

Preface

Research on the Coronavirus Disaster

Special Issue of Covid-19

The Institute of Civilization Research, Tokai University, was founded in 1959. Initially, along with being an institute conducting research on civilization, it was also characterized as an educational institution responsible for university-wide common education at Tokai University. In 2001, the Research Institute of Social Sciences and the Institute of Arts were merged, and it was re-established as a new Institute of Civilization Research founded with the “creation of civilization in the 21st century” as the basis of study. Since then, inter-disciplinary collaborative research has been propelled as its core project, and has continued to emphasize international research collaboration. In recent years, since 2015, we have held international symposiums on the theme “Dialogue between Civilizations”. From 2015 to 2019, the symposium was held at the Tokai University European Center in Denmark, and in March 2020, the symposium was scheduled to be held at the Takanawa Campus of Tokai University in Tokyo. However, as the spread of the new coronavirus infection (COVID-19) has worsened in Japan since late February 2020, and due to difficulties for people from Italy and other countries, who planned to participate, entering Japan and returning to their countries, we had to cancel the symposium. We hoped that it could be held after the spread of the infection had ended, but with the subsequent second wave and third wave in Japan, the situation does not allow holding an international symposium where people will gather. However, as a research institute, we will continue to promote the exchange of international research in the future as well, including conducting online symposiums. The publication of this issue is also one such attempt.

The theme of this issue is “Research on the Coronavirus Disaster”. We would like to talk about two or three aspects regarding the status of research and education that is familiar with us in the Corona disaster.

One of the staff members of this research institute took a sabbatical in 2020 and was scheduled to conduct research in the United States and Egypt, but the corona disaster made travel impossible and the planned research could unfortunately not be conducted. There will be many such cases. For the past few years, I have been looking at and accumulated local historical materials in Kanagawa Prefecture, where the University is located, and thus, I am not affected that much. However, even in the fields where overseas research is essential, it seems some researchers are not troubled that much by the situation like this. For example, in the case of a Middle East archeologist conducting research on the theme of farming and pastoral societies that emerged in the Neolithic period; he has been going to the Middle East every year and been involved in excavation of ruins in collaboration with the local people for more than 20 years. He could not go for the excavational investigation in the summer of 2020. Not only him, but others were supposed to conduct research of archaeology. Approximately ten research teams from Japan who had planned to study the archeological ruins in the Middle East had to be cancelled. However, archeologists specializing in the Middle East, it is said, are used to such situations. The political situation in the Middle

East is unstable and it is sometimes difficult to travel. In many cases, such as Iraq since the Gulf War, or Syria, which has been in a state of civil war since 2011, there are often situations in which it is not possible to travel to the local sites, and in such cases, it is a common pattern to organize and analyze data that has been accumulated thus far, and work on writing reports and papers on the excavations. This makes someone like me feel guilty because I have not sufficiently analyzed the accumulated historical materials, leaving them as is, however, you may say that the corona disaster may be a good opportunity to review the accumulated materials.

Due to the corona disaster, study groups and conferences are all being conducted online. I have also hosted several study groups on ZOOM, but there are quite a few issues that arise related to the communication environment and functioning. We are not really familiar with Zoom, and the level of satisfaction is low unfortunately. However, I have also received an update from an above-80 years old researcher who said “Corona may not be all bad, as conferences and seminars are now being conducted online, and I participated in them after a long time. Interacting with people has become easier while staying at home. . . .” In case of online sessions, it is easy to participate remotely, and is certainly easier to attend in seminars that people are used to be reluctant in participating in the past. Furthermore, even in the course of the daily operations of the academic societies, we heard some “unexpected benefits” brought by the online sessions such that committee members who were not able to participate because of travel hours became able to participate in the online committees. If it is difficult to conduct face-to-face meetings for the time being, devising means for conducting online meetings will be a priority.

In terms of devising means, various initiatives are being implemented all over Japan. The “Ouchi Museum” launched by Hokkaido Museum and which is a collaboration among 215 museums nationwide, is a model example among such initiatives. This project provides online information, during this period of closure of museums due to the corona disaster, about activities conducted as part of the research and exhibitions held before the museums closed. Also, in the course of this initiative, “One has come to realize that, till now museums mainly provided services based on the premise that people visit museums, and there has been inadequate consideration given to people who have difficulties visiting due to circumstances such as disabilities, taking care of family members, and residential areas.” (Mizuki SHIBUYA, “A Museum in My Living Room,” an Experiment in Dealing with the Covid-19 Pandemic”, *Journal of Historical Studies (REKISHIGAKU KENKYU)*, No.1004, January 2021). This is an issue that is common to the abovementioned conferences, research, and lectures held online. I would like to consider the corona disaster as an opportunity to review the ideal way on how our research activities should be.

Kazushige YAMAMOTO
Director, Institute of Civilization Research

Civilizations (『文明』) No.27 (2020)
International Journal of the Institute of Civilization Research

**Special Issue of Covid-19 :
Remodeling Researches under Coronavirus from "ordinary" to "new ordinary"**

Table of Contents

| | | |
|--|---|-------|
| Preface | Kazushige YAMAMOTO (Director of Institute of Civilization Research) | |
| Introductory Address for the Covid-19 Special Issue | | |
| | Yoichi HIRANO, Takuo NAKASHIMA, Shogo TANAKA | 1-4 |
| Organizing Committee / Editorial Office | | 4 |
| <i>Part I. Keynote Papers</i> | | |
| The COVID-19 Infodemic and Intellectual Empowerment | | |
| Takayuki HIRAKI | | 7-17 |
| The Analysis of Co-creative Actions for Tourism during the Covid-19 Pandemic | | |
| Soji LEE, Takuo NAKASHIMA | | 18-22 |
| <i>Part II. Concept and Theory</i> | | |
| Local Identity as the Concept of Agency | | |
| Toru HATTORI | | 25-28 |
| Reconsidering the Meaning of “Living Place” for People — From the Viewpoint of the History of Western Art and Thought | | |
| Tomoko NAKAMURA | | 29-33 |
| The Problems Presented by the COVID-19 Crisis — Centered Around Infodemic | | |
| Sei WATANABE | | 34-36 |
| <i>Part III. Online and Digitization</i> | | |
| The Dialogue of Human Knowledge Through the Medium of the Internet — Digital Archives Under the COVID-19 Pandemic — | | |
| Mina ADACHI | | 39-49 |
| Changes Amidst the COVID-19 Crisis—Limitations of and potential for the digitalization of reference material and disclosure on the Internet— | | |
| Takuo NAKASHIMA , Yoichi HIRANO | | 50-55 |
| Current Status and Typification of Online Tourism in the New Normal Era | | |
| Masamitsu FUTAESAKU | | 56-60 |

Part IV. Environment and Human Activity

Analysis of Positive Feelings Toward Tourism During the COVID-19 Pandemic

Soji LEE

63-67

The Covid-19 Pandemic and eQOL (Environment-Related QOL)

Yoichi HIRANO, Takuo NAKASHIMA, Masanori TAKAHASHI

68-76

Introductory Address for the Covid-19 Special Issue: Remodeling Research under Coronavirus from “ordinary” to “new ordinary”

The world today holds all kinds of risks. While human society suffers from natural threats such as earthquakes and volcanic eruptions, it is likewise unable to break free from the chaos of human rights violations, widening inequality between rich and poor, and ideological and religious conflict. The root of these problems lies in the fact that the science and technology that support modern civilization do not always enable the peace of the human race or further human desires. At present, it is critical to note that the human race is pondering the future of civilization on a global scale both individually and collectively.

Given the above circumstances, the Institute of Civilization Research organizes several projects to advance the study of culture and civilization. As one such project, we have developed research on the philosophical and historical processes of human activity from the perspective of transdisciplinary humanities. Since 2015, we have held an international symposium on the subject of “*Dialogue between Civilizations*,” during which a variety of themes have been discussed from diverse perspectives, e.g., human thought, art, history, epistemology of science and technology, etc. Regrettably, after the Fourth Symposium in March 2019, the spread of the Covid-19 pandemic in the following year forced the Fifth Symposium to be called off, and this situation persists.

The coronavirus (Covid-19), which has spread since the beginning of 2020, is the most influential pandemic of the 21st century, affecting the global economy and all human life. Under such conditions, it seemed most appropriate to publish this special issue devoted to topics on the influence of Covid-19. Titled “*Remodeling Research under Coronavirus from ‘ordinary’ to ‘new ordinary’*,” this special issue adds the new perspective of inter- and transdisciplinary humanities to the traditional economic and medical standpoints. Its purpose is to promote discussion of a new human society aimed at the sustainable development of civilization. We will discuss new research perspectives, formalizing them as an element of “dialogue between civilization and culture” in the era of the coronavirus pandemic.

Throughout 2020, many researchers and even university students were limited in their ability to advance their research. They could not participate in academic meetings without the use of Zoom or similar online services and, more importantly, they could not visit locations to undertake field work or on-the-spot investigation and documentation. Nonetheless, surely all researchers are hopeful of continuing their research and are eager to identify ways to develop their research in new directions and from new perspectives: what we describe as a remodeling from “ordinary” to “new ordinary.”

This special issue consists of ten papers on various fields: human thought and philosophy, history, tourism, the internet, the environment, quality of life (QOL), etc. All of these papers raise ideas, methods, and perspectives that suggest novel directions and offer a wider vision for future research.

The issue opens with two keynote papers, each of which considers an important question: information overload and a new approach to tourism, respectively.

The first keynote paper, presented by T. Hiraki, is titled “*The COVID-19 Infodemic and Intellectual Empowerment*” and discusses the peril of *infodemic* associated with Covid-19. Here the term *infodemic* refers to an overabundance of unreliable information, and particularly the possibility of such information inhibiting the public’s ability to take appropriate action during a pandemic. According to the author, WHO members warned about the risk of *infodemic* before they warned about the pandemic itself. Particularly during the Covid-19 pandemic, the *infodemic* is aggravated not only by false or unreliable information but also by misunderstanding and over-optimism. The proliferation of SNS communication threatens to fragment the perception of risk even further. The author argues that information should be synthesized into a coherent whole and presented in a fact-based manner to be shared with lay citizens who do not have scientific knowledge. This is reflected in the author’s perspective that lay people, as citizens, should be sufficiently intellectually empowered to gain insight into the situation, overcoming any deficits in their scientific thinking. Consequently, empowerment for lay citizens is required.

The second keynote paper, titled “*The Analysis of Co-creative Actions for Tourism during the Covid-19 Pandemic,*” is presented by S. Lee and T. Nakashima, who address the impact of Covid-19 on tourism. Although they point out that research on tourism in the context of Covid-19 is in progress, the authors suggest a new approach to tourism based on service theory while discussing human QOL and well-being. Here, the key factor is the Service-Dominant Logic (SDL) advocated by Vargo and Lusch. SDL signifies the exchange of services and is based on the concept that value is created only when one entity provides services and another entity receives them. Applying SDL to the field of tourism, the main entity providing services is the “tourism industry” and “residents” while the entity receiving services is the “customer/consumer” as a “tourist.” SDL thus requires co-creation, giving meaning to the existence of both entities and ultimately bringing the possibility of tourism’s sustainable continuation. Following this discussion and after scrutinizing earlier research on the revitalization of daily life and socioeconomic activities during an emergency, the authors examine Twitter data by extracting two pairs of keywords: the first of these “tourist” and “exchange” and the other is “tourist” and “participation.” From this data, the authors conclude that tourists retain their own motivations for travel even during the current pandemic. Thus, the concept of SDL can provide a new model for tourism in which co-creative action involving both tourists and residents can generate positive feelings and enhance well-being for both.

The remaining papers are grouped into three sections according to their subject matter and its relationship to the ongoing Covid-19 pandemic: “Concept and Theory,” “Online and Digitization,” and “Environment and Human Activity.”

The section “Concept and Theory,” containing three papers, is intended to discuss human behavior and feeling from a philosophical and theoretical perspective. The first paper, “*Local Identity as the Concept of Agency,*” is presented by T. Hattori and addresses the concepts of “self” and “place.” It is motivated by the tendency of people, especially in the Covid-19 pandemic, to seek a “place” where they are able to find discover “self.” These concepts should be important and necessary considerations in community revitalization. Through the discussion, the author recognizes the importance of the concept of “local identity” and its components of “self-esteem” and “self-efficacy.” Finally, having introduced the concept of “agency,” the author concludes that it allows “self” to be combined with “place,” whose meaning can then be fixed more definitely. The second paper is T. Nakamura’s “*Reconsidering of the meaning of ‘living place’ of people.*” During the Covid-19 pandemic, the digitization of communication through the internet has progressed rapidly, a process that

promotes an increasingly two-dimensional imaging of the real world. Linear perspective was a product of the Renaissance, but people today are over-dependent on artificial technology that represents the real three-dimensional world on a two-dimensional screen. The author, reflecting on this situation from the standpoint of Western art history, poses questions involving a reconsideration of the meaning of human “living place” and human existence itself. These two papers offer reflections on human existence under the severe conditions of Covid-19. By contrast, the third paper encourages us to consider human behavior under these conditions. Presented by S. Watanabe and titled “*The Problems Presented by the COVID-19 Crisis - Centered Around Infodemic,*” the paper’s theme is “infodemic” and it is thus related to the first keynote paper. The author argues that, in attempting to control “infodemic,” it is difficult to depend on individuals’ information literacy. This is because humans live in an information society in which rapid access to high volumes of information is of great value. According to the author, this necessitates further consideration of the problem of human existence in an information society.

In the second section, “Online and Digitization,” three papers present and discuss certain concrete measures related to digitization and online release of material. The first paper, “*The Dialogue of Human Knowledge Through the Medium of the Internet – Digital Archives Under the COVID-19 Pandemic –,*” is presented by M. Adachi, who points out that research conditions have become quite difficult during the Covid-19 pandemic because researchers are limited and even prohibited from visiting other locations (academic meetings, libraries, museums, etc., whether internally or internationally). Research in the humanities (history, above all) always requires documentation, therefore the digitization of documents and their release online are helpful and even indispensable. The author, reporting on the circumstances of the Bibliothèque Nationale de France and the search engine “Persée,” discusses the necessity of document digitization as well as its merits and potential future problems. The second paper also concerns the digitization of documents and digital archives. Entitled “*Changes Amidst the COVID-19 Crisis – Limitations of and potential for the digitalization of reference material and disclosure on the Internet –,*” it is presented by T. Nakashima and Y. Hirano. As in the preceding paper, the authors develop the problem of digitization of documents and digital archives. While the concept of digital archives has been considered in Japan, little progress has been made, mostly because of concerns over literary property. The authors present the efforts of some university libraries to establish digital archives and discuss future possibilities in this area. These two papers address an important problem in continuing research in every field during the pandemic, but the realization of digital archives should present a new opportunity even after the pandemic; a “new ordinary” for the future. The third paper is “*Current Status and Typification of Online Tourism in the New Normal Era,*” presented by M. Futaesaku, and it concerns the severe problems face by tourism during the Covid-19 pandemic. The tourism industry in Japan is promoting the rapid introduction of new methods like online sightseeing, online delivery of various events, etc. In this paper, the author identifies four categories of such activities: Live Tours, Live Show Delivery, Online Contact, and Archive Broadcast. The novel kinds of tourism that result can provide many people with the virtual experience of sightseeing and the chance to acquire information online. It could thus be considered a “new ordinary” in tourism.

In the last section on “Environment and Human Activity,” human activities as well as human feelings about the coronavirus are discussed. Here, the following two papers are presented with different themes. The first paper is entitled “*Analysis of Positive Feelings Toward Tourism During the COVID-19 Pandemic*” and is presented by S. Lee. The author examines positive human feelings related to tourism and the impact of the

pandemic on those feelings, and goes on to suggest that such feelings correspond to human happiness and well-being. A key concept is the temporal perspective which a human possesses both on the past and the future. By scrutinizing Twitter data concerning tourism and especially by examining changes in the emotions of tourists and residents during the Covid-19 pandemic, the author verifies that positive emotions in connection with “expectations” for the future lead to human well-being. Furthermore, one’s temporal perspective on the future is the main factor in enhancing one’s sense of well-being. The second paper is presented by Y. Hirano, T. Nakashima and M. Takahashi and is titled “*Covid-19 Pandemic and eQOL (environment-related QOL)*.” This paper not only discusses human QOL (related to happiness and well-being) but also defines the concept of eQOL (environment-related QOL) as human satisfaction in the co-existence of both humanity and nature in a sustainable manner. Among the causes of Covid-19 pandemic, the authors identify two key factors: excess human contact with nature and the globalization of the human world. Excessive human contact with nature inevitably demolishes the balance and harmony between humanity and nature, with the result that eQOL is lost. The Covid-19 pandemic suggests what human might do for the future.

Thus, the Institute of Civilization Research is publishing this Covid-19 Special Issue to consider and reflect upon the reality of the pandemic. What is most important, however, is not simply overcoming the present threat, but fixing our gaze on the future. Science and technology have certainly managed to develop a vaccine and can be expected to develop specific remedies in the near future. For their part, the humanities (human sciences) can reconsider and discuss human activities, and can even estimate and imagine the value of human existence in the future. Throughout, the goal should be to achieve a change from “ordinary” to “new ordinary.”

Organizing Committee

Yoichi HIRANO

Takuo NAKASHIMA

Shogo TANAKA

Organizing Committee:

Yoichi HIRANO (Prof., Tokai University, Institute of Civilization Research (School of Letters))

Takuo NAKASHIMA (Prof., Tokai University, ICT Education Center)

Shogo TANAKA (Prof., Tokai University, Institute of Civilization Research (Center for Liberal Arts))

Editorial Office:

Yoichi HIRANO (Prof., Tokai University, Institute of Civilization Research (School of Letters))

Mina ADACHI (Postgraduate, Tokai University, Graduate School of Letters)

Part I. Keynote Papers

The COVID-19 Infodemic and Intellectual Empowerment

Takayuki HIRAKI*

Abstract

This paper focuses on the infodemic that has misled the public as regards the pandemic of the novel coronavirus disease 2019 (COVID-19) through the spread of both misinformation and disinformation. The term “infodemic” refers to an overabundance of unreliable information, inhibiting the public’s ability to take appropriate action, in this case as regards the COVID-19 pandemic. Referring to a number of relevant cases, the author considers the impact of the infodemic on the public’s ability to combat communicable diseases and the engagement of citizens in infodemic management through intellectual empowerment. The author concludes that infodemic management concerns not just the development of skills in terms of controlling the quality of information provided to and shared with the public, but also the process of knowledge co-creation in which professionals intellectually empower lay citizens to identify, act on, and monitor the steps required for the effective control of the COVID-19 pandemic.

Keywords: infodemic, misleading statements, medical conservatism, intellectual empowerment

1. Introduction

This paper notes the phenomenon known as an infodemic¹ in which the spread of misinformation and disinformation (hereafter mis- and disinformation)² prevents stakeholders from taking proper action to control the spread of COVID-19 and considers how citizens³ can become resistant to this challenge.⁴ The COVID-19 pandemic has given rise to an infodemic that is misleading the public regarding the consequences of wearing a face mask, the efficaciousness and safety of vaccines, and the value of existing drugs or remedies. The COVID-19 infodemic can be attributed to the prevalence of information and communication based on unscientific evidence. This infodemic has caused consumers to buy and hoard in panic personal protective equipment (PPE), such as face masks and alcohol disinfectant, in order to protect themselves from the risk of infection (Abrams et al., 2020: 2). As a result, medical institutions and people vulnerable to COVID-19 are suffering a lack of supplies of PPE or its extreme unaffordability.

Infodemiology stresses the responsibility of information providers to curb the proliferation of unreliable information when discussing antidotes to the infodemic. In this sense, infodemiologists consider this challenge from the perspective of “management” in which science-based information ought to be circulated, rather than “communication” between citizens regarding the risks they face. However, citizens do not always respond well to science-based information. Some hazards or events deemed by experts to present a low risk become the focus of social and political concern, whereas those perceived as a high risk are often ignored by the public (Smith, 2006: 3120-21). In particular, people in rural communities generally prefer traditional or indigenous knowledge that is deeply rooted in their society. COVID-19 is a threat to the intrinsic values of life and good health that citizens share universally. Therefore, this paper reconsiders the relationship between cultural variations and sharing information essential for sustaining good health. To conclude, this paper considers infodemic management as a process of democracy-based risk communication and posits that intellectual empowerment can co-create the scientifically valid knowledge needed for the effective control of the COVID-19 pandemic.

* Tokai University, School of International Cultural Relations.

2. Infodemiology and Infodemic Management

The WHO Director-General, Tedros Adhanom Ghebreyesus, said at the Munich Security Conference on Feb 15, “We’re not just fighting an epidemic; we’re fighting an infodemic” (Zarocostas, 2020, 676). Sylvie Briand, director of Infectious Hazards Management at WHO’s Health Emergencies Program and architect of WHO’s strategy to counter the infodemic risk, told The Lancet, “We know that every outbreak will be accompanied by a kind of tsunami of information, but also within this information you always have misinformation, rumors, etc.” (Zarocostas, 2020, 676). According to the statement from the WHO, an “infodemic,” in this context, does not mean the spread of mis- and disinformation per se, but the consequence of the failure or delay to take effective measures or actions to control the COVID-19 pandemic (WHO, 2020b, 2020c).

An infodemic then refers to a tsunami or overabundance of unreliable information. However, it cannot be eliminated but instead must be managed, as noted by the WHO (WHO, 2020c). This section briefly outlines infodemiology’s approach to infodemic management and how it enables citizens to access reliable information. Eysenbach translates infodemiology-based infodemic management⁵ into the following four pillars, which are mainly focused on the quality control of information that stakeholders provide.⁶

First Pillar: Pursuing Accurate Knowledge Translation

Accurate knowledge translation should be pursued to make specific knowledge understood by all its end users (Eysenbach, 2020; Tangcharoensathien, 2020). The mistranslation or misinterpretation of knowledge leads to the spread of false or inaccurate information concerning COVID-19, posing a threat to public health and hindering appropriate treatment. The multiple layers of knowledge translation among stakeholders, such as scientists, medical staff, policymakers, businesspeople, and end users, is another challenge to infodemic management. As Eysenbach argues, the interpretation of facts is subject to multiple influential factors such as research, politics, commercial interests, and public interests, which lead to a distorted or biased translation of knowledge (Eysenbach, 2020).

Second Pillar: Knowledge Refinement for Sharing Reliable Information

Knowledge refinement, such as fact checking and quality assurance, are important processes for sharing highly refined and trustworthy knowledge with end users (Eysenbach, 2020). This process is equivalent to self-checking practices, such as fact checking and filtering, frequently observed in SNS communications, accelerating and facilitating the improvement of information quality.

Third Pillar: Developing eHealth Literacy and Numeracy

Eysenbach focuses on building capacity to develop eHealth literacy and numeracy skills to select and assess information provided by multiple stakeholders at different levels of communications (Eysenbach, 2020). The global spread of SNS communications has enabled users to tap into a vast array of unreviewed information. As such, SNS users are required to bear the responsibility for selecting and downloading trustworthy health information.⁷

Fourth Pillar: Monitoring via Infoveillance

Monitoring via infoveillance is enhanced to detect outbreaks of misinformation, rumors, and falsehoods, and to counter them with facts (Eysenbach, 2020; Tangcharoensathien, 2020). This process is relevant to the resistance

to false information or biased knowledge. For this purpose, information providers should be capable of discerning morally/ethically right and scientifically trustworthy information from mis- and disinformation to avoid providing unsubstantiated information.

