

Reconsidering the Meaning of “Living Place” for People — From the Viewpoint of the History of Western Art and Thought

Tomoko NAKAMURA*

Abstract

The Covid-19 Pandemic brings rapidly various changes to our society. Especially, digitalization of communication through the internet technology promotes a situation which should be called “two-dimensionalization of the real world”, namely, vivid images on computer monitors is widespread used as a substitute for real direct experiences today. To begin with, a technical method that represents the real three-dimensional world on a two-dimensional plane comes from the Renaissance period, what is called Perspective. It is a technique to depict the outside world on a plane from a fixed point, in addition, symbolizes a kind of human’s view of nature. That can be also regarded a cultural product in European civilization and have been historically developed with scientific rationalization and advancement in technique. Nowadays people are forced to depend on such an artificial technology in many situations in ordinary life. It means that a kind of science and technology strengthen its involvement in the fundamental elements of our lives more than before. We would be required to reconsider anew what is the meanings of human existence and its *living place* under these circumstances. This paper tries to discuss some problems for transformations of human’s *living place* through the science and technology from a viewpoint of history of Western Art and Thought. It would be also an important matter after the Covid-19 Pandemic because our daily lives will be influenced increasingly by the progress of science and technology.

Keywords: Living place, Human existence, Two-dimensionalization of the real world, Renaissance, Science and technology

1. Introduction—A world that is increasingly dependent on science and technology

The COVID-19 Pandemic of 2020 forced dramatic transformations in people’s lives. However, some of the transformations have been deemed necessary even before the pandemic. A reexamination of the way Japanese people work and the promotion of a digital society are typical examples. While facing the immediate challenges in a crisis, latent problems and weaknesses of society have been exposed. As a result, transformations were rapidly made without any waiting. Many people are just frantically responding to the current situation without any time to examine new challenges and problems associated with the rapid changes.

Among the transformations that have taken place within a short period of time, the promotion of remote work has had a direct impact on people’s daily lives. Digital communication through the Internet has become widespread, supporting not only work but also personal connections between family and friends. Nevertheless, however detailed the image on the monitor is, ultimately it is merely a two-dimensional image. Presently, there are restrictions on meeting others, having physical contact, going somewhere, or gathering in a group. In many cases, the two-dimensional plane is merely a substitute for such direct experiences.

On the other hand, despite living in the real world with many restrictions, we are able to do many things thanks to science and technology. As long as we have the Internet, we can communicate with whoever we want, wherever we are or they are, allowing us to share a large amount of information. We do not need to take our time to go out or

* Tokai University, Center for Liberal Arts.

be at a specific location. Let us look at a university as an example. During an online lecture, though there is a time restraint, students can take the lecture wherever they choose and focus on the lecture without worrying about their surroundings. On-demand style lectures have even fewer restrictions, and students do not have to worry about time, place, or the existence of others, and can watch the lecture as many times as they choose. Compared to the past, where instructors and students shared the same time and space, the present situation releases us from restrictions such as body, time, and space in a way. However, on the other hand, the “reliability of existence” of others that we took for granted is weakening.

Under such circumstances, our existence itself is the proof that shows the rapid and fundamental increase in dependence on science and technology. Humans naturally exist in a place, connect to a place, and build a relationship with others and the surrounding environment to establish our lives. However, the arrival of the Internet has freed us from a number of constraints, such as our bodies and specific times, and furthermore, has created a massive virtual space that can be considered as another reality. The present pandemic is an opportunity in which the existing situation could be expanded throughout various areas of our lives.

2. Presentation of problems—A Query for the human’s *living place*

Shouldn’t we re-examine the meaning of a “*living place*,” which is the foundation of our lives? *Living place* usually refers to “a space people live in” and “residence,” but another meaning of “living” is “existing” [1]. Therefore, a *living place* is not only “a place where people are physically present” but also “a place where people exist.” In other words, a *living place* means someone exists, acts, and builds a life in some place at some time with various contexts and connections.

