

Digital Humanities in Northeast Asia

Ilhong Ko

A common feature of the academic landscape of Northeast Asia since the turn of the millennium has been the emergence and establishment of Digital Humanities (DH) as a key field of research. Although the trajectories of development may differ from country to country, it is clear that Digital Humanities can only flourish when certain elements come together. These elements include government policy, large-scale funding, institutional support, digital infrastructure, an atmosphere of interdisciplinary and convergent research, the academic freedom to propose alternative research paradigms, innovative and tenacious researchers, solidarity building and the active sharing of ideas through the formation of research societies and conferences, and academic posts that make it possible to educate and nurture the next generation of researchers.

In this installment of *News from Northeast Asia*, we present an overview of Digital Humanities research in Northeast Asia that touches upon all of the above-mentioned elements.

In “One Among Many: Digital Humanities in China,” Jing Chen of Nanjing University addresses the issues surrounding the introduction and development of Chinese Digital Humanities. Although these issues are seen to have arisen from the unique context of Chinese academia, they will also resonate with DH researchers of other Northeast Asian countries.

The achievements of Taiwanese Digital Humanities are presented by Chijui Hu of National Changhua University of Education in “From Digitization to Digital Humanities: The Development of Digital Humanities in Taiwan.” Here he traces the steps that led to the construction of digital humanities platforms such as the DocuSky Collaboration Platform. The features of the DocuSky Collaboration Platform, which are introduced in detail, well illustrate the innovations of Taiwanese DH researchers.

The remaining two contributions – dealing with Digital Humanities in South Korea and Japan, respectively – shed light on the

foundations that have sustained this new field of research from two different, but equally important, perspectives. In “Trends and Challenges in Korean Digital Humanities,” Intae Ryu of Sungkyunkwan University introduces the Korean government’s past policies that established the digital environment in which Digital Humanities could take root, as well as the current administration’s policies that will hopefully ensure the sustainability of this field of research.

Finally, in “Recent Developments in Digital Japanese Studies,” Paula R. Curtis of The Terasaki Center for Japanese Studies

discusses the efforts of researchers who have been active in hosting events for the sharing and dissemination of research results and who have also come together to create community spaces for Japanese Digital Humanities. Her analysis of the increasing importance of digital-related research in job postings for East Asian Studies illustrates that the future of Digital Humanities in Northeast Asia is bright indeed.

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One Among Many: Digital Humanities in China

Jing Chen

Since 2009, the year that “Digital Humanities” was translated into Chinese as *shuzi renwen* (数字人文) by Professor Xiaoguang Wang, the field of Digital Humanities has come to receive more and more attention from scholars in mainland China. For example, the first research center for Digital Humanities was established at Wuhan University in 2011. The first Digital Humanities (DH) course came to be offered at the History Department of Nanjing University, the first translated book on DH was published in Beijing, and the first peer-review journal on DH was launched by Renmin University of China. In 2019, the first annual national conference was organized and held by the first national association of DH. Every year, more than a dozen conferences related to Digital Humanities have come to be held across the country. Reports on Digital Humanities have also featured centrally in newspapers – not only in key academic newspapers like *Chinese Social Science Today* (中国社会科学报) but also popular media outlets such as *The Paper* (澎湃). So what do Digital Humanities bring to Chinese academia, and how do scholars benefit from Digital Humanities?

Digital Humanities facilitate, first of all, a transformation of the research model from “institute-driven” to “research-oriented.” In the dawn of Digital Humanities in China, most projects were financially and strategically supported by institutes or governments. This is because the high cost of developing

databases made it difficult for individual scholars in the early 2000s to develop or maintain digital projects without major financial support; the hardware and software for Digital Humanities were also unaffordable for the individual scholar. To ensure their stability and sustainability, DH projects required a host and, therefore, in order to avoid the fate of disappearing, it was unavoidable that projects were primarily driven by the interests of institutes rather than of researchers. Also, it was not easy to directly integrate DH projects into the research of individual scholars. This situation gradually improved as some of the projects completed the digitalization process and moved one step further, allowing researchers to dig deeper into the value of its contents.