The original definition of “infodemic” is an overabundance of unreliable information that inhibits stakeholders from properly responding to risk or hazards. Thus, the term infodemic approaches the spread of mis- and disinformation from a quantitative aspect. In this context, the purpose of infodemic management is to diminish the volume of unreliable information circulated in society at a macro level. However, infodemiologists focus on the quality control of circulated information from the perspective of the responsibility information providers should have when they discuss infodemic management. The most significant challenge here is to empower stakeholders to resist the proliferation of mis- and disinformation that misleads the public about anti-COVID-19 actions they are required to take, rather than to make it the stakeholders’ responsibility. Therefore, this misleading information is considered through a number of studies in the next section.

3. Misleading Statements

The term “infodemic” refers to an abundance of unreliable information, however the problem is the information and communication that misleads the public about their thoughts and behaviors in dealing with the COVID-19 pandemic, rather than the volume of false or unreliable information available in society. In this section, the impacts of mis- and disinformation and communication as regards COVID-19 are discussed with reference to the following three examples:

Equivalence of COVID-19 to Seasonal Influenza in the United States

In the United States, particularly in the early phase of the pandemic, the equivalence of COVID-19 to seasonal influenza was considered as evidence for anti-lock down statements, leading to controversies concerning the validity of this information. Faust and Del Rio questioned the annual report by the Centers for Disease Control and Prevention (CDC) which stated that the number of deaths due to COVID-19 (as of early May 2020) appeared to be similar to the estimated number of seasonal influenza deaths (Faust and Del Rio, 2020: 1045). Their paper empirically argues that this equivalence does not match frontline clinical conditions, especially in some hot zones of the pandemic where ventilators were in short supply and many hospitals had been stretched beyond their limits, which had not occurred before in the US, even during the worst of influenza seasons⁸ (Faust and Del Rio, 2020, 1045). Thus, the misinformation-based decisions by government officials and other stakeholders in society posed a threat to public health when attempts were made to reopen the economy and relax limits on businesses (Faust and Del Rio, 2020, 1046). The equivalence of COVID-19 to seasonal influenza encouraged the public to perceive the disease as less serious and risky, leading to an infodemic triggered by misinformation. As described by Mian and Khan, the spread of false information drowns out credible sources and, in turn, results in further public confusion, ultimately leading to an acceleration of virus transmission (Mian and Khan, 2020: 90).

The “Go to Travel” Campaign in Japan

The government of Japan declared an emergency and asked citizens to quarantine themselves for the first time as of June 2020. After fully cancelling the emergency declaration on May 25, 2020, the weight of information shifted

from pandemic control to its compatibility with corporate or business activities. The government decided to incorporate Tokyo in the nationwide tourism promotion led by the government of Japan, named the “Go to Travel” campaign, as it was called in Japanese English, from October 1st, although Tokyo had been excluded from this campaign until then due to the risk of transmitting COVID-19 across the regions.⁹ The Subcommittee on Novel Coronavirus Disease Control, which is a subordinate organization of the Advisory Council on Countermeasures against Novel Influenza and Other Diseases formed by the government of Japan, suggested that Tokyo could also be nominated as an origin/destination for the Go To Travel campaign on the condition of reducing the incidence of COVID-19 cases in the Tokyo Metropolitan Area.¹⁰ In the meantime, the subcommittee stated that financially supporting human mobility between Tokyo and other regions through the Go To Travel campaign should be postponed for the time being.¹¹

However, the Tokyo Medical Association suggested that the government should be cautious about including Tokyo as part of Go To Travel. Meanwhile, the president of the Tokyo Medical Association stated in a press conference on September 17, 2020 that including Tokyo as part of the aforementioned tourism promotion campaign would give rise to a resurgence of COVID-19 infections and hospitalizations by creating the potential for a greater risk of infection.¹² After the inclusion of Tokyo in Go To Travel, the incidence of COVID-19 infections began to considerably increase in early November,¹³ although the causal relationship between the tourism campaign and the number of infections has not been determined.¹⁴ Eventually, the government declared a state of emergency in relation to COVID-19 for the second time on January 7, 2021, which was limited to only Tokyo and the neighboring Kanagawa, Saitama, and Chiba prefectures for the duration of one month from January 8 to February 7th.¹⁵

This miscommunication between science and politics, because of a conflict of interests, misled the public about making decisions to protect themselves from the COVID-19 pandemic.¹⁶ In the face of the pandemic, governments are expected to relay science-based information to the public so they can easily understand the fundamental risks of this virus (Mian and Khan, 2020: 90).

COVID-19 Related Hate Speech

The United Nations sees COVID-19 related hate speech as misleading statements in which certain individuals or groups are unjustifiably blamed for the COVID-19 pandemic and, as a result, are confronted by disparaging communication (UN, 2020). This misconduct could incite members of the public to form prejudices or discriminate against people from hot spots of COVID-19 infection. The UN calls on a variety of stakeholders encompassing UN organizations, member states, social media, the general media, and civil society to combat COVID-19-related hate speech through promoting inclusion, solidarity, and common humanity, giving citizens an opportunity to “build back better” by addressing the root causes of behaviors violating human rights and dignity (UN, 2020).

4. Medical Conservatism: Intolerance of Alternatives to Traditional Remedies

Infodemiologists do not clearly consider cultural variations as a contributing factor to triggering an infodemic. It is clear that intolerance of alternatives, such as disease prevention, vaccination, and new medicine, have hindered proper risk communication¹⁷ in terms of preventing the spread of communicable diseases. The following two cases are relevant to the “medical conservatism” entrenched in a specific community or society, and its proponents do not tolerate alternative medicine or lifestyles due to cultural variations.

HIV/AIDS Denialism

The first case is a reflection on the efforts to prevent the spread of HIV/AIDS by the Republic of South Africa and Thailand in the early 1990s. The use of condoms was the single precautionary measure available to fight HIV/AIDS in its primary phase when no effective remedy or medicine had yet been developed. However, there was a marked difference in the effectiveness of prevention efforts between these two nations in terms of tolerating the use of condoms during sex as a tool for preventing this sexually transmitted disease. In Thailand, the government successfully promoted anti-HIV/AIDS education to enlighten sex workers and successfully achieved a condom-use rate of 100%, contributing to the prevention of the epidemic (Karim, Q. A. and Karim, S. A.: 2020, 39). Meanwhile, the South African government was ambivalent about AIDS.¹⁸ On the one hand, the government clearly recognized its impact on the population. On the other, there was a sense of shame rooted in Africa's conservative, male-dominated culture in which talking about sex and wearing condoms were discouraged. This fueled the suspicion by black people in rural communities that AIDS did not really exist and the distribution of condoms reminded them of the apartheid era's sterilization programs to depopulate African communities.¹⁹ In addition, Sub-Saharan African married women are not free to make their own decisions about reproductive health and sexual relations and are not allowed to use contraceptive methods (World Bank, 2018: 21). The prevalence of HIV infection in South Africa and Thailand were both less than 1 percent, but in 1999, the rate of infection in South Africa rose dramatically to 19.9% while Thailand's rate was only 2.15%.²⁰

The South African government did not successfully engage communities and citizens, including scientists, in effectively implementing their anti-HIV/AIDS measures because South Africans were anxious about changing their traditions or culture, in addition to the spread of misinformation provided by the government.²¹ Some observers believe that had the national government rolled out proper prevention measures in 1998, an additional 343,000 deaths could have been prevented between 1999 and 2007 (Bateman, 2007). The significant lesson from the South African case is that citizens should be encouraged to prioritize good health as an intrinsic value, instead of an instrumental value, by tolerating cultural differences.²²

Face Mask Skepticism

Particularly during the early phase of the COVID-19 pandemic, more people were skeptical of wearing a face mask as an antidote to this emerging virus in some countries or regions. This is strong evidence of the failure to share correct information regarding the effectiveness of face masks in preventing COVID-19 infection. Nevertheless, there is scientific evidence to support the efficacy of using a mask, including cotton masks, in filtering expelled droplets during speech (Fisher et al., 2020).²³ Moreover, as Fisher and his colleagues assert, even non-experts are capable of validating this evidence without high scientific proficiency, meaning that this information is highly sharable among stakeholders, at least in terms of scientific understandability. In this sense, citizens should be intellectually empowered to decouple the promotion of human health from the preservation of their folklore or customs.

5. Intellectual Empowerment for Lay Citizens

Conflicts of interest are also an underlying cause of an infodemic.²⁴ Conflicting interests create social polarization, like the economy-pandemic control dichotomy, and a growing mistrust of both governments and science. Furthermore, the proliferation of SNS communication threatens to fragment the perception of risk through the echo chamber or filter bubble phenomena. Fragmented information should be synthesized into a coherent whole and presented as fact-

based information to be shared with lay citizens who do not have scientific knowledge (Hornsey and Fielding, 2017).

This section considers this challenge from the perspective of democracy-based risk communication through dialog, knowledge co-creation, and collaboration, instead of consensus building among stakeholders who depend on those with influential power.²⁵ Considering the communication of risk as a democratic process, professionals are expected to empower lay citizens to undertake fact-based communication with their community members.²⁶ As a result, lay citizens become capable of making fact-based decisions when they are confronted with an emerging communicable disease that poses a threat to human life such as COVID-19.

An anti-pollution movement in Kita Kyushu City serves as an example of civic empowerment for democracy-based risk communication, although it is not directly applicable to anti-COVID-19 communication due to structural differences regarding conflicting interests. Most of the polluters are local residents of this area, thus they also suffer threats and damage caused by the pollution-related issues. In this sense, pollution should be considered as an issue common to the local community and be dealt with beyond the polluter/sufferer divide.

This anti-pollution movement is exemplified by a group of women residing in the most polluted area (Nakahara Community) of Kita Kyushu City and characterized by the process of knowledge co-creation between local residents, professionals, the local government, and industrial polluters (Hayashi, 1995). This successfully transformed the offense-defense structure of conflict into a public work²⁷ to regain good health, clear skies, clean water, and mutual trustworthiness in the community. This anti-pollution movement is also notable for the fact that citizens in the Tobata Ward of Kita Kyushu City overcame their pollution problems without a trial. This differs from the four major pollution problems, as previously seen in Japan, consisting of two Minamata diseases, Yokkaichi asthma, and Itai-itai disease, where the judiciary took initiatives to fact find and collect science-based evidence. Furthermore, professionals in society helped local residents or lay citizens scientifically verify the damage and health problems that industrial polluters caused (Hiraki, 1998, 151-152).²⁸ Throughout this process, the lay citizens were empowered by learning from professionals about health literacy and numeracy, and gained confidence in undertaking fact-based communication with the local government and industrial polluters (Hiraki, 1998, 153). The citizens in this community signed a pollution prevention agreement with the local government and industrial polluters, marking an achievement in citizen-led risk communication (Hiraki, 1998, 147-153).

The most important lesson of the anti-pollution movement in Kita Kyushu City is that citizens developed the ability to deal with challenges to human health through democracy-based risk communication beyond conflicts of interest between stakeholders.²⁹ In other words, citizen-led risk communication can be successfully decoupled from conflicts of interest. Citizens should be sufficiently intellectually empowered to gain insights into health literacy and numeracy, overcoming their deficits in scientific thinking, as was achieved through tackling the pollution problem in Kita Kyushu City.³⁰ In this context, the science-public relationship should be reconsidered such that scientists view lay citizens not as aliens but as users and active agents of scientific knowledge, and empower them to reflect on the risks they face (Wynne, 1993, Gibbons et al., 1994). Therefore, knowledge co-creation is needed to promote public understanding on science and risk communication through intellectual empowerment. Throughout this process, professionals in society and lay citizens are required to have social accountability for the knowledge they create in collaboration and cooperation, in order to limit the production and dissemination of unreliable knowledge that can lead to an infodemic (Gibbons, 1994: 7).³¹ As Leiss put it, the whole process of risk communication should be audited by both professionals and lay citizens to meet the test of public credibility (Leiss, 1996).

The true purpose of risk communication is to protect an intrinsic value, namely good health. Risk

communication is not a zero-sum game in which one value is included and another is excluded (Slovic, 1987). It is a process not only of exchanging information, but balancing various values and interests as regards fact-based decision-making for risk management. Therefore, risk communication should be reconsidered as a decision-making process and a formulation of a code for good practice to prevent an infodemic.³²

6. Conclusion

The term “infodemic” does not mean the spread of false information per se, but the failure or delay to share fact-based information essential for preventing the spread of COVID-19, as exemplified in some people’s refusal to use a face mask. It is noteworthy that infodemiologists focus on the COVID-19 infodemic and its management from the perspective of quality control in the dissemination of information. They emphasize the quality control of information that stakeholders provide to avoid an infodemic. However, this paper views the infodemic from the perspective of democracy-based risk communication, as observed in the anti-pollution movement in Kita Kyushu City. The true purpose of risk communication is to empower citizens to make a commitment to co-creating the knowledge needed to prevent the spread of COVID-19 beyond the divide between the providers and receivers of information. Hence, citizens should be resistant to false information in order to live with COVID-19 without being misled by an infodemic. In this context, risk communication should be decoupled from any conflicting interests. Intellectual empowerment through dialog, knowledge co-creation, and collaboration with experts is crucial for citizens to share information and establish trustworthiness among stakeholders. In this context, it is suggested that anti-infodemic risk communication should be reconsidered not only from the perspective of infodemic management, as argued by the infodemiologists, but also from that of the democracy awakened by citizens.

Notes

¹ Tangcharoensathien et al defines an infodemic as an overabundance of information - some accurate and some not - that occurs during an epidemic (Tangcharoensathien, 2020). It spreads between humans via digital and physical information systems, making it hard for people to find trustworthy sources and reliable guidance when they need it (Tangcharoensathien, 2020). Infodemic might be exacerbating the COVID-19 pandemic as the spread of mis- and disinformation hinders or delays taking effective steps by citizens against the outbreak.

² The WHO clarifies the difference between the influences of a misinformation-led infodemic and those of a disinformation-led infodemic on the COVID-19 pandemic (WHO, 2020b). Misinformation-led infodemic costs lives due to the continual thriving of the virus provided that diagnostic tests go unused and immunization campaigns (or campaigns to promote effective vaccines) do not meet targets due to a lack of the appropriate trust and correct information (WHO, 2020b). In contrast, a disinformation-led infodemic transmits propaganda type information to mislead the public, polarizing public debate on topics related to COVID-19; amplifying hate speech; heightening the risk of conflict, violence and human rights violations; and threatening long-term prospects for advancing democracy, human rights and social cohesion (WHO, 2020b). In this context, these two types of infodemic are comprehensively understood here as the spread of mis- and disinformation.

³ This paper uses the term “citizen” in this context, rather than public. A report released by The Royal Society in 1985 explains the difference in meaning between these two terms. This report asserts that there are the following five overlapping functional categories regarding “public”: (i) private individuals for their personal satisfaction and wellbeing; (ii) individual citizens for participation in civic responsibilities as members of a democratic society; (iii) people employed in skilled and semi-skilled occupations, the large majority of which now have some scientific content; (iv) people employed in the middle ranks of management and in professional and trades union associations; and (v) people responsible for major decision-making in our society, particularly those in industry and government (TRS, 1985:7 and 31). In accordance with this definition, citizens mean people who participate in the process of resolving scientific issues facing their society or community, constituting a form of democracy.

⁴ As Eysenbach argues, in a rapidly evolving situation such as the COVID-19 pandemic, the rapid rate of new scientific information published and the inability of researchers, policy makers, journalists, and ordinary citizens to keep up with quickly changing facts (Eysenbach, 2020). In other words, facts filter among stakeholders only with reference to the best evidence at the time (Eysenbach, 2020).

⁵ To counter and understand the rapidly changing landscape of the COVID-19 infodemic and develop effective strategies to mitigate its negative side effects such as the spread of false or inaccurate information, on April 7 and 8, 2020, the WHO Information Network for Epidemics (EPI-WIN) organized a 2-day global online consultation on managing the infodemic (Tangcharoensathien, 2020).

⁶ Tangcharoensathien et al. posited the following six policy implication for governments and policy makers to consider as the

result of the online consultation organized by the WHO (Tangcharoensathien:2020):

- Interventions and messages must be based on science and evidence, and must reach citizens and enable them to make informed decisions on how to protect themselves and their communities in a health emergency;
- Knowledge should be translated into actionable behavior-change messages, presented in ways that are understood by and accessible to all individuals in all parts of all societies;
- Governments should reach out to key communities to ensure their concerns and information needs are understood, tailoring advice and messages to address the audiences they represent;
- To strengthen the analysis and amplification of information impact, strategic partnerships should be formed across all sectors, including, but not limited to, the social media and technology sectors, academia, and civil society;
- Health authorities should ensure that these actions are informed by reliable information that helps them understand the circulating narratives and changes in the flow of information, questions, and misinformation in communities;
- Following experiences to date in responding to the COVID-19 infodemic and the lessons from other disease outbreaks, infodemic management approaches should be further developed to support preparedness and response, and to inform risk mitigation, and be enhanced through data science and socio-behavioral and other research.

⁷ Leiss also emphasizes responsible risk communication for which all players in risk management should act responsibly in line with code of good risk communication practice (Leiss 1996:90-94). This responsible risk communication lays the foundations of public credibility essential for the whole process of effective risk management.

⁸ Faust and De Rio. mentions the root of this incorrect comparison as follows (Faust and Del Rio, 2020, 1045):

“The CDC, like many similar disease control agencies around the world, presents seasonal influenza morbidity and mortality not as raw counts but as calculated estimates based on submitted International Classification of Diseases codes. Between 2013-2014 and 2018-2019, the reported yearly estimated influenza deaths ranged from 23 000 to 61 000. Over that same time period, however, the number of counted influenza deaths was between 3448 and 15 620 yearly. On average, the CDC estimates of deaths attributed to influenza were nearly 6 times greater than its reported counted numbers. Conversely, COVID-19 fatalities are at present being counted and reported directly, not estimated. As a result, the more valid comparison would be to compare weekly counts of COVID-19 deaths to weekly counts of seasonal influenza death. ... the number of COVID-19 deaths for the week ending April 21 was 9.5-fold to 44.1-fold greater than the peak week of counted influenza deaths during the past influenza seasons in the US, with a 20.5-fold mean increase (95% CI, 16.3-27.7).”

⁹ The original plan of the government was for the reduction in travel restrictions to begin in August, and Go To Travel was originally intended to start during this month (Anzai and Nishiura, 2021). However, the campaign schedule was moved forward, even as cases were increasing in Tokyo and Osaka and the country was trying to regain control of the epidemic (Anzai and Nishiura, 2021).

¹⁰ As for the opinions released from Subcommittee on Novel Coronavirus Disease Control on September 11th, see the following URL (in Japanese).

https://www.cas.go.jp/jp/seisaku/ful/bunkakai/goto_travel_teigen.pdf. Accessed January 26, 2021.

¹¹ *Ibid.*

¹² As for the statement by the President of Tokyo Medical Association, see the following URL (in Japanese), https://www.tokyo.med.or.jp/press_conference/tmapc20200917, Accessed January 9, 2021.

¹³ As for the time series change of COVID-19 incidence, see the following URL (in Japanese), <https://www.niid.go.jp/niid/images/PDF/covid19/AB21thJP.pdf>, Accessed January 26, 2021.

¹⁴ Anzai and Nishiura conducted a descriptive analysis on this causal relationship, gaining the result that the incidence of travel-associated COVID-19 cases during the tourism campaign was approximately three times greater than the control period of 22 June to 21 July 2020 and approximately 1.5 times greater than the control period of 15 to 19 July (Anzai and Nishiura, 2021). In line with this evidence, they assert that domestic tourism enhanced by Go To Travel may have contributed to increasing travel-associated COVID-19 cases at least during its early stage from 22 to 26 July (Anzai and Nishiura, 2021).

¹⁵ <https://www.mhlw.go.jp/content/10900000/000717124.pdf>, Accessed January 9, 2021.

¹⁶ Fidler hints at infodemic attributable to vaccine nationalism. He argues that ineffective national policies to secure COVID-19 vaccine supplies create a gap between science and politics that makes the pandemic worse and undermines that which science and health diplomacy could achieve (Fidler, 2020:749).

¹⁷ The purpose of risk communication is, as defined by the WHO, to enable people at risk to take informed decisions to protect themselves and their loved ones from threats to their health, economic or social well-being. In addition, it is notable that the WHO includes community engagement in the list of risk communication techniques as well as media and social media communication and mass communication.

For the definition of risk communication by the WHO, see the following website:

World Health Organization, “General information on risk communication”,

<https://www.who.int/risk-communication/background/en/>, Accessed January 12, 2021.

¹⁸ John Jeter “Free of Apartheid, Divided by Disease”, Washington Post, July 6, 2020. Available from:

<https://www.washingtonpost.com/archive/politics/2000/07/06/free-of-apartheid-divided-by-disease/58c06c3a-1185-47cc-83b7-a2f6fad797e7/>. Accessed January 1, 2021.

¹⁹ Douglas and Wildavsky assert the anthropological argument that people, acting within social groups, downplay certain risks and emphasize others as a means of maintaining and controlling the group (Douglas and Wildavsky, 1983).

²⁰ Jeter, *op. cit.*

²¹ From a sociological perspective, Short emphasizes the impact of social institutions and systems on risk perception and acceptance by the public, rather than individual motives, individual errors, or even political ideologies (Short, 1984). Additionally, Nlooto and Naidoo argue that the prescription of traditional, complementary and alternative medicine (TCAM) prior to the roll out of antiretroviral therapy also contributed to a dramatic increase in the number of HIV infections in South Africa (Nlooto and Naidoo, 2016).

²² Sen defines real poverty in terms of capability deprivation, which is *intrinsically* significant, instead of low income, which is only *instrumentally* significant (Sen, 1990:87). Moreover, Sen asserts that freeing persons from poverty is equivalent to the expansion of their capabilities to lead the kind of lives they have reason to value (Sen, 1990:18). In this context being in good health is a significant element of capability, meaning that good health has intrinsic value.

²³ Fisher, et al. evaluate the efficacy of masks to reduce the transmission of respiratory droplets during regular speech and posit that some mask types approach the performance of standard surgical masks, while some mask alternatives, such as neck gaiters or bandanas, offer very little protection (Fisher, et al., 2020).

²⁴ A report published by The House of Lords (THL) in 2000 stressed that political realities cannot be ignored when risk communication is discussed (The House of Lords, 2000). The report asserts that a radically different approach to the process of policy-making in areas involving science is called for (The House of Lords, 2000).

²⁵ The report issued by the Food Safety Commission of Japan (FSCJ) goes as far as to define risk communication as public engagement in its process through dialogue, knowledge co-creation and collaboration, instead of the art of persuasiveness related to how the governments or scientists convince citizens to believe information or knowledge they provide (SFCJ, 2015:2). Therefore, risk communication is relevant to democracy and civil rights.

The CODEX Committee of Food and Agriculture Organization (Codex Committee) states that the fundamental goal of risk communication is to provide meaningful, relevant and accurate information, in clear and understandable terms to build and maintain trust and confidence among all interested parties, facilitating a high degree of consensus and support by them for the risk management options. In this context SFCJ stresses the aspects of democracy or civil rights in their view on risk communication while the CODEX Committee does consensus building through providing trustworthy information for interested parties.

As for the goal of risk communication set by the CODEX Committee, see FAO "Elements and guiding principles of risk communication" <<http://www.fao.org/3/x1271e/X1271E03.htm>> Accessed January 3, 2020.

²⁶ THL's report also stresses the importance of public dialogue and consultation with science for effective risk communication (THL, 2000).

