

## Painter's Process Revealed

The painting “Pansy”, or Pansies, by the Japanese painter Konosuke Tamura (1903-1986) is a stylized still life of a vase of pansies and an apple (Figure 1). The work is an example of the Western Style art movement or “Yōga” that was popular in Japan from the Meiji period until its decline after World War II<sup>1</sup>. Tamura was a member of Nikakai club, but later established the Second Nikikai with painters of similar styles and concepts. A year before his death, he was awarded as a Person of Cultural Merit in Japan<sup>2</sup>. Three of his other works are currently part of the collection at the Hiroshima Museum of Art<sup>3</sup>.

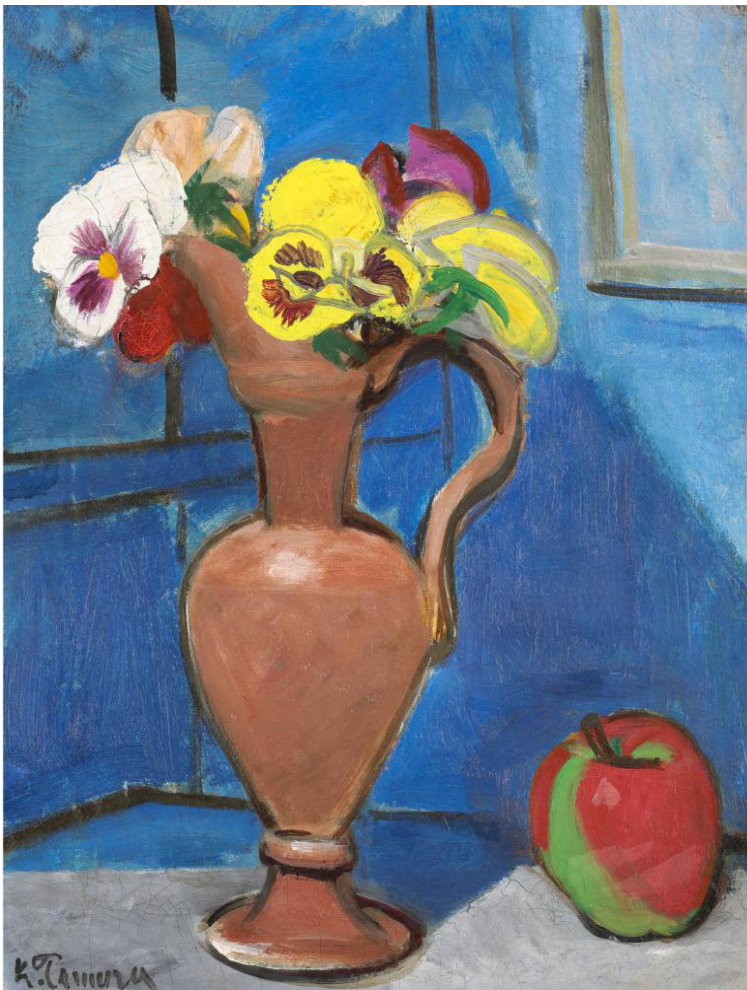


Figure 1: Pansy by Konosuke Tamura, 41.1 cm x 32 cm, oil on canvas

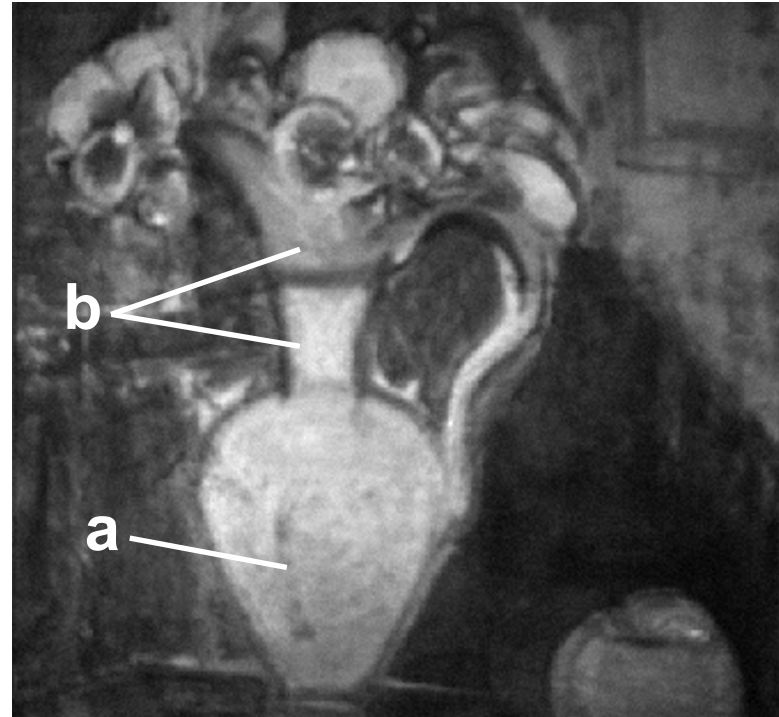


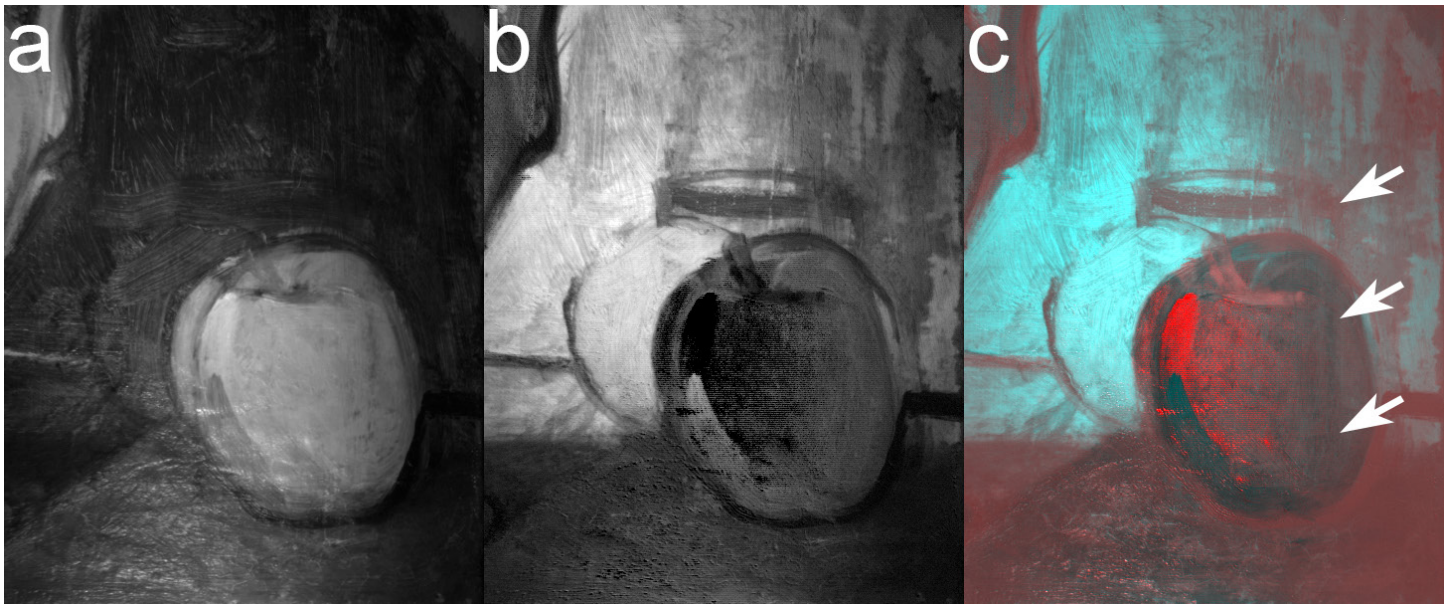
Figure 2: Infrared image of the vase shows where a previous mark on the vase was painted over (a) and a distinct contrast between the top part (b) of the vase and bottom part despite the two parts being close in visible color on the final painting

### RevealScan-M™ uncovers hidden details

While the painting seems straightforward, the painting contains more than what meets the eye. Using the RevealScan™-M multi-wavelength range camera, details that are hidden behind the visible top layer of paint begin to emerge. For instance, the vase contains a mark on the lower portion that appears to follow the curve of the object that is not visible in the overpainting, see Figure 2 (a). Furthermore, the top part of the vase is a darker color in the infrared region than the bottom part in Figure 2 (b) whereas they are similar colors in the painting, suggesting that this part of the vase was painted over, compared to the bottom. Both of these changes to features that were later covered seem to deemphasize the three dimensionality of the vase to fit the style Tamura chose.



## Painter's Process Revealed



*Figure 3: Right lower corner of the painting. a. Infrared 1550 nm wavelength image. A faint outline of additional object seems to appear. b. The resulting difference image between infrared PCA components 2 and 3. A glass and a round object are much more discernible. c. False color image (Infrared component 2 as cyan and infrared component 3 as red) enhances the visibility of the glass and additional round object, likely a fruit. The arrows indicate a line showing that the glass continues behind the apple.*

