

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

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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

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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.

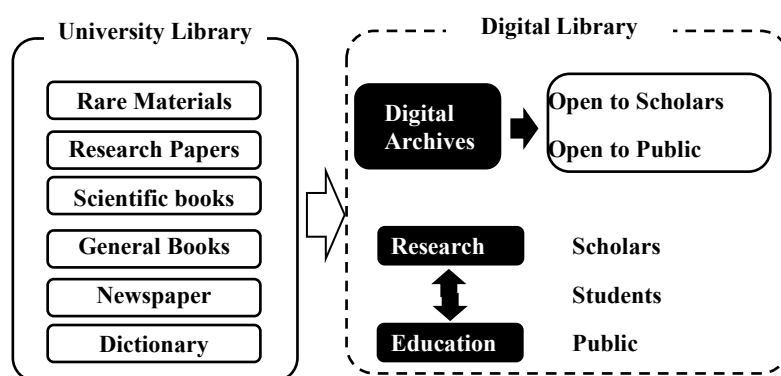


Fig.1 University Library and Digital Archives

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)