²⁷ In this context public work is the organizational concept of public achievement and the visible effort of ordinary citizens who cooperatively produce and sustain things of lasting importance in their community, nation, or the world (Center for Democracy and Citizenship, 1998:22). It also solves common problems and creates common things (things sounds a bit vague) (Center for Democracy and Citizenship, 1998:22). As for the concept of public achievement and its relevance to democracy, see Boyte (2004), Boyte (2008) and Boyte (2018).

In the meanwhile, TRS asserts that important mechanism for facilitating (risk) communication is to have good public relations organization (TRS, 1985: 35).

²⁸ TRS assert that communicating science effectively to the public can and should be taught formally to all professional scientist throughout the formal education period in order to gain experience in explaining science simply, without jargon and without being condescending (TRS, 1985:34). In addition, this report is notably concluded with the message that scientists should learn to communicate with the public, be willing to do so and indeed consider it their duty to do so (TRS, 1985:35).

²⁹ Slovic carried out an analysis of risk perception and acceptance by the public on the assumption that those who promote and regulate health and safety need to understand how people think about and respond to risk (Slovic, 1987). This research considers the co-learning process by both scientists and the public, most importantly as a means of achieving effective risk communication, asserting that each side, expert and public, has something valid to contribute and must respect the insights and intelligence of the other (Slovic, 1987:285).

³⁰ The WHO also urges its member states to engage and listen to their communities, and to empower communities to develop solutions and resilience against mis- and disinformation (WHO, 2020a, 2020b, 2020c).

³¹ Gibbons et al. distinguish between two modes of knowledge production. Mode 1, is generated within a disciplinary, cognitive context (Gibbons et al., 1994). In contrast to this traditional knowledge, Mode 2 knowledge is created in broader, transdisciplinary social and economic contexts (Gibbons et al., 1994:3).

They state, "in Mode 1 problems are set and solved in a context governed by the largely academic interests of a specific community. By contrast, Mode 2 knowledge is carried out in a context of application. ...In comparison with Mode 1, Mode 2 is more socially accountable and reflexive." (Gibbons et al., 1994:3).

³² The Finnish Institute for Health and Welfare conducted a qualitative survey to analyze risk perceptions and trust towards public authorities in the context of COVID-19 in February 2020. According to the result of this survey, Lohiniva et al. assert that risk communication programs must produce trustworthy and relevant information during the COVID-19 epidemic or pandemic to inform people about risk, influence behavioral change, and encourage participation in decision making about emergency measures (Lohiniva et al., 2020). In addition, they argue that risk communication should be based on a sound understanding of the factors underlying risk perception, risk attitudes and trust towards communicating authorities (Lohiniva et al., 2020).

Acknowledgements

The author would like to thank the Research Institute of Civilization of Tokai University for their support.

Many thanks also to Dr. Yoichi Hirano and Dr. Nakashima for encouraging me to submit this paper to the Special Issue of their journal focusing on the COVID-19 pandemic.

Big thanks to Professor Bob Ashcroft for his constructive comments on my research.

Reference

- Abrams, E. M. et al. (2020) "Risk communication during COVID-19," *Journal of Allergy and Clinical Immunology: In Practice*, 8 (6), 1791-1794, <https://doi.org/10.1016/j.jaip.2020.04.012>, Accessed January 12, 2021.
- Anzai, A. and Nishiura, H. (2021) "Go To Travel" Campaign and Travel-Associated Coronavirus Disease 2019 Cases: A Descriptive Analysis, July-August 2020", *Journal of Clinical Medicine*, 10, 398, <https://doi.org/10.3390/jcm10030398>, Accessed January 26, 2021.
- Bateman, C. (2007) "PAYING THE PRICE FOR AIDS DENIALISM," *South African Medical Journal*, 97 (10), 12-14.

- Boyte, H. C. (2004) *Everyday Politics: Reconnecting Citizens and Public Life*, University of Pennsylvania Press.
- Boyte, H. C. (2008) *The Citizen Solution*, Minnesota Historical Society Press.
- Boyte, H. C. (2018) *Awakening Democracy Through Public Work: Pedagogies of Empowerment*, Vanderbilt University Press.
- Center for Democracy and Citizenship (1998) *Building Worlds, Transforming Lives, Making History; A Guide to Public Achievement* (Second Edition), Center for Democracy and Citizenship.
- Douglas, M. and Wildavsky, A. (1983), *Risk and Culture*, University of California Press, Berkeley, 1-224.
- Eysenbach, G. (2020) "How to Fight an Infodemic: The Four Pillars of Infodemic Management," *Journal of Medical Internet Research*, 22(6), <http://www.jmir.org/2020/6/e21820/>, Accessed August 31, 2020.
- Faust, J. S. and Del Rio, C. (2020) "Assessment of Deaths From COVID-19 and From Seasonal Influenza," *JAMA International Medicine*, 180(8), 1045-1046.
- Fidler, David P. (2020) "Vaccine nationalism's politics," *Science*, 369 (6505), 749. < <http://science.sciencemag.org> > Accessed on September 22, 2020.
- Fischer, E. P. et al. (2020) "Low-cost measurement of face mask efficacy for filtering expelled droplets during speech" *Science Advances*, 6 (36), 1-5.
- Gibbons, M. et al. (1994) *New Production of Knowledge: Dynamics of Science and Research in Contemporary Societies*, Sage Publications.
- Hayashi, Eldai (1995) *Woman and the Environment: Environmental History of Kitakyushu and Anti-pollution Movement Promoted by Woman*, Kitakyushu Forum Asian Woman.
- Karim, Quarraisha Abdool and Salim S Abdool Karim (2002) "The evolving HIV epidemic in South Africa," *International Journal of Epidemiology*, 31, 37-40.
- Leiss, W. (1996) "Three phases in the evolution of risk communication practice," *The Annals of the American Academy of Political and Social Science*, 545 (1), 85-94.
- Lohiniva A. et al. (2020) "Understanding coronavirus disease (COVID-19) risk perceptions among the public to enhance risk communication efforts: a practical approach for outbreaks", *Euro Surveillance* 25 (13), <https://doi.org/10.2807/15607917.ES.2020.25.13.2000317>, Accessed on January 12, 2021.
- Mian, A and Khan, K. (2020) "Coronavirus: the spread of misinformation," *BMC Medicine*, 18, 89-90, <https://doi.org/10.1186/s12916-020-01556-3>, Accessed January 14, 2021.
- Nlotoo, M. and Naidoo, P. (2016) "Traditional, complementary and alternative medicine use by HIV patients a decade after public sector antiretroviral therapy roll out in South Africa: a cross sectional study," *BMC Complementary and Alternative Medicine*, 16, 128-139, DOI 10.1186/s12906-016-1101-5, Accessed January 14, 2021.
- Sen, Amartya (1999) *Development as Freedom*, Anchor Books, 1-366.
- Short Jr, J. F. (1984) "The social fabric at risk: Toward the social transformation of risk analysis," *American Sociological Review*, 49(6), 711-725.
- Slovic, T. (1987) "Perception of risk," *Science*, 236, 280-285.
- Smith, R. D. (2006) "Responding to global infectious disease outbreaks: Lessons from SARS on the role of risk perception, communication and management," *Social Science & Medicine*, 63, 3113-3123.
- Tangcharoensathien, V. et al. (2020) "Framework for managing the COVID-19 infodemic: Methods and results of an online, crowdsourced WHO Technical Consultation," *Journal of Medical Internet Research*, 22(6),

- <http://www.jmir.org/2020/6/e19659/>, Accessed on August 31, 2020.
- The House of Lord (THL) (2000) Science and Society Third Report
- The Royal Society (TRS) (1985) The Public Understanding of Science
<https://royalsociety.org/~media/royal_society_content/policy/publications/1985/10700.pdf> Accessed on January 10, 2021.
- United Nations (2020) Guidance Note on Addressing and Countering COVID-19 related Hate Speech, May 11,
<https://www.un.org/en/genocideprevention/documents/Guidance%20on%20COVID19%20related%20Hate%20Speech.pdf>,
Accessed January 14, 2021.
- World Bank, the (2018) *Atlas of Sustainable Development Goals*, the World Bank.
- World Health Organization (WHO) (2020b) *Resolution WHA73.1 (A73/CONF./1 Rev. 18 May 2020)*, 1-7,
https://apps.who.int/gb/ebwha/pdf_files/WHA73/A73_CONF1Rev1-en.pdf, Accessed January 14, 2021.
- World Health Organization (WHO) (2020c) “Managing the COVID-19 infodemic: Promoting healthy behaviors and mitigating the harm from misinformation and disinformation,” *Joint statement by WHO, UN, UNICEF, UNDP, UNESCO, UNAIDS, ITU, UN Global Pulse, and IFRC*, September 11,
<https://www.who.int/news/item/23-09-2020-managing-the-covid-19-infodemic-promoting-healthy-behaviours-and-mitigating-the-harm-from-misinformation-and-disinformation>, Accessed January 14, 2021.
- World Health Organization (WHO) (2020c) *Call for Action: Managing the Infodemic: A global movement to promote access to health information and mitigate harm from health misinformation among online and offline communities*, December 11,
<https://www.who.int/news/item/11-12-2020-call-for-action-managing-the-infodemic>, Accessed January 14, 2021.
- Wynne, B. (1993) “Public uptake of science: A case for institutional reflexivity,” *Public Understanding of Science*, 2 (4), 321-337.
- Zarocostas, J. (2020) “How to fight an infodemic,” *The Lancet*, 395(10225), 676.

(Japanese)

- 平木隆之(Hiraki, Takayuki) (1998)「中国大連市の大气汚染問題と北九州市による環境国際協力—「北九州方式」による地域提案型環境国際協力—」財団法人消費生活研究所『持続可能な社会と地球環境のための研究助成 1998 年度研究成果論文集』, 147-173 頁.
- 平木隆之(Hiraki, Takayuki) (2014) 「企業の社会的責任と市場共創」『環境経済・政策研究』 7(2), 87-90 頁.
- 内閣府食品安全委員会(Food Safety Commission of Japan: FSCJ)(2015) 『食品の安全に関するリスクコミュニケーションのあり方について』内閣府, 1-27 頁.
<https://www.fsc.go.jp/osirase/pc2_ri_arikata_270527.data/riskomiarikata.pdf> Accessed on January 3, 2021.

The Analysis of Co-creative Actions for Tourism during the Covid-19 Pandemic

Soji LEE*¹, Takuo NAKASHIMA*²

Abstract

This paper point out that research on tourism in the context of Covid-19 is in progress and suggest a new approach to tourism based on service theory while discussing human QOL and well-being. The key factor of this research is the Service-Dominant Logic (SDL) advocated by Vargo and Lusch. SDL signifies the exchange of services and is based on the concept that value is created only when one entity provides services and another entity receives them. Applying SDL to the field of tourism, the main entity providing services is the “tourism industry” and “residents” while the entity receiving services is the “customer/consumer” as a “tourist.” SDL thus requires co-creation, giving meaning to the existence of both entities and ultimately bringing the possibility of tourism’s sustainable continuation. Following this discussion and after scrutinizing earlier research on the revitalization of daily life and socioeconomic activities during an emergency, this research examines Twitter data by extracting two pairs of keywords: the first of these “tourist” and “exchange” and the other is “tourist” and “participation.” From this data, this research concludes that tourists retain their own motivations for travel even during the current pandemic. Thus, the concept of SDL can provide a new model for tourism in which co-creative action involving both tourists and residents can generate positive feelings and enhance well-being for both.

Keywords: Service Dominant Logic, Tourism, Covid-19, Co-creative Action

1. Introduction

Tourism as an industry has become a major socioeconomic force in both developing and developed markets. The effectiveness of tourism policy as a source of economic development has constructed strategic planning efforts indispensable in economic policy in almost every country in the world. On the other hand, there is no other industry where people could cross the world and connect many cultures, making tourism is a source of cross-cultural exchange. Tourism, however, also suffers from economic instability such as recession and stagnation, and social instability in the form of war/terrorism. It also faces changes in information technology and social media, and environmental and sustainability issues. Besides, the features of tourism contain the sharing of well-being and uneconomical values between tourists and residents. Tourism research should be considered from both the supply and demand sides of the tourism industry and should explore how the tourism experience is related to quality of life (QOL) and well-being. A study by Uysal, Sirgy, Woo and Kim (2016) explores a framework of connections between tourists and community. Tourists are consumers of different tourism and hospitality products and services at their destinations, and the community consisting of different providers and stakeholders serves as a host to tourists. Generally, when researchers discuss QOL and well-being, they focus on the specific aspects, such as objective or subjective dimensions. In the aspects of subjective meaning, researchers consider the psychological components, subjective well-being, happiness, life satisfaction, perceived QOL focusing on the positive and negative psychological effects. In this research, we will discuss the positive and negative aspects to evaluate by the subjective well-being aspect.

The coronavirus (Covid-19) that occurred in Wuhan, China in 2019 will spread worldwide in 2020, and in 2021, new variants will occur in several countries and the infection will spread worldwide. This situation has reached

*¹ Tokai University, School of Business Administration.

*² Tokai University, ICT Education Center.

a scale of a pandemic showing the most influential crisis of the 21st century. Tourism has been most significantly impacted over the world. The world economic activities including tourism have caused human interaction on a global scale due to the rapid spread of infection of Covid-19. The impact on tourism is that borders are closed, cruise ships are docked, commercial aircraft operations around the world are restricted, and hotels, restaurants and attractions in tourist areas continue to be closed. In tourism research, research focusing on Covid-19 is in progress. The Covid-19 pandemic is much larger and more serious than previous virus infections, so we need to evaluate a new theoretical foundation scrutinizing existing theories. In this research, we propose a new approach to tourism based on the service theory while assessing the impact of Covid-19 on tourism.

2. Service-Dominant Logic

In relation to where the value of service is generated from, it was traditionally thought that the service provider would generate all the value of service and the user receiving the service would only receive the value of service. As a result, the user pays the provider for the value. Traditionally, Goods-Dominant Logic has been advocated as a model of economic activity centered on the exchange of goods containing money. Vargo and Lusch (2004) advocated Service-Dominant Logic (SDL) focusing on the exchange of services. This modeling can be thought of the shift of the viewpoint from value-in-exchange to value-in-use. SDL is the thought that value is created only when there is an entity that provides services and the other entity that receives it. Besides, SDL is the origin of thought of co-creation giving the meaning to the existence of both entities. The concept of SDL used in this service and management is applied to the field of tourism. The main entity of the service is the “company,” but in the case of tourism, the main entity of the service is the “residents” and “tourism industry” promoting tourism independently of the tourist destination. The entity receiving the service is a “customer/consumer” and could be regarded as a “tourist” in the domain of tourism. Residents and tourism industry provide valuable services, and tourists are considered the recipients. The process of using the service of tourists, the experience through the service, and the place of practice of the service are regarded as the site (sightseeing spot) of value creation. Value of service is determined on the implementation process, and finally, the service is realized. The relationship between residents and tourists become a long-term and sustainable relationship leading to a long-term steady state. This state means the continuation of sustainable tourism. Therefore, we suppose that tourism is “co-created” by residents and tourists. In tourism, SDL could highlight that value is created by co-creation by providers (residents) and users (tourists). We suppose that what the residents provide is not the value of the goods themselves (for example, souvenirs), but the value of co-creation “experience” activities.

Lusch and Vargo (2012) created a new concept of value co-creation based on the following eight Fundamental Premises in SDL theory:

- FP1: The application of specialized skills and knowledge is the fundamental unit of exchange
- FP2: Indirect exchange masks the fundamental unit of exchange
- FP3: Goods are distribution mechanisms for service provision
- FP4: Knowledge is the fundamental source of competitive advantage
- FP5: All economies are service economies
- FP6: The customer is always a co-producer
- FP7: The enterprise can only make value propositions
- FP8: A service-centered view is customer-oriented and relational

Each premise is interpreted in the tourism domain as follows:

Interpretation of FP1: Residents will provide the knowledge and abilities with applied co-creation activities such as events. The service will be the basic unit of exchanging feelings between residents and tourists.

Interpretation of FP2: If indirect exchange occurs through some elements such as events rather than exchange by providing direct services, the basic co-creation element may disappear.

Interpretation of FP3: Providing services through goods. At this time, it is possible to create a shared space that provides services to residents and tourists through goods.

Interpretation of FP4: Goods and knowledge are defined separately in FP3 and FP4. Since knowledge is equivalent to how to use goods and what kind of co-creation to create, it is possible to maintain a competitive advantage depending on the content.

Interpretation of FP5: The service generates not only economic merits, but also leads to a sense of well-being by adding “experience.” As a result, the service may lead to economic activity.

Interpretation of FP6: “Experience” is created by co-creation by providers and users, here residents and tourists.

Interpretation of FP7: Companies alone could not create “co-creation,” only generating one proposal. Therefore, the products produced by a company only have the meaning of proposals and could not produce a common “experience.”

Interpretation of FP8: Service-oriented activities are not focused on the producing company, but are customer-oriented. Activities depend on its consumption and is related to the human activities between mutual residents and tourists.

3. Reconsideration of Co-creative Actions under Covid-19

In the medium and eradication of the Covid-19 disaster, the tourism industry is required to change its business method. The need for innovation in the tourism industry has been recognized. Martinez-Roman, Tamayo, Gamero, and Romero (2015) proposed a two-step interaction model based on the company’s innovative capabilities and background. They showed that there is a positive linear relationship between process innovations and business profitability, that is, process innovation improves profitability. Also, Sundbo, Orfila-Sintes and Sørensen, (2007) indicated that important determinants for innovation are not only the large professional tourism companies but also the small ones with entrepreneurial spirit. Hjalager (2002) pointed out that the tourism industry is less focused on innovation than the providing and coordinating sectors and may be seen as the driving force of other sectors. Johannisson and Olaison (2007) investigated how the impact of the hurricane Gudrun, which struck southern Sweden in January 2005, was treated by citizens and private and public organizations and discussed the concept of “emergency entrepreneurship.” They discussed the action guidelines necessary for revitalizing daily life and socioeconomic activities in an emergency term. These concepts led to action guidelines in the current social and economic situation in Covid-19 for tourists and the tourism industry. The importance of social capital cohesion such as social cooperation promoting mutual action and trust in the region is examined. These actions regarded as social bricolage. We suppose that it is possible to build a new relationship of trust by creating a cooperative relationship and a co-creative relationship. The viewpoint at the time of a disaster is an important element to survive the Covid-19 disaster and to develop tourism.

The most common cause of Covid-19 infection is to violate the social distancing rules. “Co-creative” activities could enhance the sense of well-being for residents and tourists. Coexistence of social distancing and co-creative

actions, however, seems to be a difficult circumstance. Therefore, in the situation of anxiety about Covid-19 infection, the following points of the content of “service” should be considered.

1) Indirect service perspective

It seems necessary to realize spatial sharing and temporal sharing by using virtual cyberspaces and to commercialize services based on indirect co-creation relationships.

The co-creative activities are needed to share a place and time to enhance emotional happiness and well-being.

We analyze the factors leading to the happiness and well-being with social distancing.

2) Perspective on the target person (tourists) of the service

The main factor in the spread of Covid-19 infection is the people such as businesspersons and tourists from overseas,

so the number of tourists from overseas will decrease and the number of domestic tourists will increase. The services reliant on the traditional cultures may not bring as much sympathy as before. We should be conscious of domestic tourists and change the services according to the local cultures.

3) Perspective on service content

Depending on the social distancing, a direct service from residents and the tourism industry to tourists should be changed to an indirect service. New services that can be touched and felt in some way should be considered.

Besides, it is difficult to hear direct opinions about the evaluation, so some mechanism to evaluate new approach should be required.

4. Experiments and Results

We implemented the crawling system from Twitter data. This system can filter duplicated posting at the first stage. Morphological analysis is performed by natural language analysis using MeCab, and nouns, verbs, adjectives, and adverbs are extracted as parts of speech. We selected two keywords “Exchange” and “Participation” from the ten co-created keywords. Lee (2020) showed that these two keywords are classified in the category of “positive keywords are dominant” over the ten keywords relating the concept of “co-creation”. We extracted two datasets; one is extracted using the co-occurrence of two keywords “tourist” and “exchange” called Ex-data and the other is extracted using co-occurrence of two keywords “tourist” and “participation” called Pa-data. Both datasets were gathered from January 9th to November 20th in 2020 and divided into two parts. The first part was gathered from January 9th to April 19th called Ex-data(first) and Pa-data(first) and second part was gathered from April 20th to November 20st in 2020 called Ex-data(second) and Pa-data(second). Pa-data consists of 2440 tweets (Pa-data(first) = 1102 + Pa-data(second) = 1338) and Ex-data consists of 1194 tweets (Ex-data(first) = 522 + Ex-data(second) = 672). We attempt the positive keywords filtering to evaluate how tweets include positive keywords (consisting of 100 keywords). In relation to Covid-19, a few peoples are affected in the term of first part. The second part is the term of infection of Covid-19 over Japan. As the results of experiments, we could capture the following results.

1) The number of total tweets decreased dramatically in both two datasets (Pa-data and Ex-data). The total number of total tweets per day decreased from 10.80 to 7.73 in Pa-data and from 5.12 to 3.88 in Ex-data.

This result shows that the number of tweets including the keyword “tourist” decreased during Covid-19 infection.

2) The percentage of positive tweets from total tweets increased from the first term to the second term in both two datasets.

The percentage of positive tweets from total tweets changed from 31.1% to 34.2% in Pa-data and from 35.15 to

46.3% in Ex-data.

Even if the term is in the middle of Covid-19 infection, the percentage of positive tweets increased. These tweets, including the keywords with the meaning of co-creation, could enhance the positive feeling even if people in the middle of Covid-19 infection term.

3) The frequency of typical keywords increased in the middle of the Covid-19 infection term. The frequency of the keywords “expectation” in Pa-data and “capable” in Ex-data increased in the middle of the Covid-19 infection term.

Even if people are in the middle of Covid-19 infection term, people encourage and express the keywords of “expectation” in tweets.

5. Conclusion

In this research, we proposed a new model of service in tourism based on SDL and indicated that co-creative action with both tourists and residents could generate positive feelings for both and enhance well-being. As the results of experiments using two keywords “exchange” and “participation” represented co-creation, the percentage of positive tweets increased. This means that co-creative actions could enhance positive feelings. Also, people want to encourage and express the keywords of “expectation” in tweets even if the term is in the middle of the Covid-19 infection. In the future, I would like to consider and construct positive actions analyzing the positive tweets relating to co-creative actions even at such a time.

