"Westerners (and even many Japanese) hardly know what to make of actor prints": An empirical study on the aesthetic experience of Japanese and Austrian students

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Shunkosai Hokushu was a leading ukiyo-e artist from the Osaka School and had a lasting stylistic influence on the visual conventions defining the Osaka style. The Osaka style is used as a term for prints concentrated on actors from Osaka, in contrast to those from Edo (Tokyo). In addition to famous courtesans, one of the most common motifs of ukiyo-e, "pictures of the floating world," involved kabuki actors. The kabuki theater was open for all levels of the population, in contrast to the Nôtheater, which was subsidized by the shogun. These prints were bought, for instance, as low-priced souvenirs after an evening at the theater. The actors are often depicted in a specific kabuki pose, which is an integral part of the show. During the performance, each actor freezes in a specific pose (*mie*) for a moment.

The following text focuses on a single actor print. Created around 1832, it is an especially interesting example of a woodblock print by Shunkosai Hokushu, depicting the then famous actor Nakamura Utaemon III (named Shikan) in his role as Ishikawa Goemon disguised as the farmer Gosaku (see Fig. 1). The composition is dominated by the figure of Nakamura Utaemon III dressed in a colorful costume and with a samurai sword as Ishikawa Goemon, an outlaw hero in the play *Keisei Setsugekka*. Behind the actor, a transparent curtain—a scrim—is depicted, and only a closer look reveals that behind this curtain, more persons can be discovered (see Fig. 3). The grey pattern, reminiscent of clouds, may represent the fog effect that was part of some of the shows.²

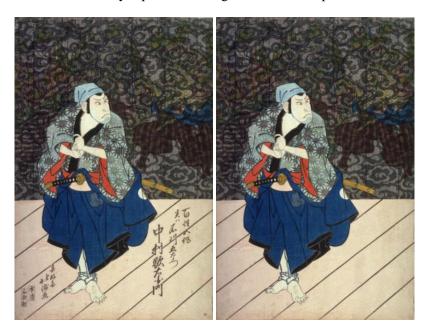


Fig. 1 (left) Original, Fig. 2 (right) edited: Shunkosai Hokushu, Shikan as Ishikawa Goemon, ca. 1832, colored woodblock, 38.2 x 25.6 cm, Fine Arts Museums of San Francisco.

¹ Roger S. Keyes and Keiko Mizushima, *The Theatrical World of Osaka Prints* (Boston: Godine, 1973), 229.

² Dean Schwaab, *Osaka Prints* (New York: Rizzoli, 1989), 148.

In *The Actor's Image*, Donald Jenkins theorizes how actor prints are currently experienced:

Today most Westerners (and even many Japanese) hardly know what to make of actor prints which is scarcely surprising. Being thoroughly unfamiliar with the theatrical experience represented, how could they find pictures of (apparently gratuitously) scowling and posturing actors anything but boring or even grotesque?³

How are Japanese actor prints perceived today—in and outside Japan? To answer this question, I highlight some of the results of my PhD thesis that relate to the specific print by Shunkosai Hokushu.⁴ This image was one out of ten artworks shown in digitized form on a computer screen to 50 Austrian and 51 Japanese students in an empirical study. While looking at the artworks in a free-viewing task, the participants' eye-movements were recorded with a remote eye-tracker by SMI. The eye-tracking data were complemented with an extensive questionnaire, which investigated, for example, the viewer's opinion on the paintings and emotional reactions toward the artworks. ⁶ Japanese and Western artworks of different periods and styles were shown.

Based on Michael Baxandall's theoretical perspective on the "period eye," a historical condition of art perception, this study investigated the cultural variance in art perception. While Baxandall postulated a historical way of perceiving, without being able to prove it, a cross-cultural study offers the possibility of investigating this interdisciplinary topic between art history and psychology empirically. Art perception is more than eye-movements, but it starts with what meets the eye. Eye-movements are mostly unconscious—especially in a free-viewing task—and can be understood as an indicator of cognitive processes. Eye-trackers allow retracing of how viewers look at an artwork. Two of the main factors measured by eye-trackers are fixations and saccades. During a fixation, the eye is still, and we can view sharply. With fixations, we mainly measure attention. In contrast, saccades are quick movements of the eyes and we can infer the direction of attention shifts from them. 8 Since it has already been shown that information, such as the title of an artwork, influences how our attention is directed when we look at an image, 9 the parts of the print that show Japanese characters were removed for the experiment (Fig. 2). In the original version, we find characters on the left and right sides of the wooden stage floor, which name the actor, as well as the block engraver, Kasuke. Many Japanese artworks combine image and script, and a clear distinction

³ Donald Jenkins, "Actor Prints: Shunsho, Buncho, and the Katsukawa School", in *The Actor's Image. Print* Makers of the Katsukawa School edited by Timothy T. Clark and Osamu Ueda with Donald Jenkins, (Chicago: The Art Institute of Chicago, 1994), 11-26, 12.

⁴ Hanna Brinkmann, "'The Cultural Eye.' Eine Empirische Studie zur kulturellen Varianz in der Kunstwahrnehmung" (PhD diss., University of Vienna, 2017).