Second, in relation to the role of digital technology and tools in humanities studies, scholars are trying to explore the theoretical foundations of Digital Humanities from various perspectives. The value of digital technology is under constant debate in China, and its reconceptualization is a key issue. The common misunderstanding about DH among Chinese scholars concerns how the humanities can benefit directly and quickly from the application of digital technology. Many scholars still hold that digital technology (or Digital Humanities) is more about the innovation of tools or methods, as opposed to being about asking new research questions. They also often assume that DH research projects are primarily about the use of quantitative

methods for studying data. The value of qualitative studies in DH, such as media studies or visualization-related studies, is rarely recognized or even noticed by humanities scholars.

Third, the barriers within and between disciplines, which acted as a serious obstacle in the early stage of Digital Humanities, are slowly disappearing. On one hand, the majority of DH projects are based on the databases and archives of digitized historical documents that are specific to a sub-discipline due to the requirements of funding and hosting. On the other hand, DH practitioners, including creators and users, have research needs that go beyond disciplinary boundaries. If individual scholars lack data analysis skills, they have to collaborate with other experts to conduct cross-disciplinary projects, especially when they involve substantial data processing and advanced digital technologies. Another obstacle is the failure of academic institutions to recognize cross-disciplinary research outcomes. It is hard for scholars to break disciplinary boundaries when they are nested in disciplinary fields and institutional units. They still have to conduct research that is recognized by evaluative systems that are usually unfriendly to new forms of digital humanities research. This is especially the case for individual scholars that are not part of research groups.

Last but not least, cyberinfrastructure has become a key concern of scholars after witnessing, for many years, the repeated construction of projects with the same content. Huge amounts of time, money, and effort have been wasted during these cycles of reproduction. Moreover, many databases are emerging from China at present, but it is not easy to be certain that they command enough resources to remain active, nor that their data will be utilized effectively in research by scholars with the required skill sets.

In the beginning of her essay “The Humanities, Done Digitally,” Kathleen Fitzpatrick asks a question: Are the Digital Humanities singular or plural? This article raises a similar question, but places it in a global context, considering the diversity of approaches to humanities on a worldwide scale. To be sure, in a global context, no single unified definition of Digital Humanities is possible, even if one would desire it. Amidst this plurality of concepts and practices, the scholarly context of Digital Humanities in the Greater China region is starkly different from that of academic communities elsewhere. This is partly due to the unique features of humanities data in Chinese, especially for texts, and also due to the context in which Digital Humanities was introduced, debated, and developed. More importantly, since around the early 2010s, Chinese scholars have been increasingly active in carrying out these discussions online, on WeChat. There are numerous public accounts (known as *gong zhong hao* [公众号]) on WeChat, the most popular social media platform in China. These accounts – akin to blogs that incorporate interactive functions – are devoted to the sharing of electronic resources for research and relevant academic events. These often attract a large following among younger academics, and they have gradually been shaping digital humanities fields and communities.

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Notes

- <https://dhdebates.gc.cuny.edu/read/untitled-88c11800-9446-469b-a3be-3fdb36bfbd1e/section/65e208fc-a5e6-479f-9a47-d51cd9c35e84>

From Digitization to Digital Humanities: The Development of Digital Humanities in Taiwan

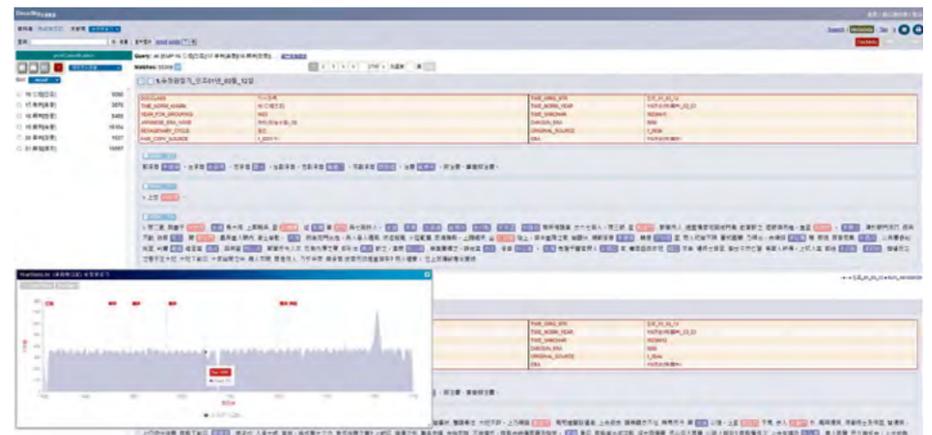
Chijui Hu



Fig. 1 (top left): The front page of DocuSky; the chart illustrates the work flow of DocuSky. Source: <https://docusky.org.tw>.