A more striking difference between the infrared images and the visible painting seems to be the area behind the apple, revealing not even one but two objects, a glass and another round object, possibly another piece of fruit, an orange or another apple, as shown in Figure 3. The underpaintings are slightly visible in certain wavelength images as seen in Figure 3a, but the underpaintings stand out much more when using RevealScan™-M Analysis software. By combining two of the infrared principal components (PCA), the glass and the round object are much more apparent in the resulting image, as shown in Figure 3b. The different wavelength information and the subsequent data processing allows in this case the clarification of the underpainting as shown in Figure 3b. Sometimes a false color representation using the calculated images display even more hidden information, such as the continuation of the edge of the glass indicated by the arrows in Figure 3c.

Both the apparent changes made to the vase and the underpainting of the glass and another fruit also demonstrate the ability of the RevealScan™-M to capture parts of the artistic process. The line of the glass extending behind the apple, as indicated by the arrows, gives us another clue of the sequence of the changes. On closer observation, one may also see the line formed by the bottom of the complete glass in the painting. It is thus likely that the glass and the other fruit were painted first and changed later in favor of the singular apple. Another later step was covering up the glass and the fruit, replacing it with the red-green apple, which may have simplified the composition, making it feel more balanced and less crowded in the left corner. All the subtle changes indicate that Tamura's painting was a dynamic process, with artistic decisions being made during the completion of the painting.

1. Mason, P. E., & Dinwiddie, D. (2005). History of Japanese art (2nd ed). Pearson Prentice Hall.  
2. Tamura Konosuke: Articles on deceased persons in the Japanese Art Yearbook. Tokyo Cultural Properties Research Institute. <https://www.tobunken.go.jp/materials/bukko/10076.html>  
3. Tamura Konosuke - [Hiroshima Museum of Art]. Hiroshima Museum of Art. (2024). [https://www.hiroshima-museum.jp/en/collection/jp/tamura\\_k.html](https://www.hiroshima-museum.jp/en/collection/jp/tamura_k.html)