

Visualization and Sonification Not for Understanding —Representation for Being in the World

*Kikoh Matsuura

In this presentation, from the standpoint of an artist and also a musician, I report the subjective sensations and thoughts that emerged through my practice of making works using scientific technology. I have used scientific technology not for the purpose of understanding nature, but as a pathway to feeling nature, and for feeling that I exist together with the world. In this presentation, visualization, sonification, and representation are positioned not as means to grasp nature, but as entrances to making contact with the world.

I am not a researcher, but an artist who attempts to reweave my relationship with the world through artistic practice. Accordingly, this presentation does not aim to propose objective conclusions or universal theories; rather, it aims to share the sensations and thoughts that arose in the process of making. By placing scientific visualization and sonification alongside artistic representation as “ways of touching the invisible world,” I bring their possibilities into view through artistic practice.

As concrete examples, I introduce two works: *Withered Plant* and *Deep Heart*. *Withered Plant* is a lifelong project in which I observe and photograph millimeter-scale fragments of withered plants with a scanning electron microscope (SEM), record and preserve the acquired images as primary data (an archive), and, at the same time, produce photographic works based on those primary data. What I am trying to see is not “death” itself in withered plants. Rather, it is the traces of life that remain within death, and the signs of transition into the next cycle. An existence that appears already finished to the naked eye, when placed within a different scale through the microscope, emerges with a different expression.

This work contains two cycles. One is the material cycle of plants, in which matter circulates through withering and decomposition. The other is the cycle of recording the observations I carry out in the midst of life and leaving them for the future as DOIs. The contents differ, yet both share a structure in which, remaining unfinished, they are passed on into the next state.

Deep Heart is a work that uses the artist’s own measured sleep EEG data and represents it through sound and light. Its aim is not to explain the meaning of brain states; rather, taking as a starting point the segments in which indicators of deep sleep appear, it constructs an experience that acts upon a layer prior to understanding. When I am unconscious, I do not recognize the world, yet the world exists. I am not there, yet I exist. By placing this twist as experience rather than explanation, I try to touch the sense of being in the world.

That said, visualization, sonification, or representation alone does not automatically generate resonance with the world. Without clues as to what one is touching, sensation floats in midair. In my practice, scientific explanation is not for the purpose of understanding, but is necessary as a clue for sharing the object toward which representation is directed. Through these two works, this presentation presents ways of visualization, sonification, and representation for making contact with the world.

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