Fig. 2 (below left): Taiwanese Association for Digital Humanities (TADH) logo. Source: <http://tadh.org.tw/en/>.

Fig. 3 (below): The tools in DocuSky include text analysis, DocuXml format converters, text mining, visualization tools, and GIS. Source: <https://docusky.org.tw>



The development of Digital Humanities in Taiwan is founded on decades of research in digital archives, including various works such as research tools, databases, and models. In the 1980s, several institutes and universities in Taiwan worked to achieve substantial progress in archives digitalization. From 2002 to 2012, the National Science Council of the Taiwan Government (NSC, which was renamed the Ministry of Science and Technology in 2014) conducted the National Digital Archives Project (NDAP).¹ This government support allowed many academic institutes, libraries, universities, and private institutions to digitize large amounts of archives, photos, scriptures, artifacts, maps, and video data. Based on these digital data, Digital Humanities researchers in Taiwan have been able to use these materials for many fields of research and innovation.

One of the achievements of NDAP was the construction of many databases in the early 21st century. However, these databases were built for institute-based researchers and experts, and so their main function is to retrieve and browse; their main principle was not only high precision but also high recall. As a result, users may find it difficult to identify the context of the data, merely ending up with many results from the database. Through an innovative process, a context discovery system was invented by the Research Center for Digital Humanities (RCDH) of National Taiwan University (NTU), which was led by Professor Jieh Hsiang. Using post-query classification methods, users can identify not only what was retrieved but also the inter-relationships among documents and the collective meanings of a sub-collection.² The basic assumption is that documents in a collection should have well-structured metadata, which is important for post-classification of a sub-collection. When the full text of the content is also available, more sophisticated analytical methods such as co-occurrence analysis can also be deployed.³

The context discovery system is, however, a closed database of sorts, making it difficult for users to add additional data or metadata into the database. In addition, the tools in the system were developed exclusively for the data of the system. This means the Digital Humanities tools are tied up with the system and that users cannot use them for their own data. This is why attempts are being made to move towards the development of a Digital Humanities platform. One of the goals of Digital Humanities platforms is to provide humanities researchers with the ability to integrate research material without the help of software engineers. Researchers can deal with the research data by themselves and upload it onto the platform; they can analyze, mark up, and reorganize metadata or produce statistics of that metadata; they can also visualize the uploaded data using the Digital Humanities tools embedded in the platform. The benefit of such a scheme is that researchers can save much time and effort, and the resources can be made much more accessible.⁴

There are several institutes in Taiwan committed to developing Digital Humanities platforms, examples being the DocuSky Collaboration Platform of RCDH,⁵ the Digital Analysis System for Humanities (DASH) of the Academia Sinica Center for Digital Cultures,⁶ and the CBETA Research Platform (CBETA RP) of Dharma Drum Institute of Liberal Arts.⁷ CBETA RP is connected with the Buddhist digital canon of the Chinese Buddhist Electronic Texts Association (CBETA), which is a full-text database of high-quality Chinese Buddhist sutras. Not only is it possible to read and search sutras through the CBETA RP; it is also possible to analyze the terms of the result and present the results through different kinds of charts using the tools of the platform. DASH connects with several data repositories. Users can mark up the text and then calculate authority terms and N-gram statistics or conduct term co-occurrence

analysis; results are demonstrated through visualization tools in charts, word clouds, social analysis graphs, and maps. DocuSky was created by Dr. Hsieh-Chang Tu of NTU, and it is managed by Professor Jieh Hsiang. With the core format called DocuXml, many converters in DocuSky can be used to convert different format data into DocuXml. In other words, .txt, .xlsx, MARKUS⁸ tagging files, or the text from many repositories (e.g., CBETA, CTEXT,⁹ KANRIP0,¹⁰ RISE,¹¹ or Wikisource¹²) can be converted into DocuXml with a couple of clicks. DocuXml can be used to build a personal database in DocuSky, and researchers can use the tools in DocuSky for tagging, metadata managing, adding relationship information for social network analysis, or even creating GIS layers using the webGIS tool called DocuGIS. The DocuXml upload in DocuSky lets users undertake analysis through the post-classification function of metadata and tags. Moreover, authors of DocuXml files can authorize RCDH to make their databases public through the DocuSky model to share their achievements with the world. From context discovery systems to a personal Digital Humanities platform, the main purpose is to make the connection between tools and databases more flexible and to allow users to operate and use the database designed by themselves more freely.