The present paper uses this term as a keyword and discusses an aspect of problems with “two-dimensionalization of the real world,” which is accelerating under the pandemic under a context of the history of Western Art and Thought.

The technique of depicting a three-dimensional space on a two-dimensional plane was established by Renaissance painters and art theorists in 15th and 16th century Europe. These include techniques such as Linear Perspective that skillfully depicts a space into a two-dimensional plane and Aerial Perspective, which was pursued by Leonardo da Vinci (1452-1519). Since then, these techniques have become an important cornerstone of Western Art, with scientific rationalization and advancement in techniques. In addition, the idea of expressing a three-dimensional reality as realistically as possible has been passed onto modern computer graphics. Today, the world depicted in two dimensions is expanded into three dimensions, and a virtual space surrounds us in 360 degrees, inducing complex perceptions. This technology is shaking our body, identity, relationship with others, and even the “reality” that is specified by place and time.

What was the thinking behind such sciences and technologies? How should we build a relationship between our *living place* and science and technology?

3. Birth of “landscape painting” and its meaning

The history of Perspective in Western Art is connected to the history of landscape painting. Landscape painting might not be the same as modern landscape painting; however, in the 16th century Netherlands, it was established as a genre [2]. In Italy, the exploration of Linear Perspective began in full during the 15th century, and a theoretical method to recreate three-dimensional perceptions on a two-dimensional plane was examined. The first achievement of such was

On Painting (De Pictura, 1435/ Della Pittura, 1436) by Leon Battista Alberti (1404-1472) [3]. A dedication by the author in its Italian edition was made to Filippo Brunelleschi (1377-1446) who practically developed a method called “artificial perspective (*prospettiva artificiale*)”. Subsequently, the Perspective theory was further examined by painter and mathematician Piero della Francesca (c.1416-1492) [4]. Masters during the height of Renaissance period, Leonardo da Vinci and Albrecht Dürer (1471-1528), pursued a method to mathematically and rationally depict three-dimensional natural objects and human bodies.

Behind the birth of art that uses nature as the motif, there is a change in people’s awareness of nature. Nature has been denied by Christians as material things. As society developed during the Late Middle Ages, nature became a target of people’s attention. The act of “depicting nature” refers to people viewing the vague and strange world outside, giving order and meaning, and segmenting the world. This has important meaning for not only art history, but also for the history of thought or science and technology. In other words, the birth of landscape painting is an expression of awareness with which humans artificially understand “landscape” and make it something they can understand. What Renaissance theorists had explored was practically knowledge and indeed technique.

4. A limit of technique: in Dürer’s theory of human proportion

As discussed, during the Renaissance period, there was what could be called the “discovery of landscape.” Artists used a weapon called perspective to tackle nature and express the complex shapes and depth of the three-dimensional world we experience every day on a two-dimensional plane. The nature they tried to depict was not limited to landscapes but also included human bodies as an important target. Another art theory that fascinated Renaissance artists as much as Perspective was the theory of human proportion. It is a theory and a technique that explored how to rationally and accurately depict complex three-dimensional structures. A German Renaissance master, Dürer, is particularly known for passionately tackling this theory of human proportion. The achievements of Dürer’s research are found in many sketches and drawings today, and are summarized in his book *Four Books on Human Proportion (Vier Bücher von menschlicher Proportion)* that was posthumously published in 1528 [5].

In this book, Dürer proposed various mathematical methods and human body proportion models to obtain and determine the ideal ratio for the human body. Specifically, a method to measure the human body, the so-called “*Meßstab* system” [6] used in the second book, is an extremely detailed measurement system proposed by Dürer, wherein the smallest unit of measurement is smaller than a millimeter. With this system, Dürer measured the size of each part of a complex human body in detail and attempted to standardize the most beautiful and ideal human body with numerical values.