⁵ The data for the Austrian sample were collected at the Laboratory for Cognitive Research in Art History (CReA) at the Department of Art History of the University of Vienna; the data for the Japanese sample were collected at Waseda University in Tokyo, Japan. I would like to thank Oliver Grau and Christa Sommerer, who put me in contact with Machiko Kusahara from the School for Letters, Arts and Sciences, Waseda University. ⁶ The questionnaire was translated from German into Japanese by a professional translator; it was then back-

translated by another translator.

⁷ Michael Baxandall, Painting and Experience in Fifteenth-Century Italy. A Primer in the Social History of Pictorial Style (Oxford: Clarendon Press, 1972).

⁸ Kenneth Holmqvist and Markus Nyström, Eye Tracking. A Comprehensive Guide to Methods and Measures, (Oxford: Oxford Univ. Press, 2011), 23.

⁹ Gernot Gerger and Helmut Leder, "Titles Change the Esthetic Appreciations of Paintings," Frontiers in Human Neuroscience 9 (2015):464, https://doi.org/10.3389/fnhum.2015.00464; Evgenia Hristova, Severina Georgieva, and Maurice Grinberg. "Top-down influences on eye-movements during painting perception: the effect of task and titles.", in Toward autonomous, adaptive, and context-aware multimodal interfaces. Theoretical and practical issues edited by Esposito A., Esposito A.M., Martone R., Müller V.C., Scarpetta G., (Berlin/Heidelberg: Springer, 2011), 104-115, https://doi.org/10.1007/978-3-642-18184-9 10; Helmut Leder, Claus-Christian Carbon, and Ai-Leen Ripsas, "Entitling Art: Influence of Title Information on Understanding and Appreciation of Paintings," Acta Psychologica 121, no. 2 (2006): 176-98, https://doi.org/10.1016/j.actpsy.2005.08.005.

between pictoriality and written form is not always possible.¹⁰ The artist's signature is often prominently placed in the image, and sometimes, we find additional information about the depicted subject, like the title of the work. For a comparative eye-tracking study, it is important that both groups receive the same information.¹¹

The analysis of the collected data was carried out on different levels. The eye-tracking data were analyzed in a quantitative way and with different visualizations (created with the Eyetrace software program¹²). For the answers in the questionnaire, especially for the open questions, a qualitative analysis was appropriate.

For both groups—Japanese and Austrian students—the results of a comparison of the average fixation duration over all ten artworks revealed that the fixation duration when looking at the Hokushū image was significantly higher compared with the durations for all nine other images. ¹³ A longer fixation duration is often interpreted as a longer processing of information, for example, because the stimulus is difficult to decode. In the case of the presented print, this can be explained with reference to the unusual background composition of the artwork. The picture analysis suggests that the figures standing somehow hidden behind the curtain drew a lot of attention, since a close, detailed manner of looking is required to recognize these persons. The ability to discover nine faces explains the above-average fixation duration (see Fig. 3).



Fig. 3: Detail with highlighted faces in the background.

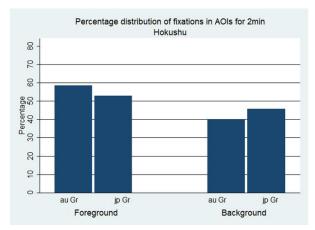
An in-depth analysis of the location of the fixations with the help of areas of interest (AOIs) shows that a large part of all fixations during the 2-minute viewing time (40 % in the Austrian and 47% in the Japanese group) related to the image's background in both groups. For this analysis, the actor was considered part of the foreground. However, an analysis of only the first 5 seconds of the viewing time showed a variance between the two groups. In this period, we find a statistically significant difference:

¹⁰ Ryozo Maeda, Wilhelm Voßkamp, and Teruaki Takahashi, "Einführung," in *Schriftlichkeit und Bildlichkeit. Visuelle Kulturen in Europa und Japan*, edited by Ryozo Maeda, Wilhelm Voßkamp, and Teruaki Takahashi (Munich: Wilhelm Fink, 2007), 7-16, 7.

¹¹ For the sake of experimental comparability, it was accepted that the composition, which is strongly balanced by the carefully placed script, suffered.

¹² See Thomas Kübler et al., "Analysis of Eye Movements with Eyetrace," in *Communications in Computer and Information Science (CCIS)*. *Biomedical Engineering Systems and Technologies*, (Springer International Publishing 2015), 458–71. Eyetrace is freeware: http://www.ti.uni-tuebingen.de/Eyetrace.1751.0.html (02.2018). ¹³ The mean of the fixation duration of each group was compared separately with a *t*-test for dependent samples. The results showed significant findings in each group for the picture by Shunkosai Hokushu.

35% of all fixations of the Japanese group were on the background of the image, whereas only 16% of all fixations in the Austrian group fell on this location (t = 4.24, p = 0.000; Fig. 4 and 5).



