as "Up-coming books in Bunsei 14." Thus Bunsei 14 didn't come and the year name was changed to Tempo just after the New Year's edition was pressed. http://archive.wul.waseda.ac.jp/kosho/he13/he13_03091/he13_03091_0008/he13_03091_0008.html

「富嶽三十六景 前北齋為一翁画 藍摺一枚 一枚に一景つゝ追々出版 此絵は富士の形ちのその所によりて異なる事を示す 或は七里ヶ浜にて見るかたち 又は佃島より眺る景など 総て一やうならざるを著し山水を習ふ者に便す 此ごとく追々彫刻すれば 猶百にもあまるべし 三十六に限るにあらず」

and pine trees are replaced instead of the curb line.

As Nishimura Yohachi Eiju-Do announces that this Fuji series featured “aizuri” - blue prints by Hokusai. If we take account of Nishimura’s strategy raised after the fan print boom in the summer 1830, it must be planned in quite hectic schedule. Nishimura and Hokusai had to kick a provisional start anyway, in that Kunisada’s “Miho no Ura” looked a good sample to warm up the series, then Hokusai likely made two prints immediately. Nishimura looked confirming the timing of advertisement, then at the result “36 views” marked an enormous sales as double as fan boom. Nishimura’s plot led the series completely success. This series made a round trip in the world when the works started influencing to the painters of Impressionism in the west where the Prussian blue originally exported to the oriental world.

There are twelve prints which were printed in both blue “aizuri” and “semi-aizuri,” they were thought to be prepared as the first season of series. Smith indicates³³ those stations in the picture were deliberately selected by Hokusai as the locations were connected with waterside, relating with the colour of blue.

“aizuri prints”

[Hongan-ji Temple in Edo](#) - Toto Asakusa Hongan-ji

[Tsukuda Island in Musashi Province](#) – Buyo Tsukuda Shima

[Ushibori in Hitachi Province](#) – Joshu Ushibori

[Shichiri beach in Sagami Province](#) – Soshu Shichiri ga Hama

[Kajikazawa in Kai Province](#)- Koshu Kajikazawa

“semi aizuri prints”

[Tea house at Koishikawa. The morning after a snowfall](#) - Koishikawa Yukino Ashita

[Tama River in Musashi Province](#) – Bushu Tamagawa

[Umezawa in Sagami Province](#) – Soshu Umezawa Sho

[Mishima peak in Kai Province](#) – Koshu Mishima Goe

[Ejiri in Suruga Province](#)– Sunshu Ejiri

[Mount Fuji from the mountains of Tōtōmi](#) – Totomi Sanchu

[Suwa lake in Shinano Province](#) – Shinshu Suwako

Prints were not produced by the order of stations, from the east to the west, which were likely classified by recent researches. Hokusai’s view order could be more or less inspired by the balance. It slowly started like warming up exercises such as a long shot view of Fuji, and suddenly leapt to the core dynamisms with colour and movement like “[The Great Wave off Kanagawa](#),” “[South Wind, Clear](#)

³³ Smith didn’t include No.5 and No.22. So his discussion about initial blue prints “aizuri-e” included only ten prints. These excluded two prints “Koishikawa” and “Tamagawa” were not either referred by Kazutaka Higuchi, Smith’s translated version issued on “Ukiyo-e Geijutsu” No.128, 1998. Image source is from Digital survey of Tokyo National Museum.

[Sky](#)” and [“Rainstorm Beneath the Summit,”](#) those masterpieces.³⁴

In addition to the "Thirty-six Views of Mount Fuji," there are ten additional pieces called "Ura Fuji" included. These were presumably added for the well-received "Thirty-six Views" series, as a new addition. It could be said that after completing a round of warm-up with the first series, Hokusai's enthusiasm for pursuing further grandeur of Mount Fuji was overflowing, leading him to create masterpieces above mentioned. "Fuji" was Hokusai's life work, a subject he confronted as the culmination of his artistic career. This determination can be seen in Hokusai's art name. The most important aspect was his adoption of the name "Iitsu."³⁵ This signifies overlaying the uniqueness of "Fuji" as one's own identity. Hokusai referred to himself as "Hokusai Iitsu," meaning he identified himself with the unparalleled existence of "Fuji."

Hokusai emphasized his name change to "Hokusai Aratame," or "Hokusai the New," and inserted the phrase "Saki no Hokusai," or "the Former Hokusai," not only to negate his previous self as an eccentric artist or as "Manji" but also to praise Mount Fuji as the unparalleled, ultimate one-of-a-kind existence, even if it meant denying his carriers, and to overlay his own existence with the art name “Go - 号” as "Iitsu - 為一." "Fuji" is "fu-ji - 不二 = not two," and hidden within it is the shape of "one." Hokusai's declaration to dedicate everything for this "one" is concealed within this art name. Here lies the artist, over 70 years old and feeling the physical decline, confronting this as the final theme of his life. Hokusai splendidly made it his own and succeeded in sublimating it into an art that transcends time and exists.

