The Meaningful Pixel and Texture: Exploring Digital Vision and Art Practice Based on Chinese Cosmotechnics

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Abstract : The study introduces a fresh perspective on the digital realm through an examination of the Chinese concept of Xiang, elucidating how it can build an understanding of pixels and textures on screens as digital trigrams. This concept attempts to offer an outlook on the intersection of digital technology and the natural world, thereby contributing to discussions about the harmonious relationship between humans and technology. The study looks for the ancient Chinese theory of Xiang as a key to establishing the theories and practices to respond to the problem of Contemporary Chinese technics. Xiang is a Chinese method of understanding the essentials of things through appearances, which differs from the method of science in the Westen. Xiang, the basement of Chinese visual art, is rooted in ancient Chinese philosophy and connected to the eight trigrams. The discussion of Xiang connects art, philosophy, and technology. This paper connects the meaning of Xiang with the 'truth appearing' philosophically through the analysis of the concepts of phenomenon and noumenon and the unique Chinese way of observing. Hereafter, the historical interconnection between ancient painting and writing in China emphasizes their relationship between technical craftsmanship and artistic expression. In digital, the paper blurs the traditional boundaries between images and text on digital screens in theory. Lastly, this study identified an ensemble concept relating to pixels and textures in computer vision, drawing inspiration from AI image recognition in Chinese paintings. In art practice, by presenting a fluid visual experience in the form of pixels, which mimics the flow of lines in traditional calligraphy and painting, it is hoped that the viewer will be brought back to the process of the truth appearing as defined by the 'Xiang'.

Keywords : Chinese cosmotechnics, computer vision, contemporary Neo-Confucianism, texture and pixel, Xiang