Adaptation of the Integrated Mode of a Free Viewing System for Paintings of Battles and Its Evaluation

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For such historical materials as folding screens and picture scrolls, we have developed a free-viewing system with ultra-high-definition digitization, allowing detailed viewing by free movement, enlargement, and reduction of images along with the display of explanatory notes. We have already applied the system to exhibitions and research on materials. In the exhibition “What are Bushi (Warriors)?” The following three works were made available to the public in this new viewing format: Folding Screen Depicting the Battle of Nagashino, Picture Scroll Depicting the Zenkunen War, and Picture Scroll Depicting the Yuki War.

The previous viewing system had separate manual and scenario modes. In the manual mode users change screen display by moving, enlarging, or reducing images, and can freely view all over the material. For those users unfamiliar with the subject and unsure where to start, or how best to view the material, the scenario mode guides them through the images, which are displayed according to a prepared script; this might be restrictive to users well acquainted with the subject matter. Therefore, we have been promoting research and development of an integrated mode combining both functions. In the exhibition “What are Bushi?” the aim was to put across the theme of the exhibition in line with the stories depicted in the painted works. To enable free viewing, the integrated mode was introduced for the first time.

To evaluate how well the two functions in the integrated mode performed, and whether the number of scenes included in a scenario was appropriate, user operations were analyzed based on data collected during the exhibition, and the following points were found.

Not only were both the manual and scenario functions used individually, there was also combined viewing; the actual viewing records confirmed our aim of ensuring a combination of manual viewing and viewing following a guide by introducing the integrated mode was met.

For material with a high degree of narrative structure, users viewed by mainly following the scenario, and in material with a lower degree of narrative, users would often freely view by manual operation, or by combining scenario with manual operation.

With regard to the number of scenes provided by the viewing system in the exhibition hall, two user groups were found: users who stopped viewing relatively early, and users willing to view many
scenes; this pattern matches phenomenon observed when material images are made public on Web pages. The probability of the latter group continuing to read the screen is high, and to maintain the interest of such users, 30 or so scenes were found to be a reasonable number.

Key word: image viewing, viewer, exhibition system, historical materials, museum materials