However some opinion like Shugo Asano 浅野秀剛 (1950-), Ukiyo-e researcher and president of Abeno Harukasu Museum in Osaka, suggests that the order argument is less essential, in case of Hokusai, as the decision was more depended on his temperament and Hokusai didn't work along with category that researchers tried to cover up by recent discussions.³⁶

Before Hokusai launched the “36 view,” he already produced a series of prints called “Untitled Tokaido – Tokaido Gojusantsugi – Ritei – 東海道五十三次 里程” in 1804 (Bunka 1). This series was collaborated with Yanagawa Shigenobu 柳川重信 and probably commissioned by a Haikai poem group in Okazaki, Mino, present Aichi. Prints are executed in post card size, “Kokonotsu ban “– 11.4x16.5cm. “Ritei” means a mile stone on the street that indicated distance to the next station or

³⁴ Discussions about chronological order of the 36 views by Shinzo Suzuki, Tadashi Kobayashi as well as H D Smith are made according to division of “aizuri,” “jun-aizuri – 準藍摺 (semi blue chrome)” and “Ura-Fuji – 裏富士,” extra ten prints.

³⁵ [“Sakino Hokusai Iitsu - 前北齋為一” to “Hokusai Aratame Iitsu - 北齋改為一.”\[iitsu\]\[fuji\]](#)

³⁶ Reference by HD Smith. In “Fugaku 36kei Shiken” by Suzuki Juzo 1979, Bijutsu-shuppan and “Fugaku 36kei” by Kobayashi Tadashi 1975, Shuei-sha, Suzuki adopted classification prior numbering the plates from 1 to 5, Kobayashi also divided them from A to E. In 2002 Asano Shugo's “Toshusai Sharaku” Shogakukan, Asano appealed the tough categorizing of numbering by researchers were losing the point of artists' temperament.

towns. This series starts from Nihom-bashi as No.1 by Shigenobu, and then continues like [Shinagawa](#) No.2, [Oiso](#) No.10, [Shimada](#) No.25, [Yoshida](#) No.37, [Okazaki II](#) No.42, [Sakanoshita](#) No.52 and [Kyoto](#) No.58 by Shigenobu.

Scenes are finely engraved, considering with the size of plate, in which people's life was depicted along with the stations and villages through Tokaido. Some of them like "[Yoshida](#)- 吉田 is recognizable as his earliest blue print.

Hokusai's Prussian blue series extended to the new series of water side, like "[Chie no Umi](#) – A thousand picturesque seascapes" [\[a\]\[b\]\[c\]\[d\]\[e\]](#), "[Shokoku Taki Meguri](#) – Trip to falls in countries" during 1833-34 (Tempo 3-4) and "Ryukyu Hakkei". After these series finished, Hokusai took up fan prints that were also printed in blue. During 1834-36 (Tempo 4-6) "Shokei Kiran – Curious Famous View Points" were published with views of mountains "[Minobu River](#)", "[Yumura Village in Koshu province](#)", "[Mt. Haruna in Joshu](#)", "[Mt. Myogi](#)" and "[Lake Suwa](#)". For Hokusai it looks a time for a rest after feverish time of waterside including "36 views," as if he reflected the origin of subject which triggered the series to have started. These mountains may remind some of shapes from the "36 views," however they are identified as Mt.Minobu, Mt.Kai Komagatake and Mt.Yatsugatake.

Utagawa Hiroshige 歌川広重 (1797-1858) was 36 years old in 1832, it is said he escorted a horse to contribute by Tokugawa to Kyoto Imperial Palace. Hiroshige made sketches of landscapes and people's livings, station by station during his travel, however, he could also hire some images from illustrated maps and other publications to reconstruct his images. Some of the views are still controversial as they are unidentified to match with the exact site like "[Hakone](#)". One suggestion is that Hiroshige's studied by Chinese mountain landscape like "[Canton](#)"³⁷ painted in 1730.