References

- Muzaffer Uysal, M. Joseph Sirgy, Eunju Woo, Hyelin (Lina) Kim(2016). Quality of life (QOL) and well-being research in tourism, *Tourism Management*, Vol. 53, pp. 244-261.
- Stephen L. Vargo and Robert F. Lusch. (2004). Evolving to a new dominant logic for marketing. *Journal of Marketing*, 68(1):1–17.
- Robert F. Lusch, Stephen L. Vargo (2012), *Service-dominant logic: Premises, perspectives, possibilities*, Cambridge University Press, pp. 1-222, January.
- Martinez-Roman, J. A., Tamayo, J. A., Gamero, J., & Romero, J. E. (2015). Innovativeness and business performances in tourism SMEs. *Annals of Tourism Research*, 54, 118–135.
- Sundbo, J., Orfila-Sintes, F., & Sørensen, F. (2007). The innovative behaviour of tourism firms—comparative studies of Denmark and Spain. *Research Policy*, 36(1), 88–106.
- Hjalager, A. M. (2002). Repairing innovation defectiveness in tourism. *Tourism Management*, 23(5), 465–474.
- Johannisson, B., & Olaison, L. (2007). The moment of truth—reconstructing entrepreneurship and social capital in the eye of the storm. *Review of Social Economy*, 65(1), 55–78.
- Soji Lee (2020), New Solution of Over Tourism based on Service Dominant Logic, Fourth International Symposium on Information and Knowledge Management (ISIKM2020), PS-1, ISIKM2020-006, December 12-13. (Poster Session)

Part II. Concept and Theory

Local Identity as the Concept of Agency

Toru HATTORI*

Abstract

In today's globalized society, regional disparities are on the rise. Therefore, community revitalization has become an important theme in modern society. But what impels us towards community revitalization? We supposedly feel a connection to the town we live in and the city we visit, in that we seem to seek some kind of identity. The starting point of our discussion in this paper is the issue of what kind of meaning the self as the subject associates with this kind of a place. Further, we organize the concept of "local identity" and discuss the importance of "self-esteem" and "self-efficacy" among other things. In addition, the concept of "agency" is used to position the subject in the discussion. In activities such as community revitalization, the relationship between self and place becomes significant depending on the "agency".

Keywords: Community, Placeness, Local identity, Agency

1. Introduction

Community revitalization is an important topic in the transdisciplinary field of tourism studies in Japan that includes sociology, cultural anthropology, psychology, economics, and business administration. Community revitalization consists of a series of activities in which rural areas faced with problems such as population outflow, economic decline, declining birthrates and aging population, are mainly trying to attract industries, create jobs, and promote tourism. In other words, in recent years in Japan, the Ministry of Internal Affairs and Communications has been working on policies aimed at creating a "*teiju jinkou*" (population of inhabitants: residents of the region), "*koryu jinkou*" (a non-resident population: tourists and visitors), as well as "*kankei jinkou*" (populations that are neither residents nor tourists who are involved, and retain various interests, in the region: regional experience seekers)¹. One of the motivations that support such activities is that we feel some kind of a connection to a particular place, such as the place where we live, where we come from, or the place we visit. It is in our efforts to protect places that have such connections that the importance of community revitalization emerges for us. So how do we connect to a specific place through the activity of community revitalization, and how do we try to engage with the regional area or place?

2. Placeness and the material self

As a concept that connects a given space to one's self, we have Relph's (1976) "placeness." Here, place is an existential space, and depending on the memories and the history of the people there, it is given the meaning it has for the people there. The character of such a place is referred to as its "placeness." On the other hand, when a place becomes homogenized and undifferentiated through modernization, industrialization, urbanization, and tourism, a loss of place, in other words "placelessness," occurs.

The concepts of "placeness" and "placelessness," presented by Relph, can be viewed as a problem in terms of the relationship between space and self, when the assumption is that the self is placed in a given space. The feeling of "placeness" assumes that the self has a direct connection with that space. Therefore, the self in this case is a self that enables direct experience.

James (1890) categorizes the "I" as "the pure ego" and "the empirical self", and assumes the following three

* Tokai University, School of Tourism.

items for “the empirical self”: “the material self,” such as body, clothing, and family, “the social self,” such as status and honor, “the spiritual self,” such as qualities and beliefs. It is considered that when these three kinds of self are established the “I” can be “I”. Here, if one attributes the meaning of “placeness” to place as existential space, it becomes important to place these three kinds of self, especially the material self (in other words the body), in this space. To begin with, in human development, self-consciousness first sprouted in the physical self that is the self as body (Kajita, 1988). For example, in a study of the Body-Theory including Merleau-Ponty, Alerby, Hagström, & Westman says the following.

“As humans, we access the world through our bodies and the knowledge we develop is always embodied. The body and the world are two aspects of a reversibility,” (Alerby et al., 2014)

In other words, to place the self in a given place refers to seeing self-consciousness take birth in that place while we feel a sense of “placeness” in that place. In this way, the concept of local/regional identity has been used in the discussion of the formation of the self through a connection with a particular place.

3. Definition of the identity concerned with a regional place

The concept of local/regional identity mentioned above has been widely used in tourism studies as one of the motivations for community revitalization, but in Japan this concept has actually been used with at least four different meanings.

The first is place identity. In environmental psychology, Proshansky, Fabian & Kaminoff (1983) define the concept of place identity in the following way: “a substructure of the self-identity of the person consisting of, broadly conceived, cognition about the physical world in which the individual lives.” Here it is pointed out that identity is formed not only in relation to the other or to social processes, but also in relation to the physical environment.

The second is regional identity which is used mainly in geography and sociology. Regarding this concept, Raagmaa (2002) defines it as follows: “regional identity is a deeply social, spatial, and historical (cultural) phenomenon that contains a stabilizing and changing, destructive and constructing character.” While the first, place identity, emphasizes the relationship with the physical world as space, regional identity emphasizes the relationship with the region in a sense that includes the socio-cultural environment.

The third is community identity. Smith, Davenport, Anderson & Leahy (2011) define this concept as, “the beliefs about the extent that landscape contributes to local culture, character and identity.” Here, it is considered that the environment and the events are connected to the personality of the individual.

The fourth is local identity, a concept that has a broader meaning than regional identity and is mainly used in environment design studies and landscape theories. Shao, Lange, & Thwaites (2017) define this concept as follows: “... small-scale places to provide features that create a recognisable image of the place and its residents to differentiate from other places. It provides special feelings through physical, social, sensory and memory perspectives; such feelings include both positive and negative emotions.” Local identity aims to encompass identity as diverse images associated with the region. At the same time, it is also characterized by the creation of an image of the place itself by distinguishing the inhabitants of the area from people in other areas.

From these definitions, we have the following elements that characterize the identity of the regional place. First, fundamentally, the following two form the basis,

(1) To strive for a “distinctiveness” between oneself and the people who do not live there through the intervention of the place,

(2) The existence of a social, cultural “continuity”,

In addition, due to the connection with the formation of the self, the following two points are important (Hatori, 2018),

(3) To have “self-esteem” related to the place,

(4) Feeling of “self-efficacy” based on the feeling of accessibility and ordinariness.

In Japan, local identity and regional identity have been translated into Japanese in a confusing way. However, the analysis above shows that as the identity related to the region, local identity that encompasses a variety of images connected to the region, is the most effective term for regional identity.

4. Local identity as the agency

The act of trying to connect to the concerned place based on the concept of local identity (and thus working on the activities of community revitalization), is also inherently a risky act. This is because involvement in changes in the region is none other than the involvement in the fluctuation of identity. Therefore, particularly for local identity, it is considered that this involvement is assured depending on (3) self-dignity and (4) self-efficacy.

Regarding the act of trying to get involved in a given place, we can refer to the concept of what is called “agency”. “Agency” is one of the social theories that deals with the extent to which human beings can actively control social conditions as “creative actors” (Fujieda, 2020)². Further, Giddens defines this concept as follows; “the stream of actual or contemplated causal interventions of corporeal beings in the on-going process of events-in-the-world” (Giddens,1979). Here, “the on-going process of events-in-the-world” refers to the (2) “continuity” of element that characterizes the local identity shown above. In addition, if “corporeal beings” (that is, the material self and the physical self) become “the stream of actual or contemplated causal interventions”, then this can be considered to mean (4) “self-efficacy”.

Later, Biesta & Tedder (2006) relied on pragmatism, defining agency as “ability to exert control over their”, and understood it as an ability achieved for the first time through temporary association with “contexts-for-action.” In other words, it is something that is understood to be formed as a unique and non-substitutable thing within the time-axis of each individual’s course of life, based on the relationship with the other, because of interactions between personal efforts, mobilizable resources, and contextual and structural factors (Biesta & Tedder, 2007). Agency as “the unique and non-substitutable thing within the time-axis of each individual’s course of life”, can be considered as the above element (1) “distinctiveness” and element (2) “continuity” that assumes element (3) “self-esteem” and element (4) “self-efficacy”. Engaging in community revitalization based on local identity is, in other words, simply having agency for the community.

5. Conclusion

Forming a local identity and maintaining it is having agency, and here it becomes possible to find one meaning that the self is associated with a given place. It can also be said that local identity is always something that is embodied by us in the sense of being positioned as a life course. In this way, we become residents of that place, or become tourists and visitors. In addition, we become regional experience seekers and try to be independently involved in that place.

If that is the case, whether we are in a globalized world, or in a world that is going against globalization such as the Covid-19 pandemic caused by the coronavirus, in the process of forming as well as maintaining the self, we try to ensure our relationship with a place through agency. Having a profound association with a given place is none

other than having agency that eventually discovers the self in that place. Especially in this corona disaster, we are increasingly seeking a place to discover the self and seem to be seeking placeness there.

Notes

¹ See the following Website, <https://www.soumu.go.jp/kankeijinkou/>

² In the background of Agency theory, can be seen various problems concerning modern criticism, social structure and power, and loss of “subject”.

References

Alerby, E., Hagström, E., & Westman, S. (2014). The embodied classroom - A phenomenological discussion of the body and the room. *Journal of Pedagogy*, 5(1), 11-23.

Biesta, G., & Tedder, M. (2006). How is agency possible?: Towards an ecological understanding of agency-as-achievement. *Working Paper 5: Learning Lives*.

Biesta, G., & Tedder, M. (2007). Agency and learning in the lifecourse: towards an ecological perspective. *Studies in the Education of Adults*, 39(2), Autumn 2007, 132-149.

Giddens, A. (1979). *Central problems in social theory; Action, structure, and contradiction in social analysis*: Palgrave Macmillan.

James, W. (1890). *The principle of psychology*: Harvard University Press.

Proshansky, H.M., Fabian, A. K., & Kaminoff, R. (1983). Place identity: Physical world socialization of the self. *Journal of Environmental Psychology*, 3, 57-83.

Raagmaa, G. (2002). Regional identity in regional development and planning 1. *European Planning Studies*, 10, 55-76.

Relph, E. (1976). *Place and placelessness*: Sage.

Shao, Y., Lange, E., & Thwaites, K. (2017). Defining local identity, *Landscape Architecture Frontiers*, 5 (2). 24-41.

Smith, J. W., Davenport, M. A., Anderson, D. H., & Leahy, J. E. (2011). Place meanings and desired management outcomes. *Landscape and Urban Planning*, 101, 359-370.

(和書文献)

藤枝聡 (Fujieda, S.) (2020).「シティズンシップ教育における「市民としての行為主体性」概念の再検討」、『研究室紀要(東京大学大学院教育学研究科基礎教育学研究室)』, 46, 187-196.

羽鳥剛史(Hatori, T.) (2012).「地域コミュニティにおける離脱と発言に関する研究 : A.O.ハーシュマンの離脱・発言理論の示唆」.『都市計画論文集』, 47(3), 991-996.

梶田叡一(Kajita, E.) (1988).『自己意識の心理学』: 東京大学出版.

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.

The Problems Presented by the COVID-19 Crisis —Centered Around Infodemic

Sei WATANABE*

Abstract

The COVID-19 Crisis throws us the various problems. Infodemic is one of them. Its practical risk is that false or unreliable information spreads rapidly and widely in the environment where anyone can broadcast what they want. How can we overcome the risk? It seems difficult to solve this problem by relying on individuals' information literacy. This paper considers the reason from the viewpoint of the meaning of human existence in the information society.

Keywords: infodemic, information society, human existence.

1. Problématique

Great achievements have often been created out of harsh situations. For example, the various achievements of Isaac Newton (1643-1727) were created in a time where there was a widespread outbreak of the black plague. In addition, the achievements of the linguist Roman Jakobson (1896-1982) were born in the process of him fleeing various countries, and the philologist Erich Auerbach (1892-1957) wrote *Mimesis*¹ at Istanbul, where he had been deported. Auerbach's motivation to write this work was his wish for Europe, which had been divided by World War II, to be united again. Like so, when placed in a harsh situation, researchers carry out work with a strong awareness of problems towards current circumstances.

2. Problems of *infodemic* in the COVID-19 crisis

The situation of the current COVID-19 crisis also makes one clearly aware of several problems that we need to work on from now on. The first of these problems is regarding the causes that brought about the worldwide spread of this virus. To put it concretely, these are causes such as globalization, urban congestion, and environmental problems. These problems were being debated in the past as bearing the potential for bringing about a pandemic. However, placed into a situation where our activities are actually restricted, the sense of danger towards these problems has become more urgent.

The second problem is regarding infodemic. Infodemic is the situation where a large amount of information is spread through the medium of the Internet, and real-life society receives the impact. In the past, the spread of information that has no sufficient basis was indicated to be extremely dangerous in a computerized society. In a dangerous situation, we feel uncertain towards our lives and futures in the real world. Uncertainty then causes us to more easily believe in information that has no basis. Moreover, the COVID-19 pandemic forces people to stay in their homes for long periods of time, increasing opportunities for encountering information. This kind of increase in opportunities for encountering information is, coupled with uncertainty, making the dangerous nature of infodemic even greater.

The third problem is the problem related to the meaning of human existence in a computerized society, but this is greatly related to infodemic. What can we do to protect ourselves from the threat of infodemic? A simple solution

* Tokai University, Center for Liberal Arts.

to this question is for the receiver of information to examine carefully and judge the correctness and falseness of each piece of information. However, I have doubts on whether this proposed solution can be effective. The reason for this is because human beings have an inherent desire towards quickness of speed, and computerized societies are making this desire greater.

3. Desire to survive

Milan Kundera (1929-), a novelist from the Czech Republic, once stated the following.

“Man desires a world where good and evil can be clearly distinguished, for he has an innate and irrepressible desire to judge before he understands. Religions and ideologies are founded on this desire.”²

The assertion that we are born with a desire towards making immediate judgments has been also debated in molecular biology. According to Shinichi Fukuoka, human beings can see special patterns and rules within random phenomena. For example, there are instances where we see a person’s face from among patterns on the bodies of beings such as animals. Fukuoka states that, in the long process of fighting against changes in the environment, human beings obtained this kind of ability to see things intuitively to survive. This is the ability that makes immediate judgments possible. This ability truly worked in a useful way in circumstances of being always threatened by death in the natural world.

In current times, we are no longer living in an environment where there is always a possibility of being preyed upon, or where we suffer from long periods of starvation if we let a moment’s opportunity escape us. However, according to Fukuoka, “Now, our goal is not survival itself. Our goal has changed to finding the meaning of our existence. However, our habits of perception and thought that we had obtained in the past still firmly remain.”³ The desire towards making immediate judgments is an ability that humanity has obtained through many years to survive. When thinking about it in this way, Fukuoka’s assertion that this ability still currently remains inside us is convincing.

4. Quickness of speed of information

In addition, there is the debate that current society, which is advancing in computerization, excessively places value on quickness of speed. The philosopher, Masao Kurosaki, states that, “Communicating and dealing with information immediately and without delay may very well be the invisible goal of computer society. Before we know it, our <nature> will also transform into a nature that admires quickness of speed.”⁴ According to Kurosaki’s argument, this nature of admiring quickness of speed makes the concepts of “information” and “knowledge” vague. These concepts originally were clearly differentiated based on value towards quickness of speed. For example, the value of information such as weather information and transport information are given through their quickness of speed. Meanwhile, the value of knowledge such as literary works and philosophy books is not that much related to quickness of speed.

However, Kurosaki indicates that in current times, where information media have developed, “It seems like everything is dealt with as <information>, and this differentiation has been forgotten.”⁵ The computerization of knowledge means that knowledge will have value as something that is useful right away. At the same time, this leads to bringing about a decrease in value in knowledge-related actions that take time, such as learning, intensive reading and careful deliberation.

From what is written above, the situation that we are currently placed in has the aspect of human beings, who had the desire towards immediate judgements in the first place, obtaining, through the development of information technology, a society freed from the dissatisfaction towards the slowness of things. It seems too optimistic to say that, under this kind of situation, individual receivers of information will venture to take the time to carefully examine the correctness and falseness of each piece of such vast amounts of information, one by one. Therefore, one has to say that relying on the information literacy of individuals to avoid the threat of infodemic does not have much effectiveness.

5. Concluding remark

Kurosaki states that, “In current times, when the quickness of speed of information is itself an absolute value, it feels as if < I > am becoming less of a maturing being than an immediately reacting machine. In other words, a being that is no more than a connecting point where information goes in and flows out.”⁶ In life under the COVID-19 pandemic, we continue to be manipulated by information on new numbers of infected people communicated by various media. Each time, this information works on our emotions, and is forgotten the next day. This is ironic, as it means that we changed from a goal towards survival itself to a goal towards finding meaning in existence, and it has actually turned out that we are machines that react immediately to information.

The harsh environment of the COVID-19 crisis has cast a sharp light on the interrelated problems that are 1) various causes that brought about the pandemic, 2) the dangerous nature in computerized societies, and furthermore, 3) the meaning of existence of human beings.

Notes

¹ Erich Auerbach: *Mimesis. The Representation of Reality in Western Literature*, translated by Willard Trask, Princeton 2003.

² Milan Kundera: *The Art of Novel*, translated by Linda Asher, New York 1988, p. 7.

³ Shinichi Fukuoka (2009), p. 59.

(in Japanese) 福岡伸一『動的平衡—生命はなぜそこに宿るのか』、木楽社、2009年、59頁。

⁴ Masao Kurosaki (2002), p.82.

(in Japanese) 黒崎政男『デジタルを哲学する、時代のテンポに翻弄される<私>』、PHP出版、2002年、82頁。

⁵ Ibid., p. 83.

⁶ Ibid., p. 84.

Part III. Online and Digitization

The Dialogue of Human Knowledge Through the Medium of the Internet—Digital Archives Under the COVID-19 Pandemic—

Mina ADACHI*

Abstract

The recent worldwide spread of the COVID-19 infection forces us to change our own lifestyles. One of the biggest changes is related to the “movement” of going from “place” to “place.” In consequence, face-to-face human interactions that accompany “movement,” are in a tendency towards decreasing due to the COVID-19 infection. This kind of situation is the same in fields of research, and through the decrease in movement and in opportunities to meet face to face, there is the possibility of a loss of opportunities for active debates between researchers, and of a decline in the vitalization of research through debate. In fact, research conditions have become quite difficult, because researchers are limited and even prohibited from visiting other locations (academic meetings, libraries, museums, etc., whether internally or internationally). In this paper, I consider a question of the digitization of materials. It is because research in the humanities (history, above all) always requires documentation, and therefore, the digitization of documents and their release online are helpful and even indispensable. Here, reporting on the circumstances of the Bibliothèque Nationale de France and the search engine “Persée,” I discuss the necessity of document digitization as well as its merits and potential future problems.

Keywords: Documentation of materials, Digital archives, Bibliothèque Nationale de France, Persée (search engine), COVID-19 pandemic

1. Introduction – Human Interaction in the COVID-19 Crisis

A variety of effects are spreading throughout our lives from confronting the dangers to one’s life and health that accompany the recent worldwide spread of the COVID-19 infection. One of the biggest changes is related to the “movement” of going from “place” to “place.” Face-to-face human interactions that accompany “movement,” are in a tendency towards decreasing due to COVID-19’s characteristics of affinity (how easy it is to be infected) towards the human body and its rapid activation (the process of becoming severe). Dangers towards one’s mental health also lurk here. This kind of situation is the same in fields of research, and through the decrease in movement and in opportunities to meet face to face, there is the possibility of a loss of opportunities for active debates between researchers, and of a decline in the vitalization of research through debate.

In other words, the current situation is also a human society crisis. Toynbee touched on the rise and fall of civilization and used concepts known as challenge and response.¹ If COVID-19 is a challenge from the natural world, can humanity respond to it?

We are currently in a situation where movement and interaction have to be restricted due to dangers to our lives, but for humans, “movement and interaction” are the most important (while also being the simplest) elements of developing culture and civilization. Without action, humanity could not have developed civilization. One of the elements for making civilization develop is the process of handling words, using tools and realizing thoughts. Human beings then communicate realized thoughts to other people as symbols. Cassirer explains that human beings are animals that handle symbols: A symbol is a kind of expression with its meanings.² Human beings symbolize a subject

* Tokai University, Postgraduate, Graduate School of Letters.

with a goal in mind, and use said symbol in order for it to influence other people. To put it in a different way, symbols are “a realized part of thoughts” that human beings carry out in order to intentionally make their own thoughts realizable, and the use of symbols is a practical application of “effective handling of thoughts” in the sense of influencing other people.

This “effective handling of thoughts” made human beings head towards forming culture, and made civilization develop.

In this way, humanity created culture and developed civilization through handling things, but what is held in common here is the “action” known as “influencing.” Influencing means to actively direct another person’s movement. One of the fundamental things that is held in common here is the “action accompanied by awareness of a goal.” Through human beings moving around and interacting with others (dialogue), a variety of ideas were mixed together, and culture and civilization developed.

When thinking about it in this way, one of the fundamental elements that make up human society is the process of movement and interaction, and through dialogue, thoughts and spiritual natures also interact. In the current civilization of Europe as well, the fusion of Hellenism and the Orient can be seen in its original beginning. In other words, the development of civilization is in the interaction of a wide variety of ideas, and this cannot be possible without open interaction. On the other hand, actions are not only caused by concrete movement. This is truly shown by the current network society. Information society truly has network society – which accompanies and seamlessly connects to scientific development – as the foundation of living, with the exclusion of societies that have cut off communication. Here, interactions between people living in current times – and also interactions with great people in the past through historical materials – are made possible. This kind of movement/interaction of ideas is infinitely spreading.

The recent COVID-19 pandemic is hindering this direct human interaction. This truly holds a crisis towards civilization. At the same time, it also impacts the studies that research civilization. Below, I will inspect these kinds of academic research, centering my inspection around the collection and exchange of information through the Internet, which is one of the plans for getting out of this situation. In this paper, I would like to inspect as a part of this plan the example of France.

2. Studies Towards Human Knowledge Through the Medium of Materials – The Importance of Historical Materials

This expansive mesh of society becomes useful in greatly developing research even in the COVID-19 crisis. In other words, the difficulty in collecting information can be raised as another obstacle that researchers are confronted with. Especially when advancing academic research, it hardly needs to be said just how much collecting and investigating materials is important, whatever the field.

This is because academic research always has as its foundation the knowledge and technology that humanity has accumulated. In other words, whether it is the humanities/social sciences, or natural science – which develops cutting-edge technology – progress is seen in grasping and criticizing said knowledge and technology, using our own thoughts on them and then presenting new knowledge and technology, all the while showing respect to the efforts of our forerunners and advancing towards ideas by using questions and answers. At the very least, the history of human knowledge has been constructed through these kinds of experiences of the soul (sophia).

The importance of research of original materials is all the greater in humanities research. This is because this research in question is not only trying to find surface-layer facts from human business and its records, but goes further to the spiritual nature deep within humanity.

For example, reading the phenomena that is the background connected to current times is important in historical science. Moreover, it demands looking back on the long history of humanity and tracing the *idée* that have been created as ways for human beings – over the passage of centuries – to face nature and people with *thaumazein*, or sometimes created as solutions towards *aporia*. In reality, the significance of learning the knowledge of humanities that has been weaved through time like this is immeasurable. This is involved with the inquiring mind (spiritual nature) that has humanity’s unlimited potential hidden within.

When tracing the tracks of human wisdom up until now like this, examples such as the public records in question, investigation records by organizations such as government agencies, newspaper articles and publications, letters of the person that is the subject of research, etc., can be raised as historical materials that will be the subjects of perusal and collection (refer to [Table 1]).