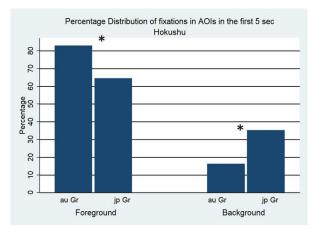


Fig. 4 and 5: Comparison of the distribution of fixations on Foreground and Background per group. Note that some of the fixations have been next to the image and are therefore not part of the analysis.

The analysis of the questionnaire mirrors this attention pattern: All the Japanese students mentioned the print's background in their answer to the question, "What were you thinking when viewing this image?" Some did not mention the actor in the center of the composition at all, and others only made passing remarks. Examples of these answers are as follows:

- "I asked myself if the scene depicts ninjas, standing behind the curtain waiting to murder the enemy"
- "What kind of facial expressions do the people in the background have?"
- "The pattern behind the actor is wonderful"
- "How many people can be found behind the main character?"
- "The bamboo shades in the background attracted my interest"
- "The pattern of the bamboo curtain and the transparent-looking persons come off very well"
- "The shadows of the people behind the curtain kept me busy somehow"
- "How many people are there on the other side of the curtain?"
- "Since there is a very elaborate pattern behind that person, I concentrated on that"
- "Who are these six persons whose shadows we can see behind the curtain? What is going to happen?"
- "It is interesting: If you look very closely, you can discover nine men in the background"

In the Austrian group's answers to the same question, the actor was primarily emphasized. The background was also mentioned, but mostly in second place. Some of the examples express the amusement and irritation of the beholders related to the convention of depicting the actor in his dramatic pose:

- "First, I looked at his feet and I asked myself if he—a warrior, or whatever he was—wears legwarmers. I found this idea very funny. Then, I looked at his frightening facial expression. [...] The tapestry in the background does not fit the image. The whole composition had a disturbing effect on me"
- "Why this facial expression? He looks very funny. Nice background!"

- "Is this a woman or a man? Disturbing and confusing background. In contrast, the foreground is pleasant to look at (the floor of the room)"
- "First, I was fascinated by the feet and the posture of the figure, as well as his gaze. After I studied that closely, I finally looked at the background, which I didn't find especially interesting"
- "What a funny figure. What is he doing? Why is he making that grimace?"
- "The woman has grotesque feet. I couldn't discover which painting was hidden in the background"
- "What is this man/woman hiding? Is he frightened or angry? What is this light circle on his costume; is this a light reflection?"
- "This might be a warrior; in the background there are two men. I was wondering if this could depict a mural or a transparent curtain"
- "A man who seems to fixate on something. He looks very angry, and the feet are really ugly. A colorful pattern in the background"
- "With this tapestry, I would also become paranoid or mad like this Japanese man"
- "The toes look really strange. The hands are cramped. Is he sensing evil? The tapestry in the background looks as if many tapestries are layered"

Jenkins assumed that both groups of beholders—Japanese and Westerners—would have specific reactions to actor prints.¹⁴ While an impression of grotesqueness could be found in the Austrian group, the image was not rated as boring by either the Austrian or the Japanese group. The questionnaire answers suggest that the Japanese beholders were familiar with the conventions of the depiction from the context of actor prints. They did not mention the actor's facial expression, clothing, or posture as much; instead, they concentrated more on the unusual structure of the background. In contrast to the Austrian group, the Japanese participants' fascination did not focus on the central figure, but instead, on the transparent curtain and hidden persons covered in fog. This result may have arisen because the participants in this study were students at Waseda University in Tokyo. On the main campus of the university, there is a famous theater museum, where one print of the Hokushu woodcut is stored. For conservation reasons, the work is not on display, but in the permanent collection, woodcut prints are exhibited that include images of actors in similar poses. Yet, in the image from this study, it is the background that varies from those of all the other prints. The conclusion that can be drawn from this empirical investigation is as follows: Due to differences in the visual cultures of Japan and Austria, the familiarity of contemporary beholders with the specific motifs and conventions of depiction varies. In this research, whereas Austrian students were irritated by the depiction of the actor in his pose, for the Japanese group, the background was the unfamiliar element. As the analysis of the questionnaires and eye-tracking data showed, such differences have consequences not only for the aesthetic experience and cognitive processing of the work, but also the actual viewing behavior.

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¹⁴ Jenkins, Actor Prints, 12.

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- Fig. 1: Shunkosai Hokushu, Shikan as Ishikawa Goemon, 1832, colored woodblock, 38.2 x 25.6 cm, Fine Arts Museums of San Francisco, Photograph: Artstor (16.12.2016).
- Fig. 2: Shunkosai Hokushu, Shikan as Ishikawa Goemon, 1832, colored woodblock, 38.2 x 25.6 cm, Fine Arts Museums of San Francisco, Photograph: Artstor (16.12.2016), edited version.
- Fig. 3: Shunkosai Hokushu, Shikan as Ishikawa Goemon, 1832, Farbholzschnitt, 38.2 x 25.6 cm, Fine Arts Museums of San Francisco, Photograph: Artstor (16.12.2016), detail.
- Fig. 4 and 5: Comparison of the distribution of fixations on Foreground and Background per group. Bar chart created with stata.