One morning at Hoen-Do gallery in 1833 (Tempo 3), the first 200 edition of "53 stations of Tokaido" was sold like hotcakes.³⁸ On the other hand Hokusai's "36 views" boom was suddenly finished. For Hiroshige's "53 stations," "aizuri" or blue print is not a sales point as Nishimura Yohachi advertised for Hokusai, but Hiroshige's use of the hue is more effectively stylized in the sky line called "Ichimon ji" that became some extent of representation of blue in Edo art which is also corresponded with Edo's sophistication "Iki." Only after four years since Eisen's fan print appeared, Japanese art scene spent the most influential period of modern art history. In 1835 (Tempo 5) Hiroshige collaborated with Eisen and produced "[69 stations in Kiso Kaido street](#)" [\[a\]\[b\]\[c\]\[d\]\[e\]\[f\]\[g\]\[h\]\[i\]\[j\]\[k\]](#) . The plot was originally commissioned to Eisen by Hoen-Do, however because of Eisen's retirement³⁹,

³⁷ Chinese Pavilion at Drottningholm/ "Encounters" V&A Museum 2004.

³⁸ "200 copies" was the basic number of 1st edition called "Ippai." "Japanese printmaking – Nihon no Hanga – 日本之版画" Tokuriki Tomisaburo 徳力富三郎, Kawara publishing co, 1968.

³⁹ Eisen continued by no. 24.

Hiroshige took over the rest of the series. It is interesting that Eisen was apprenticed to Hokusai, and then collaborated with Hiroshige. The age gaps of three artists were that Eisen was thirty years younger than Hokusai and nine years older than Hiroshige. Eisen was also one of the earliest artists who was aware of beauty of blue and particularly worked with “aizuri-e” print. He studied much about Chinese porcelain and his early trials during 1820’s could be influenced by Hokusai and his “Untitled Tokaido”. There is another suggestion that Eisen’s father Shigeharu collected Chinese porcelains and this circumstances made young Eisen familiar with blue hue and gave actual platform which let Eisen keep enthusiastic over “aizuri-e” prints. This attitude could be related with his perspectives over eroticism, “Shunga” too. Eisen made a numbers of Shunga and his depiction reaches to details and they were observed quite scientifically. His peak was during 1830’s when he was spin by producing “aizuri-e,” “Bijin-ga” and “Shun-ga” simultaneously, then suddenly he retired and became an owner of brothel which he opened in Nezu, Ueno.⁴⁰

Command of blue hue by Utagawa School and their family painters was extremely mastered since they started using indigo during 1820. When Prussian blue arrived to Edo in 1829, was Utagawa’s blue palette also changed by adding the new imported colour? During the period from Bunsei to Tempo, Utagawa’s Yakusha-e shows a slight change, with the light dayflower blue, Hanada 縹 [1][2], not by the deep Prussian blue. It is interesting this change looks totally against the boom of deep blue, and they kept producing colourful “Nishiki-e” as if they are showing off their confidence without using the new colour. On the other hand it could be said they already adopted the new colour but it was thinned until it doesn’t look like the one. However after some years they also seemed to have started using Prussian blue. “[Gototei Akitsushima](#)” by Bando Mitsugoro and “[Oniga Take](#)” by Nakamura Shikan in 1832 (Tempo 3) are ventured to mention, however it is only judged by eye inspection.

By over viewing Ukiyo-e in term of “Blue,” it is even comprehensive how the time line of artist’s names and their art works linked. Also art and people’s livings were closely connected and they did not know how much those ordinary entertainment would be evaluated by foreign audience and or their future generations. What we see here is not an isolation of art like that is framed and hanged on the wall. They were distributed on the streets and carried with the hand fan surface. People walked and dressed in stylish indigo, the local kitchens might have served lunch in blue and white rice bowls. Workmen sitting on bench were rolling up their sleeves and showing off their blue tattoo in brave. It is quite exotic to imagine about these scenes, even for Japanese people now a days, from the world of lost time. It was unknown until they were exposed to the outer world. The time lasted shortly and ended quite suddenly. Everything happened inside of egg shell where influential movement from

⁴⁰ Eisen made a series called “53 stations of Oiran beauties -Mitate Yoshihara Gojusan Tsui.” Collected by National Diet Library, Japan.

outer cultures always terminated, however after years when original aspect was completely reshaped, things starts going back, back to the home land where they were from.

[Images]

- P3. "Entombment of Christ" Pieter van der Werff Picture Gallery , Sanssouci, Potsdam, Germany
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- P5. "Shin sen Ran sen ni yoru Prussian Blue Yunyuryo/ Kakaku Suii Hyo 1782-1862" quoted from "Junko Konsei no Mozo to Yunyu" by Saburo Miyashita, Edited by Takamichi Arisaka, Masaaki Asai 1994 Seibundo Publishing.co
- P5. "Haikai Ichimai Zuri" Aichi University of Education Library
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- P10. "A scene of flourished Kamakura" Henry D. Smith II "Hokusai and the Blue Revolution in Edo Prints"/ Private collection
- P10. "Chat in brothel" Henry D. Smith II "Hokusai and the Blue Revolution in Edo Prints"/ Tokyo Municipal Central Library
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