These historical materials include printed type and those left behind in the form of manuscripts that contain handwritten rough drafts. The latter especially include rough drafts before official reports, memorandums of the individual, etc., and are important in terms of knowing the inside of the minds of people in that time period.

[Table 1] Examples of Historical Materials Related to Humanities (with an Aspect of Historical Science)

| Type of Historical Material | Content that Can be Studied/Inspected |
|--|--|
| Public records | The state of society and the economy at the time, government plans towards regional activities |
| Investigation records of organizations such as government agencies | The intentions of the government at the time, and regional situations in regard to these intentions and reactions towards the government in regard to these intentions. |
| Newspaper articles and publications at the time | The circumstances of society, public response, critical opinions and academic/cultural activities, in regard to the tendencies and phenomena at the time. |
| Letters of the person in question | The tendencies (interaction between researchers), thinking methods, private speculations towards things like society, and so on, of the people that are the subject of research. |

These historical materials include documentary materials that have been printed, those that have been published as books, and those that can also be obtained by purchasing them, etc. However, especially in relation to historical materials that go back into later time periods, there are many that are impossible to purchase, even if they are books, and it becomes difficult to obtain them, unless one were to peruse and copy them on-site at libraries, old archives, museums, etc., and this also includes the case of manuscripts. To raise one example, there are the manuscripts left by Leonardo da Vinci, which now have reproduced versions. Among them are those recreated to historical fact, including binding such as exteriors formed out of the manuscripts themselves, and those that have been further reprinted. Therefore, through these reproduced versions, it is possible to investigate and research da Vinci’s own research content, his own thought processes, etc. However, this is an extremely rare case, and usually it is necessary to peruse materials at the suitable institution – depending on the case, this includes the act of collecting historical materials that

are scattered across various places. Therefore, on-site investigations are important in humanities research that includes the aspect of historical science.

3. France's Situation Regarding the Disclosure of Materials – Heading Towards the Promotion of Digital Archives

Taking the inspections up until now into account, I will introduce from this section onwards – in relation to the interaction of opened knowledge in digital archives – the historical science research related to France in particular, as a case study.

My own research task is related to “Félibrige,” a cultural and linguistic revival group established in southern France in 1854, and F. Mistral, one of the driving forces of said group.³ In this research, the question of how linguistic revival came to be raised in the second imperial period that was the period of the formation of a modern nation state, becomes an issue. Thus, perusing and interpreting historical materials was important in terms of learning the circumstances of the time period and the motivations and goals of the group founders. In other words, materials such as government agencies' investigation records towards the region, newspaper articles of the region, publications and letters of the person in question, etc. In actuality, as part of this research, I was planning to collect historical materials on southern France – which is the subject of research – in March, through a research visit to the Université de Montpellier and on-site investigations at the Musée de Mistral in Avignon and the old archives of Béziers. However, traveling to France became difficult due to the spread of the COVID-19 infection. Under these circumstances, I was able to continue with my research from March 2020 onwards by using historical materials that France's various institutions had disclosed on the Internet. Taking this situation into consideration, I will in this paragraph first inspect the situation of France's release of materials.

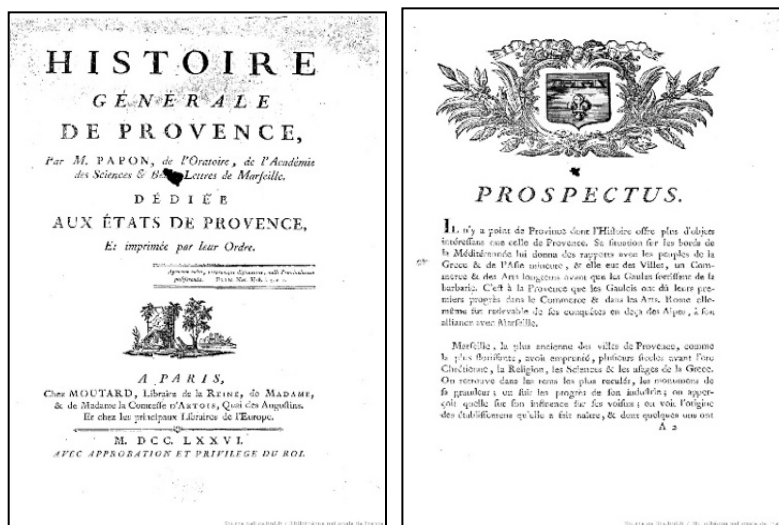
France is one of the nations actively carrying out not only the collection, preservation and management of archives of written materials, art, images, etc., under government agencies, but also the release of the abovementioned materials under government agencies. The circumstances that led to France working on the release of information and historical materials are as follows.

The national library of France, the Bibliothèque nationale de France (BnF), preserves the most historical materials in France. This BnF is a public facility founded under the supervision of the Ministry of Culture (ministère de la Culture). The reason why France came to pour their efforts into the collection and preservation of materials is especially due to François Mitterrand, the president of the republic. He showed the intention of building the world's biggest library that cooperates with other libraries in Europe. In reality, the “Proposal for a Large-Scale Library” (“Propositions pour une grande bibliothèque”) was submitted to the president by Patrice Cahart and Michel Melot in November 1988, and based on the bill of October 13th, 1989 (n°89-777 du 13 octobre 1989), the EPBF (l'Établissement public de la Bibliothèque de France) was founded. Through the bill of January 3rd, 1994 (décret du 3 janvier 1994) the EPBF combined with the Bibliothèque nationale that had existed from 1792, and this leads up to the current BnF of today. Furthermore, in this bill, it is written that the mission of France's national library is to collect, catalog and preserve materials in any academic field, and to expand and manage said process.

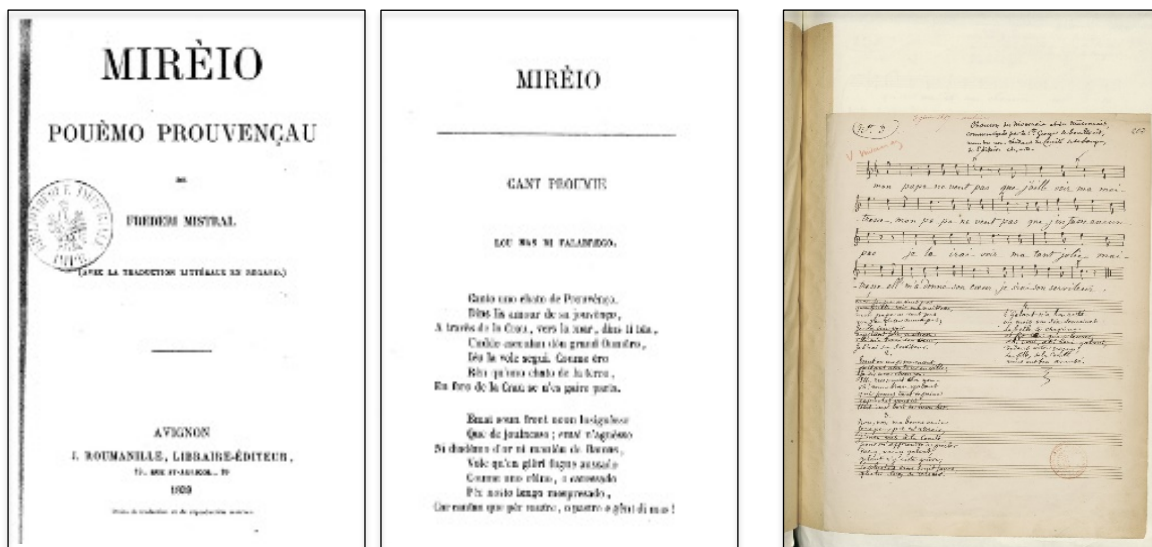
For the release of materials on a global scale, the technological development of computer tools and telegraphic communication, as well as the digitalization of actual materials through said development, are necessary, but the digitalization of the BnF catalog was carried out in April 1999. In 1997, Gallica, a digital library that can be used by

anyone for free, was set up in the BnF via the Internet. A large amount of publications, audio recordings, iconographs, maps, etc., were collected in Gallica, and digital archiving was promoted through cooperation with researchers. Here, it has become a system where many materials that no longer have issues of copyright are released and can be perused on the website. Moreover, through abiding by the rules, it is also possible to download entire texts as PDF files, just as they are. While it does not necessarily mean that the release of documentary materials in the BnF's Gallica is carried out on the entire library, it still includes quite a large number of books, and old books and historical original materials are also included among them.

In Gallica, it is also possible to peruse the manuscript that are in the BnF's catalog. Below, I raise examples of documentary materials obtained from the BnF's Gallica, which are the history of Provence published in the 18th Century (written by Papon) ⁴, the side-by-side translations of Mistral's "Mirèio" in langue d'oc and French published in 1859, ⁵ and the folk song study (manuscript) ⁶ by Fortoul in the middle of the 19th Century ([Photographs I to III]).



[Photographs I]
Papon, *Histoire générale de Provence* (1776)



[Photographs II]
Mistral, *Mirèio* (in langue d'oc and French) (1959)

[Photographs III]
Poésies populaires de la France (manuscript, 1801-1900)

In addition to this, in the BnF, the BNUE (une Bibliothèque numérique européenne) plan was made in 2005 and many materials representing Europe's historical and cultural heritages were presented. Furthermore, this kind of release of digital archives has been actively carried out in Europe, and Europeana, which was set up by the European Commission in 2008, provides access to digital historical materials of cultural facilities in the European Union, and here, institutions such as Gallica and the Louvre Museum are participating.

As seen from what is mentioned above, the release of all materials on the Internet is being advanced with in France. For example, in Gallica, there are currently 7912415 digitalized historical original materials that are released to all citizens including students and researchers, regardless of national boundary. In terms of other releases of information in France, there is, for example, the materials related to the complete radio/television audio-visual archives by the INA (L'Institut national de l'audiovisuel) that was founded in 1975⁷. Through this, all lines were released to all people, regardless of the size of scale of the broadcasting station.

Furthermore, not only national libraries, but the digitalization and release of monographs and essays are also advancing. For example, Persée, the essay search site, does not need registration, and at present, one can directly access 870009 essays and monographs for free. Here, it is possible to search for essays through time period, author, monograph and key words. Therefore, it can be said that it is a highly convenient website in terms of surveying France's recent research papers, etc. Moreover, on this website, it is possible to download essays, etc., with the premise of abiding by fixed rules. Of course, there is a need to request consent for reproduction from the publisher or author in regard to materials with copyright such as charts, but the point of it being possible to advance with research without worrying about the Internet environment – as you are able to download essays – is extremely efficient.

This kind of releasing service of documentary materials is also being carried out outside of the two institutions mentioned above. In 2020, under circumstances that made traveling to France difficult, I was able to advance with research related to "Félibrige" thanks to these online digital archives. When searching for essays and historical original materials related to France, starting with the method of investigating historical materials by applying digital archives such as the BnF's Gallica has the effect of lowering the difficulty of forming the first starting point for deepening research. This is very useful for bringing up young researchers and promoting research. I felt that this was significant for humanities studies, and especially for historical science research in which documents and historical materials become important.

4. Points at Issue Regarding the Release and Perusal of Materials on Websites in Humanities Research

For the researchers specializing in humanities that use written materials – especially historical science – the application of online archives shown in the previous section hides a lot of potential towards research promotion. In particular, the efficiency of materials released on a website is notable in the case where materials cannot be directly collected or perused. However, while on the one hand there is great utility in original materials being released on a website like this, there is also the point at issue that only information that is the content written inside the materials – such as the letters and illustrations – can be presented. While it is true that being able to obtain information through a website can by itself be acknowledged as very efficient for research, on the other hand, it is also a fact that there is the point at issue that one cannot take hold and peruse the actual materials. These points at issue should not be left as

demerits, but should be seen as tasks to be inspected for improvements towards the future. Below, I will inspect the advantages and issues of the release and perusal of documentary materials on a website, from a further general viewpoint.

First, in regard to content that can be read from materials, one can grasp and understand information written in the materials – such as written information and illustrations – in digitalized materials just as much as the actual materials. For example, in the abovementioned BnF, the released documentary materials are all released as they are in their actual forms as image data, including the book cover, the spine, back cover and blank pages. Therefore, in relation to inspecting the contents, it is possible to grasp the contents with the inclusion of said book's binding as well.

Next, I would like to inspect our emotions or senses when we actually hold the real historical materials and when we use digitalized historical materials. In other words, when receiving information from historical materials presented on a screen on a website, it cannot be denied that there is a lack of the deep emotion that comes from directly coming into contact with said materials. Although it is true that deep emotion is a problem of the mental satisfaction of researchers, the quality of information that can be gained by physically going to the actual location and using one's five senses excels as empirical knowledge, and whether it is coincidence or one's own intentions, rich information and energy is received from truths that are "encountered" on the path that pursues knowledge.

Furthermore, not holding the actual materials also means that physical information – such as, for example, the binding of the book, the sense of weight, the quality of paper – cannot be obtained. In this sense, there is scarcely any sense of reality in the materials, apart from their written contents. Moreover, in actuality, there are information that can only be obtained from the actual materials. For example, in the research on the manuscripts of Leonardo da Vinci, the time period can be specified from the quality of the paper used and the writing and patterns included as "watermarks." In other words, this is one of the limitations of image data on a website. Of course, it is possible to say that this is a task for highly specialized research, but even so, the characteristics and limitations of releases on websites can be felt if one were to think of the sense of reality in seeing the actual materials directly with one's own eyes at exhibitions aimed towards the general public, even if one were unable to directly touch it.

Finally, I will additionally consider it from the viewpoint of preserving materials. In other words, in relation to materials released on a website, whether it is possible to download or print a part of said materials or all of said materials is also an important issue. While it is true that there is the issue of copyright through reasons such as the time period of the materials, it is possible at the BnF to download materials on the condition that one abides by the rules that fundamentally limit said materials for use in personal research. Moreover, in relation to documentary materials with a large page number, it is also possible – in addition to partial downloads – to download them as image data such as JPEG files. The aforementioned Persée also has this kind of service, and with Persée, it is also possible to search for terminology inside the released materials. Like so, the ability to not only peruse documentary materials on websites, but also to download them in forms such as PDFs as long as one takes note of the copyright, etc., is useful on the point of being able to preserve documentary materials in a way so that they are within one's reach.

Releasing materials on a website as electronic data also has the advantage not only on the perusal side, but also on the storage side. This is because it is indicated that perusing the actual old documentary materials and old texts themselves is undesirable on the point of preserving materials. In actuality, human-made damages and deterioration through physical contact can be thought of, such as issues with the quality of the paper on each page, and with bindings such as leather covers. Moreover, the process of repeatedly reproducing materials by way of methods such

as a copying machine is also not desirable for documentary materials. When considering these points, turning the materials themselves into electronic data such as images opens up the possibility of carrying out perusal for research, etc., with electronic data and carrying out the release of the historical materials themselves – such as, for example, the exhibition of old texts – with the actual materials.

Moreover, plenty of consideration towards the issues of copyright is needed for the release of documentary materials on a website, in the case where printing said materials is possible or in the case where downloading the materials through electronic data such as PDF files is possible. This is a problem that is set upon both on the releasing side and the perusal side.

**[Table II] Merits and Demerits Related to the Release of Documentary Materials on a Website
(from the Viewpoint of Humanities Research)**

| | Advantages of Turning Materials into Electronic Data | Issues of Turning Materials into Electronic Data |
|---|--|--|
| The perusal of materials (historical materials) through turning them into electronic data. | <ul style="list-style-type: none"> • It is possible to obtain content written in the materials (historical materials) from the information released on the website. On this point, there is no especial trouble in relation to inspecting the contents. | <ul style="list-style-type: none"> • It cannot be denied that seeing the historical materials on a website without physically holding the actual materials has a point of it being scarce in the deep emotional impact of historical research (a problem of the mental satisfaction of researchers). |
| Convenience that accompanies the turning of materials (historical materials) into electronic data | <ul style="list-style-type: none"> • The perusal of old materials (historical materials) including old texts is not desirable on the point of preservation. By converting them to electronic data, it becomes possible to draw the line between the perusal of content and the release (such as exhibitions) of materials (historical materials). | <ul style="list-style-type: none"> • Not physically holding the actual materials means that physical information such as the binding of the book of the documentary materials, the sense of weight and the quality of paper are not obtained, and the sense of reality of the materials – apart from the written content – is scarce. |
| The handling of materials (historical materials) that have been turned into electronic data | <ul style="list-style-type: none"> • The ability to download materials (historical materials) as electronic data (in forms such as PDF) is useful on the point of being able to preserve said materials in a way so that they are within one's reach. • Depending on the form of the data, it is possible to search, process, etc. | <ul style="list-style-type: none"> • The release and perusal of materials (historical materials) on a website demands plenty of consideration towards copyright (related to limitations in release and perusal). • The boundaries of handling the materials (historical materials) depend on the form of preserving the electronic data. |

Furthermore, other problems can be found in electronic data. Even if it is possible to download materials released on a website as PDF files or text files, this involves the limitation of depending on a form that is decided in advance. In other words, PDF files can be obtained within the boundaries of the single format known as PDF, and can only be dealt with in ways that are decided as the ways of PDFs. This is also the same in the case where materials are given as written information known as text files. Although it is true that there is convenience in making it easier to deal with information by having it possible to obtain the contents of materials as electronic data, the potential of formats that can show the information held by historical materials as they are can be thought to be a task for the future. Furthermore, as an addition, converting data into different expressions – such as sound and texture – in terms of materials digitalized as written information, is also probably a task for the future.

Actually, many materials become more and more digitalized as written character information. Normally, digital libraries are targeted at all the viewers on the internet, and therefore, they seem to be equally available for all the

people. This corresponds with the motto “Library for Everybody.” The abovementioned BnF, for example, announces that the Section Gallica is “intended for all readers, whether users are just having a look, booklovers, students or academics.”⁸ However, thinking of the support for people with disabilities, it is necessary to convert data into different formats. Digitalized materials cannot be read without visual information. Therefore, considering persons with a visual impairment, digital libraries should be required to offer other functions, for example, a system converting written character data into voice data or tactile data (the character code of braille). On that point, an interesting and useful example can be found in Korea—a device called the “Tactile Pro Braille Tablet” which has been available since 2019. This is a system that converts character data into braille pins. Nowadays, since ICT technology has developed markedly, the digitalization of materials has improved. This evolution can contribute to libraries providing various ways of presenting documentation for all kinds of people, and promoting such development should be a task of libraries for the future.

In current times, where notable developments of ICT technology can be seen, the turning of materials into electronic data is being advanced with in a variety of forms. However, it is also a fact that the points at issue are becoming just as clearer. For example, although there are international standards on copyright as well, a subtle difference in sensation can also be felt in how said standards are grasped. In addition to the problem of whether the “right” to be protected can be found in the actually existing materials themselves and whether said right can be attached to drawn illustrations and information on the meaning of content, would not a variety of problems arise in the future through the diversification of forms of preserving said materials? Unlike the case with science and technology, where there is a certain type of “common language” of numbers and graphs, humanities that include a historical science aspect have the question of how to grasp as “succession of knowledge” the ideas, cultural expressions, etc., that cannot be all put together. It is thought that the turning of materials into electronic data contains these kinds of problems.

Furthermore, the advantages and issues written in this section related to the turning of documentary materials into electronic data and releasing the said data on a website, are organized and shown in [Table II].

5. Conclusion

In this paper, I looked at the spread of the space where there is interaction of knowledge – with the perusal of materials in humanities as one example – in regard to the problems of “movement” and “interaction” in the COVID-19 crisis. As seen in the example above, in France, a wide variety of materials including many documents, artworks, images, etc., that have been collected, preserved and managed up until now, have been digitalized and released to all people through the medium of the Internet. This kind of release of digitalized materials in humanities was one manifestation of the interaction of human knowledge in the COVID-19 crisis. This is not a problem limited to humanities research. Whether it is historical materials or current themes, a variety of information can be communicated to researchers, students and the general people through the Internet. This kind of world of knowledge is universally and rapidly shared with no boundaries of people or society. In this sense, the interaction of information on the Internet opens up a new direction in the COVID-19 crisis.

In the past, the invention of printing techniques freed human knowledge. The spread of printing techniques contributed to the development of printed letter culture, even if it was in a part of the educated class at first. However, this knowledge was communicated in a closed physical space known as a book. The development of ICT technology in the 21st Century broadens that space to a limitless world. Here, digitalized written information sets human

knowledge free to create an even broader universal world. The current digitalization of materials is truly the first step towards this.

On another note, in the COVID-19 crisis, in what direction will the Internet – which is one of the solutions for the crisis – go in the future? The importance of directly coming into contact with materials was referred to in the argument related to humanities materials, but the same applies to human interaction as well. Just like how romanticism appeared in order to resist the rationalism of the modern Western European mind, the mentality of sensibility is just as important for human beings as rationality is. It is possible that digitized information received via the medium of the Internet can sometimes be received as something that is inorganic. For example, reading through this method – especially in the case of manuscripts – spoils the feelings of the writer and the personality (nature) of said feelings. Moreover, it is possible for the actual materials to excel in terms of turning one's mind towards the time period in question through the binding of the book. Furthermore, in terms of electronic information released without physical qualities, there is the fear that there will be demands of thoroughness in preservation and management so that said information does not become something that is changeable. However, the world of knowledge – which we can obtain by reading content from the digitized subjects and striving for dialogue with the people who created the content or said subject – provides the same space even if there is a difference in the quality or quantity of information. This kind of world of knowledge will further open up through the current digitized written materials being converted from something that is visible to, for example, audio data and touch-related data, such as braille. In a certain sense, I would like to have hope in the possibility that the world of knowledge will broaden through the Internet taking in human sensibility in this way.

Confronting the dangers of COVID-19, human society is a way of searching for new possibilities – in other words, this is the realization of the “new ordinary.”

Notes

¹ Toynbee, Arnold Joseph, *A Study of History : Abridgement of Volumes I-VI*, Oxford, Oxford University Press, 1987.

² Cassirer, Ernst, *An Essay on Man*, Yale University Press, New Haven, London, 1992, p. 27.

³ The research related to Félibrige and F. Mistral was, fundamentally, a research related to the revival, maintenance and movement of the language culture of regions towards unified policies – including language – of the period of the formation of France as a modern nation state. At the root of this, there existed the relationship of regional nationalism or regional identity resisting the totalitarian nationalism of the nation, and this itself is linked to the problem current society is confronted with, known as globalization and maintaining diversity.

⁴ Papon, Jean-Pierre, *Histoire générale de Provence*, Paris, Chez Moutard, 1776.

⁵ Mistral, Frédéric, *Mirèio, pouèmo prouvençau de Frederi Mistral*, (Avec la Traduction Littérale en Regard.), Avignon, Libraire-Éditeur J. Roumanille, 1859.

⁶ *Poésies populaires de la France*, recueillies par les soins du Comité des travaux historiques. III Poésies romanesques ; chants de circonstance., 1801-1900.

⁷ Hoog, Emmanuel, *L'Ina*, Paris, Universitaires de France, 2006, p.10.

⁸ Website: Bibliothèque nationale de France (BnF)
<https://www.bnf.fr/en/gallica-bnf-digital-library>

Acknowledgements

The author would like to thank to Dr. Yoichi Hirano for encouraging me to develop my research.

Many thanks also to Dr. Takuo Nakashima for giving me valuable information on digital libraries.

References

Poésies populaires de la France, recueillies par les soins du Comité des travaux historiques. III Poésies romanesques ; chants de circonstance., 1801-1900.

Cassirer, Ernst, *An Essay on Man*, Yale University Press, New Haven, London, 1992.