The formation of the Digital Humanities community in Taiwan was spearheaded by RCDH, which held the 1st International Conference of Digital Archives and Digital Humanities (DADH) in 2009. Since then, DADH has become an annual meeting for Digital Humanities scholars from Taiwan and overseas. With the increasing number of scholars studying Digital Humanities in Taiwan, the Taiwanese Association for Digital Humanities (TADH)¹³ was formed in 2016. TADH, which formally became the organizer of the DADH annual meeting in 2016, has grown to become an important organization for the study of Digital Humanities in Taiwan. TADH also became a constituent organization

of the Alliance of Digital Humanities Organizations (ADHO) in 2018, officially joining the international Digital Humanities research community as a research partner. Moreover, the *Journal of Digital Archives and Digital Humanities*, published by TADH, has become a place for Digital Humanities scholars to publish their research. Through the association, annual meeting, and journal, the development of Digital Humanities research in Taiwan is expected to become more plentiful and diverse in the future.

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Notes

- 1 In 2008, NDAP changed its name to the Taiwan e-Learning and Digital Archives Program (TELDAP).
- 2 Szu-Pei Chen, Jieh Hsiang, Hsieh-Chang Tu, & Micha Wu, "On building a full-text digital library of Historical Documents, ICADL 2007 (Hanoi, Vietnam, 10-13 Dec. 2007)," LNCS 4822, pp. 49-60.
- 3 Hsiang Jieh, "Context discovery in historical documents – a case study with Taiwan History Digital Library (THDL)," July 16-22, Digital Humanities 2012, University of Hamburg.
- 4 Chijui Hu, "DOCUSKY AND DIGITAL HUMANITIES RESEARCH," Taiwan Insight. Available at <https://taiwaninsight.org/2020/07/10/docusky-and-digital-humanities-research/> (Accessed March 10, 2022)
- 5 <https://docusky.org.tw/>
- 6 <https://dh.ascdc.sinica.edu.tw/>
- 7 <https://cbeta-rp.dila.edu.tw/>
- 8 Hou leong Brent Ho, and Hilde De Weerd. MARKUS. Text Analysis and Reading Platform. 2014+ <http://dh.chinese-empires.eu/beta/> Funded by the European Research Council and the Digging into Data Challenge.
- 9 <https://ctext.org/zh>
- 10 <https://www.kanrip0.org/>
- 11 <https://rise.mpiwg-berlin.mpg.de/>
- 12 https://wikisource.org/wiki/Main_Page
- 13 <http://tadh.org.tw/en/>

Trends and Challenges in Korean Digital Humanities

Intae Ryu

The application of digital technology to humanities research has been taking place in South Korea for the past two decades. The building of the “Joseon Culture Electronic Atlas” in 2004 and “The Veritable Records of the Joseon Dynasty DB” in 2006, which aimed to expand the outreach of Korean studies using web technology, are the representative examples of Korean Digital Humanities in its seminal stage. Computer technology had been used in South Korea since the 1980s to support humanities research, but, ironically, it was the financial crisis of 1997 that provided the impetus for the “digital turn in the humanities.” Faced with the task of rebuilding a tattered economy and providing a new strategy for economic development, the Kim Dae Jung government initiated large-scale public employment schemes and promoted a strategy of nurturing Cultural Technology (CT). The former provided the human resources that helped lay the foundation for Digital Humanities in South Korea. The latter supported the establishment of a new research trend that paved the way for “digital content” production in the field of the humanities.

It is against this historical backdrop that the distinctive trajectory of Korean Digital Humanities must be understood. In South Korea, the discourse on Digital Humanities began in the 2010s, but discussions were mainly focused on the production of digital content. It is only more recently, with the active introduction of overseas case



Fig. 1: South Korean President Moon Jae In speaking about the “Digital New Deal” initiative. Image courtesy of the Presidential Security Service, Republic of Korea.

studies and the accumulation of domestic case studies, that the wider community of humanities-based researchers (and not just those involved in producing digital content) has begun to show greater interest in Digital Humanities.