I studied this system and showed that the values measured by Dürer present the limit of what can actually be recognized on paper [7]. In other words, I showed that measurements by Dürer are visually recognizable and at the limit of what can be concretely expressed. Mathematics in the 16th century was practically geometry, and the Dürer system was basically limited to the awareness by fractions. His calculations are highly detailed, but in a world without decimal points, it was the limit of his method. In a world with computers like today, Dürer might have been able to explore more detailed and abstract recognition and expressions through technology.

At the same time, we need to remember that Dürer was not satisfied with Greek geometry and attempted to create a method to measure very small numbers. As the historian A. W. Crosby (1931-2018) has pointed out, from the Late Middle Ages to the Renaissance period, there was a dramatic change in the way the world was recognized in Europe, which could be called “Quantification Revolution” [8]. The impact of this revolution, which Crosby

considers to be the biggest factor on the overwhelming success of imperialism in Europe, is clearly seen in the work of Dürer. With this era as the starting point, Europe goes on to dominate the world. It took a step forward toward a modern culture of science and technology supported by mathematical recognition and a high level of technology [9].

5. Discussions about the *space* and the *place*

As we have discussed so far, nature in Europe since Renaissance period was considered to be an existence that opposes humans. As human society developed, humans became closer to nature, and in order to find the place for nature in our own world, humans came up with various knowledge and technologies. Perspective, established during the Renaissance period, is one such example. In other words, Perspective is a technique to objectively describe the world existing outside of humans. At its roots, there is an awareness that is common with science, which breaks up the world based on human perspective and puts it in an order. However, what is depicted by Perspective is an artificial space that is removed from a fixed point in an extensive third-dimensional world and constructed on a plane. There is a separation between humans and the world. Real humans exist in the world, move, and experience the world through the five senses. However skillfully the world is copied on a plane, one cannot feel its expanse or depth. It is a world that was seen and not experienced. A perspective picture is not a recreation of the real perceived world.

In this line of thinking, a perspective picture is a type of external space that can be established without direct involvement of self. The clear images we see with computer technology today are a product of an extension of such pictures. If we are to go back to the initial question, the world on our computer and smartphone monitors is also a limited artificial world that exists outside of those who watch and listen. Therefore, this world's ontological foundation is much too weak to become a "*living place*" for people. In addition, this external space is highly dependent on modern science and technology. As we saw with the example of Dürer, human knowledge and technology are always restricted by the time and area. The nature as the target is constantly larger than what humans can understand.

In the Western World, "*space*" was the most essential framework to describe the world alongside "time" and "material" [10]. Here, *space* in principle is an empty expanse without an entity. In contrast, in the 20th century, a concept of "*place*" separate from *space* became actively discussed. Geographers Yi-Fu Tuan (1930-) and Edward Relph (1944-) are notable examples [11]. What is common between them is that while *place* is an abstract and empty *space*, as humans give meaning to place through various activities and experiences, it becomes a special place. This is fundamental to human existence.

A scholar of aesthetics, Kiyokazu Nishimura (1948-), pointed out that "theorists who advocate for Phenomenological geography are clearly influenced by the theory of place by Heidegger" [12]. In other words, there are many movements that deny the 19th century perspective on nature based on the mind-body dualism of Descartes as the background that led to the theory of *place*. For example, Romanticism, which became popular in the early 19th century, criticized the excessive rationalism of the French Enlightenment that led the 18th century, and focused on the irrational nature of sensibility, emotions, and human existence. Artistic expression at that time was diverse. For example, works by Philipp Otto Runge (1777-1810) and Caspar David Friedrich (1774-1840), who represent German Romanticism, show that their art was created through the unique and mutual sympathy between humans and nature. In addition, the so-called "Lebensphilosophie" and phenomenology that appear in the late 19th century and 20th century had a major impact on subsequent thinking, leading to thinking that focuses on realistic human perception and recognition of the world accompanied by a body.