Hoog, Emmanuel, *L'Ina*, Paris, Universitaires de France, 2006.

Mistral, Frédéric, *Mirèio, pouèmo prouvençau de Frederi Mistral*, (Avec la Traduction Littérale en Regard.), Avignon, Libraire-Éditeur J. Roumanille, 1859.

Papon, Jean-Pierre, *Histoire générale de Provence*, Paris, Chez Moutard, 1776.

Toynbee, Arnold Joseph, *A Study of History : Abridgement of Volumes I-VI*, Oxford, Oxford University Press, 1987.

Changes Amidst the COVID-19 Crisis —Limitations of and potential for the digitalization of reference material and disclosure on the Internet—

Takuo NAKASHIMA^{*1}, Yoichi HIRANO^{*2}

Abstract^{*3}

In this paper, we develop the problem of digitization of documents and digital archives. While the concept of digital archives has been considered in Japan, little progress has been made, mostly because of concerns over literary property. Here, we present the efforts of some university libraries to establish digital archives and discuss future possibilities in this area. Finally, addressing one of the important problems in continuing research in every field during the pandemic, we discuss the realization of digital archives should present a new opportunity even after the pandemic; a “new ordinary” for the future.

Keywords: Digital library, Digitization of materials, University library, Literary property, Copyright Act

1. Introduction

Human life has faced a deepening crisis since the start of 2020, with the spread of COVID-19 infection on a global scale. In addition to stressing the need for masks, disinfectant, and hand-washing, people have been requested to avoid the three-Cs (Closed spaces, Crowded places, Close-contact settings), and this has caused a major transformation in our lives, including the economy and society. We have already seen a change from the “ordinary” to the “new ordinary,” in which social formats and lifestyles that incorporate a way of living “with Corona” have become essential.

This situation has also affected education and research. In terms of education, school children and university students have been forced to either attend school under a strict declaration, or engage in home learning with a tablet. The same is true for academic research, and we have been forced into a situation where there has been an almost complete halt to face-to-face research workshops. Additionally, due to the avoidance of domestic movement and prohibition on international traveling, field surveys have also become difficult. The impact has been felt particularly significantly in the human science field. Viewing and collecting research materials (particularly historical archives) is essential for human science research. In social science research as well, interview-type surveys, involving questionnaires or face-to-face interviews, are particularly difficult.

It is a fact that, faced with this situation, we are starting to see new trends in society. Through the use of ICT technology, Web meetings, orders via the Internet, and the use of electronic money have spread further. Even when direct interaction between people has been kept to a minimum, changes have been seen in which social activities are continued - changes from the “ordinary” to the “new-ordinary.” This is the same situation for academic research; research workshops are being held through Web meeting systems, and university lectures are also being conducted via the Internet. So, what is the situation for viewing and collecting research materials? Recently, many academic

^{*1} Tokai University, ICT Education Center.

^{*2} Tokai University, School of Letters.

^{*3} This paper is excerpted from the following article, and includes further considerations.

Y. Hirano, T. Nakashima, M. Adachi, “Issues and Studies on Human Science Research Amidst the COVID-19 Crisis - Limitations of, and Potential for, the Digitalization of Reference material.” *Bunmei Kenkyu*, Tokai University Society of Civilization, No. 39, 2020 (in Japanese, in print).

journals have rejected paper media, and have been distributed in the form of electronic journals. In this sense, it has become possible to view papers and research materials via the Internet. This is not necessarily the case, however, for the library materials that have been accumulated up to this point. This is particularly true for the older historical materials and research materials known as “Kikobon” (rare books). Thus far, researchers have proceeded with their research by visiting libraries and archives directly, by themselves, both in Japan and overseas, and viewing such materials there. However, with the current COVID-19 crisis, this approach has not been possible to maintain.

In this paper, as one approach to tackling this problem, we consider the digitization of materials, such as reference materials - Our considerations here include libraries and digital archives. This problem is not simply about accommodating the convenience of the researchers. With the movement of people being restricted, the problem of library use and, in particular, library use by university students who are being forced to live inconvenient lives, cannot be overlooked. However, there are a variety of issues when it comes to the digitalization of research materials. There are problems related to knowhow in creating digital materials, the cost burden involved, and copyright. In this paper, we consider the future outlook for the digitalization of research materials in various institutions, such as libraries, in Japan in particular. That is to say, we make observations about the potential for a “new ordinary” for digital archives, as an aid to academic research and digital archives in terms of social contribution.

2. Digitalization of materials

When promoting academic research, the collection and surveying of materials is essential, whatever the field. This is because researchers are constantly standing on the shoulders of those who have come before them, and finding ways to progress based on respect for, and criticism of, preceding research. Research materials also include manuscripts known as “SHOKAN” (letters) and “SOKO” (drafts). Research materials tell the history of human wisdom and include the sources of the concept of human wisdom. In that sense, the sharing of accumulated wisdom is of great significance.

So what significance would digitalizing research materials have? What would be the advantages or issues moving forward?

There are huge advantages to digitalizing research materials and disclosing the same on websites, to the extent that this would enable many people to view and use such materials. In such a case, it should be noted that the research materials that would be digitalized would include text information, such as documents, illustrations, and photographs, and depending on the case, video, voice, and music information. Information such as the binding and weight of books, and the feel of solid materials, such as sculpted objects, cannot be accurately communicated. Nevertheless, it goes without saying that digitalized research materials are clearly very significant.

We shall summarize and present some of the advantages of digitalizing reference materials below.

- (1) The digitalization of reference materials makes access to such materials simpler, through the use of electronic data, and thus increases convenience when browsing or surveying the contents.
- (2) In addition to browsing on a website, by being able to download or print all or part of the materials, it is possible to proceed with research and surveys regardless of time or place.
- (3) Saving research materials as electronic data is advantageous not only for the party viewing the website but for the archival party as well. By storing the original and viewing the electronic data, it is possible to minimize deterioration of the original research materials.

Seen from this perspective, there are clearly advantages for both the storage side and browsing side in digitizing research materials. However, there are also several issues to be considered in its adoption. For example, the following issues can be raised.

- (i) The conversion of the research materials into electronic data itself involves issues related to version rights and copyright. In particular, when research materials disclosed on websites are printable, or can be downloaded as PDF files, it is necessary to strictly limit them to personal use for the purpose of research.
- (ii) Even if the material electronic data disclosed on the website can be downloaded as a PDF file or text file, this may include limitations in that such material depends on a pre-determined format. For example, PDF files can be created within the scope of one format such as a PDF, and only processed within that scope. This is even more true when it comes to photographic data.

Here, we shall provide a supplementary explanation to (ii) above. For example, if mainly text information-based materials are converted into PDF format, differences occur depending on whether that is image data or text data. In the former case, whereas it is difficult to process these anymore, the original material cannot easily be impaired. On the other hand, in the latter case, it is possible to process it through searches, etc. For research that proceeds through analysis of the content of the materials, the latter is effective. However, there is the risk of the materials being modified. Therefore, it is necessary to have common rules on both the side performing digitalization and disclosure, and the side using it.

Whereas, with the rapid progress in ICT technology, the digitalization of materials is progressing at a rapid pace, this has also caused several problems. For example, in regard to version rights and copyrights, there is the issue of whether they apply to the original that actually exists or whether they are attached to the information about their meaning or the depicted illustrations. As the digitalization of materials continues moving forward, various issues caused by the diversity of save file formats are expected to arise. These are problems of original processing limits and copyrights for processed materials.

3. Current status and issues related to the disclosure of materials on websites in Japan

3.1. Problems related to the digitalization and disclosure of materials

In the previous section, we considered the digitalization of materials and the disclosure and browsing of them on websites, etc. Just as in historical studies, the historical material (historical source) has importance, and the materials containing references are extremely important for humanities research. On that point, with the recent COVID-19 pandemic, the importance of the digitalization and disclosure of materials has increased. In particular, the disclosure of materials on library and archive websites is a way of avoiding research stagnation. In this sense, this can be considered to be a turning point. In terms of future research activities, the digitalization and disclosure of research materials in all fields are issues that need to be considered as methods of the “new ordinary.”

In fact, there are already moves to promote the opening and operation of such library archives within Japan. In terms of the archiving of libraries, the concept of electronic libraries was discussed for the National Diet Library (NDL) in 1998, and a budget of 12.7 billion yen was approved for the digitalization of the NDL in 2009. Currently, electronic exhibitions are being held as electronic library projects¹. However, when viewed internationally, Japan is

behind in terms of the digitalization of library materials, and this is not just from a funding point of view. It has not necessarily adopted a suitable approach for the age in terms of copyrights or neighboring rights either.

Under current laws, stipulations on copyright are subdivided based on the usage format, and a certain amount of digitalization is recognized. Under the Copyright Act, if the usage format of digitalized materials is “reproduction,” this is related to Article 31 “Digitalization of libraries etc.,” Article 35 “Reproduction of non-profit classes,” and Article 47 “Archives for searching and analysis,” whereas if it is “Net distribution,” this is related to Article 31 and Article 35 in the same way. An exception clause is “Reproduction of materials in libraries, etc.” in Article 31. In the 2015 Council for Cultural Affairs, as an arrival point related to stipulations on library archives, there were judgements that “originals, out-of-print, and other generally acquirable library materials could be digitalized even if in good condition,” and “conversion was possible even when the media is obsolete.” Currently, approval for household distribution is also being considered. We can see that these various stipulations in the Copyright Act offer a wide range of possibilities for the digitalization of research materials. What is considered to be important is not that the digitalization of materials makes them easy to use commercially, but rather that they can be broadly arranged and developed over a broad scope for research and individual use.

3.2. Current status of, and issues related to, the digitalization of research materials

When we consider the situation in Japan today, we can see that disclosure on websites is gradually progressing with the digitalization of research materials. Several examples are given below.

First, a digital library has been established in the National Diet Library alluded to above, and work in various fields can now be viewed in a form that does not cause a conflict in relation to copyright issues. However, the fact is that situations can also be seen in which disclosure is not progressing. In actual fact, the Historical Science Society of Japan across Japan as a whole (including the Historical Association of Japan), to promote research amidst the current COVID-19 crisis, submitted a written request seeking “enrichment of the knowledge and information foundations with an expansion in the scope of the publication of the National Diet Library Digital Collection” for the NDL in May 2020. If we actually look at the digital library of the NDL, a large proportion of the materials cannot be viewed. In light of this, whereas it is clear that there are copyright issues, it can also be surmised, at the same time, that there may be budget problems entailed in expanding this project.

Additionally, domestically there is disclosure of digitalized materials of some Constitution and important cultural assets in the National Archives of Japan digital archives. Additionally, digital archives are disclosed in the Yokohama Municipal Library. A wide range of projects are also being attempted in universities. Among these, in the Kyoto University Rare Materials Digital Archive, a variety of documentary records archived by the university are disclosed in a form with thoughtful commentary. Similarly, in the digital collection of the Keio University Media Center, a page has been set up called “Rare books and special collections” for articles stored therein². These kinds of trends can also be seen in the library attached to Tokai University, and there is work underway for the digitalization of a series of Japanese books, in collaboration with the National Institute of Japanese Literature.³

If we look at the catalogs published by Japanese universities, they are archiving rare literature and materials corresponding to a variety of specialty field in universities across the country, and we can see that this includes rare books that are currently difficult to obtain. In terms of their location, it is possible to search, for example, CiNii Books, but the title for whom the version rights or copyright are extinct may not be disclosed. Certainly, libraries are stores of knowledge and archiving rare documents and materials are an important role of libraries; however, it is felt that

this needs to be shared between researchers at least. This is because it is recognized that there is value in reference materials being viewed in addition to just being archived.

4. Conclusion - Future Outlook

In this paper, we considered research issues related to the COVID-19 crisis from the perspective of collecting and viewing materials, such as reference documents. In particular, given the current situation in which it is difficult for people to travel around, either internationally or domestically, there are issues with performing field surveys, and collecting and viewing materials. One measure that can be taken in such a situation is the digitalization and disclosure of materials. In this regard, we are seeing the realization of library archives and digital collections within libraries in Japan as well. This type of approach has a common significance across all academic fields, and in humanities research in particular, where materials such as reference literature are essential, there are strong calls for the digitalization of such materials. However, this is not just because of the current COVID-19 crisis. Because we live in an advanced information age, based on ICT technology, promoting the construction of a new system for disclosure and viewing of reference materials is an important issue for the modern age. From this point of view, we would emphasize the following points about the content considered in this paper.

- (1) For viewing (historical) materials, based on our experience with the COVID-19 crisis, we consider it desirable to disclose and make viewable a large number of (historical) materials on websites.
- (2) The constancy of disclosure of (historical) materials on websites will lead to a revitalization of research in all fields, and is an important issue in terms of constructing a research environment as the “new ordinary” moving forward.

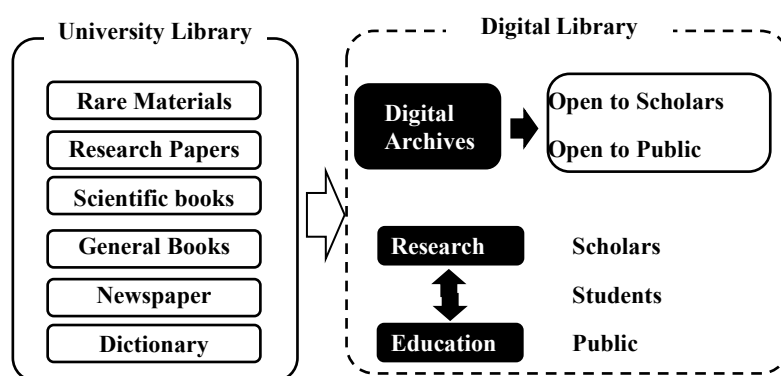


Fig.1 University Library and Digital Archives

With the global spread of COVID-19, a large number of university libraries are currently closed, or their use is restricted. From this perspective, there will be issues to consider regarding the use of libraries by students. In the November 17th issue of the Asahi Shimbun Newspaper, there was an article stating that the Agency for Cultural Affairs was considering digitalizing reference documents in its digital archive to make them available for viewing⁴. This would be welcomed by university students as it would make the reference documents viewable from their computers and smartphones. However, in actual fact, they considered issues related to copyrights and backlash from

publishers, etc., difficult obstacles to overcome. Furthermore, the realization of such a system is not limited to students using university libraries, and would also be highly significant for people using public libraries. It is keenly felt that disclosing and making library materials viewable through digitalization is an important step in bringing about the “new-ordinary” age.

Notes

- ¹ National Diet Library Homepage:
URL: <https://www.ndl.go.jp/jp/dlib/index.html> (read on Feb. 10, 2021)
- ² We referred to the below:
Yurie Sato (Article written in Japanese (material in Japanese))
佐藤友里恵、「慶應義塾大学におけるグーグル・ライブラリー・プロジェクトの著作権調査について」、MediaNet No.17 (2010.11)、pp.50-53
Shunsaku Tamura (Lecture in Japanese, May, 2013 (Lecture meeting, material in Japanese))
田村俊作、「慶應義塾大学における図書館蔵書デジタル化の進展—電子学術書共同利用実験とその背景—」
- ³ The National Institute of Japanese Literature belonging to the National Institutes for the Humanities.
- ⁴ The Asahi Shimbun, “Move to allow libraries to transmit digital versions of books”, Nov.7, 2020
(日本語記事)
朝日新聞記事「図書館電子化、コロナ拍車—休館で研究者悲鳴「文献収集できない」、(2020年11月17日付)

Current Status and Typification of Online Tourism in the New Normal Era

Masamitsu FUTAESAKU*

Abstract

In this paper, we examined new online tourism during the Covid-19 pandemic in Japan. Online tourism includes “online events” or “online holding” and have replaced traditional face-to-face tourism. As a result, we were able to confirm four main types of online tourism by categorizing the online tourism distribution methods. They are inclusive of “Live Tour Type,” “Live Show Delivery Type,” “Online Contact Type,” and “Archive Broadcast Type.” Online tourism has two advantages, such as “it is possible to balance with economic activities” and “it is possible for viewers and performers to interact with each other.” However, there are also three disadvantages: “an increase of the number of viewers who do not go to sightseeing spots,” “technical issues,” and “copyright issues.” Finally, the novel kinds of tourism that result can provide many people with the virtual experience of sightseeing and the chance to acquire information online. It could thus be considered a “new normal” in tourism.

Keywords: Online Tourism, New Normal Era, COVID-19 Pandemic, Typification of Online Tourism

1. Introduction

The outbreak of “COVID-19 (Coronavirus disease 2019)” that started in Wuhan, China in 2019 also began to spread in Japan in the beginning of 2020. In response to the worsening infection situation in Japan, a declaration of a state of emergency was issued nationwide starting in April. Everyone was called on to avoid the “Three Cs” consisting of “Confined spaces, Crowded places, and Close contact.” In addition, various facilities such as educational institutions (e.g., schools), sports centers, and entertainment facilities (e.g., movie theaters) were closed. Amid these social trends, people have begun to work from home, telework, and engage in distance learning. In other words, it can be said that a new lifestyle has been established with communication via the internet becoming mainstream.

Under these circumstances, the new normal era based on interaction through the screens of PCs and smartphones also brought about major changes in the tourism industry. Sightseeing originally meant that people visit a specific destination and have various experiences. Today, as one of the means to prevent people from crowding in a specific place, an environment where you can experience virtual sightseeing activities has been built online, such as communicating the current state of tourist spot online or broadcasting live performances held without spectators.

Specifically, events are held with tourists staying at home, such as online tours by government tourism bureaus and distribution of event videos via video streaming sites such as “You Tube”¹⁾, thereby preventing large-scale cluster infections. These are called “online events” or “online holding” and have replaced traditional face-to-face tourism. As a result, “online tourism” is rapidly taking root in Japan as part of new tourism activities.

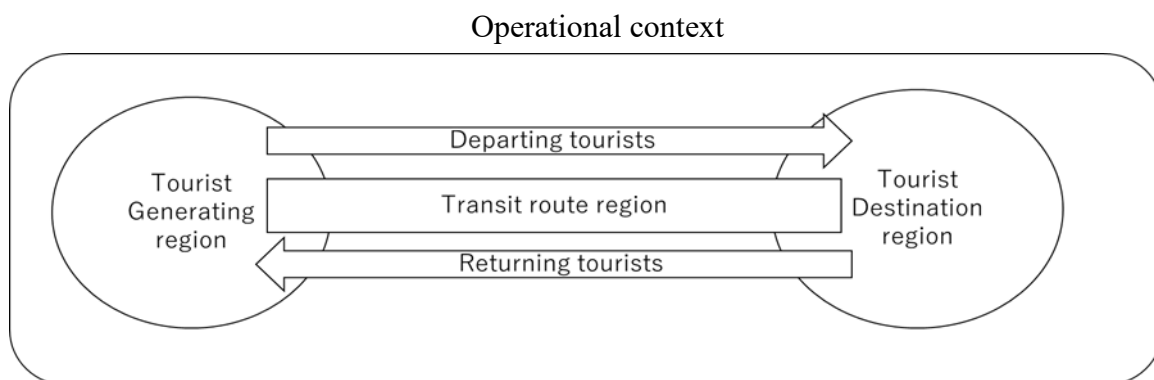
It has been pointed out that tourism is an event in which tourists jump out of their living space, head for a destination, achieve some purpose there, and then return to the living space. As shown in Fig. 1, Leiper considers tourism as the activity of going back and forth between a “tourist generating region” and a “tourist destination region,” whereby the actors here are the tourists, and the whole system is called the “tourism system.” In this system, the tourists jump out of the “tourist generating region,” which is their sphere of life, and visit the destination or “tourist destination region.” After that, the tourists will not stay, and will return to the “tourist generating region,” which is

* Research Student, Tokai University, School of Tourism.

their sphere of life. In other words, Leiper describes tourism as “a phenomenon in which people come and go somewhere.” Leiper also points out that the “tourism system” arises from economic, socio-cultural, political, technical, legal, and environmental values²⁾.

However, the online tourism described above is greatly different from the structure of tourism as explained by Leiper. This is because the venue for online tourism is the Internet. In other words, what is characteristic about online tourism is the virtual experience of tourism through a screen.

Shirasaka (2019) considers tourism to be a vast concept that includes activities such as learning, medical treatment, and volunteering, as well as traveling for human enjoyment, excluding travel for business. On top of that, he advocates the need to consider the movement and distance traveled³⁾. However, the characteristics of online tourism is to virtually experience tourism through a screen. In other words, online tourism has been put into practical use as an activity to simulate tourism through a screen unlike having to go to the destination as in the past. Online tourism itself has been practiced before the spread of “COVID-19” in Japan, but it has been confirmed that the number of cases has increased since the spread of the infection. However, currently there are still few studies that have verified the actual situation of online tourism in Japan. Furthermore, along with these social trends, the method of investigating tourism phenomena has changed significantly from the conventional field survey method to an online survey conducted by accessing a website. Therefore, it is necessary to sort out the nature of the online tourism distribution method, which is a material for tourism research.



Operational context includes economic, socio-cultural, political, technological, legal and environment variables

Fig.1 The tourism system: a spatial construct²⁾

Therefore, in this study, we examined how online tourism has been provided to tourists in the rare situation of the spread of “COVID-19” infection from 2020 to 2021, and its actual status is reorganized by breaking down the distribution methods into types. Like a field survey, this is a research having in mind that the research of online tourism will one day become an established field in tourism research in Japan.

2. Typology of Online Tourism

We were able to confirm four main types of online tourism by categorizing the online tourism distribution methods that can be found between 2020 and 2021.

2-1. Live Tour Type

This is a distribution method that allows viewers to experience the tourist spots in a simulated manner by having each government tourism bureau use its own internet site to broadcast live the tourist spots and introduce the tourist site. A typical example is the online tour “Remote Hawaii Trip”⁴⁾, which was started by the Hawaii Tourism Authority in November 2020 which allows you to experience Hawaii in Japan. Those who wish to participate can make reservations from the columns of each group on the official portal site “allhawaii”⁴⁾ and participate in the online tour by live streaming. Various content is hosted including a tour to enjoy the scenery taken from each area in Waikiki, Oahu⁵⁾ and a tour to learn about the history of Hawaii from cultural facilities such as the “Bishop Museum”⁶⁾.

2-2. Live Show Delivery Type

This is called “live delivery” and is a method of live streaming locally hosted live performances and concerts online. These can be viewed for a fee on event video distribution sites such as “SPWN”⁷⁾ and “Lawson Tickets LIVE STREAMING”⁸⁾. There are various distribution methods, but there are many cases where the event was held by such distribution methods as a substitute for the event that was canceled onsite due to the occurrence of “COVID-19.” “Kishiryu Sentai Ryusoulger Final Live Tour 2020”⁹⁾ had its national performance canceled from March 20th to April 26th, 2020, and held an alternative event called “Kishiryu Sentai Ryusoulger Final Live Tour 2020 in home”¹⁰⁾ via “Lawson Tickets LIVE STREAMING”⁶⁾ on August 15, 2020.

2-3. Online Contact Type

This is a distribution method that allows video calls with event performers and artists through online distribution. Many cases can be confirmed in relation to idol groups. For example, an online handshake event was held in early September 2020 for Fukuoka City’s idol group “HKT48.” This was a system¹¹⁾ that used the service “LINE Face2Face” that allows participants to talk one-on-one with artists and idols by utilizing the functions of the live distribution service (LINE LIVE). In addition, a similar case can be confirmed at a handshake event with a character in a costume that is difficult to communicate through conversation. Sanrio Puroland, an indoor theme park in Tama City, Tokyo, held an online greeting on June 14, 2020. This was a program that allowed 10 types of characters and viewers, including Hello Kitty, to enjoy a videophone conversation for about 2 minutes through an app called “Talkport”¹²⁾.