More recently, the “Digital New Deal” initiative of the current Moon Jae In government (represented by the “Digital Dam” project) has played a significant role in escalating interest on Digital Humanities amongst researchers. The government agenda for the transition to a data-centered society has influenced humanities research policies as well as the research environment. For example, the funding scheme outlines of the National Research Foundation (NRF) of Korea, the main funding body for humanities research, have begun to place importance on the application of digital technologies or data related methodologies. From the standpoint of researchers who depend on

state funding, such a government stance cannot be ignored.

The importance placed on coding and programming within South Korean society has also played an important role in ushering in the digital turn in the humanities. The new generation of researchers, well-versed in computer and web technology, has adapted well to the digital environment, actively applying digital approaches to humanities-related research. In fact, there is a growing perception among young researchers that academic activities should expand to include data construction, analysis, and visualization, which require interdisciplinary and convergent approaches, rather than being limited to traditional methods of publication. Such a trend can also be consistently observed in the workshops, colloquiums, and seminars of recent years.

The transition from “Humanities” to “Digital Humanities” should not be regarded simply as a change in research methodology. In terms of the technological environment, it entails a transition from analog to digital; in terms of communication media, it entails a transition from books to data; in terms of the actor, it entails a transition from an approach dominated by a human actor to one involving collaboration with non-human actors. In this sense, the expansion of interest in digital humanities can be understood as part of a greater cultural movement, in which changes in the technological environment have brought about social, economic, and political changes, which in turn have transformed the academic environment. Just as a typhoon cannot be recognized when standing amidst the deceptive calm of its eye, we may unknowingly be in the midst of a great turning point.

The disciplines of the humanities are also experiencing a crucial period of transition in South Korea, and currently there is more bad news than good news. The merging of humanities-related departments due to a decrease in the university population, the reduction of government financial

support, a decrease in academic posts, and society’s general lack of interest in the humanities are collectively seen to represent a “crises in the humanities.” Fortunately, Digital Humanities can play a crucial role in fostering a new humanities research culture by absorbing the social changes caused by the technological environment, which may also act to increase the resilience of the current academic environment. As such, it is hoped that South Korea will also witness, in the near future, the establishment of an institution similar to that of the Office of Digital Humanities (ODH) under the National Humanities Foundation (NEH) of the USA, which can take charge of the management and development of the field of Digital Humanities.

Indeed, although the Korean Association for Digital Humanities (KADH), established in 2015, has spearheaded the dissemination of Digital Humanities research through various activities, it is nearly impossible to expect such a research organization to undertake a more active role when long-term government assistance is absent. In particular, a government-sponsored institution that can support and centrally manage the numerous small-scale Digital Humanities projects that are centered around universities, institutions, and research groups across the country, and which can also be consulted when developing the results of Digital Humanities research for educational or commercial purposes, is urgently required. It is only when the government implements policies that represent a full-fledged move to improve the overall situation of humanities research in South Korea – rather than those merely focused on supporting a small number of digital humanities research groups – that Korean Digital Humanities can hope for a sustainable future.

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Recent Developments in Digital Japanese Studies

Paula R. Curtis

Over the last two years, the COVID-19 pandemic has invigorated discussions of the so-called “digital shift,” bringing new visibility to the significance of online and open-access resources for research and teaching. Though Digital Humanities (DH) as a field has been active and evolving over the last several decades, its intersections with conventional modes of scholarly engagement and pedagogy are still occurring in fits and starts across different disciplines and geographic specializations. In North America, which hosts the vast majority of Asian Studies programs, we are still seeing that East Asian languages, including Japanese, have been slow to gain representation in digital educational and research offerings despite an overall growth in interest and demand.

Though occasional presentations on digital Japanese Studies have been held at the Association for Asian Studies (AAS) and other conferences over the last decade, a 2016 University of Chicago workshop – *The Impact of the Digital in Japanese Studies* – was among the first to explicitly address the topic. While in attendance, the 13 presenters and the audience of scholars, librarians, and data science professionals emphasized the need to centralize efforts to build a digital Japan community, leading to a Japanese Language Text Mining Workshop held at Emory University in 2017. This event was attended by 25–30 participants and funded by the Japan Foundation. The original 2016 presenters subsequently met again at a 2018 workshop to discuss the progress of their work and brainstorm future directions for digital Japan scholarship.

