

The project 'Surface as a Screen', which was focusing on the screen itself as a contemporary surface moved on to the next step with the inquiry 'What makes the screen unique from others?.' And this leads to a review of the material nature of the screen and the discourse it presents to us.

Paul Elliman and Michael Rock illustrate short but diverse perspectives about the screen in the conversation *Designed Screen: A Compendium* (Elliman and Rock, 1996). In the dialogue, they mentioned a variety of screens and explored the meaning they have. Among ten different screens, the first question they brings out was the inquiry of the meaning of the word 'screen' itself. This is a same underlying question of an experiment in the studio project which is dealing with the ambivalence of the screen. According to the Cambridge dictionary, the word screen includes the meaning of blocking and protecting A from B. As a question presented in the dialogue, 'Does it reveal or conceal?' The ambivalence of screen being expressed in the word 'screen' itself has the potential to draw many discourses in itself. For example, in the studio project, the collection of photographs taken using light and hands with textiles in the middle is an experiment that deals with the ambivalence of these screens. The silhouette of the hand is reflected on the middle textile, screen, and the hand blocks light from the other side of the textile, but at the same time, it shows the shape of the hand. Here, this ambivalence could be redefined by the word 'dualistic relationship.'

Interestingly, this concept of 'dualistic relationship' also appears on modern touch screens. They are the screens with a higher level of technology applied to a normal screen. These days, it has become more common to use streaming services such as YouTube and Netflix through portable devices than TV or static screens, the touch screen may be the surface we touch the most in a day. The principle of the touch screen is based on the installation of an ultrasonic generator and a receiver around the screen to create an invisible grid of ultrasonic waves. When our fingers touch the screen, the screen visually seems like it is finding the touched point, but in the mechanical aspect of the machine, the point is like finding the unknown x and y by losing the connection of the ultrasonic waves. That is, the touch screen has both the dualistic aspect of finding a location point and losing a connection. This idea has a connection with the very first two experiments. The gathering of 100 maps of the smartphone screens which shows the grid and the record of touch points was made to visualize this dualistic aspect. Also, a Mobius strip which is written down in two opposite sentences 'The connection point has been lost' and 'The location point has been found' was made to play with this dualistic relationship.

However, these characteristics and technologies are invisible in general lives. All internal and external interfaces and systems are hidden inside the device, and we have no way of knowing their mechanisms whether it is software or hardware. Interestingly, the invisibility of these screens has been mentioned and emphasized from similar approaches in several different fields and perspectives. Mark Weiser, a computer scientist who is widely considered to be the father of ubiquitous computing, mentioned in his text *The Computer for the 21st Century* (Weiser, 1991) that "The most profound technologies are those that disappear. They weave themselves into the fabric of everyday life until they are indistinguishable from it." His position from this perspective is to present the new idea of Uni-computing in the aspect of invisibility. Furthermore, to bring this phenomenon to be more specific, he also brought several terms mentioned by experts, such as the "tactic dimension" (philosopher Michael Polanyi), "visual invariants" (J. J. Gibson), "Horizon" and the "ready-to-hand" (Martin Heidegger), and so on. Heidegger, a German philosopher who is best known for his contributions to phenomenology, hermeneutics, and existentialism, brought the idea of tools and equipment to define existentialism by presenting the difference between human existence and tools. Focusing on Martin Heidegger, the idea of invisible dualistic relationship could be extended to the idea of 'What is a equipment(tool)? (Heidegger, 1962)'