2-4. Archive Broadcast Type

Participation in this type of event is done by providing a recorded version of the video distributed in the “Live tour type” and “Live show distribution type” described above so that those who wish to view it at a later date can enjoy them. In other words, it is characterized by showing an edited video of an already distributed event to those who cannot view it in real time for some reason. The performance of “Ultra Heroes Expo 2021 New Years Festival”¹³⁾, a live show held online on January 4, 2021, had a missed-program webcast (missed delivery) from January 8th to January 22nd¹⁴⁾ of the same year.

3. Discussion

As described above, we were able to confirm four main types of online tourism distribution methods that can be found between 2020 and 2021. However, for such online tourism to take root in the same way as traditional locally

held tourism in the future, it is necessary to consider its advantages and disadvantages.

First, the advantage of online tourism is that “(1) it is possible to balance with economic activities.” Even in the situation where the tourist spots, live venues, and other facilities for attracting customers are closed due to the spread of “COVID-19” infection, hosting it through online distribution is effective for avoiding the Three Cs. At the same time, it can be maintained as an economic activity, including the purchase of online tickets by those who wish to participate.

Next, an advantage is that “(2) the viewer and the performer can interact with each other.” Even before the outbreak of COVID-19, it was already used to distribute promotional videos of tourist spots and event venues using YouTube and the like. On the other hand, the advantage of an event held live online is that when the event is being broadcast live, the viewer can use the comment section to directly ask the performers questions about the event. In other words, the organizer does not unilaterally disseminate information as in the conventional event video, but the viewer side can also ask for information from the organizer and can exchange information with each other.

So far, we have described the benefits of establishing online tourism. However, there are also concerns. First, there is “(i) concern that the number of viewers who do not go to sightseeing spots will increase.” In other words, it is possible that the viewer will be satisfied only by watching the video and lose the thought of going to an actual tourist destination. Specifically, there is concern that each industry involved in tourism, such as transportation infrastructure, accommodation industry, facilities, and cultural properties, will be hit. Therefore, when each tourist destination publicizes its own place online, it is necessary to clarify the merits of visiting the site instead of online by communicating the sense of presence.

The next point is that “(ii) technical problems will occur.” The video of the online event is made up of two parties, the distributor (hosts) and the viewer (guests) of the video. Therefore, if the transmission / reception environment of both parties is not appropriate, such as the occurrence of equipment trouble on the host side or the viewing environment on the guest side is not prepared, online tourism cannot be established. For example, “Healin’ Good Precure Main casts Live delivery Program”¹⁵⁾, which was scheduled to be delivered live at 15:00 on January 24, 2021, was suddenly canceled due to trouble with the equipment on the host side.

The last point is that “(iii) copyright issues may occur.” Since the internet is transmitted all over the world, it is possible to easily participate in online sightseeing with a PC or smartphone owned by an individual. However, on the contrary, there is a risk of copyright infringement due to personal storage, processing, editing, etc. of images and videos, and it is necessary to take measures against infringement. In addition, it is possible that the video relayed at the online event may not be available on TV due to the circumstances of the sponsor or the like, which may cause a problem for secondary use of the video.

Based on the advantages and disadvantages pointed out above, online tourism is expected to take root as a new form of tourism even after the convergence of COVID-19. In that respect, it is necessary to pay close attention to how the rise of online tourism will affect traditional locally held tourism.

4. Summary and Future Prospects

In this paper, we examined new online tourism that replaces local tourism, which has become difficult to practice due to the spread of the COVID-19 infection. A characteristic of online tourism is that the internet site functions as a tourism destination, and even in the current situation where it has become difficult to visit the actual site, viewers can easily have a virtual experience or collect tourist information at home. In addition, it has been confirmed that the

distribution methods of online tourism to viewers can be categorized into four types, “Live tour type,” “Live show delivery type,” “Online contact type,” and “Archive broadcast type.”

On top of that, online tourism has two advantages, such as “it is possible to balance with economic activities” and “it is possible for viewers and performers to interact with each other.” However, there were also three disadvantages: “increased number of viewers that do not go to sightseeing spots,” “technical issues,” and “copyright issues.”

Research into the New Normal era associated with the global pandemic of COVID-19 is still underway because it is a new phenomenon. Therefore, it is necessary to continue to investigate and analyze the current state of online tourism activities in the New Normal era. It is also necessary to promote archiving of content for the future after the convergence of COVID-19.

Notes

- 1) You Tube <https://www.youtube.com/?gl=JP&hl=ja> (accessed January 26, 2021)
- 2) Peter Mason, *TOURISM IMPACTS, PLANNING AND MANAGEMENT THIRD EDITION*, Routledge, New York, 2016, pp. 11.
- 3) Shigeru Shirasaka et al., *Encyclopedia of Tourism*, 2019 (in Japanese)
白坂蕃、稲垣勉、小沢健市、古賀学、山下晋司、『観光の事典』、朝倉書店、2019年、pp. 4-5.
- 4) allhawaii <https://www.allhawaii.jp/article/other/73/> (accessed January 28, 2021)
- 5) 【Remote Hawaii Trip: Feel Hawaii First time】Virtual walk in Waikiki (【リモートハワイ旅: Feel Hawaii 第1回】ワイキキでバーチャル散策)
<https://www.allhawaii.jp/article/4503/> (accessed February 4, 2021)
- 6) Remote Hawaii Trip “Support Hawai‘i” Your learning leads to support for Hawaii NPOs~ Bishop Museum”~ (リモートハワイ旅「Support Hawai‘i」あなたの学びがハワイ NPO への支援につながる～ビショップ ミュージアム～)
<https://www.allhawaii.jp/article/4560/> (accessed February 4, 2021)
- 7) SPWN <https://spwn.jp/> (accessed January 26, 2021)
- 8) Lawson Ticket LIVE STREAMING <https://l-tike.zaiko.io/> (accessed January 26, 2021)
- 9) Kishiryu Sentai Ryusoulger Final Live Tour 2020 (騎士竜戦隊リュウソウジャー ファイナルライブツアー 2020)
<https://l-tike.com/event/mevent/?mid=485644> (accessed January 28, 2021)
- 10) Kishiryu Sentai Ryusoulger Final Live Tour 2020 in home (「騎士竜戦隊リュウソウジャー ファイナルライブツアー2020」おうちでリュウソウジャーFLT!)
<https://l-tike.com/event/mevent/?mid=533353> (accessed January 28, 2021)
- 11) Can the online handshake events build a “new business model”? HKT48, challenge after “COVID-19” (オンライン握手会は「新たなビジネスモデル」築けるか HKT48、コロナ後の挑戦)
<https://www.j-cast.com/2020/06/10387617.html?p=all> (accessed January 28, 2021)
- 12) PR TIMES Puroland’s first “Online Character Greeting” will be held! (PR TIMES ビューロランド初「オンラインキャラクターグリーティング」開催決定!)
<https://prtimes.jp/main/html/rd/p/000000233.000007643.html> (accessed January 26, 2021)
- 13) Ultra Heroes Expo 2021 New Years Festival (ウルトラヒーローズ EXPO2021 ニューイヤーフェスティバル IN 東京ドームシティ)
<https://www.ultra-expo.com/prism/2021/> (accessed January 26, 2021)
- 14) “Ultra Heroes Expo 2021 New Years Festival” special event online distribution details announced! Enjoy the Zero 10th Anniversary Event & EXPO 2021 Grand Finale at home! (「ウルトラヒーローズ EXPO 2021 ニューイヤーフェスティバル」スペシャルイベントのオンライン配信詳細発表! ゼロ 10 周年記念イベント&EXPO 2021 グランドフィナーレをおうちで楽しもう!)
<https://m-78.jp/news/post-5724> (accessed January 26, 2021)
- 15) Healin’ Good Precure Blu-ray・DVD (ヒーリングっど♥プリキュア Blu-ray・DVD)
<http://www.toei-anim.co.jp/tv/precure/bluraydvd/bluray01.php> (accessed February 4, 2021)

Part IV. Environment and Human Activity

Analysis of Positive Feelings Toward Tourism During the COVID-19 Pandemic

Soji Lee*

Abstract

Tourism is one of the major economic sectors, while it is the most affected sector by the COVID-19 pandemic. The author examines positive human feelings related to tourism and the impact of the pandemic on those feelings and goes on to suggest that such feelings correspond to human happiness and well-being. A key concept is the temporal perspective which a human possesses both on the past and the future. By scrutinizing Twitter data concerning tourism and especially by examining changes in the emotions of tourists and residents during the COVID-19 pandemic, this research verifies that positive emotions in connection with “expectations” for the future lead to human well-being. Furthermore, one’s temporal perspective on the future is the main factor in enhancing one’s sense of well-being.

Keywords: Tourism, COVID-19, Positive Feeling, Time Perspective, Tweets

1. Introduction

Tourism is one of the major economic sectors worldwide, the third largest export category after fuels and chemicals, and accounts for 7% of world trade in 2019. In many countries that employ tourism events to accept more visitors, tourism accounts for more than 20% of the gross domestic product (GDP), thus making it the third largest export sector in the world economy. Consequently, tourism was the sector most affected by the COVID-19 pandemic in terms of economies, livelihoods, public services, and opportunities across all continents. The United Nations World Tourism Organization (UNWTO; 2020) reported that the impact spread to all parts of the vast tourism-derived value chain. Economically, export revenues related to tourism may decrease by \$910 billion to \$1.2 trillion in 2020 (UNWTO; 2020), thus reducing global GDP by 1.5% to 2.8%. The spread of COVID-19 threatens approximately 100 million direct tourism-related jobs. In addition, 144 million jobs in the accommodation and food service industries worldwide are exposed to risk. Moreover, small- and medium-sized enterprises (SMEs) constitute 80% of world travel, and their foundations are fragile. Women, youth, and non-regular workers, who compose 54% of the tourism workforce, also belong to the highest risk categories. Thus, the tourism industry provides livelihood to millions of people in developing and developed countries and especially shares 80% of exports in certain Small Island Developing States. Based on the abovementioned scenarios, the COVID-19 pandemic has a worldwide impact on the national economies of developed and developing countries.

2. Tourism During COVID-19

COVID-19 first occurred in Wuhan, China in 2019, which spread worldwide in 2020. However, scholars predicted that a variant of COVID-19 will break out, which will spread worldwide once again in 2021(CDC; 2021). The situation has reached the pandemic scale and has been the most influential crisis of the 21st century with a significant impact on the tourism industry. Economic activities, including modern tourism, require human interaction at the global scale, which is also a factor in the rapid spread of the infection. The worldwide impacts on tourism are the closure of borders, docked cruise ships, restricted commercial aircraft operation, and discontinued operations of

* Tokai University, School of Business Administration.

hotels, restaurants, and attractions in tourist areas. The research on tourism with a particular focus on COVID-19 is in progress. Crises and disasters have occurred in the past, and their impact on tourism has also been investigated. However, the COVID-19 pandemic is on a much larger scale and thus more influential, such that laying a new theoretical foundation and scrutinizing the existing theories at the same time is necessary. Thus, the current study examines new approaches to tourism and assesses the impact of COVID-19 on tourism simultaneously.

Zenker and Kock (2020) established the distinction between crisis and disaster and considered various research approaches for COVID-19 while understanding the conventional research on tourism. *Crisis* is defined as a “disruption that physically affects a system as a whole and threatens its basic assumptions, its subjective sense of self, its existential core” (Pauchant & Mitroff, 1992, p. 15). Conversely, *disaster* pertains to “situations where an enterprise [...] is confronted with a sudden unpredictable catastrophic change over which it has little control” (Scott & Laws, 2005, p. 151). According to Ritchie and Jiang (2019), the main difference both terms can be exemplified by an organization's failure in terms of internal behavior (crisis) or events external to and beyond the organization's control (disaster). Thus, their impacts on tourism are considered by distinguishing whether the cause stems from inside or outside the organization. From another point of view, the terms can be classified according to the environment surrounding human beings. Changes in the natural environment, such as natural disasters (i.e., earthquakes, floods, and infectious diseases) and those in the social and human environments, such as sociopolitical/man-made disasters (i.e., war, terrorist attacks, political crisis, and economic crisis) can impact tourism. These concepts can be understood based on a classification of whether the causative factor is artificial. Although spontaneous factors occurred during the COVID-19 pandemic, human economic activities are clearly a major factor in the spread of the infection. Thus, the impact of new complex factors should be considered and based on previous research.

Zeng, Carter, and De Lacy (2005) assessed the impact of crises and disasters on China's tourism industry in connection with the severe acute respiratory syndrome (SARS) epidemic in 2003. The authors observed that the number of people who contracted the infection spread over the month of April 2003. Thus, the period was regarded as a short-term crisis. Furthermore, the authors analyzed the impact of SARS and explored the possibility of reducing the impact of such a short-term crisis. The results suggested that nature-based tourism and its associated rural communities can reduce the impact of the epidemic. In China, tourism through natural attractions, such as nature reserves, forest parks, and scenic spots has been ceased, although it is an unlikely factor for the spread of infection. Furthermore, the results indicated that the tourism industry suffered great economic losses. The research reported that SMEs are less capable of resisting the effects of the SARS crisis, whereas large companies are better able to adapt to the crisis. Thus, the diversification of the tourism industry may reduce the vulnerability of the industry and contribute to its sustainability especially in local communities, such as rural areas. Other scholars discussed a varied of infectious diseases, such as Rittichainuwat and Chakraborty (2009; bird flu), Cahyanto, Wiblishauser, Pennington-Gray, and Schroeder (2016) and Novelli, Burgess, Jones, and Ritchie (2018; for Ebola), and Page, Yeoman, Munro, Connell, and Walker (2006; influenza pandemics).

3. Time Perspective

The time perspective denotes a view of the future, which influences the behavior of people in the present. For example, exercising regularly and undergoing a medical examination are actions that consider one's perspective of the future. Although the time perspective is traditionally a viewpoint on the future, a consideration of the past perspective is also one of main viewpoints of the present, which leads to a balanced time perspective. Webster (2011) proposed that

individuals who exceeded the median in the past and future perspectives could form a time extension and a balanced personality and gain high scores in happiness and self-esteem. The manner in which a person recognizes psychological time is considered to influence physical and psychological well-being. Thus, evidence shows that the time perspective enhances the overall sense of well-being. In the same manner, the tourism industry is evaluated economically and policy-wise in terms of time transition. A strong sense of affirmation of the past and future during the transition of the temporal outlook may be deemed as elements that enhance the well-being of tourists and residents. Thus, the study examines whether positive feelings about the past and future lead to happiness. Especially in the case of COVID-19, the study focuses on the relationship between tourism and positive feelings, including expectations of the future.

4. Varied Feelings Among Tourists and Residents During COVID-19

COVID-19 fails to enter a downward trend in 2020 even one year after its discovery. In addition, viral mutations increase the threat to humans and are expected to continue worldwide. Thus, the study analyzes the psychological factors of tourists and residents based on previous studies on the development of tourism under the COVID-19 pandemic.

As a change in behavior due to the psychological influences of COVID-19 on tourists, the study puts forward the following emotions, which may appear in the future.

1) Actions with positive emotions: the political and economic efforts against COVID-19 were implemented at the national scale, and economic exhaustion was repeatedly reported across countries. Thus, tourists may opt to travel to support the tourism industry more at the domestic than the international level. This behavior will support the reconstruction of the domestic tourism industry. 2) Behavioral suppression of negative emotions: the threat of pathogens has repeatedly emphasized the maintenance of social distancing, which may be advantageous for tourists, such that they can avoid congestion during travel to less populated destinations. 3) Behaviors with positive emotions: natural environments with abundant scenic nature and less crowds are likely to be the target of tourist destinations. 4) Behavioral suppression of negative emotions: seemingly, the tendency to travel overseas is suppressed as the COVID-19 infection was derived overseas, and the outbreak of heterogeneous viruses is spreading overseas.

In addition, as a change in behavior due to psychological influence of the COVID-19 pandemic on residents, the study expects that the following emotions will surface.

1) Behavior based on negative emotions: residents may display more negative emotions toward foreigners in line with the overseas origin of COVID-19. Such a situation seems to include factors similar to the exclusion of foreigners during overtourism.

The study then considers the forms of activities that will contribute to the development of tourism and the tourism industry in response to such changes in the emotions of tourists and residents.

1) Redefining the management method for tourism events is necessary. In particular, the development of conventional tourism should be considered by utilizing the importance of social distancing during tourism events. 2) Cooperative activities between tourists and residents and the establishment of mutual social cooperation are expected to contribute to the development of tourism.

5. Experiments and Results

An information extraction system from Twitter written with the Python Programming Language is set up. The system

can automatically collect Twitter data using an application programming interface and a filter that duplicates the posting at the first stage. Morphological analysis is conducted via natural language analysis using Mecab. Nouns, verbs, adjectives, and adverbs are extracted as part of speech. Two datasets are extracted. The first was extracted using the keyword “tourism” and designated as T-data, whereas the second is extracted using two keywords, namely, “tourism” and “corona,” and called T&C-data. The first dataset was gathered from January 11 to November 21, 2020 and consists of 17,709 tweets with 510,201 keywords. The second dataset was collected from August 8 to November 21, 2020 and consists of 6,638 tweets with 204,497 keywords. The study aims to collect positive feelings from the datasets; thus, they were screened using a dictionary with 100 positive keywords. Amid the COVID-19 pandemic, the collected tweets were issued by domestic tourists or residents and those who want to travel for sightseeing after the end of the COVID-19 pandemic.

As the sizes of the datasets differed, the percentage of the frequency of appearance of keywords in one tweet (the metric PF/Tweet) was set. Afterward, the PF/T for positive keywords was compared between the datasets. The study obtained the following results.

- 1) Popular positive keywords, such as “happy”: PF/T values for T-data and T&C-data are 1.90% and 1.27%, respectively.
- 2) Popular positive keywords before the pandemic, such as “sights”: PF/T values for T-data and T&C-data are 2.18% and 0.69%, respectively.
- 3) Positive keywords with intended actions, such as “support”: PF/T values for the T-data and T&C-data are 1.28% and 2.00%, respectively.
- 4) Positive keywords related to the time perspective, such as “expectation”: PF/T values for the T-data and T&C-data are 0.55% and 1.18%, respectively.

The results indicate that keywords with a positive time perspective will appear during the COVID-19 pandemic with expectations for the future.

6. Conclusion

The study examined changes in the emotions of tourists and residents during the COVID-19 pandemic and experimentally verified that “expectations” of the future with positive emotions lead to the well-being of residents. This result may thus be interpreted that a temporal perspective of the future is the main factor that enhances one’s sense of well-being. Thus, future studies should consider the negative factors of COVID-19, especially the conscious exclusion of foreigners and tourists that originated from areas with widespread infection, which is similar to psychological factors, such as conscious exclusion, that have been considered factors that contribute to overtourism.

References

- UNWTO (2020). <https://www.unwto.org/tourism-and-covid-19-unprecedented-economic-impacts>.
- CDC (2021). <https://www.cdc.gov/coronavirus/2019-ncov/transmission/variant.html>
- Sebastian Zenker, Florian Kock (2020). The coronavirus pandemic – A critical discussion of a tourism research agenda, *Tourism Management* 81 (2020) 104164.
- Pauchant, T. C., & Mitroff, I. I. (1992). *Transforming the crisis-prone organization: Preventing individual, organizational, and environmental tragedies*. San Francisco, CA: Jossey-Bass Inc.

- Scott, N., & Laws, E. (2005). Tourism crises and disasters: Enhancing understanding of system effects. *Journal of Travel & Tourism Marketing*, 19(2/3), 151–160.
- Ritchie, B. W., & Jiang, Y. (2019). A review of research on tourism risk, crisis and disaster management: Launching the annals of tourism research curated collection on tourism risk, crisis and disaster management. *Annals of Tourism Research*, 79 (November), 102812.
- Zeng, B., Carter, R. W., & De Lacy, T. (2005). Short-term perturbations and tourism effects: The case of SARS in China. *Current Issues in Tourism*, 8(4), 306–322.
- Rittichainuwat, B. N., & Chakraborty, G. (2009). Perceived travel risks regarding terrorism and disease: The case of Thailand. *Tourism Management*, 30(3), 410–418.
- Cahyanto, I., Wiblishauser, M., Pennington-Gray, L., & Schroeder, A. (2016). The dynamics of travel avoidance: The case of Ebola in the US. *Tourism Manag. Perspect.*, 20, 195–203.
- Novelli, M., Burgess, L. G., Jones, A., & Ritchie, B. W. (2018). “No Ebola... still doomed”—The Ebola-induced tourism crisis. *Annals of Tourism Research*, 70, 76–87.
- Page, S., Yeoman, I., Munro, C., Connell, J., & Walker, L. (2006). A case study of best practice—visit Scotland’s prepared response to an influenza pandemic. *Tourism Management*, 27(3), 361–393.
- Webster, J. D. (2011). A new measure of time perspective: Initial psychometric findings for the Balanced Time Perspective Scale (BTPS). *Canadian Journal of Behavioural Science / Revue canadienne des sciences du comportement*, 43(2), 111–118.

The Covid-19 Pandemic and eQOL (Environment-Related QOL)

Yoichi HIRANO*¹, Takuo NAKASHIMA*², Masanori TAKAHASHI*³

Abstract

This paper not only discusses human QOL (related to happiness and well-being) but also defines the concept of eQOL (environment-related QOL) as human satisfaction in the co-existence of both humanity and nature in a sustainable manner. Among the causes of Covid-19 pandemic, we the authors identify two key factors: excess human contact with nature and the globalization of the human world. Considering Satoyama culture from the perspective of the relations between humans and nature, we can find, in Satoyama, that the ecosystem's balance within nature is maintained and human lives blend into nature as well. On the contrary, excessive human contact with nature inevitably demolishes the balance and harmony between humanity and nature, with the result that eQOL is lost. The Covid-19 pandemic suggests what human might do for the future.

Keywords : eQOL (environment-related QOL), Satoyama, COVID-19, Environmental hazard, Sustainability

1. Introduction

The Covid-19 pandemic that we are currently faced is changing daily life on a worldwide scale. To avoid the “three Cs” (closed spaces, crowded places, close-contact settings), we are forced to refrain from the most social of actions, that is interacting with other people face-to-face. Japan is also in a very serious situation, with a second state of emergency declared in January 2021, calling on people to stay at home, shortening restaurant business hours, and prohibiting travel across prefectural borders. Daily life is being lost.

The novel coronavirus that has caused all this was already in existence, becoming a threat through contact with human beings. At this time, we have just managed to develop a vaccine to control the infection, but there is still no cure for Covid-19. All we can do just now is to take preventive measures, including vaccination, to reduce the risk of infection.

Academic research is doing all it can, in various formats, to work toward the suppression of Covid-19. Analysis and examination of the coronavirus and its infectious results are taking place from specialist perspectives within the humanities, social sciences, and natural sciences. One of the roles to be played by the humanities here is the investigation of human behavior with regard to infectious diseases created by the contact between nature and humanity. The objective of this paper is to consider this issue in the sense of the relations between humans and nature, that is between human actions and the natural environment. In particular, the discussion of the concept of eQOL (environment-related quality of life) so far provides a key concept for the directionality of this issue. This paper presents a perspective on the coronavirus issue based in the relationship of humanity with nature.