These gatherings underscored the need to actively create community spaces for digital scholarship in Japanese Studies, particularly in more accessible and inclusive ways. This led to the creation of the Digital Humanities Japan initiative, which hosts a scholars’ database, a mailing list, and a wiki on Japanese digital tools, tutorials, and publications. The DH Japan project will hopefully continue to grow.

In 2019, AAS held its first “Digital Expo” to highlight advances in digitally-inflected Asian Studies research and teaching; the event included work by five scholars of Japan. In June of 2019, six Japanese scholars made a special effort to bring their knowledge to the Digital Humanities Summer Institute (DHSI) at the University of Victoria, one of the premier digital humanities training venues. They offered a week-long course, “Digital Humanities for Japanese Culture: Resources & Methods,” which was attended by 11 participants, including graduate students, tenured faculty, and librarians. The course covered topics such as the International Image Interoperability Framework (IIIF), the Text Encoding Initiative (TEI), crowdsourced transcriptions, and more, helping to fill instructional and networking gaps keenly felt in North America and other areas outside of Japan.

Although AAS 2020 was canceled, the 2021 conference saw a significant increase in the number of Japanese DH-related presentations, with six on-demand sessions and at least five panels in which a digital Japan-specific topic was presented. The virtual DH Japan Meeting-in-Conjunction was attended by over 30 people.

In June 2021, Paul Vierthaler (a specialist in Chinese literature at William & Mary)

and myself were invited to run a four-day virtual course, *East Asian Studies and Digital Humanities*, for the University of Pennsylvania’s Dream Lab program in DH training. We covered a wide range of subjects at the introductory level from the perspective of East Asian Studies. We explicitly stated that we would prioritize graduate students and contingent faculty applicants. Nevertheless, our applicant pool was still nearly three times larger than the 25 participants we could accept, and over one-third were Japan-focused. Because we held the course virtually, we had participants from as far as Korea, the Czech Republic, and Chile. The great international demand for East Asia-focused digital education, particularly at the introductory level, signals the growing relevance of this field and the gap students and faculty face between demand and supply. We will hold another introduction to EAS DH course in June 2022. Given the incredible number of applicants from overseas, we will continue to offer it virtually. Also on the horizon is another Japanese-language text mining workshop from Digital Humanities Japan collaborators, which will be conducted at the University of Chicago in June 2022.

Despite challenges for obtaining training in Digital Humanities through East Asian Studies, a large number of academic job advertisements list digital studies as a desired field. Thus far in the 2021–2022 academic job cycle (July 2021–March 2022), among postings specifically seeking specialists in some aspect of East Asia, a total of 56 positions have included the term “digital,” with 26 specifying a desire for “digital humanities.” Other relevant phrases include “digital technologies,” “digital pedagogy,” and “digital media,” among many others. Of these 56 posts, 18 ads seek a specialization in Japan and the digital, with 20 such ads for generalist East Asia positions (that could include Japan). With four months remaining in the annual job market cycle, these numbers already exceed the 2020–2021 academic year,

which featured 33 “digital” ads, eight of which were Japan-focused. Harvard University’s Japan Digital Research Center and Reischauer Institute of Japanese Studies have previously hosted a digital Japan postdoctoral researcher, with two fellows taking up the role over the past several years. This year, the University of Texas at Austin is offering two postdoctoral positions at their newly-established Japan Lab, specializing in history and literature, respectively. The creation of the Japan Lab marks new institutional investment in Japan-centric digital studies in the Anglophone world, the first of its kind at a public university.

As for digital resource development, in partnership with Michael Emmerich of the University of California, Los Angeles (UCLA), work is currently underway to build a new online platform for resources in Japanese Studies known as Japan Past & Present (JPP). This is a collaborative venture with UCLA and Waseda University, sponsored by the Yanai Initiative. JPP will serve as a central hub for digitally-accessible Japanese Studies materials in a variety of languages. In the future, it will sponsor events and projects related to Japanese Studies as well.

Despite the challenges of the pandemic, the acceleration of digital activity over the last two years has generated new opportunities for community building and scholarly exchange in virtual spaces. We would be wise to leverage these changes to advocate for expanded support in the intersecting fields of Japanese (and East Asian) Studies and Digital Humanities at the institutional level and to continue building an infrastructure that allows us to share knowledge, offer educational opportunities, and promote interdisciplinary and international collaborations.

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