

Historical Condition of the Birth of the Disciplinary Device for Colorblindness —In the Case of Stereoscopic Color Vision Training Device—

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1. Aim

The purpose of this report is to clarify the historical condition that made it possible to establish “the Eric Bateman Visual Colour Training Series”. This device was devised by English psychologist Eric Bateman in the 1960s to train the color vision of colorblind people. I got the opportunity to see the actual one at the British Optical Association Museum at the College of Optometrists, London. Generally speaking, a stereoscope is a device that gives a three-dimensional image by viewing two pictures or photos separately with left-eye and right-eye. The Bateman’s device converted it to a use for training of color vision of colorblind people. At first glance, this seems to be a device invented on a whim, but in fact it was only possible on condition of the reorganization of knowledge since the middle of the 19th century. As Jonathan Crary says, the historical process from which the stereoscope was born had “a dialectical relation of inversion and opposition” (Crary 1992: 110) that would not fit into a single line of progressive history. Also, the stereoscope is “part of the same reorganization of the observer, the same relations of knowledge and power” (Crary 1992: 118). I would like to argue that the Bateman’s device also presupposed such a massive reorganization of physiological knowledge of vision in the 19th century as Crary says.

2. Methods

1) I would like to clarify the argument regarding the stereoscope in Crary's *Techniques of the Observer* and the historical significance of the device in media history. 2) I argue that David Brewster was involved in the invention of the designation of “colour blind” and the invention of stereoscope. The development of physiology was deeply involved in the establishment of the concept of color blindness and the invention of stereoscope. 3) I argue that the concept of color blindness and the stereoscope have a close relationship with Foucault's “discipline”.

3. Results & Conclusion

This report tried to clarify the historical condition that enabled Eric Bateman’s device. As a result, it becomes clear that Brewster was deeply involved in both the designation “colour blind” and the invention of stereoscope. In addition, it is revealed that the synthesis of the stereoscope and the concept of color blindness as a form of the power of discipline was a historical condition of the birth of Bateman’s device.

References

<https://www.college-optometrists.org/the-college/museum/online-exhibitions/virtual-colour-vision-gallery/ishihara-and-other-colour-vision-tests.html>

Jonathan Crary (1992), *Techniques of the Observer: On Vision and Modernity in the Nineteenth Century*, MIT Press.