2. The coronavirus as an environmental hazard Introduction

Covid-19 is an infectious disease caused by the existing coronavirus, which is transmitted human-to-human. We might refer to this as a kind of biohazard. This virus, which presumably existed somewhere within nature, came to light when something triggered its infection of humans. That is, its beginning was in the contact between humans and

*¹ Tokai University, School of Letters.

*² Tokai University, ICT Education Center.

*³ Tokai University, School of Industrial and Welfare Engineering.

nature. Currently, the virus is to be found everywhere through its existence in infected people; those who make contact with it are infected and go on to infect others further. In short, the field of the coronavirus has expanded from the natural environment to the social environment known as human society.

In this sense, the coronavirus can be considered an environmental hazard¹ in more than one aspect. First, the virus originally existing within nature has been released into human society through “excessive” human contact with nature, unleashing its force within the social environment. Second, it is based in the global social environment constructed by humans and the economic activity maintained therein likewise, on a global scale. That is, while differences in political ideology remain, economic activity across national borders has ended up spreading the pandemic much more widely.

To begin with, what kind of relations has humanity built with nature?² The natural world has changed constantly over its 4.6 billion years of history. Living organisms have done the same. These changes are “natural disturbances,” and for living things, “ecological disturbances.” On a grand scale, these disturbances lead to the destruction and recreation of ecosystems. Biologically speaking, humans are just another kind of organism, and affected by natural disturbances in the same way. Sometimes these take the form of natural disasters. The problem here is how human beings make contact with nature (exposure), and to what degree we can endure natural disturbances (vulnerability). Further, the issue of to what extent we can recover ourselves after the damage caused by natural disturbances (resilience) is also important. In fact, humanity has acquired science and technology and made use of them over and over again to cultivate, and sometimes to exploit, nature. At the same time, we have worked, in a sense coercively, to overcome the environmental hazards of nature through science and technology.

Considering the coronavirus from this aspect, our current human activity consists of a frantic effort to make use of science and technology to overcome this virus encountered by chance. However, we do not seem to have discussed sufficiently the question of why we encountered the coronavirus in the first place. If anything, we need to examine whether we ran up against it by chance or whether we ourselves advanced in its direction.

Further, the second aspect of the “environmental hazard” above is also a serious problem. There is no question that one of the factors in the current Covid-19 pandemic is the worldwide trend toward globalization. Once a pandemic arises, each country attempts to protect itself by means of entry restrictions or closed borders. Even then, business travel cannot be entirely halted. As well, globalization for the purpose of economic development has also significantly influenced lifestyles and cultures, leading to a loss of diversity in the face of homogeneous values. This context is also a factor in the uniform spread of coronavirus infection, once the virus made itself known.

3. Relations between humans and nature (I): Satoyama culture

The previous section discussed the status quo of the coronavirus from the perspective of the relations between humans and nature; how have humans related to nature to begin with? Below, we shall consider satoyama culture, one example of this³.

“Satoyama,” a part of the essential scenery of Japanese mountain villages, refers to nature amended by human hands, in which the ecosystem’s balance within nature is maintained and human lives blend into nature as well. It also evokes humanity in coexistence with nature.

One of Japan’s best-known fairy tales is the story of Momotaro (Peach Boy). It begins “One day, the old man went into the hills to cut grass, and the old woman went to the river to wash clothes.” “Going into the hills to cut grass” refers to scything grass and withered branches among the mountainside trees: the old man is caring for the

trees on the mountain. The clear water which flows from these well-cared-for mountains allows the old woman to wash clothes and clean rice in the river. This is truly a depiction of the primeval context of life adjacent to nature, life integrated with nature. This is the context at the root of “satoyama.”

Incidentally, how is the relation between humans and nature maintained in satoyama areas? If humans and nature coexist, or are integrated, in satoyama, then the boundaries between the human organism and nature are fuzzy, or else there are no boundaries (Fig. 1A). However, even in an absence of boundaries, continuous coexistence with nature means that humans do not encroach excessively upon nature or exploit natural resources. That is, humans care for nature, thus gaining resources such as grass or fallen branches, but do not invade it to the point of tearing trees out by the roots. In short, the balance between the two is maintained.

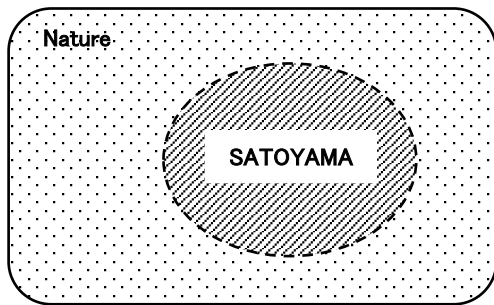


Fig. 1A Relation between Human Life and Nature (I)

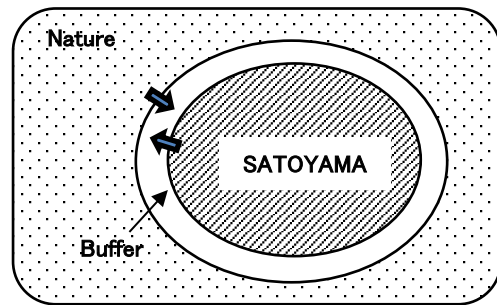


Fig. 1B Relation between Human Life and Nature (II)

Let us consider this relation from another perspective. In satoyama, humans respect nature and cherish its continued existence; this is why they live at a given distance from nature. Conversely, this distance protects humans from natural disturbances. In other words, there is a tacit buffer between humans and nature, which mitigates the effects of natural disturbances (Fig. 1B). This buffer reduces the vulnerability of the human organism exposed to nature. The other way around, humans live in accordance with an unwritten rule against crossing this buffer into nature.

This relationship between human and nature is not limited to satoyama areas. Humans live in part of the immense vastness of nature. As well, nature possesses interior areas which humans cannot approach. From this perspective, it makes sense to assume that a given distance exists between humans and nature (Fig. 2). The distance kept between the human organism and nature is the buffer mentioned above.

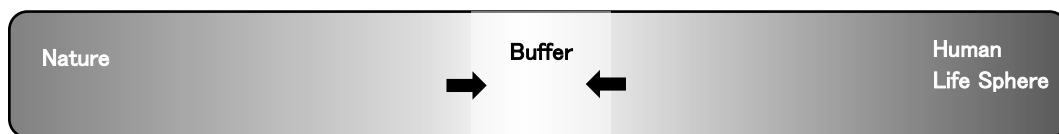


Fig. 2 Structure of the Relationship between Human Life Sphere and Nature

This is just one conceptualization, of course, and this kind of region does not actually exist in reality. However, it provides a schematic idea of sorts for considering the relationship between humans and nature.

One example is the “planetary boundary” proposed by Johan Rockström⁴. This is an analysis of the effects of human activity on nature throughout the earth, based on nine processes, examining the threshold values of each for

irreversible effects of human activity on the earth. Of these nine processes, climate change due to global warming has already exceeded these limit values, the rate of biodiversity loss is soaring, and the maintenance of this biodiversity has reached critical status. All these problems are directly caused by human behavior. That is, they are the results of humans armed with science and technology, who have invaded nature or exploited its resources. When this behavior goes too far, nature's capacity is exceeded, and it can never return to what it was.

If we describe this situation with Fig. 2 above, the boundary point is within the buffer. If humans approach nature too closely as a result of their own behavior, they encroach on nature. Conversely, in such a case, a larger contact surface of the human organism is exposed to nature, increasing its vulnerability. Therefore, natural disturbances are more likely to become natural disasters from the human perspective. That is, correctly judging this buffer supports the sustainability of nature and the human organism.

4. Relations between humans and nature (II): From the perspective of eQOL (environment-related QOL)

The previous section examined satoyama areas in the discussion of the relations between humans and nature. Important here is the maintenance of the relationship of coexistence. With regard to this issue, this study has introduced and examined the concept of eQOL (environment-related quality of life) (Hirano & Nakashima, 2017, 2018)⁵. QOL is an indicator of human satisfaction with life and its quality⁶. Therefore, even if the “QOL of the entire human race” can be expressed as a concept, QOL is essentially related to the individual. In contrast, in modern times when the future and continued existence of humanity on a global scale are now up for discussion, eQOL has been introduced as an indicator for the examination of the sustainability of both humans and nature. That is, this concept is used with a view to balancing the fullness of human life and the maintenance of the natural environment, based on the awareness that the continued existence of human civilization is underpinned by the sustainability of the earth.

Certainly, the natural environment is diverse and complex from a human perspective. Nature became a physical target for humans when Christianity and Western philosophy expressed it as an object in opposition to humanity. Nature was a resource for human life and the target of cultivation; therefore, it could also be a threat. However, to put it more radically, the stance that humans are also a part of nature is valid as well. When we consider the current status quo, in which human activity harms nature and humans receive the backlash thereby, the issue of how humans are to coexist with nature is already important, and eQOL is one perspective from which to consider this.

As QOL indicates the satisfaction of a given individual with their life, eQOL is likewise related to human satisfaction. In the latter case, humans find value and satisfaction in the balance of the fullness of their lives with the continued existence of the natural environment. To this end, items such as those below must be set.

- [1] Improvement of values consciousness toward the physical state of nature
- [2] Improvement of values consciousness toward human spiritual satisfaction with nature
- [3] Mitigation of natural threats against humans (disaster prevention/mitigation)
- [4] Improvement of the social value of nature for humans

Here, [1] means the maintenance of nature in its original state as a rule, but also includes the maintenance of the coexistent sustainability of humans with nature, as in satoyama areas. [2] depends basically on individuals' values

consciousness of nature, which must be shared within society. As well, [3] refers to humans protecting themselves from natural disasters. However, the temporary use of science and technology will not lead to permanent coexistence with nature. [4], finally, will lead to the maintenance of nature in coexistence with humans, which in turn will increase the satisfaction of humans themselves.

Most important for the construction and maintenance of an eQOL environment is awareness of the coexistence of humans with nature. In order to attain this, we must consider carefully how humans make contact with nature: the problems of “excess contact” and “excess encroachment.” The example of satoyama previously evinced is one possible solution.

In the Momotaro story, when “the old man went into the hills to cut grass, and the old woman went to the river to wash clothes,” we see an exchange between humans and nature. Cutting grass in the mountains is the maintenance of nature, based in respect and awe of nature in the form of mountains. Its blessing takes the form of the flow of clear water which returns to humans. The old man does not make any further inroads into nature. The space here called a buffer symbolizes this relationship of mutual dependence between nature and humans. Conversely, if the old couple’s house were to be fitted with electricity and gas, the old man would no longer go into the mountains; abandoned, the nature of the mountains would run wild. Or if he were to start cutting down the trees on the mountain and selling their lumber in town, the forests might be reduced to bare mountains. The buffer in Fig. 2 expresses this kind of coexistence between humans and nature. Humans’ awareness of respect for nature, including nature’s blessings, is equivalent to [1] and [2] above. As well, nature’s threats can be mitigated through avoiding excess contact ([3]). Living within nature in this way will confer peace and stability on the human spirit ([2] and [4]). In short, eQOL can be ensured here.

Conversely, let us consider a region where the tropical rainforest has been felled for economic reasons, with the land planted with rubber trees. The rainforest is in itself a diverse complex of plants, which has thus preserved an autonomous sustainability. However, the same does not apply to the uniform planting of rubber trees. The rubber forest, with grasses trimmed precisely away, cannot maintain its own natural environment. It must be watered depending on the amount of rainfall, and may need fertilizer as well. That is, artificial care is required. However, floods or droughts might also impose serious damage. The artificially planted rubber tree forest has increased exposure to nature and thus increased vulnerability, to the extent that it encroaches upon nature. Therefore, it is severely influenced by natural disturbances, in terms of the effect on the rubber harvest as well. Of course, this is an extreme example. The rubber tree forest is a part of human economic activity intended to obtain rubber. If it encroaches too far on nature, humans will be reducing their own buffer—or eradicating it by crossing it—and coming that much closer to nature (Fig. 3).

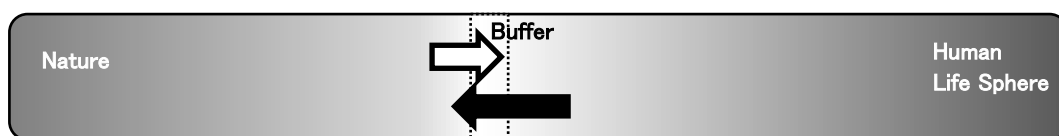


Fig. 3 Reduction or Extinction of “Buffer” Field by Human Activities

This is not intended as a rejection of human economic activity in the form of planting a uniform rubber tree forest. It is natural for humans to use nature to their own benefit. What is important is their awareness of how that

activity affects their relationship with nature. The concept of eQOL is closely related to this point. When humans destroy nature for the sake of development, they are inevitably encroaching on nature. However, considering nature’s capacity and keeping the encroachment to a measured degree enables the impact of humans on nature to remain within a mild range. This includes the awareness of the buffer, and can lead to the improvement of eQOL.

To measure eQOL, we must examine both the degree of encroachment on nature and the satisfaction of humans themselves. However, like QOL, eQOL cannot be easily expressed quantitatively. It is important here that humans respect nature and maintain an awareness of coexistence with nature.

5. The Covid-19 pandemic and eQOL

2020 saw worldwide disruption due to the Covid-19 pandemic, which has continued into 2021. As noted in section 2, this is a biohazard of sorts and, in terms of the relationship of nature with human society, an environmental hazard. From the perspective of human activity, the major factors causing this pandemic include humans’ excess contact with nature and the global society.

Here, let us take a somewhat extreme view of the relationship between humans and nature. As noted in section 3, satoyama areas represent a gentle form of human contact with nature (Fig. 4A). In contrast, what image does the urban society, heavily concreted and lined with tall buildings, represent? In satoyama, a buffer (a given distance) exists between humans and nature. However, in the urban society, nature is in some ways forcibly encroached upon in order to build a town. Even the artificial nature such as parks which may be included therein are not true nature. Rather, the city minimizes its buffer so as to negotiate with nature in the outside world. This means that the urban society exposes itself to nature, and this increases its vulnerability. Conversely, natural elements may also take a negative turn, such as the heat island phenomenon unique to cities, or locally strong winds around high buildings (Fig. 4B).

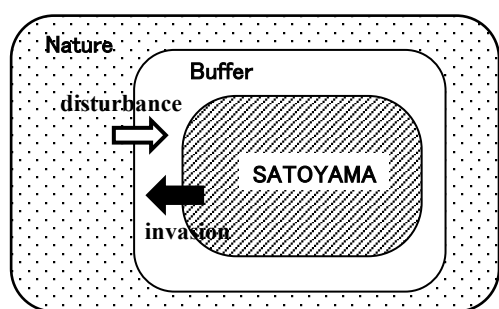


Fig. 4A Structure of Relation between Human Life and Nature (Satoyama)

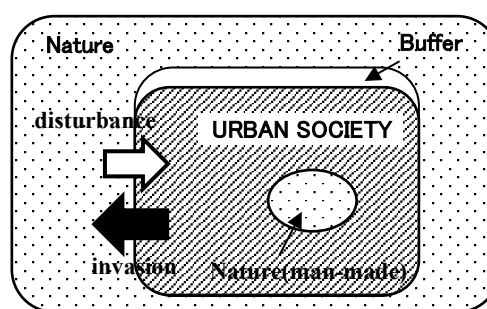


Fig. 4B Structure of Relation between Human Life and Nature (Urban Society)

Using the urban society as a model in this way is not in order to reject its existence but to analyze and consider its relationship with nature. In modern civilization, in fact, humans use science and technology to pursue comfort in their own lives, creating infrastructure for lifestyle convenience such as residences, transport, education, medicine, leisure facilities, and so on. The result of this is that houses are built on mountainsides near cities as well, dams are constructed to supply cities with water, and high-rise buildings are erected on filled-in land. Humans are actually forcing nature aside to create their own space for activity. This indicates an excessive approach to or contact with nature. No buffer maintaining a distance from nature can exist there, and even if it did it would be minuscule. While human QOL appears at a glance to be improved in this context, the same does not necessarily apply to eQOL. If

anything, it is seriously affected by climate changes such as global warming and acid rain as well as floods due to decreased water retention capacity in the mountains.

In fact, the current Covid-19 pandemic can also, in a sense, be said to derive from excess human contact with nature. We do not know what the source animal originally carrying the coronavirus was—whether or not it was a bat of some kind—but it had to have existed within nature. Humans may have approached this source animal, or something else again, by accident. It is clear that recent human activity involves invasion of the original “natural region.” Concerns arise such as whether humans have come too close to nature out of their own desires and will, and whether they have been in too close contact with animals (Fig. 5). That is, one factor in the human encounter with the coronavirus may be that humans have made contact with nature while forgetting, or ignoring, the given distance to be kept.

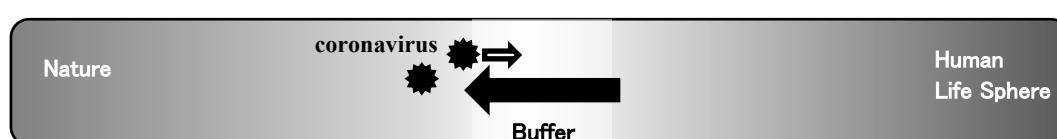


Fig.5 Human Activities beyond “Buffer Field”

From the perspective of this paper’s model, this means that humans have progressed beyond the buffer existing between themselves and nature. At the same time, it shows that humans have lost their sense of respect and awe for nature. This is where this paper’s topic of eQOL comes in. The issue of the environment is by no means an individual one. The subject which finds the nature in view beautiful, considers it soothing, and treasures it is the individual. However, when this awareness of nature as an essential environment with regard to human society is expanded from the individual to the multitudes, it is significant to consider eQOL when developing it into a further shared awareness. Conversely, when human society goes past the buffer existing between humans and nature, it can be considered the result of failing to take eQOL seriously enough. The world is now frantically putting every aspect of science and technology at work in order to develop a vaccine for the Covid-19 pandemic. We can only hope for good results at this point, but must not forget that at the root of this issue is the problem of the relationship of humans and nature, in that sense the problem of eQOL.

6. In lieu of a conclusion: The possibility of new threats

While vaccination for the rampaging Covid-19 has finally begun, humanity has still managed no more than preventative measures or basic symptomatic treatment. In the end, the everyday normal has not returned to lives around the world.

This paper has discussed Covid-19 as an environmental hazard, in particular from the perspective of the relation between humans and nature: the perspective of why a virus originally extant in nature was brought into human society. One of its factors is the excess contact with nature caused by human activity in search of our own comfort. Another is the world-scale globalization taking place. This is related to the first factor in terms of closely adjacent regions and the loss of diversity, but must remain here a topic for discussion in the future.

The Covid-19 infection was derived from a coronavirus in the natural world. While we have acquired some information on this virus, this is probably humans’ first experience with it, and its details remain unknown.

Incidentally, how much of the natural world is still beyond humans' ken? It is, perhaps, these unknowns that appear due to excess contact with nature on the part of humans.

An interesting report has appeared with regard to this point. In its 2016 news, AFP (L'Agence France-Presse) reported that the permafrost in Russia's Yamal Peninsula was melting and that an anthrax infection had spread from the carcass of a reindeer found therein⁷. Other similar examples have also come up. The American researcher Nicholas Parazoo and his group⁸ have pointed out that when the frozen soil called permafrost melts, it releases large amounts of carbon compounds. At the same time, concerns have been expressed that the permafrost will generate a range of viruses, including those unknown to humans. The melting of the permafrost is due to global warming; as humans push global warming further, greenhouse gases will be increasingly emitted. Unknown viruses are an even greater threat. This is another example brought about by humans' invasion of nature—their contact with nature beyond the buffer—which has, in the end, constituted a threat to humans (Fig. 6).

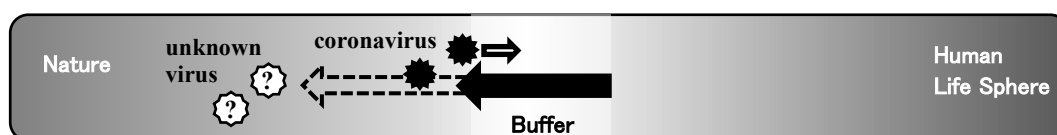


Fig.6 Possibility of the Existence of an Unknown Factor to Humans

This paper has described a conceptual “buffer” existing between humans and nature as one way to avoid excess contact of the former with the latter. At the same time, it has applied the concept of eQOL as an indicator for human respect for the natural environment and maintenance of mutual sustainability. In the end, human maintenance of the buffer's existence and contact on that premise with nature will lead to heightened eQOL. This perspective may be of help in reconsidering the Covid-19 pandemic created by the coronavirus as well.

This paper has also cited worldwide globalization as another factor in the Covid-19 pandemic. This is also related to the first factor in terms of the close adjacency between regions and the loss of diversity, and requires further consideration. This paper has also treated nature as a single overall object; however, the nature with which humans are faced includes primitive aspects as well as those integral to human activities. For example, the problem of food includes farmed marine products and livestock animals. These fall within the range of human intervention with nature. Alternatively, take the problem of avian influenza, which has not yet come completely under human control. Further, nature itself includes inorganic nature grasped as chemical substances as well as organic nature created by biological organisms. How are humans to address these various forms of nature, and how do they influence us? These issues also require further examination.

The Covid-19 pandemic has forced a shift in daily life on us willy-nilly, from the “normal” to the “new normal,” or life restricted by the coronavirus. At the same time, humans are called on to discover a “new normal” as the result of a reconsideration of our relationship with nature.

Notes

¹ Generally, the negative effects of various environmental factors on humans and other living things are called environmental risks, while harmful environmental factors are called environmental hazards.

² Ministry of the Environment, *Brochure: Ecosystem-based Disaster Risk Reduction in Japan - a handbook for practitioners-*, edited and published: Nature Conservation Bureau, 2016.

<https://www.env.go.jp/nature/biodic/eco-drr/pamph04.pdf>

- ³ Cf. Homepage: The International Partnership for the Satoyama Initiative (IPSI).
<https://satoyama-initiative.org/>
- ⁴ Rockström, J. et al., “A safe operating space for humanities”, *Nature*, 461(24), 2009, pp. 472-475.
- ⁵ Hirano, Y., and T. Nakashima, “The Core Project Research Report: An Essay on the Introduction of Environment-Related QOL”, *Civilization*, Institute of Civilization Research, Tokai University, No.22, 2017, pp.35-44 (in Japanese).
Nakashima, T., and Y. Hirano, “The Relation Between Human Activities and the Natural Environment: An Essay on the Introduction of Environment-Related QOL”, *Civilization*, Institute of Civilization Research, Tokai University, No.23 (Special Issue: Dialogue between Civilizations), 2018, pp.87-94 (in Japanese).
- ⁶ In the document (WHOQOL, 1997), the WHO has determined six domains for the evaluation of QOL, such as 1) Physical health, 2) Psychological health, 3) Level of Independence, 4) Social relationship, 5) Environment and 6) Spirituality/Religion/Personal beliefs.
Cf. WHOQOL, (1997), Measuring Quality of Life, http://www.who.int/mental_health/media/68.pdf.
- ⁷ AFP (Russia), August 11, 2016 “Scientists warn anthrax just one threat as Russian permafrost melts.”
Cf. <https://www.abc.net.au/news/2016-08-11/scientists-warn-anthrax-just-one-threat-as-russian-permafrost-m/7720362s>
- ⁸ Nicholas C. Parazoo et al., “Detecting the permafrost carbon feedback: Talik formation and increased cold-season respiration as precursors to sink-to-source transitions”, *Cryosphere*, 12, 2018, pp. 123–144.