6. Further discussion

The present paper analyzed and discussed the problems associated with rapid changes toward the two-dimensional world under various changes forced on our society during the COVID-19 Pandemic from the perspective of Western Art and history of Thought. Specifically, it is a presentation of a problem under the present condition, where much of routine experiences and communication are dependent on Internet technology, and direct experience in a three-dimensional space must be replaced by two-dimensional images. In other words, the revolution led by these technologies likely won't disappear even after the COVID-19 Pandemic is over. Digital technology will continue to advance, and our existence in the "living place" will continue to become more ambiguous. The transformation in the *living place* caused by science and technology will continue to be the major topic of human existence. Of course, the technology we have today clearly plays a major role in compensating for the physical fragility of humans, preventing the collapse of socioeconomic activities, and reducing the loneliness of people whose daily activities are restricted. However, when dependence on this technology increases, we experience fear that the fundamental element of human existence could be stipulated by science and technology. This doubt leads to questioning of the relationship between human existence, science, and technology.

This paper merely presented several arguments on a very large topic. Though we only discussed the reality depicted on a two-dimensional plane, in reality, virtual reality has already become three-dimensional. In addition, presently, what was initially created in a two-dimensional world is later made three-dimensional, impacting the real world. The live-action versions of manga represent a good example. We need to continue to examine the impact of various technologies associated with cognition and expression on our *living place*, culture, and civilization.

Notes

- [1] Under the item, living, in OALD (the Oxford Advanced Learner's Dictionary, 8th edition, 2010), the meaning of an adjective "alive now," noun "a way or style of life," and noun "the living people who are alive now" is described. Furthermore, exist means "to be real; to be present in a place or situation."
- [2] The English word "landscape painting" is derived from a Flemish word, *landskap*. cf. *Handbuch der Kunstwissenschaft*, edited by T. Kanbayashi, K. Shioe, K. Shimamoto, Keisoshobo, 1989, p.125. (in Japanese) / 神林常道他編『芸術学ハンドブック』, 出版社, 1989年, p.125.
- [3] L. B. Alberti, *On Painting: A New Translation and Critical Edition*, edited and translated by Rocco Sinisgalli, Cambridge University Press, 2013.
- [4] cf. J.R. Hale, *The Thames and Hudson Dictionary of the Italian Renaissance*, Thames and Hudson Ltd, London, 1981. / J.R.ヘイル編, 中森義宗監訳『イタリア・ルネサンス事典』, 東信堂, 2003, p83-84.
- [5] A. Dürer, *Vier Bücher von menschlicher Proportion*, Faksimile der erstgabe, Hrsg. von Wagner, G.M., Kingsprint limited, 1970.
- [6] cf. T. Nakamura, The Beauty of Harmony: the case of Albrecht Dürer's Theory of Human Proportion, *Civilizations (Bunmei)*, No.20, 2016, pp.29-33.
- [7] cf. T. Nakamura, Ein Problem zur vitruvischen Proportionsfigur in Buch II von „Vier Bücher von menschlicher Proportion“, *Asthetics (BIGAKU)* 64(1), 2013, pp95-106. (in Japanese)
- [8] cf. A.W. Crosby, *The Measure of Reality: Quantification and Western Society, 1250-1600*. Cambridge University Press, 1997.
- [9] cf. T. Nakamura, The Usefulness of Mathematics in Renaissance Art Theory, *Civilizations (Bunmei)*, Special Issue: Dialogue between Civilizations, pp.108-116, 2017.
- [10] cf. *Metzler Lexikon Ästhetik, Kunst, Medien, Design und Alltag*. Hrsg. von Achim Trebeß. Verlag J. B. Metzler, Stuttgart-Weimar. 2006. S.312.
- [11] cf. Yi-Fu Tuan, *Space and Place: The Perspective of Experience*, University of Minnesota Press, Minneapolis, MN, 1977. / Edward Relph, *Place and Placelessness* (1976), Classics in Human Geography, ed. P. Hubbard, R. Kitchen, & G. Vallentine, Sage, 2008.
- [12] K. Nishimura, *Introduction for the Environmental philosophy*, Keisoshobo, 2011, p.88. (in Japanese) / 西村清和『プラスチックの木でなにか悪いのかー環境美学入門』, 勁草書房, 2011, p.88.